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Simone dos Santos Paludo
Normanda Araujo de Moraes *Editors*

Ecological Engagement

Urie Bronfenbrenner's Method to Study
Human Development



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 Springer

 Artesã
editora

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*To Urie Bronfenbrenner, with whom we had
the chance to share and discuss the seeds of
ecological engagement as a method of
studying human development. We continue to
do our part, as we promised you!
Gratitude!*

Foreword to the International Edition by Richard M. Lerner

Ecological Engagement is an invaluable scholarly example of the continuing societal importance and scientific utility of the scholarly contributions of Urie Bronfenbrenner. Although I never earned a degree under the tutelage of Urie Bronfenbrenner, I, most members of my generation of developmental scientists, and certainly the contributors to *Ecological Engagement* are Urie's students. His vision for using developmental science to describe, explain, and optimize the lives of diverse people, as they lived and developed within the actual ecology of human development, has become the fundamental frame for theory and research in the study of the human life span.

Urie's bioecological model was neither the first nor the only dynamic, relational developmental systems-based conception of human development. Nevertheless, it has—for now almost a half century—stood as the best known and most widely used example of how coactions between an individual and the complex, nested, and integrated systems within his or her ecological setting create the basic process of development across life. This dynamic, relational process involves the specific individual and the specific features of his or her context in mutually influential coactions across time (the chronosystem) and place (the micro-, meso-, exo-, and macro-system). The process-person-context-time (PPCT) conception is, of course, the core of the bioecological model, but it is also a fundamental part of all dynamic, relational models of human development. The fact that, at this writing, these models are at the cutting-edge of developmental science is due in no small part to the power and persuasiveness of Urie's scholarship.

The methodology of ecological engagement, which is explained and richly empirically illustrated in this book, is a singularly significant extension of the bioecological model. Indeed, in my view, it is a brilliant empirical instantiation of the PPCT component of the model. In the conduct of good science, method derives from theory; that is, the methodological tools selected for use by a researcher should derive from the specific, theory-predicated questions being addressed. The bioecological model generates questions about the *specifics* of the mutually influential individual-context relation, represented in many expressions of this conception as

individual \Leftrightarrow context relations. These individual \Leftrightarrow context relations are the process in the PPCT framework.

Of course, the bioecological model goes well beyond a statement that the individual and the context are fused in a dynamic relation across life. It was Urie's insight that the actual (ecologically valid) instantiation of this process required a thorough understanding of a person's *specific* attributes of individuality (the second "P" in the PPCT conception) in concert with the *specific* attributes of his or her context (the "C" in the PPCT conception), as this coaction changes across the levels of the chronosystem (the "T" in the PPCT conception). Therefore, to describe, explain, and optimize the trajectories of development for any individual—and in particular, the diverse and often underserved and marginalized children whose ecologies are marked by adversity and ongoing challenges to not only their health and well-being but, as well, to their very existence—methods must be used to understand their individual, contextual, and developmental specificity.

The singular and historically important contribution of ecological engagement methodology is that it provides a clear and compellingly rationalized set of procedures that, together, assure that questions derived from the use of the PPCT conception can be addressed systematically and comprehensively with the scientific rigor that Urie insisted must be used to persuade scientific colleagues and policy-makers and practitioners that the information derived from research was valid internally and externally in regard to the ecology of the individuals participating in the research. The methodology triangulates observations across multiple dimensions: for example, quantitative *and* qualitative, explanatory research *and* intervention research, predesigned *and* formatively researcher \Leftrightarrow participant designed procedures, and—perhaps most superordinate—researcher-generated definitions of the research process *and* participant and community-/institutional-generated definitions of the research process.

As documented across the chapters of this book, the methods of ecological engagement are complex and time-consuming, given that genuine and continued embeddedness of the research team within the ecology of participants must be undertaken to create the trust and the ecological knowledge that provide the foundation for the collaborative research \Leftrightarrow practitioner procedures that are emblematic of the method. Yet, without embracing complexity and having the commitment to the time needed to create valid engagement, meaningful data cannot be derived from this methodology. However, as documented through each chapter of this unique and, frankly, inspiring book, the readers will realize the remarkable contributions to enhancing the lives of individuals and contexts that can be made by informed and systematic use of this methodology.

Indeed, the chapters of *Ecological Engagement* constitute the ongoing building blocks for the growth of a living monument to the highest aspirations of the career contributions of Urie Bronfenbrenner. During the last decade of Urie's life, I had the privilege of serving as the editor of three of his last major works: his 1998 chapter and 2006 chapter (a chapter completed posthumously with the help of Pam and Urie's wife, Liese) with Pamela Morris in the fifth and sixth editions, respectively, of the *Handbook of Child Psychology* and Urie's final book, published just before

his passing in 2005, *Making Human Beings Human: Bioecological Perspectives on Human Development*. In my conclusion to the foreword I wrote for this book, I said that:

Urie Bronfenbrenner has, across more than six decades of singularly prolific and significant scholarship, given the world a gift of hope and power. We may remain hopeful that we can, through our own energies and active contributions to our world, optimize our lives and the lives of others with whom we share the fragile ecology supporting our existence. If we pursue the path of science and program and policy applications to which Bronfenbrenner's vision has directed us, we can as well sustain a humane and health-promoting ecology for future generations. Such a contribution may be Urie Bronfenbrenner's greatest legacy. It may be the frame with which human decency and social justice may prosper. (p. xxiv)

Ecological engagement methodology is the scientific means through which Urie's legacy can be furthered. If the steps in this methodology becomes increasingly embraced within developmental science, and if it is increasingly used to understand and enhance the individual \Leftrightarrow context relations of children and adolescents whose opportunities for thriving, life successes, and even life itself are challenged because of their specific ecological circumstances, social justice will be significantly furthered. The contributors to this book have illuminated the path developmental science can take to make such a contribution to the youth of the world. They have shown why the star that is Urie Bronfenbrenner continues to light our path forward.

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Foreword to the International Edition by Stephen F. Hamilton and Mary Agnes Hamilton

This book is a fitting tribute to Urie Bronfenbrenner and an indication of his enduring legacy. Having known him as a colleague and friend, we are certain that he would have appreciated the authors' close attention to his theory, their commitment to testing it empirically, and their willingness to do so in complicated real-world contexts. They are continuing to modify his ideas, as he did himself. Their method of ecological engagement is a means of investigating processes and contexts, a challenge he did not address explicitly, though his 1970 book, *Two Worlds of Childhood: U.S. and U.S.S.R.*, contains examples of formal and informal observations of child rearing in the Soviet Union.

Urie was motivated to conduct rigorous research and theorizing by concern for fostering human development for every person everywhere but especially for marginalized children, youth, and families. He readily shared his findings and his ideas with policy-makers and practitioners, not just other scholars. He demonstrated his respect for them and their work by explaining his ideas to them in their complexity rather than simplifying them. The method of Ecological Engagement explicated in this book employs the tools of science to delve deeply into people's daily lives, yielding the kind of understanding that can ground action to make those lives better.

It is also fitting that the chapter authors live and work outside the United States. As an immigrant who grew up speaking two languages and acquired at least two more later in life, Urie was a world citizen who was knowledgeable about and connected with people around the globe. His theory embraces influences on and processes of human development that are universal but also those that are specific to particular countries and cultures.

Finally, it is appropriate that the foreword was written by a former student. He was a legendary teacher who indelibly affected generations of undergraduate and graduate students.

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Foreword to the Brazilian Edition

It was a real pleasure to be invited to write the foreword for this book. In some ways, this invitation captures well two distinct, but connected, parts of my life. I went to the United States, in 1981, in order to do my PhD with Urie Bronfenbrenner and started publishing on his theory there in the mid-1990s (Tudge, Gray, & Hogan, 1997) and in Brazil soon thereafter (Tudge, 2008; Tudge et al., 1999, 2000). My writing on Bronfenbrenner's theory occurred at about the same time that I met Silvia Koller, in 1995, when I was first invited to talk at the PPG Psychology at the Federal University of Rio Grande do Sul (UFRGS) and have given many presentations on Bronfenbrenner's theory, as well as teaching a semester-long class on his theory, over the following years. This invitation thus nicely connects these two parts of my life.

Although Bronfenbrenner's theory, in one or other of its stages of development, has been very widely cited by scholars, surprisingly, little has been written about the theory, its development, or the methods that should be used to test the theory (Rosa & Tudge, 2013; Tudge, 2013). So it was with great satisfaction that I read the various chapters in this book. The first two chapters are reprints of papers that were originally published in 2003 and 2008, both in *Psicologia: Reflexão e Crítica*. The first, by Ceconello and Koller, does an excellent job of describing Bronfenbrenner's bioecological theory, and the second, by Eschiletti-Prati and her colleagues, aims to show how the theory can be applied in research practice. The remaining chapters of the book are mostly devoted to studies that used the method (ecological engagement) that Dr. Koller, her colleagues, and students devised in order to put Bronfenbrenner's theory into practice. These studies were conducted in various parts of Brazil, from its southernmost city (Rio Grande) to an Amazonian river community close to Belém, and in Angola.

As Eschiletti-Prati and her colleagues point out, Bronfenbrenner's theory went through many changes from the 1970s, when he first started developing it, until his death in 2005. In fact, three distinct periods can be identified (Rosa & Tudge, 2013), and scholars wishing to use the theory should either rely on the "mature" version of the theory or be explicit about the fact that they are drawing on concepts from one or other of the two earlier stages in the theory's development. Failure to do that is

likely to lead to theoretical incoherence if not a total misuse of the theory (Tudge, Mokrova, Hatfield, & Karnik, 2009; Tudge et al., 2016). It is thus very helpful that Ceconello and Koller devote so much time to describing the mature, bioecological theory, with its focus on the process-person-context-time (PPCT) model. They draw extensively on Bronfenbrenner's writings from the 1990s, which is important, given that Bronfenbrenner first described his theory (which he sometimes termed a "model") as "bioecological" in 1993 and discussed the PPCT model from 1994 onwards. It is very helpful to the readers that they draw so extensively on these original sources; it is always dangerous for researchers to rely on "authorities" (myself included) for their understanding of a theory rather than use the theorist's own words.

Although at first glance this model seems very complex, it is, in fact, rather straightforward. Proximal processes (the "engines of development") are the naturally occurring everyday activities in which developing individuals are involved. These, as Eschiletti-Prati et al. make clear, need to be the focus of attention for researchers trying to apply bioecological theory. Proximal processes vary depending on the characteristics of the individuals involved (the "person" of the PPCT model) and by the context and need to be studied over time. As Ceconello and Koller point out, Bronfenbrenner described three types of person characteristics and four "systems" of context. Bronfenbrenner made clear, however, primarily in the course of discussing others' research, that one can test the PPCT model by examining the ways in which proximal processes are influenced by variations in a single person characteristic and by examining one contextual variation. In many of his later publications (e.g., Bronfenbrenner 1999; Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Morris, 1998, 2006) describing the bioecological theory and the PPCT model, he used Drillien's (1964) study to illustrate the ways in which differences in the child's birth weight (the person characteristic of interest) and differences in the family's social class (the context characteristic of interest) jointly influenced mother-child proximal processes, leading to different outcomes for the children 2 years later. In other words, despite the apparent complexity of the theory, it does not require researchers to do the impossible in applying the theory (see Tudge et al., 2009).

Most of the authors in this book use Bronfenbrenner's theory as their starting point, but they focus primarily on the method that is at the heart of this volume—ecological insertion. This method involves conducting a study in context, with the team of researchers "inserted" into the environment over a period long enough to understand the problems and issues of the individuals being studied. The most important aspect of the method is the fact that the researchers are explicitly viewed as part of the system, a system including all of the people involved (researchers, community members, and the participants of primary interest), and the context itself. As authors of two of the chapters point out, this method has a lot of similarity with ethnographic approaches involving participant observation (Bucher-Maluschke) and systems theory (Pontes et al.). Eschiletti-Prati and her colleagues, however, argue that the main difference between this ecological insertion and ethnographic approaches is the explicit attention given to proximal processes, the

person, the context, and time. In other words, they make a connection between the method of ecological insertion and Bronfenbrenner's bioecological theory.

The most creative part of this connection is treating interactions among the research team and the other individuals in the context as the proximal processes of interest. Eschiletti-Prati and her colleagues draw on Bronfenbrenner's writing about ecological validity from the 1970s as the supporting concept and argue, rightly I think, that although Bronfenbrenner never returned to the concept in his later writings, it is well worthy of greater consideration. The concept refers to the fact that there needs to be congruence between what participants in a study experience in their context (whether home or laboratory context) and what the researchers *assume* the participants are experiencing. How better to ensure that congruence than by members of the research team spending a great deal of time in the context, interviewing community members as well as the individuals who are the focus of the study, writing field notes about their perceptions, sharing those perceptions with others in the team, and so on? The goal, clearly, of the method is to understand the context and the individuals within it as thoroughly as possible. Some type of invisible "fly on the wall" approach is obviously not what is required, and the method is explicit that the research team is influencing and being influenced by the community and its inhabitants.

The chapters in the second section of the book do an excellent job of describing the method of ecological insertion that Koller and her collaborators developed and showing how they applied that method in their research. They all note, for example, that the method is time-intensive. For example, Morais and her colleagues describe the way in which the research team spent 7 months, averaging two visits each week, with at-risk children and adolescents and workers at two different institutions helping at-risk youth in Porto Alegre. Rosa and her colleagues describe the way in which the ecological insertion of her research group took place, also over 7 months, involving 30 visits to a children's shelter in Espírito Santo. Siqueira and Dell'Aglio describe the 9 months in which their research team spent with five adolescents following their reunion with their families after a period in an institution for troubled adolescents.

Both Silva and colleagues and Mendes describe the work that their group of researchers spent in a river community of the island of Marajó, near Belém. Their work appears the most traditionally ethnographic (given that ethnography is the method primarily associated with cultural anthropology). Silva and her colleagues went to the island every 2 months, spending 10 days each time in the community. Mendes spent 3 years meeting with and observing children from the same community and their teachers. As with the best ethnographic studies, ecological insertion requires this type of time investment, as the researchers aim to understand the community, the individuals of interest, and establish connections between themselves and the families, children, adolescents, and youth workers.

The difficulty is not simply with the investment of time, necessary though it is. In all of the studies reported on in this book, the researchers are reaching out to children and adolescents who are vulnerable to many risks, including often living on the streets, physical and sexual abuse, drugs and prostitution, and a lack of so many

resources. Trying to build trust is not at all easy and, as Vega and Paludo discovered, may not be possible. Their research team spent 5 months getting to know the community and talking with youth workers at shelters in an attempt to understand and help adolescents being sexually exploited in Rio Grande. The team only managed five interviews with adolescents, and at times, team members felt themselves to be in serious danger. A different difficulty was noted by Sacco and Koller, describing the first author's attempt to do focal group interviews with six children in Angola. As the children's lessons took place outside, gathering a small group under a tree quickly led to the group being surrounded by other children.

As a way of showing that the method of ecological insertion can be employed in a variety of different ways, Souza and her colleagues describe using the method to create a program in human rights education with adolescents. They argue that proximal processes between the research group and 72 adolescents in Porto Alegre, with whom they met twice monthly for 5 months, created a new microsystem. Another interesting use of the method is described by Krum and Bandeira. The researcher first built contacts with a well-respected leader of the military police in a small city about 300 km north of Porto Alegre that had recently experienced a tornado. These initial contacts facilitated two sessions of focal group and individual interviews with ten of the affected inhabitants.

One important part of the method which certainly deserves attention is the careful way in which field notes are meticulously written by all members of the research team, and discussed among members of the group, as a way to help the team members understand the local context better, raise questions about issues that need to be discussed more, reveal biases that have to be confronted, and so on. The field notes should include impressions of the context, doubts, and questions about the initial encounters with community members, informal observations, feelings about the ways in which the interviews or meetings went, and much more. Aquino-Morais and her colleagues do a particularly nice job of showing would-be researchers why these field notes are so important and how to use them appropriately. However, the authors of many of the other chapters also explain well the use of field notes with the method of ecological insertion.

In summary, then, the authors of this book do an exceptional job discussing the roots of the method of ecological engagement, showing how it can be used in research, and pointing out many of the problems that are bound to be encountered when trying to understand and to help children, adolescents, and their families living in situations of vulnerability and risk. The book deserves to be read widely.

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Part I
Ecological Engagement

Chapter 1

Ecological Engagement: Promotion of Knowledge Production



Júlia Sursis Nobre Ferro Bucher-Maluschke

Psychology research seeks understanding of human phenomena on the intrapersonal and subjective plane as well as the interpersonal or interactional. Realizing this goal has become the primary challenge for researchers.

How does one capture a part of reality that escapes one's immediate perception?

In ancient Greece, pre-Socratic philosophers were well aware of the complexity of apprehending reality. Some of their observations that have survived until the present attest to their ability to discern the difficulties inherent in the search for knowledge.

While Heraclitus emphasized the shifting character of reality: "You cannot step into the same river twice, for other waters are continually flowing on" (D12) p. 25; Parmenides distinguishes the path of truth from the path of opinion. The fundamental distinction between the two paths is that, for him, on the path of truth, a man allows himself to be guided by reason only, while on the other, the sense information does not lead to the discovery of the truth (*aletheia*) and to certainty, dwelling instead in the unstable realm of opinions (p. 21), indicating that our senses induce illusions and that words are what determine reality but alert us nonetheless to the fact of their deceitfulness.

With Socrates comes a change of focus from the search for knowledge search to mankind, emphasizing to his disciples the necessity of knowing oneself.

Although ancient, these observations persist today and continue to challenge researchers.

In our capacity as researchers, we pose two questions as a starting point:

- How do we capture the truth or possible systems of truth?
- How was the system we described generated?

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It is in this vein that we will address ecological engagement as a possible path to knowledge production that is as close as possible to reality.

Let's look at some of the assumptions of ecological engagement.

The efforts of social scientists, psychologists, and anthropologists to achieve the best possible understanding of the social, psychosocial, subjective, and intersubjective or relational dimensions inherent to the human being's life experience are enormous. One of the challenges pertains to the vocabulary used in scientific investigation. For example, methodology and method are often confused, according to the descriptions of those doing the research.

Potter (1996) differentiate methodology and method, defining them:

"...methodologies are perspectives on research; they set out a vision for what research is and how it should be conducted. They are the connection between axioms and methods; methods are tools – techniques of data gathering, techniques of analysis, and technics of writing. Because it is a tool, a particular method can often be used by many different methodologies (both qualitative and quantitative). Therefore, methodologies are at a more abstract (or general) level than are methods. Methodology is like a strategy – or plan – for achieving some goal; methods are the tactics that can be used to service the goals of the methodology. In essence, methodologies provide the blueprints that prescribe how the tools should be used. Those prescriptions can be traced to the axioms- beliefs about how research should be conducted." (p. 50).

This distinction is important as it clarifies two aspects in constant interaction which are not, however, synonymous.

For years, in the human sciences, quantitative research has been developed under the parameters of the natural sciences. Only quite recently has so-called qualitative research enjoyed greater acceptance in academia.

It is important to remember that qualitative investigations start with the development of case studies. Atkinson (1998) presents a life or oral story as "...a narrative form that becomes a qualitative research method when it seeks to capture, to obtain information about the subjective essence of a person's entire life." (p. 3).

Case studies are done in clinical psychology (Bucher-Maluschke, 2010), but it was Freud who initiated this method of investigation, thereby contributing to the development of psychoanalytic theory. Among the various case studies he performed, the studies "Leonardo da Vinci and a Memory of his Childhood," published in 1910, as well as "Psycho-Analytic Notes on an Autobiographical Account of a Case of Paranoia" from 1911 are noteworthy. His studies were important milestones for the development of psychoanalysis.

Since then, other case studies have been done using individual narratives as much as primary documents. Allport (1942) elaborated tests about the development of individuals based on this investigation method. Erikson analyzed Luther's (1958) and Gandhi's (1969) lives. In 1975, Helm Stierlim published a study about Adolf Hitler from his family's perspective.

These are just a few examples of studies using people's life histories, which deal with development concepts that are important for the development of other research, as, for example, occurs with the concepts of individual and family lifecycles as well as the creation of other investigation techniques, such as the family genogram.

As a form of scientific investigation, there was a systematization of case studies and identification of some sources for data and information gathering. Yin (2005) presents six sources of evidence in case studies: documents, archive registries, interviews, direct observation, participative observation, and physical artifacts.

Physical artifacts may consist of movies, photos, and videotapes as well as projective techniques, psychological tests, proxemic information (proxemics is the study of cultural, behavioral, and sociological aspects of the physical space between individuals), kinesiology or the study of nonverbal bodily movements in communication, street and community ethnography, and life stories.

To Yin, a case study "... is an empirical investigation into a contemporary phenomenon within a real-life context, particularly when the boundaries between the phenomenon and context are not clearly defined" (p. 111). He draws a distinction between this and case studies of laboratory experiments in which the context is "controlled" by the facility's own environment and only a few variables are selected for the experiment.

Quantitative and qualitative research have their own characteristics regarding data collection and analysis. In the search for information, Denzin and Lincoln (2006, p. 23) make a distinction between the two systems (quantitative and qualitative). "Quantitative studies emphasize the act of measuring and analyzing causal relations between variables and not processes," while qualitative studies emphasize "the processes and meanings that are not examined or measured experimentally in terms of quantity, volume, intensity, or frequency."

This distinction of objectives and procedures raises new questions: how does a process come to be and how do we approach it? The other question is, what are meanings and how do we reach them and understand them?

These are two of the great challenges of qualitative research.

As for understanding "what a process is," Strauss and Corbin (2008) address process using music as a metaphor:

"We know that music, be it jazz, pop, or classical, is composed of a series of notes, some faster, some slower, some louder, others softer, sometimes played in one tone, sometimes in another, with a constant come and go across the keys. Even the pauses have a purpose and are part of the sound. It is the playing of those notes, with all its variations and coordinated sequences, that gives music its sense of movement, rhythm, fluidity, and continuity" (p. 162).

The authors conclude that a process is like music in the sense that it represents rhythm, mutating and repetitive forms, pauses, interruptions, and varied movements that form the sequences of action and interaction (p. 162). In this link between music and process, capturing the constituent elements of a process to understand it and explain it demands intense study, as we will see below.

With regard to the meanings or senses, by being polysemic, they invite a certain confusion and, therefore, we must have clarity as to their use by researchers. Bunge (2002) defines meaning as object signified and adds that it signifies something to someone in the measure that it designates and denotes something. He says further that "two symbols are equally meaningful if and only if they designate or denote the same object, as is the case of "3" and "three" (p. 352).

Qualitative investigation in psychology continues to grow. It is intensive and the analysis of its results is an interpretation of the significance of human language and action. The researcher has the arduous task of decoding a language, a culture, to recode in another which will be used for the theoretical explanation, which could eventually be defined as making interpretations that might be cultural, psychoanalytical, systemic, psychodynamic, bioecological, or anything else consistent with the researcher's theoretical parameters.

Becker (2007, p. 86) highlights two questions that can be asked in the interviews "how?" and "why?" and that they will inform the type of information the researcher will obtain. According to Becker, the question "why?" provokes a defensive response in the sense that it demands an explanation, while the question "how?" provokes a descriptive response. For example, "how did things happen?" instead of "why did things happen?" The first question gives people more freedom to respond, is less restrictive for telling a story.

Postmodern ethnology makes a significant contribution through field studies carried out over decades.

Initially, observers were kept in a position and status exterior to the studied object. Thus, such objects (whether groups or societies) were seen through western eyes, which evaluated them through the lens of western values and beliefs. Later, participant observation arose as a method of ethnologic study, having been introduced by Malinowski in the early twentieth century, after having immersed himself for several years in Malian societies. Another article, from the University of Chicago, backs the term "participant observation." We are faced with two unitary ideas—**observation** and **participation**.

It should be noted that **observation** constitutes one of the most important aspects of investigation procedures, nevertheless, it can be done in several ways. The subject-researcher can observe based on his beliefs, unable to see the object of his study in himself. This observation should be seen as a true tool of discovery, a method that, conducted in the proper manner, allows access to certain psychosocial dimensions or the ecological context of the investigated object.

Then, the word **participant** joined with observation and we stress that participation is one of the most difficult concepts to circumscribe in an operational manner. First, it is a word used in many areas today. One participates in everything and the etymological sense gets lost.

In that sense, participant observation creates a lot of ambiguity, and as such it demands investigation. One can say that participation in the context of research must be **interactive participation**. It is, therefore, a personal experience of psychosocial and cultural otherness.

The danger of participant observation, if not sufficiently understood by the researcher, is that of the Hawthorne effect, that is: the observer's presence modifies the situation being observed.

Another important contribution to qualitative studies came to us from the Chicago school, in the 1920s and 1930s, where the idea of human ecology was conceived. It addressed describing man within his context. The city assumes the role of research laboratory and human behavior is then analyzed in relation to the industrial,

geographical, and urban environments. The communities are studied through processes identified for vegetable and animal ecology. We find ourselves facing the need for the ecological engagement of the researcher.

Whyte (1981), in 1937, entered the neighborhoods and developed a degree of participation in the research–researched relationship, the systematization of observation, and the first treatment of the collected material.

The Chicago school experiments propelled qualitative research to new heights—outside of laboratories or predefined samples, showing the way to a postmodern ethnology.

This development of concepts and the way the researcher sees the world is molding itself for a better understanding of what ecological engagement is. The first principle to consider in ecological engagement is **interactive observation**.

To illustrate it, we offer the example of the research performed in Brazil with families from northeastern region of the country. It sought to study the dynamics of small farming families in the northeastern countryside. The first interviews carried out in the families' homes, after an introduction with the help from local native leaders, resulted in similar data with assertions that they had no belongings, animals like cattle or chickens, all of which the interviewer could see in front of her during the interview. Either those things were borrowed, or they had already been sold. In other cases, families refused to talk to the interviewers for irrational reasons. The families' behavior, the preoccupation with giving the impression that they had nothing or could not receive anyone in their homes, after the interview had been announced by the local leaders, demanded an explanation. The interpretation of this was given to us as follows. Some time ago the IBGE (Instituto Brasileiro de Geografia e Estatística, Brazilian Institute for Geography and Statistics) census interviewers had been there, and information spread in the community and surrounding areas that these people had been sent by President Lula to verify their possessions and cut "Bolsa-Família" (Brazil's income assistance program). With this new information came the realization that while the researcher is observing, the object of observation—in this case, the family and/or the head of the family—is observing as well. The researcher arrives there steeped in the elements he brings with himself, looking for knowledge about something he wants to learn; one who is investigated within one's context is in turn curious about new arrival as well—What does he want? What does he intend? How does he see me and to what use will he put what he learns about this place?

We believe that it was from this perspective that CONEP (Conselho Nacional de Pesquisa do Ministério da Saúde, the Ministry of Health's National Council of Research) developed the protocol of terms of consent.

To develop a high-quality ecological engagement, a consistent preparation comprising several stages is necessary.

The preparation that preceded the trip to the northeast was defined initially as learning how to observe. We all think we are observers, some more, others less, but how does one characterize, test this skill, how does one train it? The first exercise we do is observation. On a table we placed several rocks of different sizes, colors, types, textures, and forms. We then asked the students to observe what was on the

table and describe, in writing, what they saw, being at liberty to verify in the best possible way and elaborate a report about what had been observed. The behaviors related to observation are the most variable—some get up, look, hold, sniff, lick, and then describe in detail. Others write poetry, develop metaphors, interpret; some do not move from their places and fantasize; others get close, use the five senses and describe and relate afterwards. After reading descriptions of their observations, we began to reflect on the experience of the act of observing—what—how and why. This is what we called the first stage of learning for ecological engagement as a research procedure.

In that situation, the concept of “the field” is learned—what becomes “the field” of investigation—in the case of the exercise with the rocks, the field is space—the table upon which the rocks had been placed—but the field can be anywhere where the subjects, or our objects of study, are.

How is one ecologically inserted into this field? Then we began a reflection on the second presupposition of engagement, that being enunciation, because the connection with words is fundamental. The narrative—the discourse, the role of words—is of crucial importance. Psychoanalysis has already posited the importance of words in the healing of the subjects that submit to it.

In qualitative research, understanding and being understood presupposes a dialogically guided relationship in a communication process defined by the pragmatics of communication developed by Watzlawick of the Mental Research Institute of Palo Alto.

We have, in effect, an example of nonengagement from this perspective. When we began a progress evaluation of a study on violence in poor communities in the suburbs of Fortaleza, Brazil, the interviewers initially returned with information that there was no violence in those families. This result was astonishment in all who were accustomed to seeing children bruised or absent from school, or even hearing reports from the children themselves of mistreatment in the family.

After a big discussion about what had happened, we saw that the topic of violence required another approach and so the interviewers made a change. Instead of discussing violence, interviewers started by asking about exchanges of affection, fondness in the family, step by step getting around to the questions about violence and from there identifying what violence meant to them. For them, violence had been defined as a “corrective,” “teaching someone a lesson,” but that was not considered violence as they did not go to a hospital and not ended another’s life.

We were facing a phenomenon called banalization of violence—“a little slap does not hurt,” as the popular song says.

This interactive observation that includes word and the meaning attributed to it by the observer as well as the observed is only one means of engagement into the ecological context of the studied group, to the extent that the researcher begins his work of translating the meanings inherent in the words said, or in the silence (the words unsaid) or the “mis-said,” those between the lines and the gestures that accompany them, a translation that allows the development of strategies of those who welcome or who refuse the researcher. In this manner, they are defining themselves in relation to the researcher.

This, as well as the rural northeast examples, contribute to the learning of enunciation which we call conceptual engagement—a fundamental stage for the observation to be interactive, that is, the researcher observes what the study's subject or group is observing about the research and researcher. This allows the elucidation of not only complex and symbolic systems, but also of the nearly imperceptible elements of observation of beliefs that accompany gestures, the most commonplace and barely visible. This means methodically exploring, in all directions, the elements that compose the studied scene.

Rites, narratives, beliefs, myths, object classification, be they natural and social, all testify equally, but differently, to the exercise of thought, of reflection. The act of interpreting cannot focus merely on the first datum or on an isolated case, but it must support other data uncovered with the comparison itself producing the space and the time necessary for the manifestation of meaning.

The heuristic demand presupposed in ecological engagement, that is, the attempt to discover other things in a field of uncertainty, tries to identify and redefine the normative ideas the researcher had before and promotes appreciation of the facts in other ways.

The elaboration of explanatory models demands that the senses, significances, or meanings of the context, or of what is inherent to the subject or group under study, be obtained.

Today we see in dissertations and even theses, the use of the notion of a *corpus*, which originates from linguistics and quantitative history, however, ecological engagement is not reducible to obtaining a closed set of facts to describe and reduce to a general model of functioning.

The ecological engagement approach supposes a progressive or processual elaboration, whose factual, historical, geographical, and cultural contours, in the perspective of the bioecological model of Bronfenbrenner, are situated in the interior of the macro- and exosystem. Thus, we confront a deep and intense dynamism that is translated through the provocative complexity of constant reflection-action-reflection-action-... This we call the movement of knowledge before, no longer the universe, but the "pluriverse" in which the human being lives.

The field of study then becomes the moment in which, with the perception of the unnoticed, there is a work of discovery in the face of blinding evidence. Then some hypotheses are extracted which a reasonable exploration will put to the test, verifying, refining, and extending.

The researcher is an actor in a psychosocial game: since the moment of his arrival he is involved, independently whether he wishes to be or not, in a network of alliances and oppositions; he is put in a position that will shift across the procedures of field investigation; but, on other hand, he experiences something all his own. In this sense, the researcher in an ecological engagement is produced like an actor through the intense processes that he defined as objects of analysis. In the test originated by Gadamer (1989), in no way can the situation be considered external, since the observer is necessarily one of the actors. He adds that when the author as well as the reader are historically situated, they can share the meaning, opening the possibility of constant reinterpretation and reevaluation, to the extent that different meanings

are projected into the work in question. We are thus looking at a “fusion of horizons”—the metaphor used by him. The distance that structures the researcher’s activities and which describes production through the “founding” operation, that is, ecological engagement, must be considered as internal to a communication whose subjects are the actors and of which the researcher is a part and it does not lend itself to a simple translation based on an exterior position. The interpretation demands permanent self-reflection and inter-reflection with the supervisors.

Ecological engagement as methodology was inaugurated in psychology starting with studies developed at CEP-Rua, a research group connected to the Universidade Federal do Rio Grande do Sul (UFRGS, Federal University of Rio Grande do Sul). We highlight some research in which ecological engagement has been described in detail in a natural environment, specifically in the streets with youth in “street situations” (Paludo & Koller, 2004). Another illuminating study of ecological engagement was carried out with at-risk families in a natural environment which focused on resilience and vulnerability in families living in adverse conditions (Cecconello, 2003; Cecconello & Koller, 2004).

Leaving CEP-Rua and entering “CEP-Rio,” where another natural environment study was carried out in a riverside community in the state of Amazonia by the research group attached to the Laboratório de Estudos do Desenvolvimento do Programa de Pós-graduação da Universidade Federal do Pará (Graduate Program Laboratory for Developmental Studies of the Federal University of Pará). Several aspects of riverside life were investigated, such as family structure and dynamics, school, and social environment. From the ecological engagement perspective, the study highlighted the role of the informant and the use of photography as crucial strategies for the development of the proximal processes, fundamental for the research’s success (Mendes et al., 2008).

In 2003, Cecconello and Koller, in their study of families in situations of risk, presented ecological engagement into the community as a methodology and a guarantee for “ecological validity,” as developed by Bronfenbrenner (1996).

A more recent study presents and deepens ecological engagements as a methodological proposal (Prati, Couto, Moura, Poletto, & Koller, 2008).

The ethics of the researcher is a part of ecological engagement as well. Cecconello and Koller (2004, p. 288) properly observe that

“... [the] methodology of ecological engagement must be used with ethical responsibility by investigators, as, in the process of carrying out research, they become part of the daily life of the people involved. The line between ecological engagement and harmful belonging can be fine indeed if the research team lacks clarity as to its role in the process underway.”

To end this essay, we bring two images identified by Vincenzo Di Nicola (1998, p. 112). The first one is of the Tower of Babel, a structure built to reach the heavens, and for which the Lord, to punish presumption of men, confused the language of the builders, preventing their communication. The second image is the Rosetta Stone, an ancient Egyptian rock discovered in the city of Rosetta in 1799, containing an inscription in two languages and three writing systems: Egyptian hieroglyphs above, Demotic characters in the middle, and Greek below. It was through the study of this

rock that J. F. Champollion uncovered the means to translate hieroglyphs, thereby opening the doors to the knowledge of an entire civilization. Di Nicola concludes: while the Tower of Babel is symbol of human misunderstanding, particularly between cultures, having become the image of the problem, the Rosetta Stone came to be a symbol of translation and of access to other cultures, becoming the image of the solution.

As qualitative researchers, we expect that learning ecological engagement will greatly benefit the resolution of methodological programs.

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Chapter 2

Ecological Engagement in the Community: A Methodological Proposal for the Study of Families at Risk



Alessandra Cecconello and Silvia Helena Koller

This chapter aims to describe a methodology for research with families in a natural environment: Ecological Engagement. This methodology is based on the Theory of Ecological Systems, which proposes the study of human development through a scientific model, involving the interaction of four nuclei: the process, the person, the context, and the time, called the bioecological model. According to this theory, the bioecological model constitutes an appropriate theoretical–methodological reference for conducting research on and in the context. In this chapter, we will describe the operationalization of this model in a qualitative research on resilience and vulnerability in families at risk. The Ecological Engagement involved the longitudinal monitoring of three poor families living in a violent community and included observations, informal conversations, and interviews. The operationalization of the bioecological model in this research provided the accomplishment of a study with ecological validity since it allowed including several levels of analysis. Brazilian studies on families have been carried out in different theoretical frameworks from different methodologies (De Antoni, 2002; Wagner, Halpern, & Bornholdt, 1999; Wagner, Ribeiro, Arteche, & Bornholdt, 1999). However, recently, some researches with families at risk have opted for a qualitative approach to family processes, since this methodology provides a closer approximation of the investigated phenomena (Bastos, 2001; Cecconello, 2003; De Antoni, Medeiros, Hoppe, & Koller, 1999; Simionato-Tozo & Biasoli-Alves, 1998; Szymansky, 1992; Yunes, 2001). This

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proposal allows the understanding of the phenomenon in relation to variables directly or indirectly linked to it, allowing a contextualized view of this phenomenon. According to Bronfenbrenner (1979/1996), the family is at the same time the richest and least used source of natural experiments on the evolutionary impact of systems involving more than two people. It is not necessary to introduce made-up variations in system size within the home and the family, because their very nature provides them daily, at a time when parents and siblings, as well as relatives, neighbors, and friends, come and go at all times, providing experiments with ecological validity.

Many studies have been carried out taking as a theoretical–methodological basis the Theory of Human Ecological Systems from Urie Bronfenbrenner (Cecconello, 1999; De Antoni, 2000; Hoppe, 1998; Mayer, 1998). However, the Brazilian literature on psychology lacks a study that describes in detail a methodological proposal for these studies to present scientific rigor and guarantee its ecological validity. In line with these objectives, this chapter describes a methodology for research with families at risk in a natural environment: Ecological Engagement.

The Theory of Ecological Systems has, in the figure of Urie Bronfenbrenner, its main author, a researcher still active in the field of Developmental Psychology. For four decades, Bronfenbrenner has been working on an appropriate scientific model to study the development; a fact that contributes to this theory is constantly evolving (Bronfenbrenner, 1999). Two distinct phases are highlighted by the author during this journey: the first, culminating in the publication of the book *Ecology of Human Development* in 1979, translated and published in Brazil in 1996 (Bronfenbrenner, 1979/1996), in which Bronfenbrenner describes the ecological model, and the second, composed of a series of works that critically develop the original model (Bronfenbrenner, 1999; Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Evans, 2000; Bronfenbrenner & Morris, 1998). Bronfenbrenner's main criticism of the original model is that it placed too much emphasis on the role of the environment during development, giving less attention to individual processes. Currently, the author has been reformulating the original model, giving the process a central position, of greater prominence. Thus, in this new version, different forms of people interaction are no longer treated simply as a function of the environment, but as a function of the process, which is defined in terms of the relationship between the environment and the characteristics of the developing person (Bronfenbrenner, 1999; Bronfenbrenner & Morris, 1998). In this new model, which is still in evolution, Bronfenbrenner proposed a recombination of the main components of the ecological model with new elements in more dynamic and interactive relationships, being named as a bioecological model (Bronfenbrenner & Ceci, 1994). These components will be described below.

The bioecological model proposes that human development be studied from the interaction of four interrelated nuclei: the process, the person, the context, and the time (Bronfenbrenner & Morris, 1998). In this model, the process is highlighted as the main mechanism responsible for development, which is seen through processes of reciprocal interaction, progressively more complex of an active human being, biopsychologically in evolution, with the people, objects, and symbols present in their immediate environ-

ment (Bronfenbrenner & Ceci, 1994). These forms of interaction in the immediate environment are called, in the bioecological model, as proximal processes.

Bronfenbrenner (1999) emphasized the importance of the simultaneous presence of five aspects in his definition of the proximal process: (1) For development to occur, it is necessary that the person is engaged in an activity; (2) To be effective, interaction must occur on a relatively regular basis over extended periods of time, and it cannot occur effectively during purely occasional activities; (3) The activities should be progressively more complex, so the need for a stable period of time; (4) For the proximal processes to be effective, there must be reciprocity in interpersonal relationships; and, (5) Finally, for reciprocal interaction to occur, objects and symbols present in the immediate environment should stimulate the attention, exploration, manipulation, and imagination of the developing person (Bronfenbrenner, 1999).

According to Bronfenbrenner and Ceci (1994), the form, force, content, and direction of proximal processes that produce development vary systematically as a joint function of the characteristics of the developing person, the environment (both immediate and the most remote) where they occur, the nature of the evolutionary results, and the changes and social continuities that occur over time, during the historical period in which the person lived.

Regarding the nature of the evolutionary results, Bronfenbrenner and Morris (1998) affirmed that the proximal processes can produce two types of effects: (1) competence, which refers to the acquisition and development of knowledge, skills, and ability to conduct and direct their own behavior through situations and evolutionary domains, either in isolation or through a combination of them (intellectual, physical, socioemotional, motivational, and artistic), and (2) dysfunction, which refers to the recurrent manifestation of difficulties in maintaining control and integration of behavior through situations and different domains of development (Bronfenbrenner & Morris, 1998). Both results depend on the nature of the environment where they occur. When there is dysfunction, its impact on the person's development will be greater in unfavorable or disorganized environments, because in these environments manifestations of dysfunction are more frequent and severe (Bronfenbrenner, 1999). Likewise, when competence occurs, its impact on the person's development will be greater in more favorable or stable environments, since in these environments the manifestations of competence occur more frequently and intensively (Bronfenbrenner, 1999).

The genetic potential for predisposition to manifestations of competence and/or dysfunction throughout the life cycle was highlighted by Bronfenbrenner and Ceci (1994) as having a strong influence on development. These authors consider heritability as a key element of the bioecological model, in which the proximal processes are seen as the mechanisms by which the genotype becomes a phenotype. The authors postulate that the proximal processes acquire psychological content through a dynamic of fusion between genetically determined patterns of behavior and the nature of environments in which they occur. This fusion determines whether it is the potential for competence or dysfunction that will be manifested. Environmental conditions and processes can substantially influence the degree of heritability, thus,

it will be greater when the proximal processes are more effective, and, less, when they are more fragile.

The impact of manifestations of competence or dysfunction in people's development in relation to favorable or unfavorable environments can be exemplified in the present study. The risk condition present in the daily life of the studied families, determined by the situation of poverty and violence in their place of residence, demonstrates the potential of these conditions to interfere in the development of their members. Lack of physical security in the environment, the presence of trafficking, robberies, assaults, and murders, coupled with the scarcity of financial resources of families and their low level of education, limits their development opportunities, affecting the quality of the proximal processes established among their families. In this sense, the availability of parents to be responsive to the emotional needs of their children may be disturbed by their level of stress arising from the difficulties in the environment. Likewise, parents' low level of education interferes with their ability to convey to their children the knowledge and skills needed to solve problems. Both difficulties tend to impair the quality of the proximal processes established between parents and children and may lead to dysfunction.

The second component of the bioecological model is the person. The person is analyzed from their biopsychologically determined characteristics and from those constructed in their interaction with the environment (Bronfenbrenner & Morris, 1998). In the bioecological model, the person's characteristics are seen as products of development, since they constitute one of the elements that influence the form, the force, the content, and the direction of the proximal processes and, at the same time, they are the result of the joint interaction of these elements—process, person, context, and time (Bronfenbrenner, 1999). Thus, in the bioecological model, development is related to stability and change in the person's biopsychological characteristics during their life cycle.

Bronfenbrenner and Morris (1998) distinguished three groups of developmental personal characteristics, due to their ability to influence the proximal processes: characteristics of disposition, resource, and demand. The first group of characteristics refers to the active behavioral dispositions. In the bioecological model, the most likely characteristics of influencing development are active behavioral dispositions that can either put the proximal processes in motion and sustain their operation, or actively interfere with, or impede, or prevent such processes from occurring. These dispositions are called, respectively, generative characteristics and inhibitory characteristics (Bronfenbrenner & Morris, 1998).

Generative characteristics involve active orientations such as curiosity, tendency to engage in individual or third-party activities, response to others' initiative, and self-efficacy. Bronfenbrenner and Morris (1998) highlighted three dynamic forms of active orientation in the life cycle: the first, and earlier manifestation of these dynamic forces, is related to selective responsiveness to aspects of the physical and social environment; the second is related to the tendency to engage in progressively more complex activities, how to design, restructure, and even create new features for the environment; and the third is related to the child's ability to conceptualize their experiences as they grow older, that is, to develop beliefs about control over

themselves and over the environment. Inhibitory traits, on the other hand, represent a person's difficulty in maintaining control over their emotions and behaviors. They include characteristics such as impulsivity, explosiveness, apathy, inattention, irresponsibility, insecurity, and excessive shyness (Bronfenbrenner & Morris, 1998).

The second group of characteristics refers to bioecological resources. These do not involve selective dispositions for action but constitute deficiencies or psychological endowments that influence a person's ability to engage effectively in proximal processes (Bronfenbrenner & Morris, 1998). Deficiencies represent conditions that limit or inhibit the body's functional integrity, such as genetic defects, low birth weight, and physical or mental impairment. The gifts are related to the capacities, knowledge, skills, and experiences that, by evolving during the course of life, extend the domains in which the proximal processes can operate constructively.

Finally, the third group refers to demand characteristics. These are personal attributes capable of requiring or preventing reactions from the social environment, inhibiting or favoring the operation of proximal processes in psychological growth (Bronfenbrenner & Morris, 1998). These characteristics include aspects such as attractive versus unattractive physical appearance and hyperactivity versus passivity.

Demographic characteristics such as age, gender, and ethnicity also influence proximal processes and their effects on development (Bronfenbrenner & Morris, 1998). According to the authors, the combination of all these characteristics in each person will produce differences in the direction and strength of the proximal processes and their developmental effects.

The third component of the bioecological model, the context, is analyzed through the interaction of four environmental levels, called microsystem, mesosystem, exosystem, and macrosystem. According to Bronfenbrenner (1979/1996), these systems are organized as a fit of concentric structures, each containing the other, composing what he calls the ecological environment.

The microsystem is defined as a pattern of activities, roles, and interpersonal relationships experienced by the developing person in the environments he or she frequents and establish face-to-face relationships (Bronfenbrenner, 1979/1996). The term "experienced" is emphasized to indicate how a person perceives and gives meaning to the influence of the environment, which goes beyond their objective characteristics. It is in the context of microsystems that operate the proximal processes, producing and sustaining development, but their effectiveness in implementing development depends on the structure and content of them (Bronfenbrenner & Morris, 1998). The interactions within the microsystem occur with the physical, social, and symbolic aspects of the environment and are permeated by the characteristics of disposition, resource, and demand of the people involved.

The mesosystem consists of the set of microsystems that a person attends and in the interrelationships established in them (Bronfenbrenner, 1979/1996). It is enlarged whenever a person moves into a new environment. The processes that operate in the different environments frequented by the person are interdependent, influencing each other (Bronfenbrenner, 1986). Thus, the interaction of a person in

a particular place, for example, in the work, is influenced and also undergoes influence of its interaction inside another environment, like the family.

The exosystem involves environments that the person does not attend as an active participant, but which have an indirect influence on their development (Bronfenbrenner, 1979/1996). Three exosystems are identified by Bronfenbrenner (1986) as very important for the development of the child, due to its influence in family processes: the work of the parents, the social support network, and the community in which the family is inserted.

The macrosystem is composed of the global pattern of ideologies, beliefs, values, religions, forms of government, cultures, and subcultures present in the daily lives of people who influence their development (Bronfenbrenner 1979/1996). Thus, the culture in which the parents were educated, the values and beliefs conveyed by their families of origin, as well as the current society where they live interfere with the way in which they educate their children.

Finally, the fourth component of the bioecological model—time—allows us to examine the influence, for human development, of changes and continuities that occur throughout the life cycle (Bronfenbrenner, 1986). The time is analyzed in three levels of the bioecological model: microtime, mesotime, and macrotime (Bronfenbrenner & Morris, 1998). The microtime refers to continuity and discontinuity, observed within the proximal process episodes. The bioecological model conditions the effectiveness of the proximal processes to the occurrence of a reciprocal interaction, progressively more complex, in a relatively regular base of time, and it cannot work effectively in unstable and unpredictable environments. At a higher level, the mesotime refers to the periodicity of proximal process episodes through longer time intervals, such as days and weeks, as the cumulative effects of these processes produce significant developmental results. Macrotime focuses on changing expectations and events within an enlarged society, both within and across generations, and the way these events affect and are affected by human development processes and outcomes within the life cycle. Thus, the analysis of time within these three levels should focus the person on the events present in their life, from the nearest to the most distant ones—such as great historical events, for example. Bronfenbrenner and Morris (1998) pointed out that the changes that occur over time, in the four properties of the bioecological model, are not only products but also producers of historical change.

The bioecological model, through its proposal of the interaction of its main components, constitutes an adequate theoretical reference for conducting research on development in the context, since it allows including several levels of analysis, allowing examining the influence of the environment for the development of the people. In this sense, Bronfenbrenner and Evans (2000) launched a scientific challenge to be realized in the twenty-first century: to develop appropriate research designs to investigate the effects of chaos currently experienced by societies and to identify factors that can minimize its effects. According to the authors, this metaphor refers to the significant increase in risk factors present in families and in society as a whole, such as violence and poverty, which interfere with the development and adaptation of people. According to the bioecological model, chaos is present in

the various environmental systems. Chaotic systems are characterized by frantic activity, lack of structure, unpredictability in daily activities, and exacerbated levels of environmental stimulation. These aspects may interfere with the development and maintenance of the proximal processes that lead to competence, but may also produce processes that generate dysfunction. For example, families experiencing stressful life events, such as parental unemployment, chronic illness, or divorce, may experience dysfunction in parent–child processes, generating low parental responsiveness to child needs (Bronfenbrenner & Evans, 2000). Nonresponsive parenting, as a result, is related to psychological distress and other negative outcomes in children. In this way, Bronfenbrenner and Evans believe that the path to the evolution of development science in this new millennium is to recreate research in social development, adapting theories and methods to the evolution of society, developing strategies to deal with the current effects of the adversities present in the people’s lives. Thus, new research methods need to be created and more rigorous forms of research proposed to identify and evaluate evolutionary aspects related to the context, time, process, and characteristics of the people involved in the psychological phenomena to be studied.

According to Bronfenbrenner (1979/1996), the analysis of the influence of these aspects on human development is only possible when using a theoretical–methodological model that allows its observation. The bioecological proposal of research by naturalistic observation privileges the Ecological Engagement of the researcher in the environment to be studied. In this sense, ways of investigating this environment and the phenomena present in it (process, person, context and time) require the establishment of strict data collection and analysis criteria. Since these results have important implications for both science and public policy, it is important that the theoretical model be methodologically rigorous, providing proof of validity and allowing the emergence of results contrary to the original hypotheses of the researcher, for the advancement of science (Bronfenbrenner, 1979/1996).

An ecological approach to the study of human development requires a reorientation of the conventional view of the proper relationship between science and public policy (Bronfenbrenner, 1979/1996). The traditional position is that social policy, where possible, should be based on scientific knowledge. The ecological line of thought leads to a contrary thesis: for the evolution of human development research, basic science must be based on public policy, rather than public policy should be based on basic science. The knowledge and analysis of social policy are for the progress of evolutionary research, as they alert the researcher to those aspects of the environment that are critical to a person’s cognitive, emotional and social development. Thus, the theoretical–methodological model must necessarily include a macro system level involving generalized patterns of ideology and institutional structure, characteristic of a given culture or subculture, as proposed by the ecological approach to development (Bronfenbrenner 1979/1996).

In analyzing some research in Developmental Psychology, Bronfenbrenner (1979/1996) states that, in a general way, the methods employed by them do not give the necessary attention to the role of the environment in the evolutionary processes. The scientific theory states that development occurs from the interaction of

the person with the environment; however, most empirical work do not give the environment an adequate emphasis, neglecting the interaction of the two. In this way, what is found is a marked asymmetry between theory and practice, with studies focusing on the properties of the person and only a brief characterization of the environment where it is found (Bronfenbrenner, 1979/1996). Although this criticism occurred in the 1970s, there has been no significant change in human development studies to date.

Some approaches include environmental investigations, but, according to Bronfenbrenner (1979/1996), the methods employed by them are far from meeting the requirements of an ecological research model. Some experiments in the field of social learning psychology are planned in an excellent way, but they ignore important aspects when delimiting the concept of the environment into a single immediate environment containing the person: the microsystem. In addition, they do not look at a person's behavior in more than one environment or the manner in which inter-environmental relationships can affect what happens within them, not recognizing that events outside the immediate environment influence the person's behavior and development within that environment. On the other hand, other studies in the field of anthropology, for example, are excessively subjective, producing interpretations of highly inferential causal influences. In this way, Bronfenbrenner points out that the methodology of research in psychology runs the risk of being caught between "a rock and a soft place" (Bronfenbrenner, 1979/1996, p. 16). The rock is the rigor, and the soft place, the relevance. The emphasis on rigor led to well-planned experiments but generally limited in scope. This limitation stems from the fact that many experiments involve unfamiliar, artificial, and temporary situations, and require unusual behaviors, difficult to generalize to other environments. The impossibility of generalization of results, from studies such as these, leads Bronfenbrenner to state that "much of developmental psychology, as it currently exists, is the science of the strange behavior of the child in strange situations with strange adults for the shortest possible periods" (Bronfenbrenner 1979/1996, p. 16).

For a while, scholars have held divergent positions on this issue, placing experimental and naturalistic methods in opposition, attempting to look for scientific reasons to defend the superiority of one method over the other (Bronfenbrenner, 1979/1996). Bronfenbrenner maintains a differentiated position, going beyond the discussion of these divergences, emphasizing that what it lacks in the methodological procedures is an ecological orientation. The incompatibility between these two methodological currents is rejected by him, because he argues that the experimental method is not only invaluable for the verification of hypotheses but also applies to its discovery, being a powerful tool for research on development in context. Similarly, the author asserts that naturalistic methods, such as ethnographic description, case studies, and naturalistic observation are equally invaluable to scientific progress.

Concern about the scientific nature of research methods on development in context led Bronfenbrenner (1979/1996) to reflect on an extremely important construct for ecological research: ecological validity. The author uses this term to refer to the "extent to which the environment experienced by subjects in a scientific investiga-

tion has the properties assumed or presumed by the researcher” (Bronfenbrenner, 1979/1996, p. 24). With this concept, it emphasizes the importance of taking into consideration the way in which the research situation was perceived and interpreted by the study participants, avoiding the possibility of erroneous interpretations by the researcher. Another important aspect highlighted by Bronfenbrenner for ecological research is the need to include as many ecological contrasts and variables (characteristics of diverse environments) as possible related to the phenomenon investigated, unlike the classic laboratory experiment, where a single variable is focused and tries to control, by exclusion, all others. The importance of this aspect lies in the possibility of generalization, beyond the specific ecological situation, avoiding also possible errors of interpretation (Bronfenbrenner, 1979/1996).

The notion of ecological validity presented by Bronfenbrenner (1979/1996) does not attribute to the environment, in which the research is carried out, a valid or invalid connotation. According to the author, depending on the research problem, the laboratory may be a fully appropriate environment for an investigation, and certain real-life environments may be highly inadequate, or vice versa. Even more important than this, is to attribute to the experiment an ecological orientation, from an analysis of the characteristics of the environments that influence the direction of the results (Bronfenbrenner, 1979/1996).

Based on the theoretical and methodological limitations mentioned above to study the phenomenon of development in context and with the aim of correcting such deficiencies, Bronfenbrenner and colleagues (Bronfenbrenner, 1979/1996, 1999; Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Evans, 2000; Bronfenbrenner & Morris, 1998) suggest the operationalization of the bioecological model as a methodological proposal. However, to date, the authors have not described a specific methodology for studying development, but point out in several articles and book chapters some aspects to be considered in evolutionary research.

Initially, it needs an adequacy between the theory and the method to be used. According to Bronfenbrenner and Morris (1998), a theory, to be good, must be practical. The authors state that, in science, a good theory is one that can be translated into research designs that correspond to the conceptual properties of this one. In the absence of research designs, or worse, in the application of designs that fail to match, or even violate, the conceptual properties of theory, science cannot progress. Bronfenbrenner and his collaborators have been systematically working on the reformulation of the bioecological model to translate it into designs that correspond to its underlying theoretical structure (Bronfenbrenner & Morris, 1998; Bronfenbrenner & Evans, 2000).

Another aspect highlighted by Bronfenbrenner and Morris (1998) is the importance of doing science in a way to discover facts, not simply to verify them. Thus, the function of a research design should not be to test hypotheses for statistical significance but to develop hypotheses of power and precision that are sufficiently explanatory to be submitted to the empirical test. The appropriated characteristics to a research design in the area of development in this character of discovery are not yet clearly defined, because, compared to the physical and natural sciences, the science of development is still in its initial phase. However, they state that the design

should include more differentiated theoretical formulations, progressively, and corresponding analyzes of data, with the results determining the next step within them. Thus, the design must generate new hypotheses, not simply confirm or refute them. In this generating process, the importance of the implications derived from the theoretical model is to provide a framework to expose the emerging research findings, in order to reveal, precisely, the type of interdependence in the results. Scientific interest should not focus on the aspects already identified by theory, but on those that produce new theoretical formulations. According to the authors, the strategy for evolutionary investigations, as a discovery, involves an interactive process of successive confrontations between theory and data, in order to formulate hypotheses susceptible to scientific evaluation in the mode of verification. The authors acknowledge that it is not easy to do research in this way; however, the bioecological model represents, through its theoretical–methodological structure, an effort to meet this scientific need.

In the bioecological model, a research design must be adequate to the underlying theoretical structure and favor the development of hypotheses to be submitted to the empirical test (Bronfenbrenner & Morris, 1998). The ecological theory requires that a research design include its four components—the process, the person, the context, and the time—demonstrating their interdependence. In this way, the researcher must be aware of the dynamic interaction of these four elements, since the evolutionary results of the proximal process vary according to the characteristics of the person, the context, the changes and continuities that occur over time. In addition, it is necessary to observe the phenomenon investigated from the point of view of all the participants involved, because the proximal process is bidirectional, that is, the interpersonal relations that happen within it are reciprocal. In the same way, the authors emphasize that the interactions of the four components of the model must have a theoretical basis and that, if possible, their direction and form be specified in hypothesis format. This fact contributes to the discrepancies between theoretical expectations and observed reality be easily recognized and provide a basis for the next step in the search for new hypotheses that deserve to be evaluated both theoretically and empirically (Bronfenbrenner & Morris, 1998).

Although these considerations are pertinent to the experimental research model, it is necessary to emphasize that nonexperimental studies can also be planned based on the bioecological model. Exploratory and descriptive studies, planned by qualitative designs involving naturalistic observations and interviews, may be based on the bioecological model of research. In more recent studies of this model, the proximal process occupies a central position, whose results depend on the interaction with its other components. In this sense, an important aspect of its definition must be retaken: the proximal process involves a “transfer of energy between a developing human being and the people, objects, and symbols existing in the immediate environment” (Bronfenbrenner & Evans, 2000). This energy transfer can be either unidirectional or bidirectional, that is, from the developing person to aspects of the environment, from these aspects to the developing person, or in both directions, separately or simultaneously. According to Bronfenbrenner and Evans (2000), any

research design must necessarily focus on these processes, contemplating the transfer of energy that occurs in the immediate environment.

From this definition, it is possible to make some inferences. In any research design, the interaction between the researcher and the participants of the research is foreseen. In qualitative research, mainly, it can be said that the interaction of the researchers with the participants generates a transfer of energy, thus producing proximal processes in both. Because it is neither ephemeral nor occasional, it occurs on a stable basis over periods of time, it is possible to affirm that the interaction of researchers with the participants, objects, and symbols in the research environment are proximate processes. In this type of research, researchers are part of the proximal process, assuming an essential role as the manager of this energy. Thus, in certain delineations, the proximal process, besides being the focus of the research, acquires a function of making it feasible, revealing a procedure by which the researcher conducts the research.

Based on the theoretical–methodological considerations made by Bronfenbrenner and his collaborators (Bronfenbrenner, 1979/1996, 1999; Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Evans, 2000; Bronfenbrenner & Morris, 1998) related to evolutionary research in this chapter we intend to propose a methodology for the study of development in the context: the Ecological Engagement. The methodology of Ecological Engagement was used in a qualitative research on resilience and vulnerability of families at risk (Ceconello, 2003), a condition determined by the situation of poverty of the families and the violence existing in the community in which they live. This study aimed to analyze the processes of resilience and vulnerability through a multiple case study (Yin, 1994) with three families: one nuclear, one reconstituted and one uniparental. For this, the research team proposed an insertion in the ecological environment in which families live, in order to know their reality, investigating risk factors and protection at intra- and extrafamilial levels, such as educational practices, parenting, parents' experience in their families of origin and social support. The Ecological Engagement involved the monitoring of these families over 4 years and included frequent visits, observations, informal conversations, and interviews. From this insertion of the research team into the ecological context of the families, it was possible to establish hypotheses regarding the processes of resilience and vulnerability, thus responding to the research questions of the study.

The Ecological Engagement involved the systematization of the four aspects of ecological theory by the research team: the process, the person, the context, and the time. The proximal process, occurring through the interaction of researchers, participants, objects, and symbols present in the immediate environment, was the basis of all research. In addition to the researchers' interaction with families and the community, the process also involved the triangulation of information, perceptions, and feelings within the team, in which the individual experiences and the aspects observed in the environment were shared and discussed according to the meaning attributed to them by the members, enabling an analysis of the proximal processes within the team itself. The proximal process was focused through procedures such as naturalistic observation, informal conversations, and interviews with families.

The presence of this in the research was observed from the five criteria described by Bronfenbrenner (1999):

1. For the proximal process to occur, it is necessary that the person is engaged in an activity—in this research, participants and researchers interacted and were engaged in the task of the interview.
2. In order to be effective, the interaction must occur on a relatively regular basis, for extended periods of time, and it is not possible to occur effectively during purely occasional activities—in this research, visits were made to the participants' homes for interviews with their authorization, which seemed always to be available for engaging in interviews.
3. The activities should be progressively more complex, so the need for a stable period of time—in the research, the informal visits progressed to the interviews, which in turn progressed in the subjects to be addressed and always had a duration equal to or greater than 1 h.
4. In order for the proximal processes to be effective, there must be reciprocity in interpersonal relationships—the interaction of the research team with the participants served as the basis for the whole process, so the interviews took place in the form of conversation, and the team was always available to respond to participants' questions and provide support when needed.
5. Finally, in order for reciprocal interaction to occur, the objects and symbols present in the immediate environment should stimulate the attention, exploration, manipulation, and imagination of the developing person—in this research, the topics addressed in the interviews aroused the interest of the participants since they were related to their life stories.

Throughout the investigation, several proximal processes occurred, both for the participants of the research, who, when talking about their life experiences, had the possibility of reflecting and learning with them, as for the research team, which, when interacting with families and the community where they live, has managed to capture important units of meaning to answer research questions and develop new theoretical hypotheses. These proximal processes, however, were only possible because of the Ecological Engagement of the research team in the environment where the families live, that is, a constant, significant, and stable presence. The team needed to become part of the environment to acquire the ecologically inserted condition in the context of the research.

The person involved the physical presence of the researcher and his team in the community and within the families. The environment was perceived and analyzed, both from the personal characteristics of each participant of the team and from the perception of families, valuing the individual experience of each person within the community.

The context was analyzed by the participation of the research team in some environments and from the reports of the families about them. Particular attention has been paid to the perception of families about the environment in which they live, since, according to Bronfenbrenner (1979/1996), it is necessary to examine the environment as it is perceived and experienced by the people, not only as it could exist in reality objective. The four environmental levels were included in the analysis: the

micro-, the meso-, the exo-, and the macrosystem. The micro- and mesosystem were captured and analyzed through the experience of the team within families, schools, villages, the neighborhood in which the community is located and the families' reports about these and other environments frequented by them, such as health centers, recreation areas, and family homes. The exosystem was analyzed by the families' reports about their perception of the environments they did not attend, but which had an influence on their lives, such as the City Hall. The macro system was analyzed through the team's perception of the families' lifestyle, their values, beliefs, the influence of socioeconomic and cultural aspects and the families' reports on these aspects.

The time involved the longitudinal monitoring of the families within the community, which allowed analyzing changes and continuities occurred in the micro-, meso-, and macrotime levels. The microtime allowed analyzing continuity and discontinuity within the proximal process episodes through the parent/child interaction, as reported by the families. The mesotime allowed analyzing the periodicity of the proximal process episodes through longer time intervals, such as days and weeks, which were inferred from the families' reports of their routines. Macrotime allowed us to focus on changing expectations and events within the broader society, such as changes of the mayor and governor, changes in the physical environment, such as community reform, and the intergenerational history of families permeated by their reports.

Based on the Ecological Engagement of the research team in this community, it was possible to conduct multiple case studies with the three families, to describe the environment in which they live and to capture sense units in their reports to illustrate the risk and protection aspects in place. In this way, it was possible to analyze the influence of these aspects for the processes of vulnerability and family resilience (see Cecconello, 2003, for a complete description).

The choice of the study by the qualitative methodology of Ecological Engagement in the community was fundamental to the understanding of these processes within the families. This methodology induced the research team to place itself as an instrument of observation, selection, analysis, and interpretation of the data collected. As Bastos points out (Bastos, 2001), in qualitative research, the researcher, as an interviewer and observer, is seen as the main research instrument. In this process, the primacy of their personal characteristics, their posture, and performance are the main instigation of the interviewee's discourse. Bastos emphasizes that this perspective has as main objective to construct a familiarization, a certain level of intimacy with the observed situation so that one can have access to the phenomenon to be investigated, as it occurs in its natural environment. In this sense, the experience of interacting with the families and the community in the context in which they are inserted allowed the deep knowledge of the investigated phenomena. The Ecological Engagement guaranteed the ecological validity of the study with families at risk in their natural environment, as it was valued the influence of the characteristics of the people interviewed, the context in which they are inserted, the time they are living and the proximal processes that occurred between themselves and between them and the research team.

In a special way, the proximal processes formed the basis of this investigation, enabling not only the understanding of the phenomena investigated by the team but

also the development of families, based on the intervention provided by the research. The monitoring of families during the 4 years acted as a type of intervention. Each meeting provided the parents and the child interviewed with space and time in which they were listened to, in which, in addition to responding to the interview, they could relate their experiences, difficulties, and feelings. Szymansky (2001) states that interview as a social interaction is always an intervention, since the human being is never neutral to another, always having a mutual influence between people, caused by the interpretation of the situation. The interviewer–interviewee relationship provides a space and time for reflection and exchange of ideas, in which the professional is able to provide information and discuss alternatives to the problems presented. Szymansky also points out that the intervention character of the interview is the result of an awareness process triggered by the interviewer's performance, in order to make explicit his understanding of the interviewee's discourse. In this sense, it can be affirmed that the methodology of Ecological Engagement described in this chapter fulfilled a dual role: besides allowing the accomplishment of a research in the natural environment, with ecological validity, provided the occurrence of a social interaction process, acting as an intervention. In this way, it contributed to the resilience of families.

The study developed allows considering the Ecological Engagement a methodology that shows to be suitable for use in scientific research. The basis of this assertion is the evidence that the findings were obtained with methodological rigor and can be considered ecologically valid. It is important to emphasize that this methodology of Ecological Engagement must be used with the ethical responsibility of the researchers, once they become part of the daily life of the people involved in the research execution process. The line between Ecological Engagement and harmful belonging can be very tenuous if the research team is not clear about their role in the current process. This attitude will allow the other participants in the research also to have defined the boundaries of the intervention and the possibilities available. The Ecological Engagement can be used in isolation, aiming to obtain data about children, adolescents, and families at any socioeconomic level or condition of life. The data obtained may serve not only for research use but also to support therapeutic, psycho-pedagogical, educational, or clinical advice. They should not, however, be used as a single instrument for decision-making on the lives of those involved, such as when a more specialized diagnostic evaluation is required. The most appropriate use, therefore, is as a research methodology. Psychologists and other professionals who choose them for their work must make an ethical commitment, ensuring the protection of the rights of their participants.

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Chapter 3

Revisiting the Ecological Engagement: New Aspects and New Research Examples



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The objective of this chapter is to update the methodological model of the Ecological Engagement, which has been widely used in Psychology and other disciplines of Human and Applied Social Sciences research (Coscioni, Fonseca, & Koller, [this volume](#)). The method has been continuously updated, based on new research and the constantly revised perspectives of the theoretical model.

The Bioecological Theory of Human Development (TBDH) was constantly reformulated and restructured due to the critical view of its main theoretician Urie Bronfenbrenner and his collaborators. The analysis of ecological environments in human development allows the access to growth opportunities, such as to the moments of stability and instability of the contexts in which people are inserted, to the affective interactions and to the relations of power in the interpersonal dynamics (Bronfenbrenner, 1979/1996). The evolution of the theory allows the main concepts to be revised as to their importance in understanding human development.

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The first theoretical model delineated by Bronfenbrenner (1979/1996) had in the environment its main focus. The context in which individuals were embedded and the way they perceived it, rather than how environments would be objectively configured. In 1992, Bronfenbrenner called his propositions Theory of Ecological Systems and contemplated in detail the aspects of development linked to the person. The evolution of the theory has led to an increase of the understanding of development in order to consider four interrelated aspects: process, person, context, and time (model PPCT). The changes in this model led to the Bioecological Model of Human Development and, then, to the Bioecological Theory of Human Development. One of the main concepts, which have gained importance in the evolution of the Bronfenbrenner ideas, is the proximal process, considered the first mechanism of human development. (Copetti & Krebs, 2004).

However, in spite of the numerous updates of the theory, Bronfenbrenner never proposed a method of investigation clearly operationalized for the accomplishment of researches. To adopt a research model based on this theory, researchers must construct their design and analysis from their four key elements (model PPCT). But the ways in which these elements are presented in the researchers' designs were not presented by the creator of the theoretical model. In his publications, descriptions of research are made that approximate the proposal of the theory (Bronfenbrenner, 1999, 2005; Bronfenbrenner & Evans, 2000), but a method is not constructed that effectively operates the model so that researchers can fully support. However, the ideas of the Ecological Engagement method were presented in 2002 to Bronfenbrenner and in subsequent years discussed at length with him, and all his suggestions and ideas were incorporated throughout the ongoing studies. In a personal communication in 2002, Bronfenbrenner supported the idea and regretted not having more time himself to publish with the authors the ideas proposed and in development. Unfortunately, he died on September 25, 2005, not allowing him to advance with him in the development of the method.

As theory and method intertwine, groups that adopt TBDH developed new systematizations with the objective of better access to human development systems. In Brazil, after conducting some research based on this model, researchers came with the methodological proposal denominated Ecological Engagement (Ceconello & Koller, 2003). In the same way, it is intended, in this chapter, as Bronfenbrenner himself did, to revisit and update the proposal of Ecological Engagement developed by the Brazilian researchers as well as to present some studies that used this method of investigation. It is important to point out that not all the researches that have as theoretical support the TBDH use the Ecological Engagement as a systematization of the PPCT model. This is an option of some researchers, influenced by the research problem to be investigated. But all research using the Ecological Engagement method should be based on TBDH. The chapter begins by describing how the four key elements of TBDH (process, person, context, and time) are present in the Ecological Engagement. The following is an attempt to describe its application in research and to present recommendations to help research teams that intend to use this research method.

The Ecological Engagement and the PPCT Model

The Ecological Engagement, a methodological proposal developed by Ceconello and Koller (2003), involves the systematization of the four elements of the PPCT model. This operation arose from the need to contemplate the different aspects brought by Bronfenbrenner, which traditional methodologies did not fully incorporate, providing ecologically valid data that included all the ecological dimensions of human development - person, process, context, and time. As the author himself pointed out to researchers in the field, even the proposition of his theory was doing “a strange science, in strange situations, with strange people and for a period of time as soon as possible” (Bronfenbrenner, 1979/1996, p. 16). Ecological Engagement emerges from the need to evaluate the processes of people’s interaction with the contexts in which they are developing over a period of time. They appear as an alternative to psychological studies that emphasize only the characteristics of the individuals, without valuing context and time or being more specific without apprehending the development process as a whole. The environment in this kind of investigation, therefore, has a key role, since it is in itself that the interactions and the proximal processes happen (between people, objects and symbols), in their histories, routines and future perspectives. To understand how each element of the PPCT model is articulated with the Ecological Engagement proposal a brief description is made below.

Process

Human development occurs when it is established a pattern of stable and reciprocal interaction between people and their environments. According to Bronfenbrenner (2005): “Throughout the course of life, human development occurs through increasingly complex processes of reciprocal interactions between an active human organism in biopsychological evolution and people, objects and symbols in its immediate external environment. The interaction must occur on a fairly regular basis, over long periods of time to be effective. These enduring forms of interaction in the immediate environment are defined as proximal processes. Examples of such processes include feeding and comforting a baby; playing with a small child; activities among children; group or solo games; reading and learning new skills; athletic activities; troubleshooting; care for others; making plans; performing complex tasks and acquiring new knowledge. (...) To sum up, proximal processes are positioned as the primary engines of development.” (p. 6).

The proximal process, according to Bronfenbrenner and Ceci (1994), is necessary for the development of the biological capacities and the genetic potential of each person, since it enables the resources of the person to be stimulated and developed. Bronfenbrenner (1999) emphasized the importance of the simultaneous presence of five aspects in order to establish a proximal process: (1) the

person must be engaged in an activity; (2) this activity should happen on a relatively regular basis, over extended periods of time; (3) activities should be progressively more complex; (4) there must be reciprocity in interpersonal relationships; and, (5) the objects and symbols present in the immediate environment should stimulate the attention, exploration, manipulation, and imagination of the developing person. And these five steps are fundamental in establishing the Ecological Engagement in all the methodological processes of the research to be developed (see Morais, Koller, & Raffaelli, 2016).

Cecconello and Koller (2003) argued that the proximal process arises through the reciprocal, complex interaction and with a regular base of researchers, participants, objects, and symbols present in the immediate context, forming the basis of all research that adopts the Ecological Engagement. The proximal process, besides being the focus of research, is what allows the research development. The research-in-context process, such as proposed by the Ecological Engagement, involves the entry of the research team directly into the field during a predetermined time in order to reduce the strangeness of the place and the people. This approximation happens gradually and progressively, and in the meantime, individual experiences and interpersonal exchanges with objects and symbols happen.

The proposal of Cecconello and Koller (2003) presents an extension of the concept of proximal processes. Not only do people develop in a specific context, but also the researcher (who inserts himself directly in that context) starts to have his own development affected by the research process. The research process generates proximal processes in the development of the team itself, in each of its members and in the relationships established with the research object, be it a person, a group or an institution. Intensive work with the research team is fundamental to keep the focus of the study in constant attention, allowing interaction with the context but considering conflicts of interest and other ethical aspects that may arise when proximity becomes inadequate. In some cases, it is impossible to establish the results of this interaction in the context under study, but the importance of the research team presence in a context, in a serious and committed way, generates the exchange of information and energy, thus establishing proximal processes.

Person

The human being, described by Bronfenbrenner (2005) as a biological and psychological being, constantly interacts with its context and is the product of this interaction process. Bronfenbrenner used the term interaction with a spiral, multicausal, and procedural connotation. That is, human development occurs through enlargements and approximations between the person and the various elements of the context that influence each other in a nonlinear and dynamic way, changing qualitatively over time. Interaction is related to the study of processes and relationships between variables that are constantly changing, and not with isolated elements. Bronfenbrenner and Morris (1998) pointed out that interactions occur with people, and also between

them and symbols and their contexts. Interaction means more than a simple and punctual relationship because it implies changes in both parts involved. It is as if one develops in “interaction”, in interplay, in constant exchange with others and with the environment. In interaction, the person constructs meanings that define his particular form of action in the various contexts of development.

From his first theoretical formulation, Bronfenbrenner (1979/1996) mentioned the presence of reciprocity in relations, covering all directions. That is, what A makes influences B and concomitantly changes oneself (A) reciprocally. The actions of C that can be a mere observer while being influenced by the other elements (A and B), also modify them. One element is simultaneously influenced and influences the behavior of others, forming a tangle of relationships and influences with various combinations. In any relation, and especially in the course of a joint activity, there are mutual reflexes and feedbacks between people that consequently produce developmental effects on the life cycle of all those involved. Reciprocity generates a *momentum* of its own that encourages and mobilizes people to engage and persevere in progressively more complex patterns of interaction. The greater the reciprocity in the interaction the greater its complexity.

In Ecological Engagement, the researcher is valued similarly to the research participant. Each one has its interaction processes altered, providing the construction of a common field of development. The research team inserted in the context under study establishes relations of reciprocity that are valued and considered in obtaining and understanding the data and systematizing the results. The field diary is a fundamental tool to capture these interactions and constructions in the development of the team of researchers.

Context

In TBDH, the influence of the environment on the development process differs between people in terms of extent and type of consequences. The environment plays a decisive role in development, being understood in physical, social, and cultural terms. Likewise, a person’s psychological perception of the environment influences how each one develops. This understanding overcomes a linear relationship between context and person, in which only one influences the other, which has been pervaded in several theories of human development. The relationship between person and environment is multidirectional, with both elements inter-influencing. The environment is not conceived simply as a source of stimulation that elicits independent responses, since the individual has an active and intentional role, not constituting himself as an isolated element. Context acts as a source of information with which the person interacts at various levels of complexity (Magnusson, 1995).

The context, therefore, was subdivided into four levels of interaction: the microsystem, the mesosystem, the exosystem, and the macrosystem (Bronfenbrenner, 1979/1996). It is necessary that the Ecological Engagement occurs in the microsystem (where the proximal processes occur) and that its understanding may be related

to the other systems, broadening the field of investigation. For example, an investigation in the school context may have the following as focuses of study: relationships in the classroom (microsystem), as between teachers and students' families (mesosystem), coordination meetings with teachers (exosystem), or the understanding of the culture in which the school is inserted (macrosystem). Such a study could choose one of these focuses or articulate all levels of context to perform an understanding of the phenomena studied in an amplified way with the view of the microsystem to the macrosystem. It is crucial that researchers are clear about their objectives in order to develop a work program that allows access to the most appropriate systems. It is also important that the study can define, delimit, and choose how to understand each type of system. As in the example, the coordination of the directors' meetings with the teachers was conceived as exosistema, the relations in the classroom as microsystem to be investigated. For each research, depending on the established objectives, the researchers need to delimit their focus of study and choose the most appropriate context for the analysis sought. Because developmental psychology is a recent field, there are a number of poorly studied areas under the focus of TBDH, although the growing interest is noteworthy. For example, the development of the adult in interaction with his/her family of origin or the development of the elderly in situations of activities in social groups or their relation with some limitations of this moment of the life cycle are fields still little explored. However, the focus of research will be directed to the interactions these people establish in one or more specific contexts. Even focusing on one or another system, researchers should not lose sight of the existence of other spaces, which interact and influence the development of all involved.

Time

Noting that development takes place through proximal processes, Bronfenbrenner (1986) encountered the question of time and its natural influence on human development. He then structured the concept of chronosystem, establishing a research model that allows examining the influences on the development of the person and the changes (and continuities) over time in the environment in which the person lives. The concept of chronosystem reinforces the idea of the person's interconnected involvement in context with processes over time. Such inclusion indicates the recognition of constant change and the impossibility of development without the establishment of interactional processes. Time plays a role in the development, from transformations, discontinuities, and continuities characteristic of the life cycle. Interactions in the chronosystem exert a cumulative influence on significant processes of human development.

By following the development cycle of a human being, it is apparent that the developmental impact of interacting people changes over the years. Complexity increases in direct relation to the level of reciprocity, complexity, mutuality of positive feeling and gradual modification of the balance of power in favor of the

developing person. The reciprocal interaction becomes a means with unique moments that motivate and support the developmental processes. Such a phenomenon occurs as people remain in interaction (Bronfenbrenner & Morris, 1998). Time, therefore, is a fundamental element in the analysis and constitution of proximal processes. Thus, conducting research that adopts the Ecological Engagement requires that the researchers consider the temporal factor and the changes in the development of all those involved in the research process (whether participants or researchers). The interactions that are established in this process influence the development of all.

Ecological Engagement in Comparison with Other Research Methods

Before exploring the specific characteristics of the Ecological Engagement, the differences that this method presents in relation to other proposals that also work with the insertion of researchers in the field of investigation should be pointed out. There are several methods that are concerned with the relationship of researchers with the field. These include participant observation, participant research, and ethnography. But beforehand the Ecological Engagement appears as the only research method that effectively is based on the theoretical model proposed by Bronfenbrenner. The researchers, prior to their departure for data collection, should have in-depth knowledge of the theory and search for data that validates their hypotheses or allows the creation of new ones, based on the person, process, context, and time dimension, as defined by Bronfenbrenner. Theoretical, methodological, and ethical training is fundamental before entering the field (see Morais et al., 2016).

The *Participant observation* or active consists of the observers' participation in the daily life of the community, the group, or a specific situation. Observers assume, at least to some extent, the role of group members. They can take it in two ways: the *natural* one (in which researchers actually belong to the same group they investigate) and the *artificial* one (when observers join the group for the sole purpose of conducting an investigation). Artificial observation triggers, according to Gil (1994), more problems for researchers than natural observation. One of the controversial aspects of artificial observation is the decision on whether or not to use a disguise for group integration. Another aspect is the decision whether or not to describe the research objectives to the participants, in order to protect a member of the group who knows the intentions of the research or who may be impaired by the study.

Participant research is a methodological option that articulates researchers with the field of research, criticizing the idea of research neutrality. Subjectivity is transformed into an analytical category and has a differentiated treatment. Participating research is mainly concerned with the role of researchers in the investigated situation. Attention is drawn to the establishment of a less hierarchical dialogue between researchers and participants, creating a new perspective on the relationship between

(da Rocha & de Aguiar, 2003). Participating research, according to Haguette (1990), involves the action reflected in an organic process of change, whose protagonists are researchers and the population interested in change. This change in understanding the research allows both to be coauthors of the process of diagnosis of the problem situation and, consequently, the construction of ways to solve it. As the main objective of the participant research is to increase and promote the quality of life of the studied population, the data produced during the investigations are made available to the investigated group and used as tools during the investigation process.

Among the participatory research modalities are action research and intervention research. Action research is a research method that aggregates several social research techniques, with which a collective, participatory, and active structure is established at the level of information capture, therefore requiring the participation of the people involved in the investigated problem. The purpose of action research is to solve or clarify the problems identified in the observed situation. The research is not limited to the action, it presupposes an increase of the knowledge and the “level of conscience” of the people linked to the situation and of the researcher himself. They arise in the 1940s from the ideas of Kurt Lewin and emphasize that the participants (called actors) must be able to express their opinion on the phenomena being studied. The mere observation by the researchers is not enough; in action research, how the participants question the situation, how they understand it, and what they want to change must be taken into consideration. In general, action research is an activity of understanding and explaining the action of social groups on their own, in order to improve this praxis. The intervention research is based on the philosophy of difference and institutional analysis and aims to produce knowledge through self-analysis, self-management, and participatory diagnosis. Intervention research, therefore, is a method that seeks to encourage autonomous (self-reliant) development from the bases of the group, considering a relative independence from the outside (Haguette, 1990).

Brandão (1990) stated that the researchers are part of the field under study. With this statement he suggests that the researchers go through a process in which they try to mitigate the distance that separates them from the group with whom they intend to work. It indicates that this process (of engagement) is an indispensable condition for the research-participant to be carried out. Participants should feel they are protagonists of the study and not mere objects of investigation. For this reason, the engagement process must be done with patience and honesty, allowing researchers to capture the dynamic and contradictory logic of each social actor’s discourse and his relationship with the other actors. In addition, it is necessary to awaken in the participants of the research (called dominated) the desire for change, allowing a joint elaboration of the means of its realization.

Another methodological option that emphasizes the need for engagement in the context of development is ethnography. According to O’Connor, Davis, Meakes, Pickering, and Schuman (2004), ethnography has the interview and the field diary as the main ways of collecting data. Such data are systematized to allow a rich and complex description of the search context. The investigations, which use ethnography, seek to study and understand the culture in which the participants are inserted.

The people interviewed and observed during the research are therefore considered participants or coresearchers. For Mattos (2001), ethnography's main concern during the analysis of a specific culture is to obtain the most complete description as possible about what the participants do and the meanings that the group attributes to their activities. After data collection, the interviews are transcribed and a careful analysis of the information obtained through the reports and the field diary is done. Beltrame and Camacho (1997) emphasize that a quality ethnography must support a reanalysis of its initial data, allowing diverse approaches. In this way, through multiple glances, it allows a greater understanding of the observed complexity. This possibility of reanalysis is proof of the scientific quality and appropriateness of the research.

The Ecological Engagement, compared to the forms of research described, presents some similarities. All approaches emphasize the need for involvement with the field and to consider subjectivity in the context investigated. However, the theoretical basis on which they are based and the intention of the researchers in one and another approach indicate the main differences between the methods. The Ecological Engagement is based on the precepts of TBDH, postulated by Bronfenbrenner (1979/1996), which has repercussions on the objectives of researchers. While the participant research aims to give back to the group aspects identified in its functioning and structure, ecological researchers are concerned with understanding the process of people development. That is, they intend to investigate the relationships (processes) that they establish during their personal or social growth, in the course of their history (time) in a given context. The researchers and here it is possible to perceive an important difference, besides not being neutral, have their own personal development process influenced by the interactions they establish with the research participants. Ecological researchers are people in development (process), being part of the research scenario (context), at a time in their personal history (time). TBDH allows understanding the processes that are established in the human development while the research is carried out, to test hypotheses and to create new ones. A comprehension that involves since the relationship between two people to alteration in the widest cultural context in which they are. It is a dynamic, systemic, and complex vision that emphasizes and allows access to the ever-present instability and change in human development.

TBDH stresses that people and their environments are constantly changing (Elder, 1995). Development takes place through the relationships that are established between the developing person and the changing environment. As Cairns and Cairns (1995) point out, "in the course of development, individuals inevitably grow, mature and change. At the same time, changes occur in their societies, communities and social network" (p. 399). This relation between person and environment has a procedural character, because to the extent that the person changes his environment, this also changes. As the environment changes, people consequently transform themselves, as well as relationships, having an intrinsic relation between these elements.

Involvement with the context by all members of the research team is a prerequisite to the Ecological Engagement. There is a search for the understanding of the

spaces studied, through the tracking of the interactions that occur between the various subjects, symbols, and objects of the context and that allow the ecological validity of the findings. The level of engagement is closely linked to the research problem. Thus, researchers go to the field to observe and collect various data, even those that do not relate to their research topic, to understand the process, person, context, and time in human development. This engagement, although informal, needs to encompass the complexization of interaction and the rigor of data collected and recorded systematically. It is important to note that all observations, events experienced, impressions, doubts, and emerging feelings are recorded in field notes throughout the research process. In this work, the chapter by Morais, Borba, and Koller details the importance of the records and encourages the use of field diaries in bioecological research. However, it must be remembered that the research objectives need to be clear both to avoid an excess of notes and/or records and for the collected data to be filtered and elected in order to respond to these.

In order to clarify the importance of the context in the Bioecological Theory of Human Development, it is necessary to retake the concept of proximal process. According to Bronfenbrenner (2005), human development happens through increasingly complex interactions between a biopsychological being and people, objects, and symbols of their immediate environment. It is perceived that the immediate environment has a central role in the theory developed by Bronfenbrenner, since it is the resources that are contained in it that enable the development. However, Bronfenbrenner emphasized that the wider environment directly influences how the immediate environment resources are organized. In addition, the developmental outcomes established through the proximal processes arise not only from the environment, but from the characteristics of the person (including the genetic ones). From these propositions, it is noticed that there is, as already said, a multidirectional relation between person and environment.

The Ecological Engagement, as described in Cecconello and Koller (2003), relies on the five indispensable aspects for the establishment of proximal processes. Thus, (1) researchers and participants interact and engage in a common task; (2) there is a need for several meetings, over a considerable period of time; (3) informal meetings will progress to conversations that should address ever more complex issues, reaching a duration of 1 h or more; (4) the proximal processes that are established in these meetings serve as the basis for the entire research process, being fundamental the informal and conversational posture, that allows the dialogue on points not directly related to the objective of the study; and (5) the topics addressed in the interviews are interesting and stimulating for researchers and participants, as they explore the life histories and the way in which the development inserted in the context under study.

In the examples of proximal processes, presented by Bronfenbrenner (2005), it becomes evident the necessity of constancy and regularity of time of the interactions so that the healthy development course (or not) is established. In the proximal processes, all involved are recursively important one for the development of the other. In Ecological Engagement, the exact developmental effects obtained during a research are difficult to determine, including because the duration of the research is

delimited. However, proximal processes are certainly established between researchers and participants, researchers and other team members, and researchers and institutions in which research develops. There should be no intention of staying in these relationships. In research involving intervention, it is important to maintain the individuality of people and the characteristics of communities. Researchers should empower their participants during the research process, so that when they leave the field, everyone can follow the course of their development independently and strengthened. Everyone changes with research, everyone learns, everyone is still developing.

The proximal process is established when all the people that act in this interplay develop; it is therefore considered a reciprocal process. During the execution of research that adopts the Ecological Engagement, for example, reciprocity implies exchange and this is established in several ways between the researchers and the participants. Since the beginning of the research, participants have in mind that this exchange will happen, since the participation is voluntary and there is a concern to clearly present the objectives of the study.

Insert-in-context must be previously contracted. The contract does not happen by chance, but must be the result of planning and reflection. The Free and Informed Consent Form can be a good instrument of agreement between the parties. Researchers need to make clear to the participants what the activities, the time, the need for involvement, the risks, and consequences of the research will be, as well as the return that will be made of the data found. The duration of work should also be combined between the parts, ensuring that the expectations of both protagonists will be limited in duration. It is crucial that participants know when the research process begins and ends, with its well-defined stages and moments. Such contract allows the establishment of healthy relationships during and after research, mobilizing the least frustrated expectations on all involved during the study.

The Informed Consent Term (TCLE) is a way of formalizing reciprocity in the participant–researcher relationship, since this document describes all the rights and duties of the parties involved in the research. The mandatory use of this document in research involving humans was defined by the National Health Council in its Resolution number 196/96. This Resolution determines that any researcher who wishes to involve human beings in their study must obtain the consent of the participant and/or their legal representative by signing a document. There is a determination that researchers should not use simulation, fraud or error, dependence, subordination, or intimidation to achieve such consent. Researchers should fully explain the nature of the research, its objectives, methods, anticipated benefits, potential risks, and any discomfort it may cause. In developing the TCLE, researchers should consider all these principles, ensuring that the research procedures are within ethical standards, informing participants that participation is entirely voluntary. Thus, when the participants/responsible sign the TCLE, it is their prerogative to provide their consent on participation in the research, agreeing to the procedures. Recently, the National Health Council in Brazil approved Resolution n.510/2016, which deals with the epistemological and empirical diversity of the areas of Human

and Social Sciences and, the possibilities of contract between researchers and participants (see Lordello & Silva, 2017).

Researchers and participants establish a reciprocal contract in which they are aware of how the relationship between them will proceed, making it clear that both parts agree to the same. Researchers who use the Ecological Engagement when using this document in their surveys ensure that participants will be legally protected. This gives participants greater security to engage in relationships, facilitating exchanges and show reciprocity. However, although the TCLE serves as a sort of initial contract for conducting the research, it is necessary that the researchers in the Ecological Engagement engage beyond the formalities described in it. It is imperative that they are willing to integrate into the context, relating in an appropriate, committed, and ethical way and as close as possible to the participants.

The duration of the researchers' engagement in the field is closely linked to the study objective. In this sense, the *timing* (defined as the optimal time for the formal start of the research) of the Ecological Engagement is defined according to the objective, the focus to be investigated by the research team, and formalized by the participants' ICF. *Timing* of engagement influences both human development and research development. For an interaction to generate a lasting effect on development it must happen at a good time. Situations of crisis (or stress) can arise that trigger the resumption of resources or the attempt to reorganize its evolution. In the Ecological Engagement, the objectives of the research define the moment of entry and exit of the team in the field and the way in which the interactions are established.

There is also a need for participants to agree that the research is important for their development. It must be seen as an opportunity and not as an imposition. Working with a nonfavorable scenario, for example, with participants not engaged in the investigation, prevents the establishment of proximal processes, hampering the progress. Because there is a concern in establishing a process of rich interaction between researchers and participants, the reciprocity of interest of all those involved in the development of the study is fundamental.

However, according to the objectives of the study, the *timing* of the Ecological Engagement should be quite planned. For example, if the intention is to verify the attitude of the children in the family routine, during the period of school adaptation, it is important to follow this routine a few months before entering school, until the first months after the child's adaptation. There are also cases where the engagement of the research in the context can only happen after an event (for example, the repercussion on the behavior of colleagues in the classroom, after the kidnapping of a class member). In cases of violence against children, for example, it is not possible to contact the participants in a planned manner before violence. Proceedings prior to this event will be accessed retrospectively through the reports of those involved.

In order to establish the Ecological Engagement, it is necessary to be engaged in the same activity, to create regularity in the interaction of the research object with the researchers according to the research objectives. It is also necessary to search for the meaning of the objects and symbols of the context and to keep in mind that the proximal processes will be increasingly complex. In considering the proximal

processes as the main engines of human development, only the progressive and more complex understanding of these activities will provide the researchers with a greater understanding of context and time. It is through the proximal processes that the influence of all other elements (person, context, time) is expressed to the researcher. Therefore, the proximal processes are the lens that allows access to the research data.

The interaction of researchers with the research context allows the discussion of the meanings attributed to them by each member, making possible an analysis of the proximal processes within the team. This way of working with data collection does not leave aside the importance of its rigor, systematization, and consistency, which characterize the formality of the collection. However, the interaction, present in investigations based on the principles described in this article, is marked by informality (characteristic of the natural environment). In this work, Pontes, Silva, and Magalhães propose an important debate about the role of the research group and its procedural aspects in the interaction with the research process and suggest a strategy of collective construction of the knowledge allied to the Ecological Engagement (see more details in Chap. 12).

Ecological Validity

Bronfenbrenner (1979/1996) argued that the ecological concept of *development-in-context* has implications for the method and planning of research. Initially, he postulated that an investigation would be considered valid if executed in a natural environment, involving objects and activities of daily life. However, he himself makes a self-criticism, later evaluating such a definition as “simplistic and senseless” (p. 23), and affirms that ecological validity is the “extent to which the environment experienced by the subjects in a scientific investigation has the properties supposed or presumed by the researcher” (p. 24). He adds that it is not simply the environment in which research is carried out that defines its ecological validity. This is related to the interaction of researchers with the studied context. In order to carry out the research it is necessary that the team engages with the research context and captures how people perceive the interactions between them and, therefore, how the proximal processes are established. In this way, it is not possible to lose sight of the fact that the people who occupy the role of researchers are also engaged in this process, influencing the development of the other characters and being influenced by them. In this sense, this is a counterpoint to the neutrality of science.

Through the concept of ecological validity, Bronfenbrenner (1979/1996) affirmed the need to take into account how the research situation was perceived and interpreted by study participants. Although this concept has disappeared from the studies of Bronfenbrenner, the Ecological Engagement takes it back, indicating it as one of the objectives to be achieved when developing a research (Cecconello & Koller, 2003). Using the notions of person, process, context, and time is the possible access to the movement and development of people inserted in a given context of research.

The concern with the accuracy of the interpretation that the researchers make of the field is necessary to try to reach the ecological validity of the findings. Thus, the idea is to avoid to the maximum the possibility of erroneous interpretations of the data by the researchers and to guarantee the ecological validity of the study. However, the misinterpretation of the researchers is also given to be considered in the results and concerns the peculiarities and the process of development of the researchers and their processes in the insertion. The value of the phenomenological field in ecological research emphasizes how participants experience the research situation in the role they play. While indicating the importance of this construct, Bronfenbrenner acknowledged that “ecological validity is a goal to be sought, envisaged but never attained” (p. 27). The aim of researchers should, therefore, be to get as close to this ideal as possible. Through the Ecological Engagement, the research team can come as close as possible to obtaining shared accuracy of the findings, since it returns, in the warmth of participants’ perceptions, their impressions and receives feedback from participants on their impressions and conclusions. Incidentally, these conclusions are drawn together with all possible stakeholders.

The concept of ecological validity is closely associated with the Ecological Engagement, considering that this model is aimed at the access of people’s interaction patterns (proximal processes) and the influence on the perception and interpretation of the study by the participants. These standards can only be analyzed if the researchers remain for a minimum period of time in the field and are sufficient to respond to the research problem proposed by it. And even more, they can ensure that their understanding is safeguarded in the participants’ perceptions, affirmed by themselves.

Typically, a change in context indicates changes in the rules of an interaction. Where the person is, with whom, and when define the ways in which they interact with others and with symbols and objects that surround them. Behaviors only make sense if understood in the context in which they were constructed. Modifications of context generate variations in interactions and in the way people communicate (Becvar & Becvar, 1999). Transformations in these forms of communication and interaction cause changes in the context. Thus, there is a dynamic relationship between interactions and contexts (Bronfenbrenner & Morris, 1998).

Ecological Engagement as a Research Method

Numerous studies conducted by researchers CEP-Rua (Centro de Estudos Psicológicos Cep-Rua, a Centre of Psychological Studies), over more than 20 years, collaborated to build the base of the Ecological Engagement (Prati, Couto, Moura, Poletto, & Koller, 2008) in investigations with diverse themes: families at a personal and social risk (Cecconello, 2003; De Antoni, 2005), street children (Neiva-Silva, 2003; Morais, 2005). Although these studies can be considered as responsible for this basis, the use of the Ecological Engagement is greatly expanded.

In the present work, it is possible to find the use of Ecological Engagement with different groups of participants in the most assorted regions of Brazil. It is well known that Brazil is a plural country and, although it shares social and economic problems in its 27 states, the realities experienced by its people in each region may have very specific characteristics. The opportunity to access development in very particular contexts has motivated researchers to use EE. The North region, for example, hosts a series of riverside communities in Amazonian ecosystems. Mendes and Pontes chose EE as a strategy to access the reality of one of those communities that literally live islanded on Marajó Island in the Amazon. Silva, Pontes, Silva, Reis, and Mendes also found in EE a theoretical–methodological tool capable of capturing the specificities of the familiar functioning of the Amazonian riverside. According to the researchers, the riverside inhabitants live in geographic and sociopolitical isolation that ends up impacting the organization and functioning of its residents. EE is highlighted in the studies cited for favoring the study of development in the ecological context and for allowing the engagement of researchers and participants in increasingly complex activities on a regular basis of time.

Although the situations of removal from the family of origin and the experience in institutional reception are not an exclusivity of one or another region of the country, Rosa, Nascimento, Santos, Melo, and Souza chose EE to describe the daily life, routine, relationships, and development processes of children from 0 to 6 years old who were housed in an institutional home in Espírito Santo, Southeast Region of Brazil. In the metropolitan region of Porto Alegre, Rio Grande do Sul (RS), Siqueira, and Dell’Aglío identified in EE the appropriate strategy to follow the process of disengagement of the institutional context of five adolescents and the possibilities of family reintegration. As sensitive relationships of the capital’s adolescents with the institutional context, with the family and with the street were described in the EE process by Morais, Koller, and Raffaelli. EE was also the strategy chosen by Vega and Paludo to access adolescents in situations of sexual exploitation in a municipality in the interior of Rio Grande do Sul.

This work also presents reports of the EE in the construction of programs of education in human rights and youth protagonism (Souza, Dutra-Thomé, Schiró, Morais, & Koller) and the application of EE in the process of approaching families affected by a tornado that damaged a community in the northeast of Rio Grande (Krum & Bandeira). EE has already crossed the borders and it was the theoretical–methodological approach chosen to carry out a situational diagnosis on the primary public system in Angola (Sacco & Koller).

Analysis of Common Points for Studies Using Ecological Engagement

Reviewing the studies detailed in the rest of this work, as well as in several articles and dissertations/theses published using the Ecological Engagement; a short list of minimum recommendations for the application of this methodological approach can be established. Below is a list with a brief illustration of what you are trying to emphasize with each item:

1. *A study based on TBDH and its elements (PPCT).*

The construction of the study should be based on the Bioecological Theory of Human Development, using the key concepts of it in order to construct the research intervention allowing opportunities for the construction of a space of coexistence and understanding of the *process* of development of the *people* participating in the research during the *time* in which the research team is inserted in that specific *context*.

2. *Collection of data in ecological environment and presentation of Consent Form Free and clarified.*

The data collection must take place in the context in which the studied phenomenon is occurring. Therefore, the presentation and discussion of the objectives, limits, and risks of the study should be clear to all involved. It is important to establish the means by which the data will be constructed and the period required for the study. From the beginning of the Ecological Engagement both the researchers and the participants must know the why, how, and until when the research will be conducted. It is worth emphasizing that the Ecological Engagement only ends when a return of the data to the study participants is made.

3. *“Period of approximation” between research team and study participants.*

A key feature of the Ecological Engagement is that the “Data Collection” itself does not occur in the first interactions between the participants and the research team. It is necessary to make sure that everyone is sure about their roles in conducting the study and that the proximal interactions are established in a natural way.

4. *Use of field diary and, where appropriate, other data collection instruments.*

The field diary is the basic tool of the researcher used in the Ecological Engagement. This is the space to raise questions and data about the researcher’s process during engagement in the field. Many studies use semi-structured interviews or scales to capture details of the development. The integration of data from the various instruments allows access to the complexity of human development as proposed by Bronfenbrenner.

5. *Occurrence of systematic meetings with the group of researchers.*

Ideally, Ecological Engagement involves a group of researchers. Each researcher will experience in a way the phenomenon under study and these differences enrich the research. The field diary and constant supervisions of the group (in

person or at a distance) allow the construction of new hypotheses and the alignment of the objectives to be reached at each insertion in the field.

Throughout this chapter, the importance of the group of researchers is emphasized. This does not mean that only one person can carry out a study using Ecological Engagement. Our intention is to emphasize that interpersonal exchanges (between researchers, supervisors, and other professionals involved in the construction of the research) is fundamental to the constant concern with the ecological validity of the study. The more interactions among professional researchers the greater are the capacity to question and establish new readings regarding the phenomenon investigated.

6. *Returning to participants.*

This step is considered fundamental in order to construct a unique moment to verify that the data constructed during the Engagement are valid. Talking with the participants about what was identified and presenting the conclusions of the study allows them also to grow and construct other alternatives for their development. Returns can be provided systematically throughout the study, at the time the researchers leave the field after a period of data analysis or, preferably by submitting the material to be published in scientific media before submitting them.

7. *Interpretation of the data from the TBDH PPCT Model.*

The Ecological Engagement will only be complete if the research team maintains consistency with the theory adopted in the analysis and interpretation of the data. The proximal processes and the personal experiences during the engagement are very rich tools to contextualize the results found through the formal instruments of data collection.

Take-Home Message

As discussed in this chapter, Ecological Engagement obeys some assumptions and criteria. It is based on the TBDH proposed by Bronfenbrenner (1979/1996; Bronfenbrenner & Morris, 1998). It is, finally, an attempt to operationalize the elements and assumptions of TBDH in the data collection and analysis obtained in research-in-context (Ceconello & Koller, 2003). The research process itself occurs after a period of linking the research team with the research participants, inserted in the context of the development of these participants. In this period, the contract for the development of the research should be clarified, dealing with the permanence of the team, the participation of the people, the activities proposed, as well as the way in which the team will leave the field and the return of the data. All these aspects need to be expressed and agreed upon in the Informed Consent Form. In the Ecological Engagement it is also necessary to predict and inform that the team is able to provide informal returns during and after the research progress.

Since in this methodological proposal, there is always the involvement of a team and not only of an individual person, it is necessary that the members are constantly

trained and supervised. Training and supervising the team is essential for ensuring methodological rigor and ethical procedures. In order for a good preparation to be possible, in-depth knowledge of the Bioecological Theory of Human Development and its proposals for research in psychology is indispensable. The four main components of the ecological model, namely the process, the person, the context, and the time, form the basis for the Ecological Engagement of the research team and for the understanding of the studied phenomenon. The most relevant aspect, however, must be the analysis of the proximal processes, which occurs through the interaction of researchers, participants, objects, and symbols present at the different environmental levels (micro to the macrosystem), in order to discuss the research findings.

In addition to the scope of the interaction of researchers and participants, the proximal processes must also be investigated in the context of the research team, given that researchers are also developing people and have their own contexts and histories. Through the collection of researchers' information, perceptions, and feelings it becomes possible to make an analysis of the proximal processes within the team itself. The entry of a research team, not just a single field researcher, is an important point for allowing access to nonverbal data (through observation), to proximal processes in several developing people, diversity of interpretation, and data analysis. The discussion of the various points of view of the team members acts as a facilitator to search for ecological validity, avoiding interpretations that are distant from those related to the research focus or those present in the contexts studied. Therefore, all the understandings generated in the context of research should be considered in the analysis of the data.

From the points in common in the works described and discussed, the minimum conditions to develop research following the Ecological Engagement can be identified. The need to better understand this methodological proposal and the minimum criteria required for its use, however, remains in vogue. It is a new method, and it is important that continuous attention to the researches is planned from this approach, for a better systematization of the procedures adopted. The research-in-context requires an ecological understanding of the event studied. However, the Ecological Engagement intends to go beyond this, involving other elements that enhance the ecological validity of the data through the establishment of proximal processes.

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Chapter 4

Ecological Engagement: Systematic Review on the Use of the Research Method



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Ecological Engagement is a research method based on the Bioecological Theory of Human Development (BTHD) developed by the Russian psychologist and naturalized American Urie Bronfenbrenner. As its name suggests, BTHD sets out to provide insight into the development of individuals and groups over time. However, in addition to this objective, BTHD provides methodological guidelines for conducting research in the area of human development. This is based on the understanding of Bronfenbrenner and Morris (2006) that “a good theory is one that can be translated into a corresponding research model that fits with the properties that define the theory itself” (p. 796).

As a landmark for the study of human development, BTHD originates as a theoretical approach centered in context and gradually becomes a systemic theory that considers the interrelation of four elements that favor human development: process, person, context, and time (Rosa & Tudge, 2013). “Process” refers to the everyday interrelations between people, objects, and symbols. Particularly important are the so-called proximal processes, conceived as the “progressively more complex processes of reciprocal interactions between an evolving active biopsychological human organism and the persons, objects, and symbols in their immediate external environment (Bronfenbrenner & Morris, 2006, p. 797). “Person” and “context,” in turn, refer to the personal and contextual characteristics that influence directly or indirectly the engagement in the proximal processes. Finally, “time” gives a chrono-

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logical perspective to BTHD, which shows personal and historical temporal elements that also relate directly or indirectly to the engagement in proximal processes. The emphasis on these four elements consolidated what Bronfenbrenner and Morris (2006) called the PPCT Model.¹

The proposal of the PPCT Model was accompanied by methodological considerations about the execution of research in human development. In the early stages of BTHD, Bronfenbrenner (1979) already harshly criticized researchers in the area, who developed laboratory research and investigated the strange behavior of people in a strange environment, which he called development *out-of-context*. Bronfenbrenner then suggested that research in human development deal with the study of human behavior in the environment in which people were inserted beforehand. In 2006, Bronfenbrenner and Morris considered that the science of human development had advanced in this methodological dilemma, starting to conduct research more frequently in natural environments. However, they emphasized a new methodological problem in the area: conducting research on *context without development*. That is, conducting research without the proper focus on development processes (Coscioni, Nascimento, Rosa, & Koller, 2018).

Although the BTHD brings innumerable methodological assumptions to be considered, Bronfenbrenner never developed his own researches as a means to operationalize the theoretical model proposed by him (Tudge, 2008). For these reasons, a number of methodological dilemmas prevail to this day to be considered in the attempt to operationalize a theoretical model of such complexity as the Model PPCT.

Ecological Engagement (EE) seeks to respond to the demand for a research strategy that is effectively consistent with BTHD. It was systematized, initially, by Cecconello and Koller (2003) in a longitudinal survey that accompanied families in situations of vulnerability during 4 years. The originality of the method consisted in the operationalization of the elements of the PPCT Model during the development of the research itself. That is, EE as a method assumed that the proximal processes necessarily had to occur between the research team and participants. These processes should not only be studied but also favor the emergence of an ecological context that approaches the researched context of the daily reality experienced by the participants. In 2008, EE was reviewed in a theoretical study that deeply analyzed the methodological characteristics of four surveys that used EE as a research method (Eschiletti-Prati, Couto, Moura, Poletto, & Koller, 2008). Five basic conditions for the development of an EE were described: (1) the team and participants interact and engage in an activity; (2) meetings occur on a long-term basis; (3) informal meetings progress to more complex conversations; (4) the team's posture should be informal and allow the development of talks beyond the objective of the research; and (5) the topics addressed in the research should interest the participants.

Fifteen years after the publication of the first article that systematized the EE method, some questions arise: How much has EE been used? What areas and contexts has research been applied in? What experiences have been reported in using

¹For more information on the PPCT Model, see Bronfenbrenner and Morris (2006).

EE? How effectively has EE been used by researchers? To answer these questions, a systematic review of the literature was carried out, whose general objective was to characterize the researches that declared the use of EE in their bibliometric and theoretical–methodological aspects. Considering that the method was initially published in Portuguese, the review mainly presents studies developed in Brazil. However, the purpose of this chapter is to show the strength of the method in this region and to foster its use in research in other countries.

This chapter, therefore, is set up as a systematic review of the literature and databases *Scientific Electronic Library Online* (SciELO), Latin American and Caribbean Literature in Health Sciences (LILACS), Electronic Periodicals in Psychology (PePSIC), Index Psi, and Periodicals and Network of Scientific Journals of Latin America and the Caribbean, Spain and Portugal (Redalyc)—which traditionally index Brazilian scientific productions in the area of Psychology, Education, and Health Sciences. The decision to consult such databases reflects the fact that EE is a Brazilian method still not popular among researchers from other countries. Searches were conducted in English and Spanish and in international databases (PubMed and PsycINFO), but no manuscript was added to the *corpus*.

The searches were carried out in January 2018 and the composition of the *corpus* is summarized in Fig. 4.1. In the search, the term “Ecological Engagement” was used and there was no restriction regarding the year of publication. Duplications were controlled and only scientific articles were selected. After the floating reading, only the reports of experience and empirical research that declared the use of EE as well as the literature reviews that discussed EE were retained. After the full reading, empirical research reports were excluded, which, although they stated the use of EE, did not describe crucial elements for the characterization of the method, as will be discussed below. The final *corpus* contains 46 papers: 39 reports of empirical research, 05 reports of experience, and 02 reviews of the literature. The 39 reports of empirical research referred to 36 researches, since papers were found referring to the same research. All the research procedures were carried out by two independent judges. The disagreement situations were discussed until a consensus.

The data of the selected papers were extracted and organized, based on the following information: authors, year of publication, knowledge field of the published journal, locality of the authors’ institutions, theoretical background, characteristics of the sample, instruments, method of data analysis, and duration and frequency of EE. With regard to the analysis of the methodological quality of empirical research reports, the criteria described in Table 4.1 were created. These criteria were created based on the content of the selected papers of experience review and literature review, which consistently describe the central characteristics of EE, as will be seen below.

The extracted data were qualitatively and quantitatively integrated and analyzed. The frequencies associated with the bibliometric information of the papers were calculated (year of publication, knowledge field of the published journal, locality of authors’ institutions), considering the published manuscript as the unit of analysis ($N = 46$). The papers of intervention report and literature review were qualitatively analyzed, emphasizing their contributions to the characterization of EE. Empirical

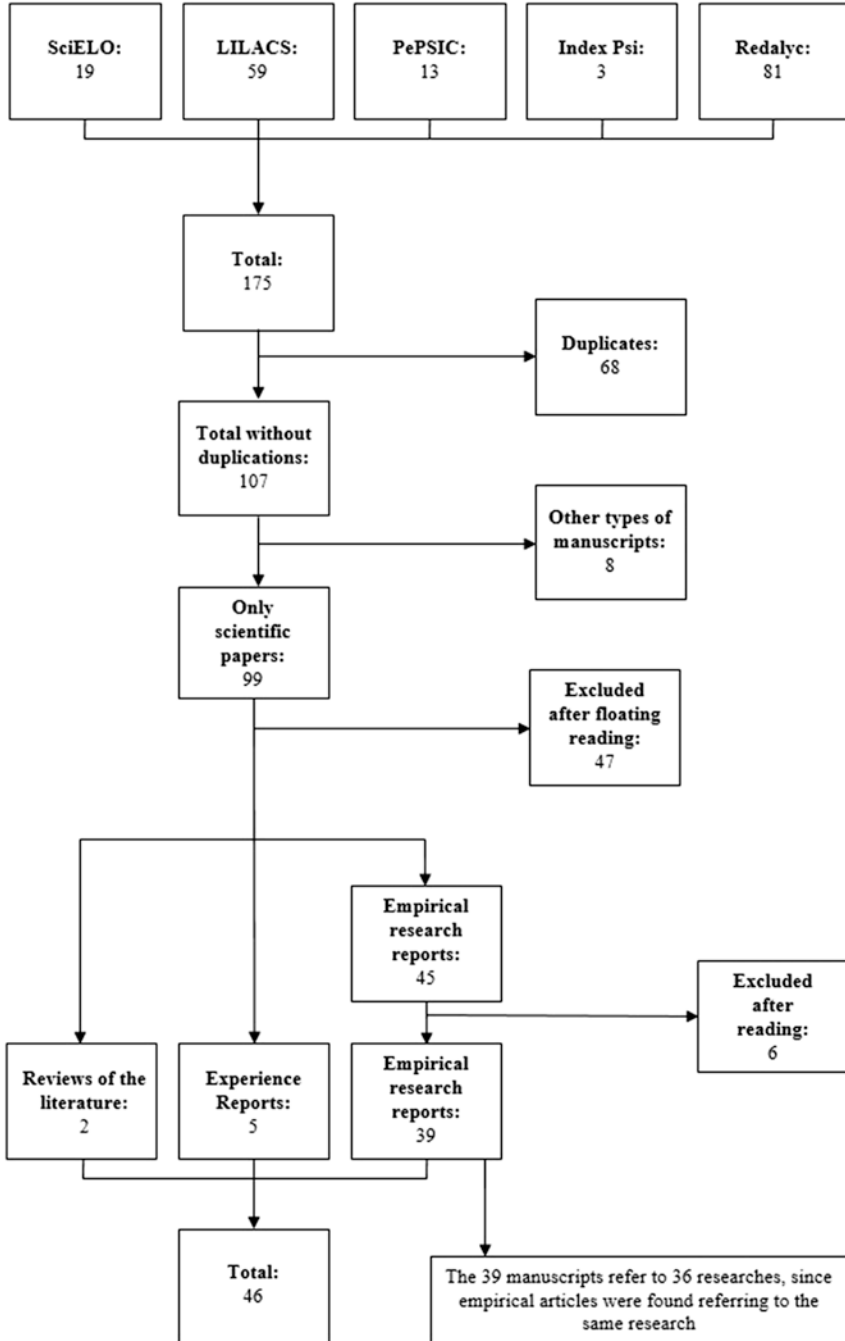


Fig. 4.1 Research Corpus

Table 4.1 Criteria for the methodological evaluation of empirical research reports

Criteria	Description of ecological engagement methodology
1. Is the work grounded on BTHD?	The research was grounded on BTHD
2. Has data collection taken place in an environmentally friendly environment?	EE occurred in an environment in which there was a strong interaction between team and participant
3. Has the EE process occurred in order to provide a gradual approach between team and participant?	EE process was described in order to inform the steps and the formal procedures of data collection
4. Was the field diary used as an instrument in the research?	Feld diary was used as a data collection instrument
5. Was the occurrence of group supervision mentioned?	Group supervisions and group experiences in the field were largely discussed
6. Was the occurrence of feedback returned to the participants?	The results were largely discussed with the participants
7. Was BTHD helpful in interpreting the results?	The results were interpreted based on PPDT model of BTHD

Source: Authors

research reports were quantitatively analyzed: they were grouped according to their theoretical and methodological characteristics, and the frequency associated with the groups was subsequently calculated. For that, empirical research ($N = 36$) was considered as the unit of analysis. The process of composing the *corpus*, extracting and analyzing the data were performed by two independent judges and the differences found were dealt with by consensus.

As observed in Table 4.2, most of the manuscripts are empirical research reports ($n = 39$, 84.8%) published in Psychology journals ($n = 36$, 78.3%). Regarding the year of publication, 23.9% of the manuscripts ($n = 11$) were published in 2012.

Table 4.3 summarizes the main contributions of the papers of Intervention report and literature review for the understanding of EE as a method. These papers constitute important references for the understanding of the central characteristics of EE, such as: (1) basing on BTHD; (2) data collection in an ecological environment; (3) “approach period” between team and participants; (4) use of field diary; (5) occurrence of group supervision; (6) devolution to the participants; and (7) interpretation of the data from the PPDT Model of BTHD. From the survey of these characteristics, the criteria for the evaluation of empirical research reports were created (Table 4.1).

Based on the methodological evaluation criteria created, empirical research reports were classified into three groups. In the first group, the papers that declared the use of EE, but that did not describe the care to assure an ecological environment of data collection, were grouped together. Failure to comply with this criterion (second criterion) generated the exclusion of the manuscript in the last stage of composition of the analysis *corpus*. In the second group, papers describing the ecological environment generated during data collection procedures were assembled but did

Table 4.2 Bibliometric aspects of manuscripts

Manuscript	Area	Type of publication	Region
Acosta, Amaya, and Koller (2013)	Health	Empirical research	Brazil and Colombia
Afonso, Silva, Pontes, and Koller (2015)	Psychology	Intervention report	Brazil
Albuquerque, Garcia, and Yunes (2012)	Psychology	Empirical research	Brazil
Andrade and Morais (2017)	Psychology	Empirical research	Brazil
Brito, Rosa, and Trindade (2014)	Psychology	Empirical research	Brazil
Cardoso and Becker (2014)	Education	Empirical research	Brazil
Cecconello and Koller (2003)	Psychology	Intervention report	Brazil
Cerqueira-Santos et al. (2012)	Psychology	Empirical research	Brazil
Cerqueira-Santos et al. (2006)	Psychology	Empirical research	Brazil
Cerqueira-Santos et al. (2008)	Psychology	Empirical research	Brazil
De Antoni, Barone, and Koller (2007)	Psychology	Empirical research	Brazil
Dutra-Thomé, Cerqueira-Santos, and Koller (2011)	Psychology	Empirical research	Brazil
Faciola, Pontes, and Silva (2012)	Psychology	Empirical research	Brazil
Feijó et al. (2012)	Nursing	Empirical research	Brazil
Fernandes and Matsukura (2016)	Psychology	Empirical research	Brazil
Freire, Silva, and Pontes (2012)	Psychology	Empirical research	Brazil
Garcia et al. (2016)	Education	Empirical research	Brazil and Portugal
Garcia, Yunes, Chaves, and Santos (2007)	Psychology	Empirical research	Brazil
Iriart and Bastos (2007)	Psychology	Empirical research	Brazil
Martellet and Siqueira (2014)	Psychology	Empirical research	Brazil
Marzol, Bonafé, and Yunes (2012)	Psychology	Empirical research	Brazil
Mendes et al. (2008)	Psychology	Intervention report	Brazil
Merçon-Vargas, Rosa, and Dell'Aglio (2014)	Psychology	Empirical research	Brazil
Merçon-Vargas, Rosa, and Dell'Aglio (2014)	Psychology	Empirical research	Brazil
Morais, Koller, and Raffaelli (2010)	Psychology	Empirical research	Brazil and USA
Morais, Koller, and Raffaelli (2012)	Psychology	Empirical research	Brazil and USA
Morais, Morais, Reis, and Koller (2010)	Psychology	Empirical research	Brazil
Morais, Raffaelli, and Koller (2012)	Psychology	Empirical research	Brazil and USA
Pereira-Llano et al. (2016)	Nursing	Empirical research	Brazil
Porciuncula and Porto (2014)	Multidisc.	Empirical research	Brazil and Spain
Porto and Koller (2006)	Psychology	Empirical research	Brazil
Eschiletti-Prati et al. (2008)	Psychology	Review of literature	Brazil
Rosa, Nascimento, Matos, and Santos (2012)	Psychology	Empirical research	Brazil
Rosa, Santos, Melo, and Souza (2010)	Psychology	Empirical research	Brazil
Sacco et al. (2016)	Education	Empirical research	Brazil
Santana, Doninelli, Frosi, and Koller (2005)	Psychology	Empirical research	Brazil

(continued)

Table 4.2 (continued)

Manuscript	Area	Type of publication	Region
Schein and Boeckel (2012)	Health	Empirical research	Brazil
Silveira, Garcia, Pietro, and Yunes (2009)	Psychology	Review of literature	Brazil
Silveira and Yunes (2010)	Psychology	Empirical research	Brazil
Siqueira and Dell'Aglio (2007)	Psychology	Empirical research	Brazil
Siqueira, Massignan, and Dell'Aglio (2011)	Psychology	Empirical research	Brazil
Souza, Dutra-Thomé, Dei Schiró, Morais, and Koller (2011)	Psychology	Intervention report	Brazil
Vasconcelos, Yunes, and Garcia (2009)	Psychology	Empirical research	Brazil
Vega and Paludo (2015)	Psychology	Empirical research	Brazil
Zillmer, Schwartz, and Muniz (2012)	Nursing	Empirical research	Brazil
Zillmer, Schwartz, Muniz, and Meincke (2011)	Nursing	Intervention report	Brazil

not use the BTHD to interpret their results (seventh criterion). The manuscripts of this group used EE as a procedure prior to formal data collection. In the third group, the papers that described the ecological procedures of data collection and that used the BTHD in the interpretation of the results were gathered. Table 4.4 presents methodological characteristics of the last two groups.

Theoretical Background

There was a predominance of researches based on BTHD ($n = 31$, 86.1%), although only 44.4% ($n = 16$) of them used it to interpret their findings (Group 3). The other most mentioned theories were Vulnerability (considering studies on risk and protection factors) and Resilience, which were based on seven (19.4%) and four (11.1%) surveys, respectively. The Paradigms of Health Promotion, Environmental and Ecological Education, as well as Positive Psychology and Attachment Theory were also mentioned.

Participants

More than half of the researches (52.8%, $n = 19$) were conducted with children, adolescents, and/or families using Social Assistance services (institutional shelters, institutions for street children, institutions for the care of children and adolescents who are victims of sexual exploitation, CRAS, and CREAS), Guardianship Council, Health (CAPSi and HIV-positive care institution), Judicial Branch, and/or Third Sector. Seven of these surveys (19.4% of the sample universe and 36.4% of the surveys with children, adolescents, and/or families using services) were conducted

Table 4.3 Contributions of papers of Intervention report, theoretical research and literature review

Manuscript	Contributions of the manuscripts
Afonso et al. (2015)	The manuscript demonstrates the use of the field diary in an EE conducted with a family with a child with intellectual disability in the Amazonian riverine context. The field diary was described as an instrument for recording the participatory observation process of a field researcher. From these records, it was possible to highlight elements analyzed according to the PPCT model proposed in BTHD
Cecconello and Koller (2003)	It is the report of experience of the research that originated EE. The manuscript proposes EE as a method that enables the operation of BTHD and the development-in-context study based on the report of a research that investigated resilience in families in situations of vulnerability. The authors proposed that EE should occur through longitudinal research in which there is a strong interaction between the research team and participants. They also underscored the importance of team surveys in order to discuss the experience of team members in the field
Mendes et al. (2008)	The manuscript presents the strategies used by a research team in an EE in a riverside community. The authors emphasized the role of group supervision, in order to collectively construct knowledge about the field. They emphasized the role of an informant in the community as mediator of the contact between team and participants. Photographic techniques were identified as triggers of later discussions. Finally, the application of a sociodemographic inventory was described as effective in the initial apprehension of the community, as well as favoring a rapprochement between team and participants
Eschiletti-Prati et al. (2008)	The manuscript proposes that EE occurs from five basic conditions: (1) team and participants interact and engage in an activity; (2) meetings should take place on an extended basis; (3) informal meetings progress to more complex conversations; (4) the team's posture should be informal and allow the development of conversations beyond the objective of the research; and (5) the topics addressed in the research should interest the participants. The authors review four studies that have in common the conduction of group supervisions, the use of field diary, and a period of approximation between team and participants before the formal data collection
Silveira et al. (2009)	The manuscript reviews three studies conducted from an EE and delimits the essential characteristics of the method. Their main contribution is the implications of the results of these surveys, in order to describe three university extensions developed based on the research findings. The work rescues the importance of devolution to the participants
Souza et al. (2011)	The manuscript describes an EE conducted in an intervention program for adolescents in situations of social vulnerability. Its main contribution is the possibility of EE occurring in environments where the participants do not insert themselves before the beginning of the research. The authors described the construction of an ecological context during the development of the research, so that the participants gradually became familiar with the environment where the research was conducted
Zillmer et al. (2011)	The manuscript described an EE performed with three rural families living with cancer. The authors described how the five basic conditions for the development of an EE (Eschiletti-Prati et al. 2008), as well as the possibility of operationalizing the PPCT Model based on the findings. They conclude on the possibility of EE favoring an approximation between team and participants

Table 4.4 Theoretical and methodological aspects of researches

Manuscript	Theory	Participants	Instruments	Data analysis
<i>Group 2: Manuscripts which described an ecological environment during data collection</i>				
Acosta et al. (2013)	BTHD	HIV positive children and employees from the institutions where they were treated	Field diary, interview, focus group, documentary research	Software Atlas
Andrade and Morais (2017)	BTHD	Families who used the municipal social assistance service	Field diary, interview, sociodemographic questionnaire	Content analysis
Cardoso and Becker (2014)	BTHD	Grifted teenagers users of social services, their teachers and their families	Field diary, interview, psychometric scales	–
Cerqueira-Santos et al. (2006)	BTHD	Policemen	Field diary, interview	Thematic analysis
Cerqueira-Santos et al. (2008)	–	Truck drivers	Field diary, open- and close-ended questionnaires	Quantitative
Cerqueira-Santos et al. (2012)	–	Civil construction workers	Field diary, open- and close-ended questionnaires	Quantitative
De Antoni et al. (2007)	BTHD, vulnerability	Low socioeconomic families attended by guardianship council because of physical parental abuse	Interview	Content analysis
Dutra-Thomé et al. (2011)	Vulnerability	A teenager victim of sexual exploitation using a service of assistance to victims of violence	Field diary, interview	Case studies
Faciola et al. (2012)	BTHD	Teenagers with disabilities and their classmates	Interview	Case studies
Freire et al. (2012)	BTHD	Riverine families served by an social assistance program	Genogram, psychometric scales, sociodemographic questionnaire	Case studies
Iriart and Bastos (2007)	BTHD	Teenagers and employees from a NGO, a treatment facility for young offenders and a public school	Field diary, interview, focus group	–

(continued)

Table 4.4 (continued)

Manuscript	Theory	Participants	Instruments	Data analysis
Morais, Koller, and Raffaelli (2010, 2012) and Morais, Raffaelli, and Koller (2012)	BTHD, resilience, vulnerability	Children and teenagers living on the streets and children and teenagers users of a NGO	Field diary, psychometric scales, map of five fields, close-ended questionnaires	Case studies, quantitative
Morais, Morais, et al. (2010)	BTHD, health promotion	Employees from an institution which served children living on the streets	Field diary, interview	–
Pereira-Llano et al. (2016)	BTHD	Elderly people affected by falls using traumatology services	Field diary, ecomap, interview, genogram	Thematic analysis
Sacco et al. (2016)	BTHD	Children and teenagers students in public school in Angola	Group interview, close-ended questionnaires	Statistics
Santana et al. (2005)	BTHD	Employees from an institution which served children living on the streets	Interview	Content analysis
Schein and Boeckel (2012)	–	Caregivers of people with severe mental disorders	Field diary, interview, psychometric scales, close-ended questionnaires	Content analysis, statistics
Silveira and Yunes (2010)	BTHD	Families served by judicial power and employees from judicial power	Field diary, interview	Textual analysis
Siqueira et al. (2011)	–	Teenagers in shelters	Field diary, interview	Case studies
Vega and Paludo (2015)	Vulnerability	Children and teenagers victims of sexual exploitation using a service of social assistance	Interview	–
<i>Group 3: Manuscripts which described an ecological environment during data collection and used BTHD for the analysis of results</i>				
Albuquerque et al. (2012)	BTHD	Employees from a city social assistance service	Field diary, interview	Grounded theory
Brito et al. (2014)	BTHD	Employees from a shelter	Field diary, focus group	–
Feijó et al. (2012)	BTHD	Men treating cancer	Field diary, ecomap, interview	Thematic analysis
Fernandes and Matsukura (2016)	BTHD	Teenagers users of a specialized mental health service for children and youth	Field diary, identification protocol	Case studies

Garcia et al. (2007)	BTHD, resilience, vulnerability, ecological education	Fishers' families	Field diary, interview, genogram, open-ended questionnaire	Grounded theory
Garcia et al. (2016)	BTHD	Social vulnerable families	Field diary, open-ended questionnaire	Grounded theory
Martellet and Siqueira (2014)	BTHD, attachment theory	A teenager in a shelter, her family, and the psychologist from the shelter	Field diary, interview	Case studies
Miarzol et al. (2012)	BTHD, resilience, vulnerability	Children and teenagers in shelters	Field diary, interview	Grounded theory
Merçon-Vargas et al. (2014)	BTHD	Adopted children and their adoptive families	Field diary, interview, documentary research	Case studies
Porciuncula and Porto (2014)	BTHD, Ambient education	Institutionalized elderly people	Field diary, interview, photograph	Thematic analysis
Porto and Koller (2006)	BTHD	Institutionalized elderly people	Field diary, interview	-
Rosa et al. (2010)	BTHD	Children and employees from a shelter	Field diary, interview, documentary research	-
Rosa et al. (2012)	BTHD	Teenagers in shelters	Field diary, interview	-
Siqueira and Dell'Aglio (2007)	BTHD, resilience, vulnerability	Teenagers in shelters victims of sexual violence	Field diary, interview, documentary research	Case studies
Vasconcelos et al. (2009)	BTHD, positive psychology	Teenagers in shelters, their families, and the employees from the shelter	Field diary, interview	Grounded theory
Zillmer et al. (2012)	BTHD	Families with people treating cancer	Field diary, ecomap, interview, genogram	Thematic analysis

in a bidirectional way, also collecting information from the employees of these institutions. Four surveys (11.1%) were conducted only with employees of these services and three surveys (8.3%) were conducted with adults who did not work in these services but who lived with children and adolescents in vulnerable situations: policemen living with street children and civil construction workers and truck drivers who lived with children and adolescents who are victims of sexual exploitation. In all, 75.0% of the researches ($n = 27$) dealt with issues related to children and youth in situations of vulnerability.

The remaining researches were performed with elderly (8.3%, $n = 3$), caregivers of people with severe mental disorders (2.8%, $n = 1$), men in cancer treatment (2.8%, $n = 1$), families living with cancer in one of their members (2.8%, $n = 1$), adoptive families (2.8%, $n = 1$), families of fishermen in the interior (2.8%, $n = 1$), and students living with colleagues with disabilities (2.8%, $n = 1$). All investigations, therefore, investigated, to some extent, people in situations of personal and/or social vulnerability.

Instruments

The most used instruments were the field diary (83.3%, $n = 30$) and the interview (77.8%, $n = 28$), followed by questionnaires (22.2%, $n = 8$)—which includes psychometric scales, sociodemographic questionnaire, and open and closed questionnaires. Four case studies (11.1%) used group techniques of data collection, either focal group or group interview. The other instruments used were: documentary research (11.1%, $n = 4$), genogram (11.1%, $n = 4$), ecomap (5.6%, $n = 2$; 8%, $n = 1$), and photographs (2.8%, $n = 1$).

Techniques of Data Analysis

The most used data analysis technique was the case study (25.0%, $n = 9$), followed by the grounded theory (13.9%, $n = 5$), statistical analyzes (13.9%, $n = 5$), content analysis (11.1%, $n = 4$), thematic analysis (11.1%, $n = 4$), discursive textual analysis (2.8%, $n = 1$), and Atlas (2.8%, $n = 1$). Eight manuscripts (22.2%) did not inform the technique used to analyze the data.

Data Collection Process

Regarding the duration of EE, the work ranged from 2 to 8 months. Frequency of field trips was often not mentioned in the manuscript and, when mentioned, was detailed in terms of the number of weekly meetings (from one to four) or total

meetings during data collection. With the exception of the quantitative perspective studies (Cerqueira-Santos, Koller, Pilz, Dias, & Wagner, 2006; Cerqueira-Santos, Morais, Moura, & Koller, 2008; Cerqueira-Santos, DeSousa, Melo Neto, & Rocha, 2012; Sacco, Ferreira, & Koller, 2016), in all the research the participants were accessed at least four times. Only one research (Garcia, Yunes, & Almeida, 2016) mentioned the occurrence of group supervisions among the members of the research team, and only two surveys mentioned the occurrence of devolutions to the participants or institutions (Fernandes & Matsukura, 2016; Porciuncula & Porto, 2014).

Discussion

From the results, it is possible to identify that the use of EE is still predominant in the area of Psychology; however, studies are also found in areas such as Nursing, Education, and Health. Although the number in other areas is still not very expressive, EE can be used in a wide range of research areas, especially health, human and social. Its use in research can potentially be broadened and strengthened.

Another relevant aspect of EE is that it enables the use of several methodological procedures for data collection. The researches studied here have used sociodemographic questionnaires, interviews, inventories to ecomaps, and genograms. This diversity and methodological multiplicity may favor a broader apprehension of the processes, considering that from the BTHD a broad, dynamic, and contextualized look for the research data is necessary.

Although grounded on a theory, EE can dialogue with varied theories, since its perspective of development emphasizes the process, considering all elements of the PPCT model. In this sense, the research used several foundations with emphasis on vulnerability, risk, protection, and resilience theories.

The EE format is undoubtedly bidirectional since the interaction between the researchers and the participants must be configured as a proximal process, that is, grow progressively in terms of complexity, mutual engagement, and have a duration in time. The researches, in general, although mentioning these elements, presented very brief descriptions in this regard.

It was observed that the description of the methodological procedures was a limitation for this study. Many elements of the research course seem not to have been reported, which makes it difficult to understand the exact paths of the researchers. A good description of all the procedures, from the approach and insertion in the field, the frequency of the contacts and duration of the data collection must be rigorously described. The description of the methodological procedures favors the quality and comprehension of the research results, as well as contributes to the growth of the EE method.

Although group supervision is an important part of the process of EE, there has been a low frequency of research reports about this process. Group supervisions make it possible to discuss the researchers' perceptions about the field and the

enrichment of the data in the collection process. This is a very important element in the process of EE that cannot be placed in the background in research.

In addition, the devolution of the research to the participants represents important opportunities to check within the field if the data effectively make sense and has ecological validity. Participants can benefit from various forms of this feedback, both in the sense of being able to rethink and reflect on the research results and to use them in order to improve and advance the understanding and actions related to the researched topic.

The results of the research need not only be published in the scientific media but also be made available to the participants in a way that can be used of them. The research done can generate a concrete product or a knowledge that needs to be shared with the participants and with everyone that is part of that context. The research questions that have been identified through this systematic review point to the social commitment of Psychology with themes mainly related to development in contexts of vulnerability (street situation, poverty, violence, institutionalization, among others).

The use of EE as a procedure prior to formal data collection seems to have been used as a means of approximation between the researchers and the field and participants. Although we do not ignore the importance of this process, EE as a research method provides a solid basis for the entire research process, from the approximation to the data collection, analysis, and devolution of the results. Although other fundamentals are used in the process of interpreting research results, it is considered important that the analysis does not lose sight of BTHD. EE has BTHD as a base, and this requires an analysis whose justification can understand all the dynamicity and complexity of the data and elements from the research.

Human development research is still marked by cutbacks often disconnected from the wider context in which people's lives are embedded. BTHD and EE reflect a movement of understanding of development processes and not only of their phases and characteristics. Research on human development, through EE and other contextual and systemic methods, has the opportunity to understand the development process in its complexity, as part of a context and permeated by all the dynamics discussed by BTHD.

Recommendations for Using EE

EE as a research method can contribute greatly to the advancement of knowledge about EE development processes. Methodological rigor must be translated into both the research procedures and the description of such procedures. This favors not only a better understanding of the results of the research but also the contextualization of the findings in the entire bioecological and sociocultural scenario in which it is designed.

In order to contribute to the broader use of EE, the criteria that support this research method are reiterated:

1. Basing on BTHD;

EE allows interlocution with other theories and methods; the foundations of BTHD help researchers to understand not only their scenario of study but also the very method of EE that is fundamentally linked to this theory.

2. Data collection in an ecological environment;

The collection environment needs to have a strong interaction between team and participant and it needs to be described.

3. “Approach period” between team and participants;

The approximation between the researchers team and participants should favor the construction of proximal processes. The result will most likely be richer and more consistent data about the phenomena studied. On the one hand, the participant feels closer and relies more on the researcher, and on the other hand, the researcher begins to understand better the dynamics that permeates the phenomena he is studying. In addition, it allows a progressive contact with the field, and the frequencies of these encounters should be described, as well as the duration of the whole EE process, differentiating approach and formal data collection.

4. Use of field diary;

The field diary serves as a record of the researcher’s impressions and experiences and assists both as a data source and as a resource that assists in contextualizing the data collected.

5. Occurrence of group supervision;

Group supervisions are important strategies for strengthening the research process and enriching the data obtained. They are spaces for debate.

6. Return to participants;

The return to the participants is an important phase of EE, both in the sense of checking with the participants if the results found make sense to their life processes and to contribute to the improvement of the processes and contexts of life and development. BTHD and EE should not only contribute to the advancement of the sciences through subsidies and scientific productions but also commit to the transformation of public policies and overcoming the vulnerabilities that cross the life and development of people.

7. and Interpretation of the data from the PPDT Model of BTHD.

Just as the work requires grounding in BTHD, the interpretation of the data cannot avoid this work. It is through BTHD that the team will be able to broaden their understanding of development dynamics, taking into consideration the interrelations between the four nuclei, as well as having the process as a fundamental element in the study of development in the most varied contexts and with the most diverse publics.

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Part II
Ecological Engagement in Different
Contexts

Chapter 5

Ecological Engagement in Research on Trajectories of Adolescent Life in Situations of Social Vulnerability: Identifying Risk and Protective Factors



Normanda Araujo de Morais, Sílvia Helena Koller, and Marcela Raffaelli

It is the intention of this chapter to present the operationalization of the methodology of Ecological Engagement during the doctoral research of the first author, under the guidance of the two coauthors. The thesis was aimed at characterizing different profiles of life trajectories of children and adolescents (11–18 years old) who lived in situations of social vulnerability (a group in a street situation—G1 -, and a group that lived with the family—G2). For this, three studies were carried out, the first using a quantitative design, while the other two were qualitative (Morais, 2009; Morais, Koller, & Raffaelli, 2010, 2012; Morais, Raffaelli, & Koller, 2012). In Study I, G1 and G2 ($N = 98$) were characterized for risk (stressful events), protection (social and affective support network), and adjustment (physical symptoms, drug use, risky sexual behavior, suicidal behavior, and positive and negative affect) and then the groups were compared. In Study II, multiple case studies were carried out on the profiles of four participants who had the worst and best adjustment scores in Study I. Finally, Study III, carried out 1 year after data collection that originated from Study I and II, presented the perception that staff members of the network of assistance had on relevant aspects of the trajectory of the participants in Study II. In all three studies, however, the Ecological Engagement was fundamental in guiding the process of data collection and analysis. As the emphasis of this chapter is the methodological approach and how it was implemented across the process of collecting and analyzing the data, the results of the respective studies will not be presented

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here. For more information on the results of the research, see Morais (2009), Morais, Koller, and Raffaelli (2010, 2012) and Morais, Raffaelli, and Koller (2012).

Why Choose Ecological Engagement?

With the view to complete the gap of a research method that was based on the Bioecological Approach to Human Development proposed by Urie Bronfenbrenner (2005) and Cecconello and Koller (2003) proposed what would become the first systematization of Ecological engagement. In their article, Ecological Engagement was described as a method that privileges the insertion of researchers in the research environment, with the aim of establishing proximity to the object of study and, thus, answer the research questions. In addition, because it is based on the bioecological approach, Ecological Engagement predicts the systemization of the four nuclei proposed by Bronfenbrenner: process, person, context, and time.

The study conducted by Cecconello and Koller (2003) had the goal of describing processes of resilience and vulnerability experienced by families in situations of social vulnerability. In this case, the engagement process involved the longitudinal monitoring of three families (one nuclear, one reconstituted, and one uniparental) and included frequent visits, observations, and informal conversations (recorded in the field), as well as recorded interviews that were later transcribed for analysis. The authors illustrated how the nuclei of process, person, context, and time were systematized and taken into consideration not only in the process of planning and carrying out the research but also in the data analysis process.

At the end of the research, Cecconello and Koller (2003) concluded that Ecological Engagement is suitable for use in scientific research, since the findings were obtained with correct methodological rigor and were considered ecologically valid. That is, the researchers were certain that their “interpretation” of the processes of resilience/vulnerability was based on the day-to-day perception and experience of the participants. Finally, in addition to enabling the implementation of research in the natural environment, with ecological validity, the engagement provided the occurrence of a process of social interaction, acting as an intervention, through counseling and/or the provision of referrals.

Subsequently, Eschiletti-Prati, Couto, Moura, Poletto, and Koller (2008) proposed a revision of the Ecological Engagement approach, with greater detail. In this way, the authors returned to the concepts of the bioecological approach (process, person, context, and time) and the contributions previously offered by Cecconello and Koller (2003), but went further, especially since they brought other examples of research which used the methodology to propose its operationalization. Thus, through the comparison of the studies of Cecconello (2003), two studies by Neiva-Silva (2003), De Antoni (2005), and Morais (2005), and Eschiletti-Prati et al. (2008) listed some common characteristics which can be taken as a basis for other studies that intend to use this methodology.

They are:

1. Elaboration of field diaries by the members of the research team in order to analyze the proximal processes of the participants and also the members of the research team.
2. Participation of researchers in diverse activities together with the participants at formal and informal data collections.
3. Period of connection with participants and institutions.
4. Combination and integration of several data collection strategies: quantitative and qualitative (interviews, tests, scales, etc.).

In the research to which this chapter refers (Morais, 2009), it can be affirmed that the main justifications for making use of Ecological Engagement were:

- The search for coherence between method and theoretical approach that served as the basis for the study:

The literature on research methodology has shown the need for coherence between the theoretical approach and the method to be used (Bronfenbrenner, 2005; Robson, 2002). Thus, since the study was based on the Bioecological Approach (study of human development in context through the analysis of the four nuclei—process, person, context, and time), it was felt that the Ecological Engagement approach was the most coherent to enable its realization, because—as stated above—Ecological Engagement is the first proposal of operationalization of this approach. Still, it is important to note that Ecological Engagement is very well suited to studies of the psychopathology of development (another theory that underlies the research), specifically studies starting from a more process-oriented conception of so-called risk and protection factors. In these studies, risk and protection are not seen *a priori*, but from the perception that the subjects have about them, the characteristics of the contexts in which they live, and especially the developmental processes established by each individual over time with each risk or protective factor (Assis, Pesce, & Avanci, 2006; Rutter, 1985, 1987, 2007; Sapienza & Pedromônico, 2005; Yunes & Szymanski, 2001).

- Quality of data collected, quality of researcher–participant interaction, and conceptualization of research as a concrete possibility of intervention:

The aforementioned aspects were key points for the research team to select Ecological Engagement. They relate to a way to do research, which is committed to the quality of life and well-being of the participants rather than the collection of the “data itself”. In the case of a population in situations of vulnerability, this need is even more of an ethical imperative (for a deeper consideration of ethical questions in research with participants in a situation of social vulnerability, see Neiva-Silva, Morais, & Koller, 2010).

In the case of the research of Morais (2009), the engagement consisted of the researcher and her research team¹ going to three institutions for a period of 7 months. On average, they made two visits per week to each institution. During

¹The research team was formed by the thesis author (Morais, 2009) and four undergraduate Psychology students. Three of these students collaborated with the data collection of the street-based group (G1) and one student was involved with the collection of the family-based data (G2). All students were duly trained theoretically, ethically, and methodologically for the development of the research.

the visits, the researcher and her team engaged in everyday activities of each space, seeking to know and be part of the institutions, while at the same time they were able to connect with the adolescents and educators. Such a connection is considered essential for Ecological engagement, since it allows for a greater knowledge of the reality studied by the researchers (guaranteeing validity of the collected data), and, above all, because it presupposes a relationship between researchers and study participants. This relationship of reciprocity meant that the process of data collection was not alien to the daily life of the participants, nor restricted to a single and fortuitous meeting time.

Researchers and participants were able, over time and using the activities they shared, to get to know each other, and to exchange life experiences and cultural meanings. More than this, the Ecological Engagement allowed, especially in the case of populations in situations of social vulnerability (traditionally victims of various forms of rights violations throughout their lives), that the researcher and her team could act in each context as an agent of protection and as a positive support figure for these adolescents and professionals with whom they interacted. In concrete terms, protection and support were expressed through the moments of conversation and listening to adolescents, sharing different knowledge (health, education, etc.), or in the case of professionals, through the constant feedback (on specific adolescents, dynamics of the institution, etc.) that the Ecological Engagement in the context was providing. With the connection between the researcher and the participants established, the process of applying study instruments could begin. Concerning the importance of connection and concern in not disturbing the daily running of the institution, we have this example of an account from a field diary:

Today is a rainy and cold morning. So there are fewer children and adolescents in the institution. I have talked to the coordinators of the SASE and Educational Work² about how to approach the children. I agreed to be in the SASE room more often to ensure a better connection. The patio [playtime and sports practice] is on Friday from 10:30 am, but Vilma [educator] said that maybe this is not so good. She said that I could take them out of the activities. I don't want that to happen. But perhaps the idea is to guarantee a better connection even with the children for a little more time (Field Diary).

Thus, the Ecological Engagement approach directly and indirectly implies strategies of intervention and transformation of contexts and realities (objective and subjective) that we encounter. The situations can be very diverse, varying from moments in which guidelines are given by the research team to the participants (rights, sexuality, etc.), to complaints of cases of sexual abuse and

²SASE: Socio-educational Support Service provides for the care of children and adolescents from 7 to 12 years of age, outside school hours. During this period, the users receive food, pedagogical and psychosocial support, and when necessary are referred to health services, they have cultural workshops, expressive and recreational activities to stimulate development.

Educational Work: offered to adolescents between 12 and 18 years old. In the Educational Work group, professional activities such as cooking, computer science, and music accompany the basic modules, which include the discussion of various themes (hygiene, citizenship, rights, sexuality, etc.).

exploitation. There is the creation of an atmosphere conducive to the expression of personal feelings and sufferings and/or the use of research to foster intervention programs, through discussion of data from our research with professionals from different institutions.

- Use of multi-methods:

As proposed by Cecconello and Koller (2003) and Eschiletti-Prati et al. (2008), Ecological Engagement allows for the use of quantitative and qualitative approaches. Contrary to what some people may suppose, in the Ecological Engagement approach quantitative strategies can be used to collect and analyze data. In this sense, there are no restrictions to studies with many subjects and/or using questionnaires and other instruments of psychological evaluation (tests and scales, for example). In fact, it is strongly recommended that quantitative and qualitative strategies be increasingly integrated into the study of a specific phenomenon (Günter, 2006; Günter, Pinheiro, & Elali, 2008; Sommer & Sommer, 1991).

In the research of Morais (2009), several quantitative instruments were used in the data collection process (for example: Inventory of Stressful Events, Positive and Negative Affect Scale and the Five Fields Map). Because the study population had a low level of schooling and some difficulties in understanding, the scales were applied by the researcher and not by self-report. Thus, the quality of the collected data was guaranteed and, most importantly, a greater connection established between researcher and participant. The latter almost always explained the answer given, for example, why the number 5 was given when the participant was asked about how much a particular event (drug use by a certain family member) left them stressed. When proposing to carry out studies with these instruments (Inventory of Stressful Events, Positive and Negative Affect Scale, and Five Fields Map), there is a contribution to the development of the research area with children and adolescents in situations of social vulnerability, both those who live with their families and those living on the streets. Thus, research into the risk and protective factors can advance both methodologically, since it is based on standardized and validated measurements in the Brazilian context, and also conceptually, by relying on tests of theoretical models (Raffaelli, Koller, & Morais, 2007).

In addition to the theoretical and conceptual relevance (instruments used, results found), it is worth highlighting the receptivity of the participants to the aforementioned instruments. Throughout the data collection process, participants from both groups showed involvement with the application of the instruments, which was evidenced by positive comments at the end of the application and the degree of involvement during the application. The instruments favor the expression of feelings and stories of life, which might take longer to be expressed, if only interviews had been used.

Influence of the Ecological Engagement on the Definition and Redefinition of Research Process

Initially, during the elaboration of the research project of Morais (2009), the goal was to reach as many children and adolescents in street situations as possible, including those who had different types of connections with the street (street-work, leisure, street-dwelling). To accomplish this, it would be necessary to carry out data collection in two institutions of the service network specialized in children and adolescents in street situations in the city of Porto Alegre. Both institutions (day-time shelter and night shelter) were located in the central part of the city and provided food, hygiene care, a place to stay, and ludic-pedagogical (videogame, theater workshop, television, painting, etc.) and sporting activities. Based on previous research experiences (Morais, 2005; Santana, 2003), also carried out using Ecological engagement, it was known that these institutions represented strong reference points for street children and adolescents who looked for some kind of support in the central region of the city, a fact which made them the obvious choice. However, it was found that the institutions at the center of the city were half empty; a fact that was observed by the research team and network educators, who were constantly wondering about the reason for this.

At this point, the research was redirected, with a new definition of data collection paths. And the main justification for this redefinition was given by Ecological Engagement. To explain the lack of attendance in the centers, the leaders and social educators said that the adolescents were increasingly staying in their communities and getting involved with drug trafficking. Another hypothesis was that many of the adolescents who arrived at the center were being attended to by “*Ação-Rua*” (Street-Action) teams³ in their communities of origin. At that moment, the research team decided to “go back” to these communities.

In the conversation with the educators and based on the knowledge of the service network of the city, an NGO⁴ was identified, located in a neighborhood on the outskirts of the city of Porto Alegre, characterized by high indices of poverty, violence, and drug trafficking and the concentration of a large number of street children and

³ *Ação-Rua* (Street-Action) is a program for the care of street children in Porto Alegre, which has existed since 2007. The Program provides for the decentralization of the care of this population through 11 regional centers. Each nucleus, in turn, is formed by a coordinator, two technicians (usually psychologists and social assistants) and four social workers. Its activities consist of approaches in the street, case discussions, and monitoring of children / adolescents and their families, through, above all, referrals to the assistance network. According to the project prepared by the *Ação-Rua* Program team, they should act “by expanding and articulating the services of the existing network and including the child / adolescent and his / her family in the social assistance network of the Municipality, aiming at guaranteeing rights and social inclusion” (*Ação-Rua* program, 2006, p. 7).

⁴ The NGO offered socio-educative activities outside school hours for children and adolescents in the community. For children between the ages of 7 and 12, the Social-Educational Support Service (SASE) was offered, while for Adolescents (12 to 18 years old) the Educational Work was offered, both previously defined in the text.

adolescents. These children and adolescents, although not really living on the street, spend a large part of their day on the streets of the neighborhood, asking for change, working, and/or playing. Thus, the NGO was founded with the objective of reaching children and adolescents with varied profiles who have a connection with the street. This institution was responsible for caring for children and adolescents in situations of social vulnerability, including some that had street history and that were referred for follow-up by the *Ação-Rua* teams.

Once again, however, the Ecological Engagement process redefined the data collection paths. During the team's engagement at the NGO, there was an evaluation of the positive and negative aspects of trying to "recruit" only cases with connections to the street. It was feared that this would create an ill feeling among the children and adolescents when they realized that some would be invited to participate and others not. The field diary expresses this worry:

In the conversation I had with Deise (*Ação-Rua* coordinator) she indicated the names of Miguel, Amanda and Simone as children attended to by *Ação-Rua* and referred to the SASE of that institution. I asked myself (and I keep asking myself) how best to call them to participate in the research, since it will not be all of them. How not to contribute to their labeling or discrimination? (Field Diary).

Thus, it was decided to expand the collection and, consequently, the scope of the research to the situation of social vulnerability as a whole, defining two groups of participants: one with a family base and the other living in a street situation. Although data collection was proposed at the NGO for children and adolescents in SASE and those doing Educational Work, the researchers selected cases that had some type of connection to the street (Group 1—street situation) and the group that saw the family as a basis for their development (Group 2—family based).

In the process of redefining the objectives of the study, observation of the research settings (allowed by engagement) was fundamental, as well as theoretical deepening, which allowed for greater clarity of conceptualization (of what was or was not appropriate to do) and an intense exploratory analysis of the data. However, at each step of the research three concerns were always present: (1) the attention to the quality of the relationship between research team, participants, and institutions; (2) careful attention to theoretical clarity, through the proper use of concepts, designs, and methods of data analysis that were consistent with one another; and (3) the desire to advance knowledge regarding childhood and adolescence in a street situation.

Gradually, the thesis was gaining a new objective, the data collection was progressing (the small "transforming" encounters in the everyday life of the institutions were occurring), and the analysis of the data was allowing for a new construction. If before the goal was just to research the children and adolescents in street situations, it soon made sense (theoretical, practical, political, ethical, and methodological) to invest in data collection from children and adolescents who, despite living with their families, experienced situations of vulnerability to their development in their communities and families of origin. And thus it was so!

With the redefinition of Study I, Studies II and III also underwent modifications. Therefore, in Study II, multiple case studies were carried out about the profiles of

the four participants who obtained the best and worst adjustment scores in study I (of each subgroup). Once again, the data collected through Ecological Engagement, created from the quantitative instruments and field diaries, were fundamental for the description of each case. It is important to mention that the cases were described by the information contained in the instruments and the field diary, elaborated from Study I. No additional collections were made. Study III, carried out 1 year after the data collection that originated with Studies I and II, presented the perceptions of staff members in the care network regarding the life trajectory of participants from Study II. Here too Ecological Engagement guided the research team in the process of developing the research instrument (questions of the interview protocol), in the choice of participants (technicians who were a reference for each adolescent) and interpretation of the data collected.

Relevant Aspects for the Operationalization of the Ecological Engagement

The following is a more detailed description of the Ecological Engagement, across the different steps, which start before entering the field and only end with the final reporting of the research findings. The description represents an attempt to systematize the most important information regarding the engagement process, and what arises from the demand of the research teams, made up of undergraduate and graduate students who have accompanied the Master's and Doctoral students in the studies at the Center of Psychological studies CEP-Rua.

Data Collection

Before Going to the Field

- Ethical, theoretical, and methodological training of the research team. Guarantee that the entire research team has in-depth knowledge about the theory of the Bioecological Approach, and of the other theories that encompass the research project, as well as the necessary aspects required for engagement. In the case of this research, going into the field was only possible after months of prior training of the research team, which was made possible by holding of weekly meetings, and study and preparation for going into the field.

At the Beginning

- Clear presentation of the objectives and research proposal to the team of the institution. Establishment of the “psychological contract” with clear definition of the beginning and end of the research team’s stay.
- Signing of the Term of Agreement by the person responsible for the Institution.
- Request for authorization for photographs and filming, when required.⁵
- Always establish the methodology of work (days, times of collection, for example) with the staff of the institution, and follow the arranged times and days.
- Know how to identify the places and key people with whom the team must be connected in the institution.
- Preferably, ensure good circulation through the institution’s spaces in which there is engagement (as far as is permitted and necessary), in order to listen to the various discourses.

Although often overlooked, this is an essential part of the engagement process, since it consists of the first contact of the researcher with the staff of the institution. It is therefore essential that the contract with the institution is completely agreed upon between the parties, with great clarity and objectivity. In the present research, this process was made possible by the previous contact that the research team already had with the institutions. However, this fact only increased our responsibility and commitment to respect all the recognition that the University and the research group represented and that had previously been achieved.

During

(a) Connection

- In the Ecological engagement, there is an indispensable aspect to the realization of the research and the relation between researcher–participant: the connection between these two.
- In order to ensure connection, it is necessary to be part of the institution and/or the place of data collection, so as to be involved with the participant’s daily life. Thus, regular visits and participation.
- (formal and informal) in the institution are necessary.
- It is necessary to ensure that there is at least one connection to the research between researcher and the participant (call for an interview, questionnaire, application of scales, etc.).
- A signature of the Terms of Free and Informed Consent by the participants.
- In a research situation, a demand is almost always created which did not exist until that moment, or at least the people were not aware of it. Therefore, you cannot be in a hurry and rush into the process of connection, both out of respect for the participant, and for the quality of the data.

⁵The present research did not use these resources.

- The issue of timing (“optimal” time for the invitation and effective participation in the research) is not a chronological question (more or less time, 1 month, 2 months, for example), but a connection issue and “reciprocity” in the relationship between researcher and participant. Additionally, of course, the connection is also “culturally dependent”, which implies that the researcher needs to be very attentive to the ways different groups from different cultures establish and express the bonds of closeness and trust.
- The daily life of the institution and the life of the participants are usually very dynamic. Therefore, it is advisable to accompany the participants in the different spaces they attend (ecological transition). In fact, this allows a more accurate analysis of their development, while ensuring a stronger connection.

The positive characteristics that the research team established with the participants and staff of the institution were undoubtedly a very important aspect of the entire data collection process. There was much positive feedback given by some participants to members of the research team (invitations to participate in games and other activities with them; decisions to share an episode of their lives, etc.). In some cases adolescents were averse to interaction with the research team and, above all, to participate in the research, but it was found that in most of these cases it was possible to “break the ice” during the ecological engagement. And such a change was made possible by the trust that was created by the researchers. In this process, the use of certain instruments, such as the scale of positive and negative affect and the five fields map, were dealt with in a more playful way. The following field diary extracts show the connection process and confirm its relevance, both in the development of the children/adolescents involved, and in our own development as researchers.

The boys went to play sport and the girls stayed in doing the self-assessment. I spent most of my time helping Amanda who asked for help in reading and writing. Now I realize the importance of this act, especially for someone who, as she always says, does everything alone and does not ask for much help from anybody (Field Diary).

Two educators were absent. Carla and Vilma (educators) took the children to the small square. I was with five girls. Four of them would have a sexuality group with the psychologist (but she changed the appointment for next Monday). The other girl was Amanda who wanted to stay. Fabiana was playing with a doll and Jenifer also. Nina and Clara were making decorations for the São João celebration. And Amanda was making the poster with me. It was a very interesting experience, because we made a lot. Amanda used the hot glue, Clara helped with the balloons and I found it all very unusual because I have no skill at all for this kind of work. But, as a group, each one gave a little bit of themselves (Field Diary).

(b) In regard to the instruments and the field diary

- Researchers should be guided by the methodological and ethical strictness of the investigation.
- The use of instruments that are more “natural” to the reality of the population studied is highly recommended. The more playful and suited to reality, the better. The idea is that at the moment of application of the instrument or

when conducting the interview, for example, it is not so distant and far from the reality of the participants' lives.

- Elaboration of the field diary:
 - The report should be true to the experience and as descriptive as possible, accompanied by impressions and reflections of the team member who completed it.
 - It needs to be clear what is fact and what is impression and personal commentary.
 - Each member of the research team must have their own field diary.
 - Reports can be written and/or recorded for later transcription.
 - Description of concrete aspects (day, time, people present, activities performed, perception of the physical environment, etc.).
 - Personal reports on the “feelings” of researchers should also be included in the field diary.
 - The diary must always be written based on the research question and the relevant facts to answer the research question.
 - When writing the report, it is necessary to be always aware of the dimensions of person, process, context and time, which are related to the research objective.

When writing a field diary, especially a good field diary, it is essential, above all to “enlighten” the process of data analysis. The more that each researcher reports what they have witnessed, the more the diary will be complete. This also includes how soon the report is made (as near as possible to the visit is best). And the researcher's degree of perceptiveness is key; that is, the more directed by and oriented to the “research question” the journal writing is, the better.

In the study in question, each staff member had their own field diary. The lead researcher had the final task of grouping the reports and analyzing them. Given the relevance of information contained in the diaries, it was decided to use some stories from the diaries to illustrate the thesis, as well as the present chapter. The grouping of all reports about the same teenager, for example, in the creation of a timeline, was a strategy used to organize the volume of information collected.

(c) Conducting interviews and applying the instruments

- In the interview spaces, during the application of the instruments, the realization of groups and even in informal conversations, it was essential to view from the “psych” perspective. One cannot forget that one is inserted in that certain context as a researcher and that one has a question to be answered.
- In regard to psychometric scales and other validated and/or adapted instruments, their application must be completed as recommended by the manuals.

(d) Supervision

- Ongoing supervision is recommended for to discuss the engagement, specific cases, application of instruments, etc.

- Supervision times should also be used for “feelings groups”. The idea is for the groups to function as an affective support for members of the research team.
- Supervision should also include review of the field diaries.

Weekly supervision should not be overlooked, as it constitutes an important space for the discussion of cases, practical referrals of the research and expression of the feelings (joy and anxieties) of the research team.

(e) Researcher–participant–institution relationships

- Gradually, the research team gains ground in the Institution and in the lives of the people with whom they are working. Thus, it is natural that situations arise in which the research team is called to exercise its roles of protector and contributor to healthy and positive relations. It is only natural that there will be demands from the institutions and people with whom you work. The research should always be thought of as a tool for support of social policy and the promotion of health and education. The next step is to discern when and how is the most appropriate way to respond to the demands. Not everything that is requested needs to be responded to (at least not as requested), but a team response is indispensable along with a referral.
- Interventions in the daily routine and during the research are a form of ongoing return of the contributions that the team of researchers can and should give the context in which they are inserted and that have been welcomed into.
- You must always be aware of the impact on people and the institution as a whole. It is also necessary to take care of the relations and of the “manipulations” in which one may be involved.
- There is much to be made of the “clinical” listening and welcoming that must always be preserved in meetings with the participants. Empathy, attentive listening, feeling and insight are some key interventions.
- Everything should be used to its advantage for the research team. For example, willingness and unwillingness of the participant, their willingness to offer up details or omit facts about their life, everything has informational value. Therefore, the researcher/clinical perspective is necessary.
- We discourage people from going into the field if they are not comfortable with the topic of study, as well as with the population and context in which fieldwork will occur.
- At other times you must be aware that “on that day” (be it from tiredness, lack of willingness or another problem), it may not be appropriate that the researcher goes into the field. This is a measure to protect not only the researcher, but also the participants that would be contacted.
- You should strongly avoid the posture of people going into the field and looking at the other as “exotic”, like a shop window. There must, therefore, be a deep respect between researcher and study participant (reality).
- It is very important that you are firmly (and deeply) convinced that the research activity, although it may not even be necessary, can contribute to the

well-being and quality of life of the people who are involved. If you are not convinced of this, how will you be able to convince another person?

- It is interesting how most of the aspects pointed out in the training of researchers (ethical, theoretical and methodological aspects) deal with their relationship with the participants. This is no accident, after all, the Ecological Engagement and the bioecological approach emphasize that development is the result of a process of reciprocal interaction between persons, or of these with objects and/or context. Therefore, the research activity in light of the proposed Ecological Engagement does not deny or dispense with the relationship between researcher and participant. Rather, it draws attention to the fact that development was possible for both due to the interaction that the research situation generated.
- The practice of engagement makes it clear that between researcher–participant and institution there may be a very positive relationship. This is even truer when there is greater investment in technical and ethical training, especially in the skills of listening and empathy.

Finishing

- It is necessary that leaving the field be worked out as a process by the entire research team. In this way, both research participants and the institution’s team need to be previously informed that there is a deadline for the team’s presence in that space.
- Farewell celebrations (such as parties, for example) can be carried out, provided that they are properly arranged with the participants and the institution’s team, as was done in Morais’s research (2009).

Analysis of Data

The closeness of the researchers to the research context and knowledge of the particularities of the lives of the individuals allows for a much more complex discussion and analysis relating to the information collected, including quantitative data. In the research of Morais (2009), the discussion of the studies involved analysis of quantitative and qualitative data. Since all research consists of an exercise of systematizing collected data, it is important that the source of any statement by the researcher is made clear, whether it be from the reading of the statistical data, field diary entries or interpretations made possible by the literature. In particular, the importance of the field diary to illuminate the data analysis is highlighted, as previously discussed.

Together, the three studies of Morais’s research (2009) allowed for a more complex analysis of the life trajectories of children and adolescents in situations of social vulnerability. While the study allowed for a quantitative and comparative

analysis of the two groups (street-based and family-based), Studies II and III allowed for a qualitative analysis of the worst and best adjustment profiles that were defined from Study I, with an additional shared vision (adolescents and professionals of the institutions). That is, the collected data for these studies were based on the instruments used by the researcher, the vision of the professionals of the institutions and the participants' own reporting, collected through the Ecological engagement. The four cases of worse and better adjustment (Studies II and III) were illustrative of life trajectories of other children/adolescents in the Brazilian context, their relevance being found therein. The cases summarize, therefore, trajectories that are common to other individuals, since they reflect models and patterns (relationships with risk factors, protection and indicators of adjustment) that go beyond the individual case, as described by Fonseca (1998). The reply from the technician Monica, when asked about the fact that the adolescents Rita and Fernanda had been characterized as the cases of worse and best adjustment in the family-based group, confirmed the idea advocated by Fonseca (1998), giving evidence to the complementarity of quantitative and qualitative data and showed the relevance of the latter to give meaning to the former. Thus, the "adjustment scores" created in Study I, which defined participants in the case studies, gained ecological validity, from the reply of the educator who said that she saw in the aforementioned adolescents characteristics that were equivalent to what the "adjustment score" reflected.

[If I said I was going to look for the "more and less adjusted" cases, Does it make sense for Rita and Fernanda to be where they are? Do you think that makes sense?]

It makes sense. Maybe if I had to tell you, I'd say Rita is more or less 5, 6 and Fernanda another 5, 6. But they would be between them. (Mônica, pedagogue).

After Completing the Search

- The final reporting of research findings is as fundamental as data collection in the steps of a research study. Therefore, every effort should be made to ensure this is done correctly. The report must be made in accessible language that is understandable to those in the context, as well as relevant to the specific setting.
- This report should be made both at the place where the research was conducted and in other settings (secretary of health, education, NGOs, etc.) where it is deemed necessary.
- Publication in journals is also required, so as to disclose the results to scientific peers.
- It is therefore necessary to ensure that research takes the political action that can/should be done. All efforts in this direction should be encouraged.

Contributions of the Ecological Engagement to the Study

The first of the contributions is the quality of the data collected. By prioritizing the connection between researcher and participant, the closeness between these and the engagement of researchers in the research participant's reality, it is possible to draw conclusions about the quality of the research data. In contrast to a situation in which an interview is conducted without any prior knowledge or connection, or scales are applied freely by individuals with no previous interaction with the researcher, for example, the engagement improves the way the data is collected. The lower amount of missing information and the possibility of understanding the answers given, even on a scale, confirm this idea.

The second major contribution of insertion concerns the possibility of greater richness in the discussion of data. The involvement in the context of the participants, as well as knowledge of their characteristics and their developmental processes over time, allow for the possibility of a much richer discussion and analysis of data. We say, therefore, that "data comes to life" as a result of the engagement. Even if the results are shown in numbers, percentages, and results of statistical tests, it is possible to clearly specify what child/adolescent and setting are being described. The data achieves meaning, so to speak.

Finally, it is very important to realize that our research is not disconnected from the daily reality of public policies and assistance aimed at children and adolescents in situations of social vulnerability.

The process of data collection from Morais' research (2009), for example, shows how the reality of the context acts by guiding the issues of research and the participants. Once a process was identified in public policies to turn their attention to the communities and find the child/adolescent who has not yet arrived "in the center" of the city and who is not yet completely connected to the street, the definition of participants and data collection sites were also redefined. Therefore, the focus of the study could be extended to the situation of social vulnerability as a whole and not solely for the street situation. The change of focus, in turn, allowed us to reach other conclusions.⁶

⁶(a) The existence of a continuum of social vulnerability between risk factors and in the life of the participants in the street-based and family-based group. The groups may not be as different as common sense presupposes, a fact that is confirmed by the report of the four cases of adjustment. These cases showed that stressful events and negative developmental outcomes already existed prior to the street. (b) The need for greater visibility to be given to the child and the adolescents who live in different situations of social vulnerability, either working and / or living on the streets or that are invisible in communities, towns, and slums (*favelas*). Hence, the need for preventative measures that precede going to the street and for measures to assist children and adolescents who are already on the street must be defended.

Challenges of Engagement

The process of Ecological Engagement is filled with many challenges. The expenditure of time and energy on the part of the researchers perhaps would be the first of them. The Ecological Engagement approach requires time and a lot of willingness on the part of the researchers, since it involves the team's presence in the institutions for a period of time generally greater than other types of research that place less value on the connection with the participants and the knowledge of the context. There is, therefore, a lot of investment of time and also of "affect" by the researchers, added to the expenses of travel, for example. A constant challenge is to ensure a good number of participants, reconciling—with quality—quantitative and qualitative information about them.

Another great challenge of studies that use engagement is the one of adequately operationalizing the investigation of the four nuclei proposed by the Bioecological Approach to understand development. That is, ensuring that a study has sufficient strategies (in the collection and analysis of data) capable of contemplating the four dimensions—process, person, context, and time (PPCT). Due to the limitations that research involves (material resources, human and temporal resources), one or another aspect is generally more neglected. When confronted by this, often unavoidable, limitation, it is important to be clear that each study allows for a different level of approximation and systematization to the nuclei described by Bronfenbrenner (process, person, context, and time). It is, in fact, very difficult for the same study to methodologically contemplate the four proposed dimensions. Instead of thinking that the engagement becomes unfeasible, it is better to believe that there are different levels of approximation and systematization of these dimensions. Even if they are not evaluated, they need to guide the researchers' gaze (as a lens that they use to focus on the research problem more widely). However, it is clear that, above all, *this* point is responsible for differentiating Ecological Engagement from other research proposals, such as ethnography, participant research and action research. Ecological Engagement is characterized as such, since it presupposes looking at the research setting from the reference point of the Bioecological Approach. The advance in the use of this methodology involves the researcher's effort in these two dimensions (in the design and analysis of data that considers the four nuclei—PPCT). Efforts in this direction are welcome in the literature of Human Development and Ecological Engagement itself. Let's get down to work!

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Chapter 6

Ecological Engagement in a Children's Shelter in Espírito Santo, Brazil



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Because of the complexity and dynamism involved, Sifuentes, Dessen, and Oliveira (2007) consider to be challenging the task of finding adequate tools to research the human development. The Bioecological Theory of Urie Bronfenbrenner is considered by the authors an interesting alternative to guide research aimed at embracing the complexity and plasticity of human development, taking into account the multiple influences that affect it.

Human development was defined by Bronfenbrenner (2001) as the phenomenon of continuity and change in the biopsychological characteristics of the human being, considering the life of individuals and of groups over the generations. To understand this phenomenon, the author emphasizes the importance of analyzing the relation between the person and his context from four interrelated elements: the process, the person, the context and the time. The research methodology that investigates the development considering the synergistic interaction of the four elements was named PPCT Model (Bronfenbrenner & Morris, 2006).

The first element of the model refers to the proximal processes and is considered the most powerful mechanism capable of driving the course of development, being it a particular way of interaction between the person and his environment. They are characterized by long-lasting interactions that become progressively more complex over time (Bronfenbrenner & Morris, 2006). Proximal processes vary depending on the characteristics of the person, the environment, and the nature of the developmental outcomes under consideration (Bronfenbrenner & Ceci, 1993).

The understanding of the person as component involves the analysis of the characteristics of the subject which, from a positive point of view, places him in active

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participation in his environment by instigating him to engage in proximal processes. People are considered both producers and product of development and are updated depending on the characteristics of the environment and the quality of the relationships that they establish with the elements of their environment (Bronfenbrenner, 1993; Bronfenbrenner & Morris, 2006).

The context is formed by a system of four environmental levels: the microsystem, the mesosystem, the exosystem, and the macrosystem. The first is defined as the context in which the person lives his experiences in a pattern of closer relationship, face to face, with other people, objects, or symbols. The mesosystem is formed by the set of microsystems in which the person participates, and the interrelations established between the microsystems are their most relevant characteristic. The exosystem, in turn, refers to environments in which the person does not participate directly, but is influenced by them in its immediate context. The macrosystem refers to cultures, ideologies, beliefs, values, and religion, which are present in other environmental levels and in the person's daily life and that influence their development (Bronfenbrenner, 1993). Finally, time refers to the consideration that development always occurs as a function of time, which may be a specific time of the person's life course or a historical time (Bronfenbrenner & Morris, 2006).

From this perspective, the methodological proposal that guided this work was the Ecological Engagement, a systematization developed by Cecconello and Koller (2003) based on the Bioecological Theory of Human Development. The Ecological Engagement is the basis of the action of the investigator during the entire investigation so that the four elements described above (the process, the person, the context, and the time) can be identified in the course of the research. However, aspects related to the proximal processes and the context were prioritized in the observations made in the shelter home.

The placement and permanence of children and adolescents in shelters in Brazil, are governed by the Statute of the Child and the Adolescent—SCA, which recommends the brevity and the exceptionality of this measure. The new wording given by Law n° 12.010, of August 03, 2009, changed the terms of §1 of the art. 101 of the SCA, so that the hosting institution is now named as institutional sheltering.

Institutional sheltering is a measure to be taken when the rights of children and adolescents are threatened or violated by members of their families and when their being with the family is not possible (Law n° 8.069, 1990, art. 33). According to the SCA, the situation of each child or adolescent received must be reassessed every 6 months and their permanence should not exceed 2 years (art. 19). Also according to statutory legislation, the shelter entities must guarantee the preservation of family ties, the personalized service and in small groups, the participation in community life and the preparation for the leaving (art. 92).

Martinez and Soares-Silva (2008) pointed out the existence of controversies between the legal aspects of the SCA and the reality experienced by children and adolescents in foster care regarding the preservation of family ties and the provisional nature of the measure. Silva (2004) also analyzed the situation of institutionalized children and adolescents throughout the national territory and found that of 80,000 children and adolescents who were in the foster care, almost half (52.6%)

spent more than 2 years in the institutions. On the other hand, data on the family showed that 87% of the children and adolescents received at that time had a family, and 58% maintained ties with their relatives. It is therefore important to understand that the provisional nature of the measure of institutional sheltering is an ideal to be achieved that presupposes the incessant search for the reestablishment of family ties, which is the main function of the technical teams of the sheltering institutions.

Seeking to reinsert the child or the adolescent in their family of origin is a function that the technicians recognize as of great value for the life of the kids (Rosa, Santos, Silva, & Souza, 2010), despite the difficulties that they face to meet this goal. Technicians from six shelter institutions heard by Brito, Rosa, and Trindade (2014) cited the difficulties encountered in reinserting children and adolescents, the lack of adherence of families to family support programs, and the valuation of the institution as an ideal place for their children to live.

Thus, the shelter becomes, for many children and adolescents, a reference environment where affective and social bonds are established and where the construction of their life projects takes place. However, it is important to emphasize that the institutional context can be seen either as detrimental or as favorable to the development of those who live in it. The consequences for development will not only depend on the time elapsed within the institution but also on the nature of the institutions as social systems and the circumstances of their removal from other environments (Poletto & Koller, 2008).

Regarding the dynamics of the functioning of the shelter institutions, the Technical Guidelines for Shelter Services for Children and Adolescents indicate that each institution should have a team of professionals composed of: a coordinator; 2 technicians for a demand of up to 20 children and adolescents (a psychologist and a social worker); 1 educator/caregiver for each 10 users, and increasing this number in case the institution also has children or adolescents with specific demands; and an educator/caregiver assistant, who must be as many as educators (Conselho Nacional dos Direitos da Criança e do Adolescente & Conselho Nacional de Assistência Social, 2008). The functions of each worker are specified in the aforementioned technical guidelines and all are aimed at preserving the physical and emotional integrity of the children and adolescents by offering them a strong link capable of overcoming the possible psychological damages caused by a previous family separation.

Based on the Bioecological Theory, we can consider the shelter institution a microsystem, because several interactions that enable the development of all parties involved take place there. The environment is an important element in the development process and should be understood from the psychological perspective of the people who are included in it. Thus, the observation and analysis of the environment must take into account its physical and socio-cultural aspects, besides the reciprocal influences between the person and the environment (Eschiletti-Prati, Couto, Moura, Poletto, & Koller, 2008).

Although we know that in the most up-to-date version of Bronfenbrenner's Bioecological Theory he has emphatically devoted himself to describing Proximal

Processes (Rosa & Tudge, 2013), we will make an analogy of his understanding of context to what the geologist Milton Santos called geographic spaces (Santos, 2004). For Santos, spaces are manifested in two categories: territorial configuration and social relations. The first is characterized by its natural systemic content, while the second, by a social existence that can only take place through social relations. In this understanding, geographic space would be the junction of these two dimensions of space. The author proposes the indissociability of the system of objects (territorial configuration) and the system of action (social relations) that form the space. In his view, the analysis of a context would entail taking into account the relevance of its physical and material aspects as well as its relational aspects. This form of understanding the space corroborates Bronfenbrenner's view of the phenomenological dimension of experience, through which the person's perception takes precedence over the objective environment.

Considering these assumptions, this chapter aims to describe the Ecological Engagement carried out in an institutional sheltering space for children and point out the successes and failures of this experience.

Data Collection

Prior to visits to the institution, a letter was sent with the purpose of obtaining authorization from the Municipal Social Assistance Secretariat (SEMAS), as well as from the NGO executing the shelter project. After receiving approval, we started the process of Ecological Engagement. Ecological Engagement proposes that the researcher enter into the ecological environment with the objective of knowing the reality in which the research participant lives, through informal conversations, interviews, and observations of the natural environment. With this assumption, it was possible to have access to a range of contents of the place studied because the research team became part of the ecologic environment, experiencing the space and the relationships that took place in it.

The recommendation is that the Ecological Engagement happen in the microsystems, nevertheless, without considering the influence of the other systems that interfere in the development of those involved in the research (Eschiletti-Prati et al., 2008). Focusing on this perspective, engagement in the shelter space took place through the following of the dynamics of its functioning, through regular visits, observations, informal conversations, and interviews. The interviews were carried out with the social educators, the coordinator, the psychologist, and the social worker, totaling seven interviews.

In the interviews with the technical team, a voice recorder was used to record the responses for subsequent transcription and analysis. In the interviews with the social educators, the answers were noted, since they did not feel comfortable to authorize the recording. A field diary was also produced to record the impressions about the daily life of the institutional environment, as well as of the relations that existed in that place.

The routine of the institutional sheltering was followed for a period of 8 months; a total of 30 visits were made to the institution, covering the period from May 2008 to January 2009. In general, these visits were carried out weekly; in some occasions they could not happen, or occurred twice in the same week. The research team consisted of three researchers (one scholarship holder and two volunteers) and two professors who were the coordinators of the project.

Of the 30 visits made to the institution, 53.33% were in the afternoon, 40% in the morning, and 6.67% in the evening. The three researchers were present in all visits during the first 2 months and in the last month of the investigation. After the first 2 months, the visits were made in pairs, the researcher who is the scholarship holder and a volunteer researcher who took turns every week.

During the work, we sought to understand and describe aspects related to the physical space of the institution and the interpersonal relationships present in that environment, as well as to identify data on the reasons for the institutionalization of children, their length of stay in the institution, and records of the referral of the case. The inflow and outflow of children were quantified because this parameter can indicate the effectiveness, or the lack of it, regarding the attempts of family reintegration.

Information on the structure of the institutional sheltering and its operation were requested directly from the technical team. Such information included internal regulations, local work plan, individual plan of care for children, process of receiving and embracing the children enrolled therein, the program of preparation for the leave of the child, follow-up of the children who leave the institution, interpersonal relationships, and difficulties faced by the professionals.

Activities such as games, drawings, storytelling with puppets, and children's films were developed in order to help with the process of interacting with the children. At first, the children showed a kind of shyness, but after some time they started to interact more spontaneously and more frequently. After a few days they were already behaving very affectionately with the researchers.

The moments spent in the company of the professionals of the shelter, as well as of the children were unique. After each question, other questions arose during moments of dialogue. Knowledge was produced in each relationship that was established, adding content to the academic and professional training of the team of researchers, because the information offered broadened that data produced in the classroom in the teacher–student relationship, ratifying the aspect of valuation of the methodology used.

At these moments of analysis of the functioning of the institutional shelter, the researchers sought to talk and articulate the personal considerations with the previously studied content of the Bioecological Theory. The importance of contexts and proximal processes for the development of children was something frequently stressed by the team in the attempt to understand how these elements were articulated, both when coming into contact with the peculiar histories of each child through the reading of the reports and in moments in which there was a more direct interaction.

Challenges in Ecological Engagement

When considering how the time factor is present in research using the methodology of Ecological Engagement, Eschiletti-Prati et al. (2008) understand that time is fundamental in the constitution of proximal processes between researchers and participants, and several meetings are necessary for a period of time for the relationship allow to approach more complex topics. Starting from this proposal it was possible to evaluate the changes that occurred in the development of those involved in the research over time.

In the first months that the Ecological Engagement was started, the researchers sought to introduce themselves, talk and participate in the activities that took place in the environment to promote a more informal and enjoyable atmosphere, different from the aspect of “research” postulated by the scientific method usually widespread in popular media. It was possible to see that the technical team and the team of caregivers of the institution did not understand the presence of the team of researchers in the environment due to the position of observers in the context.

There seemed to be an expectation from the workers that the research team would be there to perform some more specific activity. Because the researchers were just observing, talking and interacting with the children, it was as if the work had not yet begun. The coordinator himself requested that the visit be informed in advance and that the planned activities be described. In response to this request, a notice was sent 1 week before describing the activities that would be carried out, and this process of informing the activities opened a space for exchanges on issues pertinent to the children’s daily lives with the coordinator. However, sometimes the children suggested another type of interaction, such as a watching a movie instead of drawing or other story, modifying what had been planned. Due to these changes in the moments of interaction and the closer ties with the educators and the technical team, the researchers acquired greater autonomy in relation to the work. Activities were no longer informed by e-mail, and a greater interaction with children guided their planning and implementation.

Just as occurred with the children, the social educators also showed resistance to interact and collaborate at the beginning. The assumption that they were being evaluated led many to avoid talking to the team or chose not to help the children when we interacted with them. Furthermore, the hectic routine of the institution often made it impossible to carry out the research with the professionals of the institution.

Because this was a recent methodology, in which the research team had little experience, there were some doubts as to the procedures that should be adopted. Because of these difficulties, we found it necessary to provide a better explanation of the project to all the people who worked in the institution. The strategy used to solve this issue was the preparation of a folder with information on the objectives of the research, the methodology adopted, and the Bioecological Theory. The folder was used as a resource to explain to each of the educators and other members of the

technical team the project that was being developed in the institution. At the end of the exhibition, the folder was delivered to each person. There was a moment of dialogue that allowed a greater approximation between researchers and workers, especially the social educators.

The routine of the institutional shelter did not always favor the realization of the research, due to constant unforeseen events. The team witnessed various situations, as a case when a child got ill and one of the educators had to leave the institution to take the child to the Basic Health Unit. In another moment the coordinator went to the Child and Youth Court to resolve issues related to the children's processor on the day that had been scheduled for her interview. In another occasion, the children went out for a leisure activity and we found the institution "empty". Although, initially, these situations discouraged the team of researchers, these events were not ignored because they were part of the continuous process of engagement. Observations and records were made in the field diary about the sensations that these situations caused, as well as about the interactions with other people who were in the institutional context. Such notes contributed positively to the Ecological Engagement.

After about 3 months of visits to the institution, and after the presentation of the objectives of the work for each participant, we can say that the research team felt ecologically inserted in the context. The educators and technical staff were more willing to interact with the children in the presence of the researchers, helping to clarify some of the doubts and showing to be more receptive to interviews.

During this period, a set of factors allowed to identify that the team was actually performing the Ecological Engagement in the context of research: there was more familiarization with the method proposed in Ecological Engagement, the institution team understood the reason for the engagement, and the interactions occurred more naturally and reciprocally throughout the process. Some indicators that allowed us to evaluate this engagement were the fact that the children began to wait for the visits and ask when one of the researchers was not present; the researchers were called by their names both by the members of the technical team and by the children; the informal conversations started to address deeper issues of the dynamics of the institution and the reporting of emotional aspects of child care. From this moment on, it became possible to implement more complex activities in the institutional context and the interviews could be started. According to Ceconello and Koller (2003), in the Ecological Engagement, the informal meetings progress towards interactions in which the subjects and themes approached become increasingly complex, creating interaction relationships that are increasingly attractive to both parties.

For the children, the activities proposed were not similar to those already carried out by the educators. Thus, we moved from painting and drawing activities to exposition and discussion of videos and storytelling. The latter activities appeared to be more interesting for children. The instruments used were planned and organized based on the visits to the shelter and the difficulties encountered.

Reciprocity in Relationships

The methodology of Ecological Engagement presupposes that, during research, the proximal processes between researchers, participants, objects, and symbols present in the context arise through the reciprocal, complex, and regular interaction between these elements (Eschiletti-Prati et al., 2008). In this study, the reciprocity between the parties involved (researchers, workers, and children) was evident only some time after the beginning of the Ecological Engagement, when the children began to interact more with the researchers through the proposed activities.

With the passing of time, the social educators started to leave the researchers more at ease with the children, which aroused more self-confidence in the work performed in the shelter. The team noticed that the workers no longer felt as if they were being monitored and analyzed with respect to the way they were caring for children. At the beginning of the activities, a mediator was needed to assist in the interactions with the children. However, over time we gained more freedom to approach, talk, and play with them, without fear of how this could be interpreted by the workers of the institution.

As a result of the increasingly closer ties with the children, they began to show affection for the researchers, requesting affectionate exchanges such as hugs and kisses. On the part of the social educators, mutual interest in the relation was perceived in the moment when they began to share their experiences and their difficulties. By creating spaces for talking and listening, both during interviews and informal conversations, new channels of discourse circulation were opened, allowing the emergence of alternative forms of operationalization of everyday work of each of the workers in their respective roles.

An example of this was the question we made to one of the educators who said that she used to reprimand the children as soon as she started working in the institution. After we made the question about the way and the motives that made her act that way, she turned to another educator standing beside her asking about her practice. This interaction between the two educators, in particular, generated a very interesting and unique moment in which the daily work was problematized and the exchange of experiences was the means to think about new educational practices.

The fact of providing opportunities to give the professionals a space where they could speak about their practices, experiences and doubts showed that the research had a meaning in that context. Through the opportunities created by the team of researchers, it was possible to exchange experiences regarding the most normative aspects to the events, and apparently more trivial with the professional categories there, resulting in valuable moments of production of knowledge in the context of the institution.

The technical team, on the other hand, demonstrated this reciprocity by informing about the progress of some cases, explaining which children were in the process of family reintegration or in the process of adoption. In this way, the research team was also able to follow the dynamics of the institution in its formal aspects.

A striking case for the researchers was a couple of siblings, a six-year-old girl named A. and her three-year-old brother W. The children were referred by the Tutelary Council to the shelter due to mistreatment, neglect, psychological violence, alcoholism, and chemical dependence on the part of the biological parents and were in the institution for approximately 1 year and 6 months.

These kids called the attention of the researchers because the girl would soon turn 7 years old and would be out of the age range of the children hosted in that institution, and she could be separated from the brother. It was clear that they were very attached and dependent on each other. Because of what was seen during the visits, doubts about how the situation of those children would be were inevitable, and there was a concern about whether there would be a family that manifested the desire to adopt both of them.

In the period in which they were in the shelter, they had been visited by the father only once and no other member of the family ever came back. The technical team tried an extended family reengagement, but the uncle claimed not having the resources to care for the children. During the playful moments and conversations with the researchers, A. showed a strong desire to have a family, and she reported the names of the other children who had been reinserted into their families, and asked when she and her brother would have this opportunity.

As a result of the loss of family custody, A. and W. were referred to the adoption process. According to the educators and the coordinator, throughout the period in which she was in the shelter, A. proved to be a communicative girl, with leadership and initiative. She longed to have a family again and expressed feelings of sadness because she had not yet been adopted. In turn, W. had difficulty to speak. His speech was not well developed for his age, and he had been referred to a speech therapist by the shelter institution. She was an active, kind child who required much attention, even from the researchers.

It was with great joy that the research team received the news, through the coordinator, that the children would be adopted by a couple. The psychologist of the technical team began a process of family reintegration explaining to the children that they would go to a new family. This process was characterized by visits to the new family and visits to the institution. A. and W. showed much enthusiasm and anxiety to be definitely with the new parents. The two children were adopted in the last month of the Ecological Engagement. The sharing the history of the children with us consisted in a parameter pointing to the effectiveness of the Ecological Engagement that was in course.

Elements of the macrosystem were also present in the dynamics of the relationships that occurred at the institution and they may have affected the relationship between researchers and participants. According to Siqueira and Dell'Aglio (2006, p. 72), "when analyzing the institutionalization of children and adolescents, social stigma, loaded with pejorative and depreciating value, associated with culturally expected values can be considered elements that integrate the macrosystem [...]". Therefore, it is believed that it is not easy for professionals to talk about this place,

marked by so many stereotypes and prejudices, without externalizing some resistance, almost inevitable, when it is assumed, although mistakenly, that they are being evaluated.

At the moment when the professionals showed resistance or expressed lack of time to talk to the researchers, the strategy adopted by us was to help in the service. To pick up a child who was crying, to cross the inner courtyard between the two houses in rainy days, or even to help the children to wear the shoes were some of the actions, although unplanned, that aided in the approximation and demonstration that “we were there also to help”. Ecological Engagement requires the researcher to have a more open attitude while conducting the research and a previous preparation to deal with the possible signs and behaviors of intolerance and discomfort on the part of the subjects. It requires patience and the confidence that this way of doing research brings unique benefits.

When We Had Doubts...

At various points in the research, the question arose as to whether we were actually achieving the Ecological Engagement, because this is an approach with an innovative proposal in the application of Psychology in studies and interventions with children in situation of social and personal risk, without, however, the provision of a systematization of the application of data collection instruments. In some situations, the question arose as to whether the instruments would really respond to the initial objective of the study and whether the established relationships were actually reciprocal, because not always the support of the educators to the activities carried out by the research team was possible.

At other times, especially at the beginning of the study, the difficulty was great because the research team did not know if they should just be there, in that space, and observe or if they should plan a activity and suggest it. Moreover, the exact timing of proposing a more complex activity was unclear. There was also anxiety due to the deadline of 1 year to complete the research. However, we can say that dedicating the first 3 months of engagement to observation was a very positive decision because during this time the relationships became more intense and the presence of the researchers became part of the environment of the shelter. At the time the interviews were held, many aspects did not need to be asked because of the degree of knowledge that the researches already had of the environment. Thus, in the Ecological Engagement, the research instruments are complemented by providing an integral view of the space and the relationships, and it is up to the researcher to evaluate the exact moment of inserting them in the research, a task that did not seem easy.

Data Analysis Procedure

To analyze the data, we sought to understand the psychosocial development of children in the context of the institution, identifying the aspects that influence positively or negatively this development based on the Bioecological Theory of Human Development and the Statute of the Child and the Adolescent.

After repeated readings of the collected material—both the field diary and the interviews—aspects related to the four environmental levels described by Bronfenbrenner, microsystem, mesosystem, exosystem, and macrosystem, were identified. The aspects related to these environmental levels were discussed among the researchers, seeking to clarify the perception that each one had in relation to the content of interviews. In the microsystem, contents were raised that referred to the immediate context of the ecological environment investigated, that is, the institution. As a criterion for the analysis of the mesosystem, we sought to observe the effects of the interaction of the immediate contexts present in the speeches of both the technical staff and the social educators. With regard to the exosystem, the analysis of the participation and the indirect influence of the non-immediate contexts on the dynamics of the institution's functioning were prioritized. Finally, we listed the statements in which there were values, concepts, beliefs, ideologies, and stereotypes that make up the macrosystem and that give subsidies to understand what was present in the microsystem. In addition, it was analyzed how the proximal processes were established and how they were valued by the people who were part of them.

Aspects belonging to each of the four levels were organized by separating the data from the technical team and the social educators, and once again the content was read and discussed among the researchers and the teachers to clarify the emerging doubts regarding the proposed analysis.

In the analysis of the data it was verified that the technical team mentioned more frequently aspects of the meso-, exo-, and macrosystems related to the family and the community. This result is explained by the fact that the processes of attempted reintegration of the family are made through home visits and referral of families to social support services. In this way, the psychologist and the social worker act more in environments outside the shelter. The technical team practices with children consisted of accompanying them in outdoor activities, special reception when the child arrives at the shelter, accompanying the process of adoption by means of individual attention and offering a listening space in case of affective complaints.

The social educators mentioned more reports of the daily activities of children and the relationship established with the community. Microsystemic aspects of the institutional context were the most frequently mentioned in their speeches. It was possible to observe that they seemed to like what they did, assuming responsibilities in the material and affective care for the children. They participated in the care process by providing basic care (accompanying children to the doctor, schooling, feeding, hygiene) and giving emotional support to children through individualized care in times of need. They remarked that separating from the children, when they are

reintegrated into their families of origin or the foster family, causes them suffering because of the ruptures of bonds already established in the institution.

The community established an interaction with the children through outside activities, visits and outings promoted by the shelter or by people in the community. The institution also sought to establish partnerships with the community for the acquisition of resources and donations, or by directing children to health, education and culture services.

Evaluation of the Experience with the Method

The method of Ecological Engagement made it possible to follow the processes of interaction of people with the context in which their development is taking place, as well as to obtain details of the development processes. In this sense, the team identified that these interactions need to be prioritized because they are very important to the understanding of the reality of the study. They allow the researcher to make a more in-depth analysis of the studied phenomenon, not only being a mere spectator of the processes that take place in the studied environment. Furthermore, the engagement allowed the researcher to record, as empirical data, what is in fact relevant to the institution and its participants, and not only to the researcher. This is only possible when experiencing the dynamics of the institution or the group.

One difficulty found in this study was the way of judging whether the researcher was really inserted in the context. In the case of this research, we used the time of permanence in the institution as observers as reference, before moving on to more systematic proposals for interaction and data collection. Thus, time was the aspect that served as the strongest indicator of the engagement, and it was the driver of the need to propose other activities foreseen in the project, progressively increasing the degree of complexity of the relationships, according to recommended by Bronfenbrenner and Morris (2006).

Very interesting results were obtained through the procedures used; however, we did not accompany the children in activities promoted in other spaces besides the immediate context. Visits to the school, the executing NGO, and the Tutelary Council could have been done by the researchers, as well as the accompaniment of the children to the tours promoted by the institution for leisure places in the community. These activities seemed to have a great importance in the effectiveness and efficiency of the work of the technical team in the shelter and also demonstrated to have implications in the development of the children.

During the research, some adaptations of the instruments had to be made. Many activities initially planned to be carried out with the children were rethought and new interaction strategies were created, such as the preparation of a folder. This dynamics of the researchers was important to achieve the positive results described here.

Another essential point for the enrichment of the data collected was the presence of the researchers at various times in the institution. This presence made it possible

to gain a very broad knowledge about the functioning of the place, as well as the relationships established in that space, since the visits were carried out on common days of the week and days of visits to the community. This procedure would be adopted again if a new research was carried out.

Conclusion

The methodological proposal of Ecological Engagement was used in result of the choice to adopt the Bioecological Theory of Human Development as the theoretical basis for our study. This choice was due to the fact that Ecological Engagement is a theory that encompasses several aspects of the life of the subjects studied and by the very concept of development that underlies it. This choice was also based on several research articles that consider it a successful methodology in studies similar to this one.

De Antoni and Koller (2001) report an experience with this methodology in an institutional environment called Casa de Passagem that hosts girl victims of violence. The application of the knowledge of the Bioecological Theory involved the study of the four nuclei: the person, the process, the context, and the time (PPCT). The context was described by the levels of interaction of the ecological environment: microsystem, mesosystem, exosystem, and macrosystem. The reality was understood through the triangulation of information obtained from girls, the family, and the neighborhood, observing the physical environment and the relationships developed in various contexts, such as the shelter home itself and the constituent bodies of its support network.

Siqueira and Dell'Aglio (2007) performed procedures based on Ecological Engagement in the study of the family reintegration of an adolescent who had undergone the experience of institutionalization through semi-structured interviews (participant, mother, monitor, and social worker of the institution) and analysis of records of the shelter institution. The risk and protection factors present in the family and in the institutionalization in aspects related to the person and to the contexts were investigated.

In view of the present report on Ecological Engagement carried out in a space of institutionalization of children aged 0–6 years in a municipality of the State of Espírito Santo, it is possible to affirm that the experience of applying this methodology was successful, complementing the evidence presented above. The following aspects were indicative of the adequacy of the methodology of Ecological Engagement used in this work:

1. The range of information to which the researchers had access in a same ecological space, from the simplest activities developed in the workers' daily life, to the most formal workers, such as reports and pedagogical projects of the institution.

2. The successful use of different forms of recording data, considered with the same degree of importance – including data from informal conversations and those from conversations recorded and later transcribed.
3. The process of mutual development of researchers and research participants, implying the recognition of the researcher as part of the phenomenon studied.
4. The possibility of discussing the doubts that arose during the data collection due to the sufficient time that the researchers had to interact with the other participants, allowing relevant data of the studied reality to be reassessed when necessary.
5. The richness of the content emerging from the sources of data collection that made it possible to respond the problem proposed by the research.

One of the challenges of employing the Bioecological Theory is to carry out a plan that contemplates the investigation of the four elements of the theory in a single study; provided adequate and sufficient instruments are used, we can conclude that the Ecological Engagement is a method that successfully achieves this goal.

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Chapter 7

Ecological Engagement in Institutional Care Context: An Experience Report with Adolescents in Pernambuco



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Introduction

In this chapter, we intend to report an experience with the use of the Ecological Engagement method in a research developed with female adolescents aged 10–14 years who are in care institutions for protection measure in the state of Pernambuco, Brazil. Our report is based on the research entitled “Autocuidado e apoio social na perspectiva de adolescentes acolhidas em medida de proteção,” developed by the authors at the Hebiatrics Master Program of the University of Pernambuco, in partnership with the State Superintendence of Child and Youth Care, whose aim was to understand the conceptions of health self-care built by adolescents in care and its relation to institutional and social support networks in the light of the Bioecological Model of Human Development (BMHD). The mentioned study was part of a major study entitled “Vulnerabilidade, gênero, violência e os determinantes da saúde na adolescência.”

Accordingly, we developed an exploratory, descriptive research of qualitative approach and interdisciplinary nature, based on theoretical–methodological parameters established on Anthropology, Linguistics, Collective Health, and Psychology, having the Ecological Engagement purpose as a guide, which was first systematized by Ceconello and Koller (2003), from studies based on the BMHD.

Choosing the Ecological Engagement was a response to the researchers’ need for a theoretical–methodological framework which would enable them to be inserted into the environment to be studied and would allow the development of a real and natural perspective of various interactions between people/researchers and different actors, objects, and symbols that comprise the context where the object of study is inserted (Ceconello & Koller, 2003; Eschiletti-Pratti et al., 2008; Koller, Morais, & Paludo, 2016).

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The Ecological Engagement, in practical terms, consists in the introduction of the researcher to environments that constitute the natural contexts of the subjects' lives (Santana et al., 2018), based on Bronfenbrenner's idea (1979/1996), exponent of the BMHD, which emphasized the importance for researchers to investigate the studied subjects' environment as it is perceived and experienced by those who are in it. Therefore, the Ecological Engagement is presented as a strategy that favors the formation of bonds between researchers and participants, ensuring deeper knowledge and enabling more organic data collection.

The Field of Study

In the specific case of the research which developed into this study, the settings were two care institutions that shelter children and adolescents of both genders, aged 0–18 years, in Recife, capital city from the state of Pernambuco, one of the nine states that comprise the Northeastern region in Brazil. According to the last demographic survey, it is estimated that Brazil's population comprises 190,755,799 inhabitants, while Pernambuco's inhabitants comprehend 8,796,448 and Recife's population comprises 1,625,583 people, out of which 245,673 are between 10 and 19 years old. The demographic data also show that a high percentage of Brazilians spend part of childhood and adolescence in shelters. According to the National Registry of Children in Care (CNAC), currently in Brazil, there are 47,073 children and adolescents who live in 4457 shelters. Among them, 24,698 are aged 10–19 years (BRASIL, 2009). According to recent data of the National Registry of Children in Care (CNCA), Pernambuco has 90 care institutions where 1452 children and adolescents are in care; 13 of those institutions are located in Recife. They are children and adolescents who are in care by judicial determination to serve one of the protection measures set forth in the Child and Adolescent Statute (ECA), especially that which consists in, exceptionally and temporarily, withdrawing children and adolescents from family life in cases of rights violation so that they are assisted by the integral protection network dedicated to them.

Considering that one of the BMHD's assumptions is the contextualization of the subject in the environment, and regarding the interdisciplinary practice for the analysis and understanding of the object of study, it is urgent that we comprehend the historical–social context in which the studied subjects are.

The Policy for the Protection of the Child and Adolescent in Brazil

Brazil currently has the greatest teenage population in its history. During the past decades, the country has built policies to ensure and promote the rights of the child and adolescent, which were aligned following international parameters. However,

the social indicators of adolescence in the country are still bad: a reality shared with other countries in Latin America and the Caribbean. Indicators such as poverty (people who live with monthly household income per capita lower or equal to half the minimum wage¹), extreme poverty (monthly household income per capita lower or equal to one quarter of the minimum wage), low educational attainment, exploitation of labor, privation of community and family life, violence that results in murders of adolescents, pregnancy, sexual abuse and exploitation, sexually transmitted infections (STIs), and drug abuse are social phenomena that crucially affect the development of Brazilian adolescents and put them in situation of vulnerability (Fundo Internacional de Emergência para a Infância das Nações Unidas [UNICEF], 2011).

These vulnerabilities, however, do not affect all 21 million of adolescents the same way. What differs in the way the adolescents are affected by such vulnerabilities is the social inequalities historically built in Brazil (UNICEF, 2011).

For all the indicators, the Northeastern region is in evidence with high percentages. According to data from the National Household Sample Survey (PNDA), performed in 2015, 27% of inhabitants in that region currently live with up to half the minimum wage per month. When the information considers population aged between 0 and 14 years, that percentage rises to 40.2% and surpasses 60% when Federation Units as Alagoas, Maranhão, Ceará, Bahia, and Pernambuco are considered. In these states, around 17.3 million of children and adolescents aged up to 14 years are in low-income families. 5.5 million out of that appear in situation of extreme poverty (Instituto Brasileiro de Geografia e Estatística—IBGE, 2016a, 2016b).

The social panorama that is present in the Northeast reveals the adolescence as a twice vulnerable stage, either for this age group's own characteristics or for the characteristics imposed by society, relegating a great number of them to a life with few opportunities for their development.

Adolescence is an evolutive stage, singular of the human being and considered one of the most crucial moments of an individual's development, which begins with changes in the body and personality due to puberty and ends when the individual consolidates their personality and body changes, progressively obtaining more autonomy and independence. Despite the fact that puberty is considered the starting point of adolescence, it does not exclude the fact that this period needs to be understood through the contextual and social view into which the adolescent is inserted (Macedo, 2012).

In chronological terms, the World Health Organization (WHO) considers that adolescence is a period that extends from 10 to 19 years old, being divided in two stages: preadolescence, which constitutes the age from 10 to 14 years, and adolescence itself, which goes from 15 to 19 years; and the ECA comprehends childhood as the period from 0 to 11 years old and adolescence as the period from 12 to 17 years old. However, the conceptions of being a child and an adolescent were and are historically built in all societies.

¹The value of the Brazilian minimum wage, valid since January 2019, corresponds to R\$ 998 and is equivalent to US\$ 252.

In the West, the conception of childhood according to Ariès (1981) is a creation of modernity and is around 150 or 200 years old. The term adolescent is even more recent, developed as a concept between the end of the World War I and the beginning of the World War II, 1918 and 1939; until then, the transition from childhood to adulthood was done in a short term. Therefore, we believe that any attempts to diagnose and normalize adolescent health need to consider not only the ecological and social-cultural context of the teenagers but also the history which formed the social issues that affect them. Accordingly, we agree with Dell Priore (2013) that we need to recall the Brazilian child's history, a past full of unknown tragedies that trespass the life of an uncountable number of boys and girls. Additionally, we state that it is necessary to distinguish, in that past, the origins of the current Brazilian adolescent's social issues.

Thus, the studies on adolescents and children's rights violation in Brazil cannot be detached from the historical process that formed the Brazilian society, marked by the abandonment of newborns and children, high mortality, slavery, and sexual abuse, not always seen as childhood violation, which reveals the great indifference to the child's value in the country's history (Dell Priore, 2013).

The basis for the formation of Brazil, the slave economy, produced a society under constant human rights violation, of adults, children, and adolescents. In fact, in colonial Brazil, from 1500 to 1822, where about 15% of the population was made of children and adolescents, when a poor or slave child turned 7 years old, she/he was forced to work in the plantations and in other small jobs, a habit that lasted until mid-nineteenth century (Dell Priore, 2013).

Pardal (2005) highlights the difference existing between slaves' children and white children during the Brazilian slavery period. The white children, especially the ones from upper social classes, were given to wet nurses right after their birth, and the boys, after turning 6 years old, engaged in Latin and good manners classes in schools. The slave child, on the other hand, was raised doing manual work that would prepare her/him for adulthood when she/he could make profit for its owner, and not much older than 12 years she/he was seen as an adult, regarding work and sexuality. Thus, social class and economic differences have early determined different approaches to children and adolescents in Brazil.

In addition to those inequalities, Brazilian colonial society also produced a high number of abandoned children. They were called "the exposed," who until the eighteenth century were abandoned as babies on streets and squares, a situation that created very high child mortality. In the attempt to remedy this practice, the colonial administration and the Catholic Church, dominant at that time, adopted one of the first institutions dedicated to care for the abandoned: Roda dos Expostos (Wheel of the Exposed, literal translation), which should guarantee the surviving of the rejected children and hide the identity of the person who abandoned them. According to Marcilio (1997), Roda dos Expostos was one of the most lasting child assistance institutions in Brazil's history, going through the imperial period and the Republic, only having its final extinction in 1950. The Wheel sheltered children and sent them to foster families who were paid to take care and educate them, act which could be done either for charity or for turning them into loyal laborers (Dell Priore, 2013).

In this long journey of abandonment, violation, and neglect to children and adolescents, only in the twentieth century the first laws for child protection were created in Brazil, albeit, originally more worried about social peace promotion than about adolescent health and well-being promotion: one of the most important laws was the Brazilian Minors Code of 1979, whose aim was to care for those under 18 years old who were in “irregular situation” (Rizzini & Rizzini, 2004). The Brazilian Minors Code was in effect in the country until the 1990s and was the first legal document dedicated especially to the protection of abandoned children and adolescents, guided by the idea of the adolescent as a State’s “ward of court.” This legislation which was valid until 1990 was especially focused on minors’ protection and recognized the need for protection of those under 18 years old, and in some cases between 18 and 21 years old, not only from violence but also from exploitation and neglect, considering the subjects’ social contexts.

In 1990, the Child and the Adolescent Statute, through the Law No. 8069/90, was created, which started the construction of a “subject of rights and duties” (Siqueira, 2012). The emergence of this adolescent protection law happened in a context of consolidation of the concept of adolescent, in the second half of the twentieth century. While the Brazilian Minors Code generalizes all under 18 years old, the ECA differentiates children and adolescents, responding to the historical reality in which this age group is started to be seen as owners of their own characteristics, and also responding to the social mindset change that began to recognize the need to protect these individuals from violations imposed by society.

Therefore, an important modification process of the conceptions of this population’s rights begins, instituting the share of the responsibilities regarding integral protection of children and adolescents, set forth in the article 227 of the Federal Constitutions of 1988:

It is the duty of the family, the society and the State to ensure children and adolescents, with absolute priority, the right to life, health, nourishment, education, leisure, professional training, culture, dignity, respect, freedom and family and community life, as well as to guard them from all forms of negligence, discrimination, exploitation, violence, cruelty and oppression (Brasil, 1988, p. 92).

From this moment, it became undeniable the mandatory character of the recognition of adolescents as citizens with specific rights, who experience a singular development phase and whose experiences will significantly impact on adulthood (UNICEF, 2011).

Among other contributions, the Child and Adolescent Statute provides for the fundamental rights of children and adolescents, protection measures, socio-educational measures, and the consolidation of an integral protection network for this population. In practice, this means that in cases of confirmation or suspicion of violation of children’s or adolescents’ rights, either for action or omission by the society or the State, for neglect, omission, or abuse by the parents or guardians or due to their conduct, the competent authorities may, according to the situation, determine: referral to parents or guardians, via statement of responsibility; temporary orientation, support, and monitoring; enrollment in middle school; inclusion in

adolescent, child, and family assistance programs; requisition for medical, psychological, or psychiatric treatment, either as an inpatient or outpatient; inclusion in community or official program for assistance, orientation, and treatment of alcoholics and drug addicts; having all preferential protection measures been taken, institutional care and placement in a foster family (Brasil, 1990).

In extreme cases, the ECA determines that the adolescent must be withdrawn from the family and sent to care institutions attached to the High Complexity of the Unified System of Social Assistance. It is a protection measure of exceptional and temporary character, as the Statute considers that the protection job's focus must be the reintegration into the family or the placement in a foster family, since the ideal situation is that the adolescent's right to grow, be raised and educated in a family and community environment of protection should be guaranteed (Brasil, 1990).

Currently, the reasons that take children and adolescents to care institutions are mostly the different forms of violence experienced by them in or out of the family environment. In Brazil, neglect and abandonment exist in all regions, followed, as a reason to sheltering, by the parents' or guardians' dependence on psychoactive drugs. Nevertheless, literature mentions the fact that most adolescents in care receive the measure for two or more reasons, which demonstrates a serious situation of vulnerability and social risk in which a great number of the Brazilian population lives (Assis & Farias, 2013).

For the specific case of the state of Pernambuco, a study performed by Santos et al. (2017) reveals that during the period from 2009 to 2012, 5357 aggressions against adolescents aged 10–19 years were notified, a higher proportion than what is shown for the female gender, about 64.3%. When separately assessed, the probability of sexual violence, compared with the age group of 15–19 years, was 2.4 times higher for the age range of 10–14 years, which indicates greater vulnerability for this age group. Additionally, it is evident that there are distinctions according to the child's and adolescent's gender: among the girls, physical domestic violence and sexual domestic violence stand out, a result that corroborates many other studies and encouraged the choice for this public in the research (Baptista, Rueda, & Brandão, 2017; Delfabbro et al., 2013; Silva, 2004).

It is important to highlight that the chosen adolescents constitute only part of the population who needs care, representing that parcel that experienced extreme situations in terms of violations, which does not constitute the totality of teenage victims of rights violation. However, it is evident that children and adolescents are the most vulnerable regarding the social inequality that permeates their families, whose fundamental rights to health, education, and other social rights should be guaranteed, so that they can perform their duties in the promotion and protection of their children's rights (Brasil, 2006). Extreme poverty, low educational attainment, violence against women, proliferation of alcoholism, and dependence on psychoactive drugs that devastate millions of Brazilian families produce domestic environments full of neglect and violence that victimize mostly children and adolescents.

Nevertheless, the experienced reality only promotes the multiplication of violations of cases in different areas of the adolescents' lives. In Northeastern Brazil there are high rates of: high school leaving (7.8%), age/grade distortion in high

school (36.1%), child labor (6.9%), homes in favelas (6.2%), lack of drinking water (26.4%), lack of improved sanitation (60.3%), deaths by homicides committed against people under 19 years old (18.4%) (Cintra, 2018). All these indicators are results and representatives of poverty.

This situation, however, is hardly restricted only to the Northeast: only in 2016, Disque 100, a phone service for receiving, delivering, and monitoring reports of human rights violations in the whole Brazilian territory, received more than 144,000 reports of rights violations against children and adolescents in the whole country, out of which 71.3% were neglect, 44.5% psychological violence, 42.1% physical violence, 20.6% sexual violence, 11.4% other types of violence (Cintra, 2018). Many of these cases of neglect and psychological violence are produced by the reproduction of misogynistic, racist, and violent values originated in the slave society, in which abuse was a routine. Despite the end of slavery, the mindset that it created continues to exist in the Brazilian society.

In this scenery of violence and abuse to which children and adolescents are subjected, the possibility and reality of institutionalization as a protection measure for those adolescents constitutes a subject of great social and political relevance. The great number of adolescents in shelters due to social, economic, and family conditions that led them to institutional care reveals the State's, society's, and family's flaws in building opportunities for the adolescents' healthy biopsychosocial development.

Characterization of the Shelters, Families, and Adolescents in the Study

From the theoretical background that supports our paper, we consider it to be relevant the contextualization of the studied spaces, as well as the families and adolescents who participated in this research. This characterization is opportune once knowledge on some elements from these sceneries and actors can help in the engagement process of the researcher into the field as much as in the analysis and discussion of the results.

The research was performed in 02 public state institutions associated to the State Superintendence of Child and Youth Care (SEACAD) of Pernambuco. The type of care in the institutions where the study was conducted corresponds to the modality "institutional shelter," according to the technical guidelines approved by the National Council for the Rights of Children and Adolescents (CONANDA) and National Council for Social Assistance (CNAS). This modality attends children and adolescents of both genders, in the age range of 0–18 years. Among the main characteristics of the shelters, it is remarkable that those presented a similar aspect to a residence, inside a community, offering welcoming environments and institutional conditions that intended to provide personalized proper care in small groups to the cared (Brasil, 2009).

The institutions are in Madalena neighborhood, located in the North region of Recife city, with a resident population of 23,082 inhabitants according to the IBGE's census (2010). As for the public areas in the neighborhood, in the shelter's surroundings, it is possible to count: one public square, one public school, Lessa de Andrade polyclinic, and one Family Health Strategy health center (ESF). However, it is worth highlighting that none of the shelters are under the ESF coverage. Each shelter can attend up to 20 children and adolescents, but throughout the research period both presented an amount of attended people higher than recommended.

For the characterization of families, data were collected from records and the Individualized Care Plan (PIA) of each adolescent, with special attention to demographic data about the family with the composition of the family of origin, occupation, family income, distance between the city of origin and the institution, and also whether there is the possibility to reintegrate the adolescent into the family of origin or the extended family. Concerning the parents' educational attainment, this information was missing in more than a half of the records. Among the collected data, the notes indicated predominance which varied between illiteracy and low educational attainment.

Those family data are important because, as the study carried out by Somer (2017) shows, most of the times girls come from families with low income and low educational attainment. Janczura (2012), on the other hand, claims that, in poor families, besides the low socioeconomic level and the absence of one parent, low educational attainment works as a risk factor to one's social and psychological development. As we have previously stated, ignorance, male chauvinism, and violence against women are elements that accumulate with situations caused by poverty in generating child abuse.

However, it is important to underline that today there are different family compositions in society, as claimed by Dias (2009). Among the family compositions, we may mention the nuclear family constituted by the father, mother, and children and the extended family composed by a larger number of people such as aunts and uncles, cousins, stepchildren, and grandparents. Concerning family composition, occupation, and income, we observed that the majority of the studied families is numerous but has as a characteristic the absence of one parent due to either death or abandonment.

Concerning income, the majority of the families have no income or have insufficient income to maintain the family group, living in general poverty conditions (people who live with a monthly household income per capita lower or equal to half the minimum wage) and extreme poverty (those with income that is lower or equal to one quarter of the minimum wage), thus, presenting more vulnerability and social risk. According to IBGE and PNAD (2015), 60.6% of the population aged 0–14 years live in a situation of low income in the Northeast of Brazil (Fundação ABRINQ, 2018).

The monthly family income is still lower than 1 (one) minimum wage for 43% of the total of families, with income of 1 (one) minimum wage only for 21% of the families, and 36% of those live with no declared income. However, we should remark that the family's lack of financial resources does not constitute a reason that,

at first, causes the child to leave the family life and be admitted to a shelter. On the other hand, we highlight that only 21% of the adolescents have the possibility of reintegration into the family of origin or the extended family.

The National Plan of Family and Community Life which was elaborated in 2006 (and represented a milestone for public policies in Brazil by aiming to stop the culture of child and adolescent institutionalization and strengthening integral protection, the preservation of family, and community bonds set forth in the ECA), states that, concerning the socioeconomic conditions of the families of children and adolescents in institutional care: “*the ability of the family to fully perform their responsibilities and functions is strongly related to their access to the universal rights to health, education, and other social rights*” (Brasil, 2006, p. 27). Therefore, one can infer that in addition to conditions of poverty and extreme poverty that affect those families, there is precariousness in the social support network and social policies, as fundamental rights such as housing, health, and education do not come into effect.

Today in Brazil, six out of ten children and adolescents live in poverty, that is, in families whose per capita income is insufficient to afford a basic food basket. Nevertheless, that poverty is even greater when the view is extended beyond the lack of material resources, as girls and boys do not always have their fundamental rights ensured and are subjected to various types of violation (UNICEF, 2018). The situation of poverty and extreme poverty that permeates the reality of thousands of Brazilian families should not be a condition that justifies the termination or suspension of parental authority, as set forth in the ECA in Article 23.

Concerning geographic location, it is noticeable that none of the families of the adolescents in this study live in Recife, city where the shelters are located, and only 7.1% of the families live around 25–50 km away, whereas 92.9% live 50–200 km away, which opposes to the ECA, which states that institutional care, when necessary, must occur in the same location as the family’s residency so as to contribute to the preservation of the bonds among its members (Brasil, 2018). The distance between the city of origin of the families and the shelter appears as an unfavorable characteristic to the process of familiar reintegration (Acioli, 2015; Acioli et al., 2018; Fávero, Vitale, & Baptista, 2008).

On what concerns reengagement into the family, we observed that for the majority of the adolescents, all the possibilities of family reintegration were deployed, thus the only action left was to wait for a possibility of integration into a foster family (adoption).

Different reasons for institutional care of adolescents were identified, most frequently: neglect in the family; guardians addicted to psychoactive drugs; adolescents subjected to labor exploitation, begging, and street situation; situation of guardian abandonment; sexual domestic violence and lack of material resources. Among those, lack of material resources was identified in all the researched family groups. As for less frequent reasons there were absence of the guardians for imprisonment; the family deliberately giving its child to care institutions; subsection to sexual exploitation; and death threat.

The literature reveals that diverse forms of violence are committed against people of both genders; however, it is proved that sexual violence against girls is prevalent. Sexual violence, when considered by age range, appears as preponderant in girls aged 10–14 years (Santos et al., 2017; Sena, Silva, & Falbo Neto, 2018), a period that coincides with the emergence of secondary sexual characters, which is used as an excuse for the emergence of the aggressor's sexual desire. It is important to emphasize, however, that the motivations for sexual violence is less about sexual desire and more related to an impulse to dominate the weakest, for power hunger, and the will of the most experienced to explore the ingenuity and intellectual immaturity of the other, which makes the youngest the most vulnerable (Faleiros & Faleiros, 2001; Ribeiro, Ferriani, & Reis, 2004; Souza et al., 2014).

Vulnerability is amplified by low educational attainment, condition that hinders rights awareness and even the recognition of the experienced situation of violence. Thus, in our research we perceived that among the research adolescents almost all the total of them have had their education delayed. Other data indicates that the majority, during the period when they lived with the family, did not attend school or did irregularly. A study carried out in Portugal with adolescents in institutional care, also found significant distortions between age and school year (Brandão, 2015). And if this situation is hardly particular to Brazil, according to the Ministry of Education (MEC), in 2016, the Northeast region counted one of the highest rates of abandonment and age/grade distortion, to middle and high school, compared to other regions in the country (Fundação ABRINQ, 2018).

To Bronfenbrenner (2011), out of all the contexts that contribute to the development process, the family—basic unit of our social system appears as a core context and should offer the child the love and care needed for development. School is also mentioned as another important context that promotes development. Carlos et al. (2011) indicate that school is part of the affective and social network for children and adolescents and constitutes an effective protection factor. Considering those statements, in terms of school and family environment, the situation before sheltering was so precarious that it revealed vulnerability in the various forms of violence suffered by the girls.

Experience Report: Employing the Ecological Engagement Methodology in Interdisciplinary Research

Considering the BMHD's assumptions that guided this research, the researchers' engagement into the field initially came from the questions raised in the search for a methodological strategy that would enable approach and interaction with the subjects in this study; that would privilege naturalistic observation of the context where the subjects developed; that would enable the researchers to apprehend reality as experienced and perceived by the subjects; that would provide a combination of data collection strategies; and finally, that would ensure the development of a study with ecological validity.

The work began with meetings promoted by the multidisciplinary group of researchers, composed of professors from the University of Pernambuco, from the areas of Health, Anthropology, and History; and students of the Master in Hebiatrics and different undergraduate programs at the mentioned university.

In those meetings there were discussions on the characteristics of the population of adolescents under protection measures and the institutionalization context in Brazil, more specifically in Pernambuco state. Some of the meetings had external guests, such as members of the technical team that composed the State Superintendence of Child and Youth Care (SEACAD) in Pernambuco. Despite the interdisciplinary methodology in data collection and analysis, Ecological Engagement was the theory that supported all the research work, once it covers the Bioecological proposal of investigation and research “in context,” which privileges the researcher’s engagement into the environment intended to be studied. Therefore, it is identified as a methodology that ensures scientific rigor as much as ecological validity of the collected data (Afonso et al., 2015).

Although Bronfenbrenner have not described or systematized a specific investigation method, Ceconello and Koller (2003), Brazilian researchers, have developed the first systematization of the Ecological Engagement, aiming to establish proximity and bonds with the object of study and, therefore, be able to answer the questions numbered in this research (Morais, Koller & Raffaelli, 2016).

Based on the methodology of engagement, the following instruments were used: data collection from records and the Individualized Care Plan (PIA), collection of information from health files and compiled information in enquiry elaborated by the researcher. Subsequently, we carried out the application of Social Network Map and semi-structured interview. A field journal was made, which was used since the moment of approach and entrance into the institutions until the conclusion of the research. On the journal, the researcher’s impressions were recorded, as well as perceptions of the daily routine at the institutions and informal conversations with the shelters’ professionals about the adolescents. This information contributed to complementing missing or not reported data.

The records correspond to all the legal documents related to the process of institutional care, including personal documents such as a birth certificate and an academic transcript; the Individualized Care Plan (PIA), besides the reports weekly recorded by the technical team that follows each adolescent. The health files hold a compilation of information related to the adolescents’ health, such as the vaccination card, the Caderneta da Adolescente (the Adolescent’s Healthcare Book, literal translation), medical prescriptions, and reports.

The mentioned instruments were used as a strategy to have Ecological Validity in the results. According to Eschiletti-Pratti et al. (2008), the duration of the researcher’s engagement into the field is intimately linked to the study’s aim. Therefore, the *timing* (understood as the sublime moment for the formal start of the research) of the Ecological Engagement is determined in accordance with the aim, the focus to be investigated by the researchers. The researchers go to the field to observe various data, even if they are not directly related to the research theme, they, however, help the researcher understand the individuals-in-context. In total, it was 6 months in the

research field, starting from March 2018, with the principal stage of engagement and bonding of the research at the shelters, which lasted until August 2018, when the interviews finished.

According to the BMHD, we considered the minimum criteria proposed by Cecconello and Koller (2003) for research with Ecological Engagement, that is, importance of interaction between researcher and participants; various meetings in extended periods; informality in interactions; and dialogues with interesting and stimulating topics that progress to even more complex topics. These criteria are necessary so that proximal processes are established, which represent forms of communication, interaction, and bidirectionality.

According to the Bioecological model, those forms of interaction with people, objects, and symbols present in the immediate environment are denominated proximal processes, which is the main mechanism responsible for development (Bronfenbrenner & Morris, 1998).

Cecconello and Koller (2003) highlight that the proximal processes configure the basis of every investigation that adopts the Ecological Engagement methodology. From those premises, the following stages guided the engagement of the researchers into the shelter context and the procedures adopted in this research, based on the aspects presented by the respective authors in the use of the Ecological Engagement methodology:

Establishment of Proximal Processes Between Researchers and Different Authors

Interactional exchange between the researchers and the different actors at the shelter occurred initially with the research team's visit to the shelters to present the proposals of the studies that would be developed with the University and the respective institutions. Also, an opportune moment for listening and exchanging ideas with the technical teams that composed each institution, valuing professional experience and knowledge that had years of work developed with children and adolescents in institutional care.

The interactions between the researchers and the professional teams (psychologists, social workers, educators, teachers, and professionals with high school diploma that worked at the shelters) occurred gradually, with the entrance of the former into the field, with weekly visits, at various shifts and times. That fact contributed to meeting all the professionals that worked at the institutions where the study was developed. The researchers attempted to display willingness to collaborate, listen, interact, participate, and help in different moments in the daily institutional routine, as simple observers or as active agents, always with an ecological view and ethical attitude, intending to preserve the privacy and secrecy of the situations that they would at times experience.

The researchers first approached the team of professionals with higher education (shelter's manager, Psychologist, Social Worker, Teacher). During the weekly visits, the researchers applied instruments of collection that consisted in data collection from the Records, the PIA and Health Files of each adolescent. Checking these documents provided previous knowledge of each girl's history, from the family's history to the period of living in the shelters. Knowing the variety of violations suffered by the adolescents and the conditions of the institutionalization process favored sensitive and individualized approximation with each girl, thus, avoiding during the interviews topics and questions that might embarrass them and generate discomfort.

Gradually the researchers could know and be known by all the actors in the shelter context, professionals, children, and adolescents who lived there. Informal meetings, such as ludic games (dominoes, drawing, painting, book reading), Feast of Saint John, birthday parties, school activities, recreational activities in the neighborhood, and various activities in moments when the adolescents were together in the shelter's common areas, fostered and deepened the relationship between the researchers and the other actors. Interactions occurred during breakfast, lunch, and the moments of leaving and arriving from school. The diversity of times also appeared as an effective tool that enabled knowledge on the daily institutional routine in the broadest and most reliable way.

It is worth mentioning that the researchers attempted not to make any distinction between the types of interaction with the social actors involved, taking every approximation opportunity, the simplest it might seem. We consider vital the comprehension that entering a context requires effort and dedication and helps the researcher be a part of the daily routine of all the people living in that environment, not only the ones to be studied. Therefore, all the subjects should feel equally privileged, especially when the object of study is children and adolescents in institutional care, who are already so victimized and socially vulnerable.

Bond Establishment Between the Researchers and Adolescents in the Research

Interaction between the researchers and the participants of this study occurred in the institutional context with the activities developed daily, often performed with groups of children and adolescents of both genders as an alternative to facilitate further approximation directed to the specific research group.

Through the researcher's engagement we could identify the girls' topics and approaches of interest, which led to engagement in the activities. In those activities performed in the shelters, a number of interaction situations were not planned but suggested by the adolescents themselves, such as dialogue circles with the researchers on topics chosen by the adolescents. The topics discussed became more and

more complex and some informal meetings became formal, due to the application of the other instruments of collection, such as the social network map composition and interviews.

Concerning the adolescents' engagement in the research, it was positive, once all the adolescents who corresponded to the inclusion criteria participated in data collection. No objection to participation in the interviews or quitting, for example, was observed.

During the interviews, special attention was given to the finalization of each meeting, and after its ending, the researchers tried to recover informality in the topics and address subjects that interested the researched group. The conclusion of the interviews consisted in discussing subjects that were related to the topic, in a comprehension level that valued individual knowledge; the talk followed a pattern that allowed a relaxed atmosphere and appreciation of singular interests. For example, for the adolescents that liked soccer or fashion, or enjoyed talking about religion, the ending of the interview would address one of those topics.

Application of the Data Collection Instruments

- Field journal: it permeated all the process of research development. On the journal, observations of the institution's context were recorded, as well as various situations experienced in the shelter's daily routine. This resource enabled the documentation of the researchers' observations, the interactions, and the established proximal processes. Situations, perceptions, impressions, facts (reported or known), feelings, and stories were recorded. As suggested by Morais, Borba & Koller (2016), the observations were written preferably on the same day, shortly after leaving the research field and sometimes, simultaneously, so that each entry carried the emotional aspect of the researchers and the participants.
- Data collection from the records, the PIA, and the health files: collected information was compiled on a spreadsheet elaborated for this purpose and the data were analyzed.
- The Social Network Map: it was adapted considering the theoretical assumptions of the bioecological model, albeit adapted to be easily understood by the adolescents who participated in this study. The mapping aimed at knowing, from the perception of the adolescent in institutional care herself, how the bonds between the girl and the personal and institutional social network are configured, in addition to identifying potential gaps in the relationships established by the adolescents.
- Semi-structured interview: shortly after applying the social network map, the semi-structured interview was applied, which according to Duarte (2004) enables deeper perception of the way that each participant perceives and gives meaning to her reality, allowing a broader view of the investigated universe.

Leaving the Research Field

Leaving the research field happened gradually with the support of the research group, once the bonds between researchers and adolescents were significant, which made the goodbye difficult. After the conclusion of data collection, the researchers met the group of adolescents a few times, intending to explain their need to leave the field for research analysis and conclusion, which did not prevent the researchers from attending to some invitations made by the institutions' team and by the adolescents to join events with the group. This provided the researchers and the girls with a positive experience of continuity.

Data Analysis

The quantitative analysis is privileged when Ecological Engagement is used, as all information collected through different tools and through the engagement can be complemented. The choice for this type of analysis enables the researcher to do the triangulation of data, a relevant element for qualitative research, once it provides a view that transcends the answers provided by the instruments (Siqueira & Dell'Aglio, 2016).

Regarding these aspects, for data interpretation, we elected the content analysis technique for the thematic modality. According to Bardin (2016), the content analysis is understood as a set of techniques of communication analysis that aims at the cores of meanings, through objective and systematic procedures of message content description, which allow the inference of knowledge related to the conditions of production and message reception. As for data interpretation in the research, we summarized and analyzed the study's findings according to Bronfenbrenner's BMHD. The results can be fully consulted in the master's thesis entitled *Autocuidado e apoio social na perspectiva de adolescentes acolhidas em medida de proteção* (Macêdo, 2019).

Considerations

The master's dissertation research from which this chapter derive had the challenge to find out how the adolescents under protection measure do their self-care related to health and realize their support network, from an understanding that transcends several environments and contexts where those girls lived or still live, since the family core and its influences and contradictions, in the support or abandonment reproduction and in the family neglect, in the street experiences, in the different schools and communities, and staying in different institutions; contexts that are imposed on these adolescents' journey who are only beginning to build their life stories.

The choice for the BMHD and the ecological engagement as methodological strategies fostered the development of this study, as it enabled the researchers to immerse into the context in which the adolescents live and made it possible to understand how they interact and perceive the relations and experiences related to their development, favoring a coherent analysis with the studied universe.

The long engagement period was an important factor not only for data collection and the ecological validity of the results but also for the establishment of significant bonds between the researchers, the people, the objects, and the symbols that composed the context shelter, especially with the researched adolescents.

The moment of entrance into the research field appeared as one of the biggest challenges, once the researchers immersed into new environments, with characteristics inherent to groups that carried life stories permeated by situations of violence. Another complex moment was leaving the field, when data collection was over and the researchers should finish the proposed study. However, how to proceed when the quality of the established proximal processes exceeded the expectations and the researchers and subjects of the studies became intertwined? At this point, leaving field must be gradual, shared with the research group and the different actors that compose the context in which the research was developed, so that the participants do not feel abandoned.

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Chapter 8

Ecological Engagement in Studying Adolescents Undergoing the Process of Family Reunification



Aline Cardoso Siqueira and Débora Dalbosco Dell’Aglío

This chapter aims to present and discuss the theoretical–methodological procedure of *ecological engagement* used in a study with five adolescents undergoing the process of family reunification. This procedure, which was created by Ceconello and Koller in 2003, then revised and expanded by Prati et al. in 2008, is based on Urie Bronfenbrenner’s Bioecological Model of Development. This model was chosen to support this study as we consider the ecological perspective proposed by it to be important. Thus, it evaluates the phenomenon through the interaction of four important aspects (*person, process, context, and time*), in addition to the theoretical conception of *development in context*, ensuring ecological validity.

In this chapter, the research used as a framework for the discussion on *ecological engagement* is a qualitative study with adolescents who were reunited with their families of origin after a period of family separation by court order. To better understand the phenomenon of family reunification, and the reasons for selecting and using the procedure of *ecological engagement*, we will initially present studies on socially vulnerable families, institutionalization, and family reunification. Then, we will focus on concepts of the Bioecological Model, which are relevant in this investigative process. Finally, we will present data on the application of *ecological engagement* to discuss the possibilities and challenges offered by this procedure during the study.

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Family Reunification: Brazilian Families and Institutionalization

Whenever the topic of discussion is the institutionalization of children and adolescents, the characteristics of families are taken into account. In 2011, a national survey on Brazilian foster care services (Assis & Farias, 2013) revealed the existence of 1980 institutions serving 36,929 children and adolescents, which is evidence that a large number of Brazilian children and adolescents have faced this reality. Neglect was considered the most frequent cause for institutionalization (33.2%), followed by abandonment by parents and guardians (18.5%) and parents with chemical dependency (17.7%). The researchers question the issue of neglect present in medical records, because this type of abuse indicates a willful omission of the basic needs of the child, whereas in practice omission may be due to lack of conditions (i.e. poverty).

These families are considered socially disengaged from their children and unable to provide adequate education. This stigma has been present in Brazilian society for decades (Patias, Siqueira, & Dell'Aglio, 2017; Rizzini, Rizzini, Naiff, & Baptista, 2006; Siqueira, 2009; Siqueira, Morais, Dell'Aglio, & Koller, 2010; Yunes, Garcia, & Albuquerque, 2008). Other studies have also pointed to the poverty status of such families (Azor & Vectore, 2008; Silva, 2004), which is the reality of many families in Brazil. The literature shows that the vulnerable situation of families is directly associated with their poverty status and the Brazilian panorama of social inequality (Ferrari & Kaloustian, 1994). Poverty is not the cause of the victimization process that occurs in many families, but it has been considered an influential risk factor for family dysfunction, along with other factors such as parental neglect, inadequate standards of parental care and supervision, inappropriate models of social responsibility and academic performance, rigid educational practices, and parental mental illness (Masten & Garmezy, 1985; Seifer, Sameroff, Baldwin, & Baldwin, 1992).

The Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística—IBGE*) (2016) revealed that the percentage of Brazilian families whose head of the household is the woman has increased over the years (22.2% in 2000 to 40.5% in 2015). In the study of gender and race inequalities of the Institute of Applied Economic Research (*Instituto de Pesquisa Econômica Aplicada—IPEA*) (2017) based on data from IBGE's national survey by household sample, the high number of families in which women do not have partners increases the risk of social vulnerability, as the average income of women (especially black women) is lower. Both in Brazilian and international literature, poverty has been considered a risk factor for the separation of children and adolescents from their families. In many cases, it is the only reason for separation and the main obstacle to family reunification (Courtney & Wong, 1996; Eamon & Kopels, 2004; Landy & Munro, 1998; Silva, 2004). According to Saraiva (2002), the lack of basic material resources is often a reality in vulnerable families, which commonly results in the neglect of a child's education or abandonment, and leads to institutionalization. On the other hand, this situation has led many families to take advantage of

institutionalization as a way to provide their children with better living conditions, ensuring school attendance, food and housing, medical and dental care, as well as leisure, culture, and access to several technical courses. This perspective on institutionalization was described by Fonseca (1987), who found the foster care institution as part of the support network of lower income families, playing the role of caregiver when the family is unable to develop such a role. According to Fonseca (1987), many women perceived the former State Foundation for the Welfare of Minors (*Fundação Estadual para o Bem Estar do Menor*—Febem) as a boarding school, where they could leave their children to be raised when faced with situations of unemployment, physical or mental illness, lack of an effective family network, or prior to a new marital union. This separation was not experienced with suffering and sadness, because they believed their children would be well cared for and their needs met at the institution.

The action of institutionalizing abandoned and “helpless” children is present in the history of Brazilian society, and it is a deeply rooted practice (Baptista, 2006; Leite, 1997; Marcilio, 1997). Rizzini and Rizzini (2004) believe that there is a culture of institutionalization in Brazil in which children living in poverty, violent homes, and abandoned are placed in institutions that aim to protect, confine, and move them out of neglect. However, this culture that resorts to institutionalization as the first solution and discredits the potential of families to solve their problems is not in line with the conceptions that gave rise to the Brazilian Child and Adolescent Statute (*Estatuto da Criança e do Adolescente*—ECA, Brasil) in 1990. This legislation considers foster care an extraordinary and temporary protective measure used when the rights of children and adolescents are threatened or violated. It also determines that family separation should be carried out when other alternatives cannot be implemented, and only in situations where children are at risk. Starting in 1990, there is a shift in paradigm from an irregular situation doctrine to an integral protection doctrine (Rizzini et al., 2006).

With the Brazilian Child and Adolescent Statute (*Estatuto da Criança e do Adolescente*—ECA) (Brasil, 1990), children and adolescents passed from objects of guardianship to subjects of rights and duties, having the right to family and community life. This makes it possible for abandoned children and adolescents not to be “forgotten” on the fringes of society, but rather placed in a community, developing nourishing relationships and cherishing the role of the family.

In refining the determinations of the Brazilian Child and Adolescent Statute (*Estatuto da Criança e do Adolescente*—ECA), the National Adoption Law (*Lei Nacional de Adoção*) (Brasil, 2009) operationalized the period of placement and periodic assessments of the cases of institutionalized children. This legislation was sanctioned in August 2009 and limited the placement of children and adolescents in foster care institutions to 2 years. It also determined individual assessments of each case every 6 months by a multidisciplinary team with the objective of planning the process of family reunification, be it in their family of origin, a kinship family, or an adoptive family. Research on the possible impact of the resolution limiting the period of institutionalization showed that there will be changes in out-of-home placement, making it shorter. This helps with the problems and the difficulties of a

prolonged period of institutionalization, although this does not guarantee that the family will be in a position to care for the institutionalized child (Abaid, Siqueira, & Dell'Aglio, 2011). However, Siqueira (2012) stresses that changes in legislation do not necessarily represent changes in everyday practice, although there have been advances in the field of social services. Also, based on this legislation, the term "shelter" was changed to "foster home."

The institutionalization of children and adolescents remains in focus due to the large number of institutionalized children and adolescents in Brazil (37,000 in the last survey) (Assis & Farias, 2013), and its impact on emotional, social, and cognitive development of children and adolescents. In recent years, numerous studies have shown positive and negative indexes associated with out-of-home placement and institutional experience (Arpini, 2003a, 2003b; Azor & Vectore, 2008; Barros & Fiamenghi Jr, 2007; Oliveira, 2006; Prada, Williams, & Weber, 2007; Rodrigues, Gava, Sarriera, & Dell'Aglio, 2014; Rosa, Nascimento, Matos, & Santos, 2012; Rosa, Santos, & Souza, 2010; Rossetti-Ferreira et al., 2012; Saraiva, 2002; Siqueira, 2012; Siqueira & Dell'Aglio, 2006; Yunes, Miranda, & Cuello, 2004).

As pointed out by Siqueira and Dell'Aglio (2006), the effects of a period of institutionalization cannot be considered positive or negative in advance, because there is no consensus among the studies on this issue. The lack of consensus is based precisely on the presence of multiple factors that influence how this event occurs and impacts the life of the child and adolescent. Grusec and Lytton (1988) believe these factors do not have uniform or fixed effects. They believe the factors that influence the developmental effects caused by institutionalization are: (1) reason for family separation; (2) quality of the relationship with the mother prior to separation; (3) opportunity to develop attachment after separation; (4) quality of care in the institution; (5) age of the child and period of separation; and (6) the gender and temperament of the child. Considering the Brazilian reality, Siqueira, Zoltowski, Giordani, Otero, and Dell'Aglio (2010) added the type of placement (institutional, residential, or foster home) and the possibility of maintaining the emotional bond with family members during the period of institutionalization. The type of placement is relevant, because small entities, which function similarly to a family setting (siblings are not separated and children are cared for by foster parents), may provide better care than foster care institutions. However, the characteristics and abilities of the individuals who provide care should be considered. The study by Lemos, Gechele, and Andrade (2017) in foster homes showed that the relationships between the foster mothers and foster children enabled the formation of emotional bonds. However, there was a lack of preparation on the part of the mothers, lack of planned activities, and great dedication to housework.

As family separation is temporary, the process of family reunification should be planned as soon as the child enters the institution. In some cases, the return to the family of origin does not occur and the adolescent is required to undergo a process of emancipation at age 18, making the transition into adulthood. Cassarino-Perez, Córdova, Montserrat, and Sarriera (2018) investigated publications on transition programs from foster care to adulthood and found a lack of such programs and none in Brazil. On the other hand, family reunification of younger children and adolescents

with their families of origin is common, but it is complex with regard to public policies for the protection of the child's welfare. The increasing rate of children and adolescents who are separated from the family of origin in the United States has contributed to a greater concern both for the prevention of this phenomenon and for the promotion of safer and faster family reunification processes (Pine, Spath, & Gosteli, 2005). Family reunification is defined not only as the physical reunion of children and adolescents under foster care with their families of origin, but also comprehends a broader understanding, such as psychological reunification. It is the planned process of reconnecting children with their families through a variety of services and support to children, families, foster caregivers, or others involved in the process. The goal of this process is to help each child and family achieve and maintain an optimal level of reconnection through planned strategies, strengthening the child's sense of belonging to his or her family (Maluccio & Ainsworth, 2003; Maluccio, Warsh, & Pine, 1993; Pine et al., 2005). Promoting family reunification is to work towards the preservation of the family's emotional bonds, even prior to the physical reunion (Maluccio, 2000; Maluccio, Abramczyk, & Thomlison, 1996; Maluccio, Fein, & Davis, 1994).

The study of Landy and Munro (1998) showed that prior preparation of the families is a facilitating factor for a successful family reunification. This preparation essentially depends on the characteristics of the cases and the risk factors that are present and have to be addressed, ranging from the inclusion of the family in housing, education, and food programs to the monitoring and treatment of drug abuse, parenting, among others (Marsh, Ryan, Choi, & Testa, 2006). Frequent visits between separated caregivers/parents and children has been considered a powerful factor for an effective family reunification (Davis, Landsverk, Newton, & Ganger, 1996; Warsh & Pine, 2000). Children who had periodic visits from parents as part of a family preservation plan were more likely to return home (Landy & Munro, 1998). It should be noted that the process is carried out with the active participation and agreement of the family, which is a key factor for a successful family reunification. These visits are monitored and planned (there are clear objectives previously defined in accordance with the parents). According to Pine, Warsh, and Maluccio (1993), parents/caregivers need help to learn how to interact positively with their children and make the most of the moment.

Certain family problems influence the likelihood of family reunification and recurrence of separation. Festinger (1996) found that children who had been away from the family for a longer period and returned more often to foster care (recurrence) were those whose caregivers had numerous problems such as mental illness, poor parental skills, lack of social support, lack of attachment with their children, little participation in community activities, social isolation, or those who declined social services offered to them. The risk factors most highly correlated with recurrence were poor parental skills, number and severity of the child's own problems, and lack of social support (Festinger, 1996). The study of Wells and Guo (1999) in the United States in the early 1990s found a greater risk of return to foster care among older (African-American) children who experienced a change in care during separation (spent a few months in foster care, but lived with non-family members

prior to placement). Courtney (1995) further notes that the recurrence rate is highest in the first months of reunification, suggesting the need for a special follow-up program for families during this critical period.

In the Brazilian reality, family reunification of children and adolescents has recently become a focus of investigation. The studies of Azor and Vectore (2008), Silva and Nunes (2004), Siqueira and Dell'Aglio (2007) and Rosa et al. (2012) are some. According to Azor and Vectore (2008), the factors that contributed to the return of institutionalized children to family life were the resolve of the judicial system, the monitoring of the family by professionals, and the adjustment of the housing situation and the desire of the family members. These authors believe that much more than having the economic conditions that enable reunification, it is necessary to understand the emotional conditions, the motivation of the family and their expectations in regards to the children and adolescents. Thus, it is clear that family reunification is a complex issue, and requires extra effort from researchers to understand the phenomenon. In order to do so, the Bioecological Model of Development (BMD) was used with a theoretical framework in carrying out this research.

Contributions of the BMD to the Understanding of Family Reunification

From the BMD, it is possible to understand family reunification as an ecological transition. Ecological transitions correspond to a joint function of biological and circumstantial changes, occurring whenever the position of the individual in the ecological environment is altered as a result of a change of role, environment or both (Bronfenbrenner, 1979/1996). These transitions are understood as processes that result in a qualitative reorganization, both psychologically and behaviorally (Bronfenbrenner, 1986), generating changes in the perception of oneself and others as well as in establishing relationships. Throughout a life cycle, an individual experiences numerous ecological transitions, which are considered clear examples of the process of mutual accommodation between the organism and its environment. Bronfenbrenner (1989) emphasizes the need to investigate the impact of life events throughout development. In order to do so, one should evaluate short and long periods, as well as before and after these events.

With regard to children living in foster care institutions, it is understood that the movements of family separation, institutionalization and returning to the family of origin correspond to ecological transitions that influence the way children understand and express themselves in the world, each of which demands a different coping mechanism. These transitions give rise to new behaviors, as a result of assigning and assuming new roles and the need to respond to new demands.

The conception of human development in the BMD (Bronfenbrenner, 1979/1996, 2004) has important contributions in regards to research with institutionalized children and adolescents. According to Bronfenbrenner (1979/1996, 2004), human

development consists of the process by which the developing person acquires a broader, differentiated, and valid conception of the ecological environment in a continuous and procedural manner. Development involves an effective change that is not tied to the individual's situation or characteristics and entails a reorganization that has certain continuity over time and space. In addition, the BMD proposes the understanding of human development through the interaction of four important aspects (*person, process, context, and time*) and calls it a bioecological model (*PPCT*, Bronfenbrenner, 1986, 2004; Bronfenbrenner & Morris, 1998; Bronfenbrenner & Evans, 2000). This model proposes the scientific study of development through a broad perspective, considering aspects that are beyond individual characteristics and the context in which the person interacts. For instance, this perspective considers the existence of the influence of environments in which individuals are not physically situated, that is, non-immediate interaction environments.

The first component of the bioecological model refers to individual, physical and psychological characteristics of the *person*, which are crucial aspects of the relationship of the person with the social world. An unattractive shy person with a low sense of self-esteem and self-efficacy will understand, respond to, and develop proximal processes differently to an attractive, extroverted person with an adequate sense of self-esteem and self-efficacy. The second component of the model (*process*) is considered the main mechanism responsible for development, and is seen through increasingly complex reciprocal interactions of an active, biopsychological human being evolving with the people, objects, and symbols of his or her immediate environment (Bronfenbrenner, 2004; Bronfenbrenner & Morris, 1998). The proximal processes are the complex and reciprocal forms of interaction the person experiences in his or her immediate environment, which are necessary for the development of the biological capacities and the genetic potential of an individual, since it enables the person's resources to be stimulated and developed (Bronfenbrenner & Ceci, 1994). The third component corresponds to the *context* in which development takes place, the people and their roles. It is analyzed from the interaction of the four environmental levels: *microsystem, mesosystem, exosystem, and macrosystem*. These environmental levels constitute the ecological environment of the developing person. The ecological environment is understood by Bronfenbrenner (1979/1996) as a system of grouped, independent, and dynamic structures, ranging from the most intimate contact of the child with the caregiver to the environments of broader social contexts such as school, foster care, neighborhood, and culture.

The first level of the ecological environment described by Bronfenbrenner (1979/1996) is the *microsystem*, which is under the proximal, environmental, and organismic influences that come from within the person, his or her physical characteristics, the objects, and the people of the immediate environment that characterize face-to-face interaction. It consists of the environments in which developmental processes take place, such as within the family, at school, daycare, foster care institution, among others. According to Yunes et al. (2004), the family environment is the main central *microsystem* for children and adolescents living with their families, while the institution becomes the main *microsystem* for those living in a foster care institution. However, one *microsystem* does not exclude the presence and influence

of the other. The *mesosystem* refers to the links and processes between two or more *microsystems*. Thus, the *mesosystem* of children and adolescents in foster care consists of the interactions between the institution itself and the family of origin, between school and foster care, as well as between the family of origin and the Juvenile Court, family members, neighbors, and any social program that the family is involved in, among others. During family reunification, it is possible to notice an intensification of the processes and interaction at the level of the *mesosystem*, due to the fact that arrangements and agreements need to be planned and agreed upon. The *microsystem* and the *mesosystem* represent the structures whose levels of interactions are proximal, their influences are more apparent and essential for the developmental processes.

The *exosystem* consists of environments in which the person does not directly interact in, but have an indirect influence on them. According to Santana (2003), the board of the foster care system, the Guardianship Council and the Municipal Council for the Rights of children and adolescents are examples of what may constitute the *exosystem*. Lastly, the *macrosystem* is the broadest component of the ecological environment and corresponds to the system of values, ideologies, lifestyle, preconceptions, and the organization of social institutions common to a given culture. With regard to institutionalization, social stigma charged with pejorative and derogatory value associated with culturally expected values can be considered integral elements of the *macrosystem* according to Siqueira and Dell'Aglio (2006). The ideas that foster children and adolescents are problematic or are not capable of performing well at school, and that they are "defective," or even destined to be "criminals" or "prostitutes," are concepts that permeate the development of children and adolescents who live or have lived in a foster care institution (Arpini, 2003a, 2003b). These elements are present in the way the institution's caregivers treat them, the way the teacher teaches them, or the way an adolescent who lives in foster care relates to another who lives with their family.

The last component described by the bioecological model is *time*, which assigns crucial value to the continuities and discontinuities in the life trajectory of the child over a period of time. It proposes to examine the influence of changes and continuities that happen throughout life with regard to human development (Bronfenbrenner, 1986). Thus, the examination of time should focus on the person in relation to life events as great historical events, from the closest to the most distant. According to Bronfenbrenner and Morris (1998), the changes that take place over time in the four components of the bioecological model are products and producers of historical changes.

This theoretical perspective allows individuals belonging to at-risk populations (who have numerous disadvantages) to be considered developing human beings capable of adaptive and healthy responses in their life trajectories. Their potentials and triumphs are highlighted instead of failures and defeats, enabling a broad and complete reading of the individual (Morais & Koller, 2004).

The BMD considers the foster care institution a microsystem with unique characteristics capable of promoting developmental processes in a lesser or greater intensity and efficiency. Considering development in this context, this theoretical

approach seeks to investigate how the proximal processes are produced, how they act and are expressed.

As a way of systematizing the theoretical contributions of the BMD and especially the bioecological model in the field of scientific investigations (Bronfenbrenner, 1986, 1989, 1979/1996, 2004; Bronfenbrenner & Morris, 1998), Cecconello and Koller (2003) constructed a theoretical–methodological model called *Ecological Engagement*. This procedure offers an in-depth look into the ecological environment of the study participant to understand his or her reality. Through formal and informal interviews and observations, we investigated risk and protection factors at intrafamily and extrafamily (e.g., social support) levels (Cecconello & Koller, 2003). In the revision and extension of the method performed by Prati et al. (2008), *ecological engagement* aims to evaluate the processes of interaction of the person within their context. For these researchers, the application of the ecological engagement procedure involves the systematization of the bioecological model (person, process, context, and time) by the researchers of the team. In order to properly use ecological engagement, the study should be based on five aspects:

1. Researchers and participants must interact and engage in a common task;
2. Several meetings should be held over a period of time;
3. Meetings should be informal and formal, progressing towards increasingly complex issues and lasting for 1 h or more;
4. Researchers should adopt an informal posture during the conversations and interviews, allowing conversation about issues not directly related to the purpose of the study; and
5. Issues covered in the interviews should be interesting and stimulating for researchers and study participants in order to explore their life stories and how development takes place in this context (Prati et al., 2008).

These aspects will help establish proximal processes in these meetings, serving as the basis for the entire research process. An investigation based on the BMD with a focus on *development in context* and using ecological engagement in the data collection process will take into account how the four elements of the bioecological model are expressed, both in the context in which the research occurs and in the perspective of the development of the research team, conferring ecological validity to the research. Thus, case studies of adolescents undergoing the process of family reunification were conducted through the procedure of ecological engagement.

Ecological Engagement in Investigating the Process of Family Reunification

The ecological engagement procedure was used in a qualitative and longitudinal study with five adolescents in the process of family reunification in the metropolitan region of Porto Alegre, state of Rio Grande do Sul (RS), Brazil. The research project

was submitted to the Research Ethics Committee of the Institute of Psychology of the Universidade Federal do Rio Grande do Sul, and no restrictions were found regarding the proposed use of ecological engagement. After approval by the ethics committee (registration no. 07/007) and by the technical board of the foster care institutions (Term of Agreement), the teams of the institutions indicated cases going back to family that met the inclusion criterion (minimum period of institutionalization of 6 months). The children's families were contacted and visited by the researcher, who provided all the information and made arrangements in regards to the periodicity of meetings.

Planning

The theoretical–methodological procedure of ecological engagement requires a careful planning process by the research team. Data collection should be organized and revised several times by different researchers with technical skills in the use of this procedure. These aspects are intended to ensure that all study objectives are met and to guarantee the viability of carrying out the study. Several aspects were considered in this investigation: the time period available for the data collection process, analysis and writing of the results, the number of cases, the development stage of the study participants, and the regularity of the meetings.

Considering the first aspect, the longitudinal nature of the study was related to the fact that it is part of the doctoral thesis of the researcher, and must therefore follow all the mandatory and formal steps required by the graduate program. Furthermore, this study was carried out following a quantitative study. Thus, the minimum time of 9 months was established for the monitoring period.

As for the second aspect, in order to meet the criteria of the ecological engagement procedure (in-depth look, regular medium term interaction, among other criteria), it was necessary to decide upon a number of cases that did not exceed the execution capacity, but were enough to understand the phenomenon. Thus, five cases were prearranged and concluded during the study.

The development stage was another aspect considered in the planning of this study. Initially, the inclusion of children was considered. We believed that together with their families, they could provide extra information for the understanding of the process of family reunification. However, the fact that reunification cases are scarce in the Brazilian reality, and that adolescents could provide more elements of the process than the children, because of their developmental conditions, we chose to include individuals in this development stage. Furthermore, we confirmed that this decision was correct during data collection. With the passing of the months of follow-up, and with the progressive ecological engagement of the participants and the researcher in the study, the adolescents began to expose their opinions, free from judgment or fear of punishment.

The regularity of the meetings was also assessed by the researcher prior to data collection. It was necessary to ensure that the periodicity would lead to engagement,

attachment, and execution of increasingly complex tasks, essential aspects for the occurrence of *proximal processes*. We sought to standardize monitoring (monthly visits) for all the cases of the study. However, two visits took place in the months in which we conducted interviews with the adolescent and the family. These were some of the many relevant aspects that should be considered when planning an investigative process that uses ecological engagement.

The prior planning of monthly interviews and home visits also converges with the assumptions of ecological engagement. Information arising from ecological engagement was carefully recorded by the researcher in the field journal after each visit with the families, and subsequently served as the basis for data analysis.

Procedures

The procedures should be in line with the assumptions of the BMD and ecological engagement. Five adolescents undergoing the process of reunification and their respective caregivers participated in this study. After having left the institutions, reunification interviews (Siqueira, 2006) with the adolescents were conducted at 3, 6, and 9 months and with their families at 3 and 9 months. The interviews were recorded and transcribed. Monthly home visits were carried out with the intention of examining the interaction processes of the people in their development contexts, and the researcher was an integral part of the research process. Ecological engagement in this study included home visits to the family of origin of the study participants; visits to the foster care institution where they had lived; reunification interviews (Siqueira, 2006) with participants and family members (minimum duration of 1 h); informal conversations with the monitors, technicians, directors of the participating institutions, adolescents, their families, and their support network (grandparents, neighbors, health technicians, and nongovernmental organization technicians); participating in family celebrations; walks around the community; helping adolescents with homework assignments; and participating in school celebrations. During these activities, participants were given a free environment for conversation, not related to data collection, allowing them to talk about their life stories, everyday events, adversities, triumphs, failures and distressing issues. These activities were conducted according to the guidelines of Prati et al. (2008), which emphasize the importance of regular and frequent meetings for a long time period, the engagement of researchers and participants in a common task, the participation of formal and informal meetings with the family (longer than 1 h), the adoption of an informal posture by the researchers, and stimulating and interesting issues in the interviews.

The use of home visits in the data collection process is in line with the ecological conception of *development in context* and with the theoretical–methodological procedure of ecological engagement, arising from the BMD (Bronfenbrenner, 1986, 1989, 1979/1996, 2004; Bronfenbrenner & Morris, 1998). The home visit—a research and intervention technique used by health, education and psychology

professionals—provides an approximation between researcher and participant, enabling the formation of a bond and a deeper understanding of the context of the study participants and their community (Lopes, Saupe, & Massaroli, 2008; Rocha, Boeckel, & Moreira, 2008). It is understood as a unique moment, in which the movement of relationships is established through qualified listening, bonding and support (Lopes et al., 2008). The number of visits varied from 3 (in the case of the adolescent who stayed 5 months with the family) to 14 visits.

The field journal is a data recording technique widely used in qualitative research in the social sciences. Social researchers take important notes about the research field, and the field journal should contain as much information as possible about the context of the observation (Frizzo, 2008). The author believes the journal entries should reflect what goes on in the researcher's mind regarding the events, their reasoning, thoughts, and emotions. Home visits and field journals are complementary techniques for qualitative research (Lopes et al., 2008). In their study of a riverside community, Afonso, Silva, Pontes, and Koller (2015) considered the field journal a fundamental research tool for studying individuals in singular contexts, as it enabled the understanding of the families based on description and reflection.

The Researcher and the Participants

The procedure of ecological engagement requires researchers to have certain characteristics, such as flexibility, empathy, managing unforeseen events and changes, tolerance to frustration, and persistence. Considering the physical engagement of the researcher and team in the field (e.g., home visits), it is necessary to constantly adapt to unexpected circumstances, taking the context and the individuals participating in the study into account. Researchers should adapt to the settings and not the other way around. If participants do not comply to what was agreed upon, if the conditions for recording the interviews are not ideal, if there is no suitable room for data collection, it is necessary to improvise and have the ability to deal with improvisation. In studying adolescents undergoing the process of family reunification, numerous situations arose throughout the process. For instance, in one of the cases, the adolescent was again placed into foster care 5 months after having left the institution, causing the researcher to “lose” one of the participants for the study; visits had to be rescheduled due to medical appointments of another adolescent; interviews had to be conducted out on the sidewalk in front of a child's home, because there was no room in the house for privacy; among other unexpected events.

The researcher should also show empathy in this process to promote the bond between the people involved, which is key for the occurrence of proximal processes. The researcher should also be aware of additional happenings (everyday events relevant to the reality of the participants), which are often unrelated to the research, but which interfere and should be welcomed by the researchers. For instance, a mother whose family member is ill and hospitalized will want to talk about this experience and the difficulties she is having, often moving away from the focus of the study.

Researchers should consider these situations as evidence of trust and bond between the team and participants. Another consideration arising from home visits is the research team's commute time. When working with socially vulnerable families, who typically reside on the outskirts of the cities, and the public transport is the safest mean of transportation, commute time exceeds 1 h. Therefore, it is important that researchers using the ecological engagement procedure be aware of the importance of setting aside enough time for field study. In examining family reunification, we found that the flexible and welcoming posture of the researcher (offering non-judgmental listening) combined with the regularity of the meetings favored the research process. These aspects enabled a connection between the researcher and the families, causing a sense of engagement to take place in the field.

The neutrality of the researcher, which is ideal in scientific research and considered a primary factor, is also worth discussing. In pursuit of the *status* of science, psychology has adopted scientific methods and procedures established in the exact and natural sciences in which neutrality is one of the highlights. In order to guarantee the scientificity of psychology, laboratory studies and highly controlled experiments have been conducted. However, the methodology in social and human sciences has developed and other forms of research are being validated. This is the case of qualitative research, participant observation, ethnography, action research, among others. Ecological engagement can be included in this range of methods and procedures, sharing the assumption that the researcher is acting in the research field. This aspect should not be judged as a weakness of the study, but rather as an important characteristic that should be taken into account in analyzing the data.

Finally, there is the issue of the safety of the researcher who uses the procedure of ecological engagement. Throughout the data collection process, as the researcher is "immersed" in the field, there is the possibility of being exposed to dangerous situations and risky events. Thus, it is important to consider a set of measures to prevent such situations. Firstly, members of the research team should avoid wearing expensive clothing or jewelry in order not to draw attention at the time of data collection. In a humble community, where people with low purchasing power reside, these objects attract attention. Also, such objects may be intimidating to study participants and act as a barrier in the bonding process. It is suggested that researchers take only what is necessary to carry out the activities. Afterwards, it is necessary to assess the viability of conducting visits, given the dangerousness of certain regions. Whenever possible, the researchers should work in groups to better act in a situation of stress. Extra care should be taken in the case of extremely dangerous regions. Researchers should be accompanied by someone from the community of origin, such as an education and health professional (community agent and social worker) and should wear something that identifies the university or the research group (such as a university t-shirt or I.D.). It is important that these situations be seriously taken into account. If necessary, researchers should consider canceling the inclusion of participants due to the dangerousness of the region where they live.

As for the participants, it is essential to carry out a detailed study of the population, in order to know them through existing research. This aspect is especially important because it is possible to learn details which were not previously considered

by the researchers. During the process of ecological engagement, one must be aware of the feelings and moods of the participants, because despite what was previously agreed upon, the participants may not be motivated to sit through an hour-long interview. To consider these subjective aspects of the participants is to respect them as human beings with rights, not submitting them to the typical script of data collection. Such situations arose with some of the adolescents in this study. On one occasion, one of the adolescents had tutoring lessons. When the researcher arrived for the home visit, the family members suggested that the adolescent not go to the lesson (although extremely necessary), because of the planned meeting. In general, the families and communities of deprived regions appreciate and value the contact with professionals, especially those from the university. In these situations, it is up to the researchers to be clear that school matters, medical and psychological care are priorities for the development of the participants, and the researchers should adapt to the vicissitudes of this process, not the other way around.

Engagement in the Task

It is expected that the researcher and participants will mutually engage in the investigative process, promoting proximal processes. During the period of data collection, it was possible to notice a greater autonomy of the participants to express their individual concerns, not necessarily associated to the process of family reunification. Participants also began to seek the researcher's counsel during these informal conversations. These aspects indicate the establishment of trust on the part of the families with the researcher, signaling the possibility of moving towards more complex activities, such as the introduction of more delicate issues, charged with sadness, discomfort, and suffering.

Furthermore, it was an indication of engagement and reciprocity when family members began to ask the researcher for information about the process of reunification and about the adolescent. Another significant sign was when caregivers started calling the researcher by their first name, doing it frequently as if seeking approval. These aspects confirm the process of engagement, transforming the study into an opportunity for growth.

Data Analysis

A qualitative analysis of the data is privileged when the ecological engagement procedure is used. The data collected through the instruments and ecological engagement complemented each other. Thus, not only the instruments used in the collection are included, but also any information derived from the nonverbal language, or responses and comments given by the participants in informal situations. Based on this, it is possible to perform data triangulation, which is an important

aspect in qualitative research, and to observe convergences and divergences regarding the participants' perceptions of the investigative process. In our study, it was possible to understand the perception of both the adolescents and the family members on the reunification process. We identified consistent aspects, which indicated harmony between them, as well as inconsistent ones. Ecological engagement requires extra effort and attention from the researcher to the proximal processes, broadening the study beyond the responses to the instruments.

The analysis should focus on the four components of the bioecological model (*person, process, context, and time*) and seek to describe and analyze each of these dimensions in detail. The characteristics of the study participants, their plans, and their behaviors are considered aspects of *person*; the characteristics of the interaction contexts as well as the relationships between the participant's microsystems are aspects examined in *context*; and finally *process* is the product of face-to-face interactions and *time* is related to changes made possible by the passing of time. The occurrence and analysis of the proximal processes in the interactions during the study period provided rich and valid information of the phenomenon. According to Prati et al. (2008), the proximal process also arises through the interaction of researchers and participants. In addition to being the focus of research, it is what enables the development of the study itself. The use of ecological engagement in studies that focus on ecological transitions enhances the understanding of the transition itself, as it provides additional information and important details that would not be detected otherwise.

Conclusion

Ecological engagement is an exciting procedure to access phenomena of interest of the social sciences. This chapter aimed to expose relevant aspects regarding the planning and use of this procedure, seeking to clarify theoretical and practical matters through a study in which the ecological engagement was used. As a new procedure, there is plenty to be developed to improve and facilitate its use. Thus, further research with specific objectives should be developed.

For the study presented in this chapter, ecological engagement was in many respects decisive for the understanding of the phenomenon of family reunification. The procedure provided a rich description, which enabled a broad and dynamic understanding of the phenomenon. We were able to confirm that the process of family reunification has taken place without the assistance of government agencies and entities, which goes against what the legislation proposes. Furthermore, families are experiencing a new spectrum of situations as a result of reunification, such as financial problems and difficulties in dealing with leaving foster care. These situations are experienced without support or guidance. It was possible to identify a number of risk factors which made the reunification process difficult, as well as protection factors, which supported the participants and promoted successful reunification processes.

For instance, one of the cases followed in this study was that of an adolescent named Pedro, whose case is presented in full in Siqueira (2009). Pedro was a 15-year-old adolescent who had spent more than 10 years in a foster care institution. He was institutionalized after his mother was arrested and there was evidence of abuse perpetrated by his father when he was three years old. Pedro spent all of his childhood and part of his adolescence in foster care. He witnessed several changes as a result of institutional reorganization, causing him to experience breaks in relationships and bonds throughout his development. Considering these aspects, his often cold and distant way of being is understandable. After leaving foster care, he never showed any interest in visiting the people with whom he had lived, often refusing to do so. He claimed not to miss anyone. The portrayal of Pedro could lead to the conclusion that the adolescent had difficulty connecting with people, which could be a result of institutionalization. However, the ecological engagement evidenced a connection between the adolescent and his family, based on conversations with Pedro's aunt, his main caretaker. A bond was also established between the adolescent and the researcher. This was shown by the adolescent's interest in maintaining contact with the researcher, as well as carrying out activities such as walking around the community to show where his school, the local supermarket, and his friends' houses were located, in addition to his willingness to accompany the researcher to the bus stop. With this information, the understanding of the case had radically changed, causing social beliefs and theories related to emotional loss and attachment capacities of institutionalized youth to be reviewed.

The triangulation of the data of the interviews with the adolescents and their families, the home visits and the theoretical–methodological procedure of ecological engagement (Ceconello & Koller, 2003; Prati et al., 2008), combined with a flexible posture and informality on the part of the researcher, enabled a wide and dynamic data collection, resulting in a wealth of information. Similarly, the longitudinal characteristic allowed the visualization of the *processes* in which the relationships were changing, transforming and becoming stable over *time*. These aspects can be considered the highlight of this study as they provided an in-depth understanding of the phenomenon, validating the study. Furthermore, we noticed the engagement in the research by the participants, their families and the researcher, which led the development of these relationships and the proximal processes.

After an extended and intense period of interaction with the families, the greatest challenge was the conclusion of the study. This moment should be considered when the contracts are being signed and the arrangements are being made, so as not to leave the participants feeling abandoned, especially when it comes to institutionalized adolescents and socially vulnerable families.

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Chapter 9

The School as a Development Context: An Ecological Study in a Riverine Community on the Marajó Island



Leila Said Assef Mendes and Fernando Augusto Ramos Pontes

The School as a Development Context

Considering the different perspectives and expectations regarding the school institution, this study assumes the conception that the school as a development context must provide students “not only, nor mainly, with knowledge, ideas, skills and formal abilities, but also dispositions, attitudes, interests and patterns of behavior” (Sacristán & Gómez, 2000, p. 14–15). It therefore has as its main objective the socialization of students, to make them ready for the world of work as productive individuals, and also they can incorporate themselves into adult and public life as citizens.

In the school context, children experience innumerable situations: relationships between peers, groups, friendship, competition, rivalry, learning and discovery of the new, among many others. The school can promote students’ self-esteem and self-efficacy, enabling them in social skills, as well as influencing the relationship between the peer group, through its norms, rules and the culture of this institution (Lisboa, 2005).

In this sense, Lisboa and Koller (2004) emphasized that “school is the privileged scenario that brings together young people, human development and learning.” Therefore, it is configured as a place of social opportunity, understood as a physical environment, social (teachers, colleagues) and of learning (exchanges, contents, materials, information), capable of inserting the child as a productive member of society. Thus, the school should promote more than acquisition of knowledge, and should be a context of education and socialization, emphasizing the active role of the child in this process, believing that the child interprets, organizes, and uses the information of the environment in which it lives and in this process acquires or builds the skills and knowledge of adults (Corsaro, 1985).

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Several studies have been interested in the contexts in which children's development occurs, instigated by the lack of opportunities and resources in which many children live together and that can hinder their physical, cognitive, and social development. These studies are based on public policies that aim to offer at providing socioeconomic and cultural opportunities and resources for children in less favored conditions. Some researches focuses on the impact that contexts, at different levels, have on child development (Brito & Koller, 1999; Ceconello & Koller, 2003; De Antoni & Koller, 2000; Tudge, 2001). Understanding the context here not only as the immediate environment where the child is inserted, but also the relationships that develop with other systems that interfere in the immediate environment. Such statements refer to the school context, as a locus of attendance of a public policy that aims to guarantee the formation of children and adolescents and, therefore, the research must propose to study the phenomenon of contextualized education. However, in selecting the studies that take the school as object, it is verified that despite the diversity of the scientific researches about the school, few investigations have stopped in riverine contexts, that is, in contexts that, so specific and marked by poverty, are at the margin of society in general. It is in this direction that this work is inserted, when proposing to analyze the school as a context of development of children of a riverine community on the island of Marajó, located in the Araraiana River, Ponta de Pedras (PA), in order to understand how the characteristics of this environment make possible and/or impose limits to the development of these children. This research is part of a larger project entitled "Development Contexts of a riverine community on the Marajó Island: Pairs, Family and School," under the coordination of Professor Fernando Pontes, of the Postgraduate Program in Behavior Theory and Research of the Federal University of Pará, financed by CNPq.

Conceiving the school as an institution which primary function is to serve as a context for the integral development (cognitive, affective, and psychomotor) of children and assuming the singularities of the context of a riverine school, it was intended to identify the place assumed by the riverine school in the development of children, in view of their interactions in their contexts, from their own perspective, their parents and teacher's perspectives. This concern compelled a multidimensional study focusing on four basic aspects for the study:

1. Physical and social environment. Observation and characterization of the community—ecological environment, physical environment (home, school, etc.), social environment (with whom students live together, description of families, relationships between themselves, networks of relationships, kinship, and routines);
2. Practice of the interlocutors. Description of daily acts with which families, the teacher and the students keep alive the relations between themselves and with the general context of social living;
3. Expectations of parents. Expected or fomented perspectives on the future of their children and the place of the school in these perspectives;

4. Relations occurring internally and externally at school. Interactions between teacher/student, student/student, and student/school conditions, as well as with other contexts, such as the family of the students and the City Hall that coordinates and maintains it.

In order to carry out this project, it was used the bioecological approach of Bronfenbrenner (1979/1996), one of the contemporary theoretical models, which has allowed the understanding of human development allied to the physical, social, and cultural environment in which the person is inserted. This model, through its proposal of interaction of its main components—process, person, context, and time—constitutes an adequate reference for conducting researches about the development in context. Their assumptions allow to include several levels of analysis and make it possible to examine the influence of the environment on people's development.

The exploratory study of the context in which the project was developed resulted in the initial knowledge, but sufficient to indicate the qualitative research as a more appropriate theoretical and methodological option for the development of the study. The peculiar characteristics of the participants in this study, typical of the Amazon region, as the geographic isolation were punctual for the delimitation and choice of this context. The community is far from urban centers, 3–4 h by boat. Its location also determines other basic forms of isolation, that mark the group under study as peripheral in relation to economic and social goods.

It seems opportune and important to respond, in advance, to the anxieties that seek to know about the social and academic relevance of a research, which takes a “small place” of the Amazon region as a locus of study, dealing with a double articulated perspective: (a) the opportunity of access and to take to the public knowledge a small piece of the Brazilian reality literally “islanded” in its environmental circumstances and related singularities; and (b) to fill some of the enormous shortage of studies of this nature in similar contexts in the country. Perhaps the greatest justification lies in seeking a response in the conceptual and theoretical body of Developmental Psychology for peculiar and specific questions that can be asked to the reality of this population (Koller, 1994). Can Psychology answer these questions? Can this population generate questions that still do not have answers? Researchers inserted ecologically will be able to find these points in their experience in the riverine community to advance knowledge? The findings of these researchers must be evidently impregnated with ecological validity.

Cecconello and Koller (2003) postulated that the basis of all investigation that adopts ecological insertion is possible through a reciprocal, complex and regular interaction of researchers, participants, objects and symbols present in the immediate context. The researches developed in Brazil that are based on this concept were developed in contexts in which it was possible the continuous presence of the researchers, since they happened, in the majority, in urban areas of facilitated access (Cecconello, 2003; De Antoni, 2005; De Antoni & Koller, 2000; De Antoni & Koller, 2001; Morais, 2005; Neiva-Silva, 2003).

Differently from the cited researches, the one presented in this chapter was developed in a non-urban context, difficult to access because of its location and lack of systematic transport, thus becoming a unique research regarding the use of the bioecological approach in a naturalistic context. This investment was facilitated by the orientation of the ecological insertion method, which allowed to investigate the relationships (processes) established during the research between the participants and the research group itself, agreeing with Ceconello and Koller (2003) who stated that the relationships established between the ecological researchers with the research participants influenced their own personal development, once they are people in development (Process), being part of the research scenario (Context), in a moment of their own personal story (Time):

The TBDH allows to understand the processes that are established in the human development while the research is realized It is a dynamic and complex vision that emphasizes and allows the access to the instability and the ever present change in the human development" (Ceconello & Koller, 2003, p. 521).

The characterization of the environment where the families live and the investigations related to each project developed in the community were only possible to be accomplished mainly due to the ecological insertion, based on the interaction of the research team with the families. In this sense, the ecological insertion realized in the community endorsed the ecological validity of this research. It was considered, therefore, for its analysis and consequent ecological validity, the four essential elements to a study about development in context: the process, the person, the context, and the time (Prati, de Paula Couto, Moura, Poletto, & Koller, 2008). From the ecological insertion of the research team in this community it was possible to describe the environment where the families live, as well as the school of the community, highlighting the limits and possibilities that these environments impose on the development of the children and adolescents they attend. This result was made possible by the interactions among the researcher, the team, and the elements involved in the investigated environment (participants, objects, and symbols), which were constituted in proximal processes. These processes were carried out by sharing information and feelings between the researchers and the research participants during the investigation, making possible the analysis of these processes, not only in the community but also within the own research team.

The second element of the bioecological approach (the person) was always present in several activities developed during the research. The frequented and varied environments, such as the houses and the school, were analyzed not only from the individual perceptions of each member of the families and the school, in order to value their personal experiences, but also considering the personal characteristics of each one of them researchers. Therefore, the third element of the model, the context, was analyzed through participation in the environments in which the children attended and from the reports about them, since, according to Bronfenbrenner (1979/1996), this perception that people have of their contexts is fundamental for their analysis, once it is not enough to analyze them as they appear in objective reality.

The analysis carried out at the community school considered the four environmental levels proposed by the bioecological model: the micro, the meso, the exo, and the macrosystem. The microsystem and the mesosystem were analyzed by the way of life and the record of the participants' speeches involved in those environments and in others where they participated occasionally, such as religious cults. The exosystem was analyzed through the teacher's reports about her perception regarding public policies and administrative bodies, which, despite the environments in which the children do not actively participate, had a direct influence on their daily lives in the classroom. The teacher was responsible for coordinating the school and the agencies for providing resources for its operation. The macrosystem was analyzed based on the perception of the team and the speeches of the participants involved in the research about their culture, represented by their way of life, with precarious access to public policies.

Data Collection

For the understanding of the context that this research proposed to investigate (the design of the research strategy), it was tried to join quantitative and qualitative research, but according to the contextual settings in which the research was carried out, a privilege was given for the latter. In this direction, quantitative data processing on the characterization of the community was developed, but the use of observation techniques, field diaries, interviews, questionings and informal conversations, and, of course, photographic records became essential.

The methodological course in its specificity required the preliminary exploration of the school environment. A more specific presentation of the project and the team was made, and then the identification and recognition of the teacher, the students and the school infrastructure, as well as the research team, constituting, therefore, an initial phase of interaction with the context and with the people.

It was necessary for the researcher to stay in school for an extended period, both in the morning and in the afternoon, for a few days. During this period, observations were made, without interfering with any routine activity of the children and the teacher. Since the beginning of the research, several conversations with the teacher and several visits to the children's families were carried out. These meetings occurred during all the research process, more or less for 3 years, in order to strengthen and maintain the relationship with the participants. The visits to the community of Araraiana river occurred during 3 months, always having clarity in the dates of return so that the visits were scheduled with the community. For each return there would already have indication of future activities. Therefore, there was an increasing participation of the members of the team in the most diverse activities of the residents, such as hunting activities, games, religious activities such as worship, and in school, specifically in class activities and on break times, in the snack time and some recreational activities.

The visits to the school space were part of the schedule established in the project, so that in all the scheduled trips included the school in order to register, through participant observation, all the dynamics involved in the space of the school. This participation was registered on paper and was set up as a field diary.

In the present study two types of questionnaires were also applied, in order to consolidate the research objectives:

1. Biosociodemographic inventory—to effect an initial link with the community, also serving as the basis of an initial characterization, as well as to propitiate the selection of the research sample. For this purpose, it was applied to all families of the community a questionnaire consisting of 88 items referring to aspects of the survival way; perspectives on education and school; plays, beliefs and values of creation; recreation; support networks; socialization goals; gender and religion and others.
2. Routine inventory—for characterization, in three special dimensions of (a) activities, (b) locations and (c) company/presence in each hour, during the days of weeks and at the weekend (Sunday), for each Family member. It was necessary to read the inventories by the researchers, since most of the residents were not literate. The applications occurred during several meetings, considering the need for reading to the large number of families, in the sample.

The observations were registered in field notes in order to capture relevant aspects for the understanding of data collected in the questionnaires and interviews. The guidelines of Lüdke and André (1986) were followed for these notes, starting each registration with the indication of the day, time and place; duration of observation and number of participants over a period of 3 years, with intervals of 2 months between visits to the community. Impressionistic observations of the observed event and/or inferences of the observers were also made in the margin of the field notes.

The interviews, with the parents of three children selected with the help of the teacher and a person in charge of the city council, were done by two researchers at the same time. These were alternated between interviews and field notes, to ensure full attention to family members.

In the interviews with the teacher were investigated her formation, her professional and personal course of studies; her beliefs about education, her perception of the role of parents in the school life of their children; her conceptions about the students, how she visualize and describe them; the organization of the pedagogical work, with the methodology and content of the classes, and how she coordinated the learning process; how she evaluated her students, her procedures to teach classes and the difficulties encountered in the teaching–learning process. It was also investigated aspects such as her relationship with the students, with the parents, with the City Hall that hired her, the demands she had to fulfill, and the difficulties and limitations in this relationship. These interviews were carried out at the teacher's house, however, some informal conversations occurred during the visits to the school and were registered in field notes. The interviews took the form of a semi-structured interview, in order to make her feel more comfortable to answer. The interviews

took place without problems, since the teacher was always nice and attentive with the research team, being always available for any clarification.

The parents also answered about their expectations regarding the future of their children and their practices that would allow them to fulfill their wishes in the form of semi-structured interviews. It was also asked about the relationship that the families had with the riverine school and with the Secretary of Education.

The interviews with the students had as objective to investigate what they thought about the school, how they felt in relation to the work developed there, the reason to attend it and their relations with the teacher. These interviews occurred in the school, at the moments made available by the teacher. However, during the visits to the families and in the various meetings where there was an opportunity to talk with the students, the content was registered in several field notes.

A final interview, for the team farewell and to finish the research, took place collectively, with the presence of all students, to enable them to answer together, collaborating with each other. This kind of interview with the group was based on the experience with the community during 3 years, which proved to be the best option, given the shyness and preference for the collective of the participants. The presence of the teacher has become an important link between the team and the school community. The teacher was seen as a friend who understands and knows their realities, encouraging them to respond and participate.

In the field notes, it was tried to register verbal and nonverbal aspects, in an attempt to capture and register the contents of speeches, behaviors, receptivity, occupation, and organization of the living space, working time, idleness, leisure, groupings and subgroups, personal spaces, unexpected events, informal conversations, and other aspects that could denote the form and content of the culture of the group under study and the forms or styles of organization, planning, achievements, and evaluation of the group. Field diaries were always written after the insertions at the research context.

Informal conversations were fundamental for the field diary registers, as they allowed to complete and clarify information collected informally and mapping horizons that could not be captured through the mediation of formal instruments. Similarly, the photographic records were significant, since they served as a support not only for the description but also for the analysis of the data. These records were made with the permission of the residents in the consent term to carry out the research. Even when the stage determined for data collection had already finished, if it was necessary to investigate a particular aspect that had not been adequately collected, the contact with the participants should be established again to the specific data collection, as well as the use of field diaries and photos.

All the information collected were grouped in a database, where they were analyzed in a specific way, according to the nature of each group, as well as under the focus of family, pairs, and school. However, it is emphasized that although the analyzes are distinct, the interests were common and interconnected. The quantitative data were passable as tabulation as the biosociodemographic inventory and the routine questionnaire, through descriptive statistics, transformed into dynamic worksheets and figures.

For the characterization data of the community, some variables were considered: number of inhabitants divided according to gender and age, parents' schooling and religion, as well as physical aspects of the community, including description of housing and way of life such as health, education, religion and other related items.

Based on the routine questionnaire, the routines of three couples and their children at the local school were analyzed in order to investigate the time they had for school activities, checking the study habits of these children and the involvement of parents in the school activities, their expectations and dreams. It was also tried to develop a survey of the main activities developed by the participants, in a way that could be possible to have an evaluation of their routine and the nature of the activities, as well as the possible skills involved. This last aspect would serve as a basis for understanding a little about the local culture for the purpose of evaluating whether or not curricular activities were in tune with this routine and culture.

This investigation was carried out, mainly, through observation techniques and unstructured interview of school and family activities. In these observations were privileged aspects referring to the spaces of interactions destined to the transmission of knowledge, both formal and informal.

The data of a qualitative nature, resulting from the field notes and interviews, were discussed in more detailed way, highlighting the characteristics of the micro-system, the proximal relationships carried out in the school, and between the contexts involved: the family and the City Hall.

At school, the observations aimed at unraveling the relationships and interactions developed in it. It was sought to apprehend the core values present in the relationships and interactions of the students, with the teacher and the interactive context of learning.

At each observation context were described aspects of the communication environment were described for each relevant interaction environment, for example: home, school, play areas, and the description of the physical environment. The following aspects were highlighted:

- (a) Restricted areas;
- (b) Exposed areas;
- (c) Environmental arrangements;
- (d) Symbolic arrangements and decoration;
- (e) Division of rooms;
- (f) Arrangement of furniture and objects;
- (g) Areas of interaction;
- (h) Play areas.

These aspects served as a basis for the identification of significant and symbolic elements of the educational/school phenomenon under study.

The research evidenced the linkage between almost all the systems involved that, in some way, contribute or hinder the students' development. The analysis started from the school microsystem, considering the school–family mesosystem and the school–City Hall exosystem, until reaching the macrosystem—in which it did not

stop in a less detailed way, since this is not the main context in the analysis of the development of the children of the community, interest in this study.

It was considered that the macrosystem, represented by the set of normative laws that govern the public policies for communities with the profile of the community in question, does not represent the values, beliefs and ideologies that permeate the relations developed at each level or transcend the sets of systems considered. In this sense, the macrosystem was analyzed based on the perception of the team and the speeches of the people involved in the research about their culture, represented by their way of life, with precarious access to public policies.

The Research Context

One of the places that integrates the island of Marajó is called Ponta de Pedras, which presents in its configuration several riverine communities and among them is the community of the Araraiana River, specific locus of this study. Its distance from the city of Ponta de Pedras is approximately 1.5 h, in small boats rented for this purpose, since there is no systematic transport for this community.

There are 22 families residing in the Araraiana River, living in houses with wooden floors built in the stilt system, some with walls made of miriti¹ and others with wooden boards. Most houses have three rooms; the front, the bedroom, and the kitchen or backyard.

The riverine residents are isolated both from the general culture (deprived of any access to the written media and little or restricted access to the television and radio media) as well as with the community in which they live. The distance between the residences is around 200 m, making it difficult for the residents to interact with each other, but allowing a greater interaction among the members of the family. These families are generally nuclear, with an average of three children per family, with a minimum of two and a maximum of ten. Teenage pregnancy is a fact of life in the community, in addition to the large number of adolescents who will work as maids in families in the city (Ponta de Pedras, Muaná and Belém), to attend the last grades of elementary and high school, since the community school only provides the education of kindergarten and first to fifth grade.

In 2004, the total number of people living in the community was 125 individuals organized in 22 families. At the end of the data collection, in 2007, the number of residents changed to 129, when the 23rd nuclear family was formed. However, the

¹ Palm tree abundant in the Amazon, predominating in low and marshy places. Also called buriti of the marsh, the miriti (*Mauritia flexuosa* L.) belongs to the same family of the buriti (*Mauritia vinifera* M.), being often confused with it. It is one of the most important palm tree of the amazon, playing a relevant role in the daily life of the populations of the region, because everything is taken advantage of: From its fruit is extracted a delicious juice, which is taken "in natura," with flour, or as a substitute for milk, in rice or flour porridge. From its stem, a kind of very light wood is extracted, that serves as much for walls of the houses, as to make children's toys: vane, boats, canoes, among others.

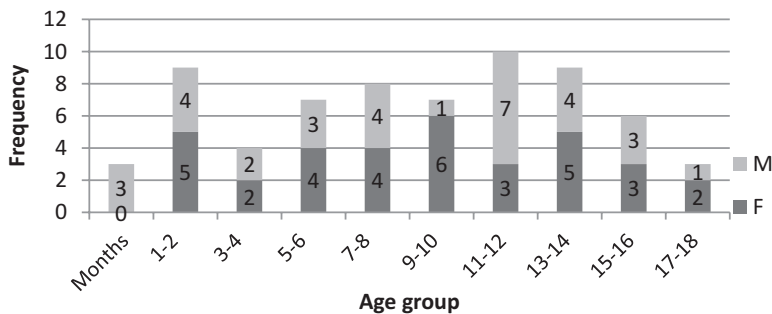


Fig. 9.1 Age and gender of children and adolescents from 0 to 18 years old of the Araraiana community population

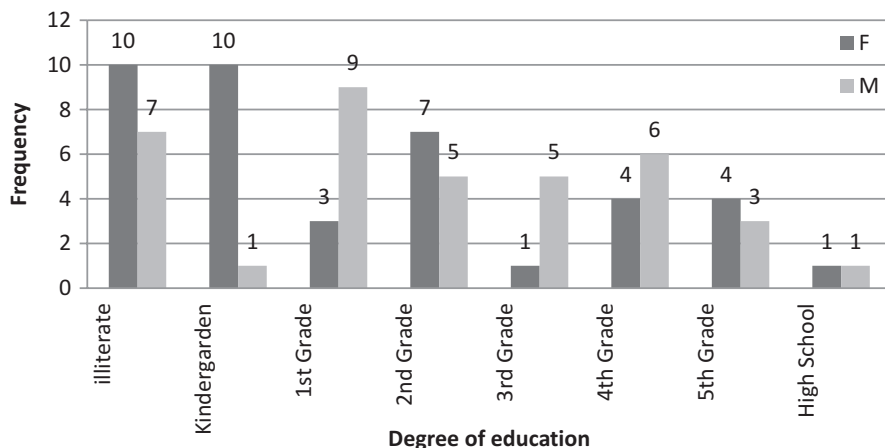


Fig. 9.2 Relation of the residents of 19–85 years old with their respective degrees of instruction

data in the present study refer to the initial collected data. From the 125 inhabitants, 59 are adults (between 19 and 85 years old) and 66 are children and adolescents (between 0 and 18 years old). The latter, 32 are boys and 34 are girls. The age data for children and adolescents are demonstrated below (see Fig. 9.1).

Regarding the levels of schooling of the participants involved in the research, Fig. 9.2 demonstrates that of all adults between the ages of 19 and 85, only two completed High School, one of them being the local teacher, while the others did not complete Elementary School. It was also verified that, although 41 people had started literacy, they are illiterate, that is, they only know how to sign the name and most of them, with some difficulty. In relation to the age group between 19 and 24 years old, according to the reports, all are outside the school.

The survey indicated that of the 66 children and adolescents from 0 to 18 years old, 24 were out of school, 3 in preschool and 9 in first grade (current second year); only 1 child was 7 years old, while the others were in the age group of

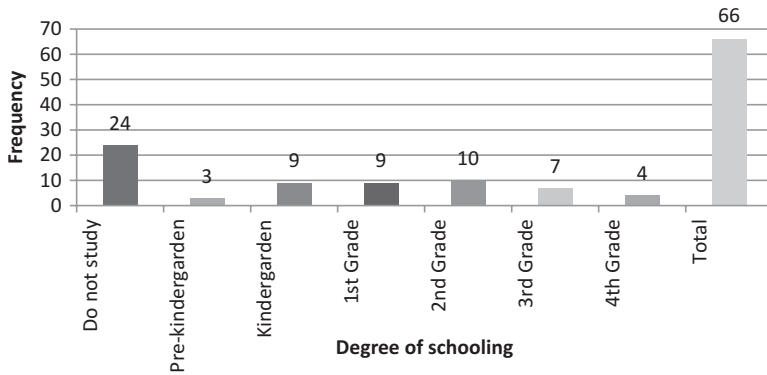


Fig. 9.3 Number of children related to educational level

11–16 years old. In the second grade (the third year) there were 10 students, only 2 with ages compatible with the series (school year), while 4 were 13, 2 were 12 and, 2 were 11 and 12 years old, which indicated a high percentage of school lag (see Fig. 9.3).

The school only attended from kindergarten to the fourth grade (fifth year). When these data are compared with the urban public educational level, there is an educational deficiency represented by the lack of attendance to Infant Education, together with the lack of expectation of continuity of the studies.

The school had only one teacher with training in teaching to attend all the grades, which compromised the work carried out due to the differences existing in multi-grade classes, with different ages and levels of learning. The population of this riverine community has low levels of schooling and a high rate of illiteracy, which could be explained by the lack of effective public policies in place that meets the yearnings and peculiarities of the riverine people.

The Microsystem School

Considering the school as a context in which the child actively participates, the study described here chose the community school as the microsystem of analysis. In this way, the study of the school, taken as the main locus of research, in a systemic perspective—in the terms in which it was defined—, sought to apprehend several constitutive dimensions of its singularity and identity.

According to Bronfenbrenner and Morris (1998), a microsystem is configured as a pattern of activities, social roles, and interpersonal relations experienced by the person in development in a secure environment, maintaining face-to-face relationships with physical, social, and symbolic characteristics that favor or not the insertion into progressively more complex activities in interaction with the environment. The elements of this microsystem, which are the activities, roles and interpersonal

relationships evidenced in this context, were analyzed in order to verify the possibilities and the limits that this context imposes to the development.

For the purposes of this work, these elements were tracked and discussed according to the following categories:

1. The physical and social environment;
2. The student body: frequency and school dropout;
3. Characteristics of the students according to the teaching–learning process;
4. Students’ conceptions about school;
5. Student–student relationship; the school as a space for socialization;
6. The teacher’s staff–teacher graduation;
7. The teacher and her practice;
8. Teacher’s conceptions about education;
9. Organization of the pedagogical work;
10. Teaching–learning difficulties according to the teacher’s report.

The cut in these aspects was due to the recognition of its influence in the engagement in proximal processes.

In the categories of analysis described, in general, particularities of the physical and social environment of the school were verified, as well as possible factors involved in the proximal processes and the characteristics of the people involved. In the physical environment, it was intended to verify how much the objects and symbols present in the school environment stimulated the attention, the exploration, the manipulation and the imagination of the developing person. In the social environment, the factors involved in the proximal processes and the characteristics of the people were analyzed, mainly regarding the dispositions of the teacher and the students and their resources in the teaching–learning process to generate proximal processes, that is, their engagement in regular, frequent, more complex and reciprocal activities. In general, it was tried to show how the participants experienced the school environment.

The Reversible House That Turns into School and Turns into House

The specific locus of the study, that is to say, the place where a substantial part of the research carried out, was, at the time, a house of a resident of the river who, in this case, was the father-in-law of the teacher. He gave up a compartment in the house so that the children could have a place to study during the day, characterizing the phenomenon of reversibility.

This house that turns school during the day, like all other houses, is situated on the banks of the Araraiana River. All the houses are built in a stilt system, and the access to them is made by the paths of neighborhoods to the right and left of the river, with trunks of the palm trees (*miritizeiro*) or by the canoes of shallow hull, commanded by the oar, and by the own children.

At the moment the school was seen by the researchers, the impact and mutual estrangement was immediate. In fact, this was a feeling lived continuously, during the presence of the researchers in the study environment. When confronted with the reversible house that turns into a school, the research team found, astonished, also the remarkable similarity between reality seen from the river's edge and inside the "school," with the situation present in the narrative of Davis and Gatti (1993), which content applies well to the case of the Araraiana River, that says:

There was not a building that looked like a school, not many classrooms, not many teachers, not even a principal. Beginning with the physical aspect and precariousness of the facilities, the school (...) seemed to be the reign of informalism and improvisation. In a way, it was easier to define it by negation, in so far as it was the antithesis of what one imagined about a school. (...) was an institutionalized social space at the teacher's direction (Davis & Gatti, 1993, p. 77).

This is what announces, at the same time what denounces Fig. 9.4:

This impression was corroborated by many and varied reasons, and the application in the continuity of Davis and Gatti's (Davis & Gatti, 1993) speech also:

(...) there were no classes made up of better students and classes made up of worse students, more educated and less prepared teachers, more efficient and less efficient principals, on the contrary, there was only one class, just one teacher, no one director (Davis & Gatti, 1993, p. 77)

Children and adolescents attending school were low-income students with little access to material goods essential for their livelihood and survival, few resources to feed and dress, though they had a healthy appearance, accentuated mainly in a determined time of the year, in the period when there is the harvest of açaí, different from other months, in which they were a little more slimmer.



Fig. 9.4 The school of the Araraiana River (dry sea). (Mendes, 2008)

They had little information on what was happening outside the river region, because few had access to television and newspapers. Perhaps because of this, they had little prospect of a change of life, which meant that their performance in school was not the desired one, both in terms of performance and interest in attending it, compromising their levels of development and learning.

The School of Araraiana: Context of Child Development?

In the biosociodemographic analysis of the community investigated, it can be seen that the riverine lifestyle, characterized as predominantly extractive, contributed to the maintenance of the community's poverty conditions, since this way of life subjected the riverine to live for a cycle seasonality, which periods of scarcity were marked by the reduction of natural resources to feed the population and extreme fall in the income used to supplement the livelihoods of the families.

All families had some origin in the riverine way of life, the standard of living, therefore, was not strange to them, they were used to and valued in their speeches the set of aspects referring to this way of life, mainly when compared with the urban one. In one of the families studied, this valorization seemed to clash with the possibilities posed by education.

Most of the families that lived in Araraiana had typical configurations of extended and multigenerational families, that is, of more than a generation coexisting in the same environment at the same time. This aspect contributed to a possible system of shared care and support network present within the family environment, even though the physical distances between houses appeared as a barrier—transposed only by close family ties. Such factors could enable a greater flow of information or cultural characteristics within the family itself. These characteristics could possibly also influence the relationships developed between the family and the school, since local traditions in relation to schooling were continually repeated, that is, parents and children had low schooling, which reflected in the reproduction of ways of life from generation to generation. When the occupation data of men and women were observed and compared with the activities of children and adolescents, it was really clear the relation of the division by gender in these activities, in which the girls helped their mothers in the household tasks and the boys helped their fathers in hunting and fishing activities.

Children since childhood were inserted into the activities of subsistence and family support, where they learned by example. This pattern of survival was transmitted and reconstructed by the children, since both the larger and smaller ones performed activities together and, at times, without the presence of adults, demonstrating the involvement and appropriation of the children with activities, essentially, of the adult universe and the family environment.

There are, therefore, strong indications that routine activities could interfere with the attendance of children in school, as the occupations and tasks performed by them were reasons for absences and school dropouts. An important detail in this

regard was the issue of gender differentiation in relation to these absences, as it was found that boys skipped school more than girls and dropped out much earlier to work, perpetuating the idea that men should be supportive for the family and women should be the housewives.

Participation in various subsystems, where activities and customs established ecological transitions and role changes, tended to affect the development of proximal processes in school. Thus, the intense involvement of the riverine lifestyle with the elements of nature and its culture expressed a close relationship with aspects related to survival, an aspect that was revealed in the school context through the reasons why the students frequented or left the school.

The specific characteristics of the school microsystem, in terms of physical conditions, revealed that the place could be characterized as little conducive to the development of teaching and learning activities. Being a residence, there was little clarity of the home/school boundaries, and the characteristics of the two contexts tended to merge at certain times.

The lack of specificity of the environment for school purposes meant that it lacked stimuli referring to the literate world, because as noted, letters, numbers, symbols, books, etc. were absent at school. The school followed the tendency of the houses where the children lived, being a little stimulating environment for the development of proximal processes related to learning.

In the classroom dynamics, the students seemed to be quite adapted, little demanded of the teacher and assumed a posture that could be classified as passive in the classroom. However, the school represented an important space of socialization in the community, becoming a main place of cultural transit—especially of pairs culture²—of the children’s community.

The teacher, on the other hand, presented a deficient formation, with an education inferior to the one required for the exercise of the activity that she realized. However, she was well disposed towards learning and change, an extremely positive characteristic, the basis for the development of proximal processes, since she was clearly affectively involved with her work and with her students. In addition, it was perceived that she held great respect and authority and was used in a very skillful way, for the control of her students in the classroom. The analysis of the methodology and content of her classes indicated the use of a traditional methodology, rigidity of planning, and consequent low sensitivity to the dynamics of the processes developed in the classroom.

The teacher, despite her intention and disposition, lacked adequate pedagogical resources for the development of proximal processes effective to the educational development of her students. Another limiting aspect of her practice was the relationship established with the students’ family, because as evidenced in the analysis of the mesosystem, the family, according to the teacher, was a factor of resistance to learning, even though it was identified as distant and disinterested. An important point was the religion that was constantly appearing in the teacher’s speech, which

²A concept worked by Corsaro (2011) characterized as “a stable set of activities or routines, artifacts, values, and concerns that children produce and share in interaction with other children.”

provided classroom playfulness. The families were divided into Catholics and protestants, but the school, because it was based in a Catholic family house, was evident as such, because in the classroom one could observe images of saints, which should be respected.

It was verified and evidenced in the works of S. Silva (2006a), dos Reis (2007) and S. D. Silva (2006b), in the investigated community, that although there is a support network along the river, formed by the neighbors, this almost did not work, as the houses were very far apart, they had little opportunity to meet. There were also the children who did not go to school anymore and this made them lose contact with each other. The closest contact was between neighbors who were related, when one observed the help in the homework and the play among the children.

The school, in turn, had little contribution to this family-school engagement, since it had a decontextualized content that did not fit the reality of the families. The fact that classes were multigrades was also a negative factor, since the lack of individualized follow-up was felt and discouraged students from continuing their studies. The lack of relation to practical life was visible; for example, students were unable to place themselves on the map of Brazil and the readings taken in the classroom dealt with aspects unknown to them, such as the seasons, popular festivals, and others.

Communication between the family and school systems was basically through verbal messages. The greatest contact was in the meetings which according to the teacher's report were little attended and also at the time of enrollment that took place at the student's house. The passage of the students between the systems was always done unaccompanied of the students' relatives, which led to suppose that the connection between the microsystems was, in this case, weakly linked, since this passage between the systems called by Bronfenbrenner of ecological transition, becomes more effective and healthy when the child feels supported and their relationships have a more effective participation in this process. By virtue of the discussed it is perceived that in practice there was little consensus of objectives among the subsystems so that the family was not willing as a supportive link in the developmental potential of the students. However, parents were unanimous in considering education as very important for the achievement of a better future, that is, associated with a good job, a nonmanual work, different from what is provided in the Araraiana river and, therefore, for better living conditions. However, they did not think about school, only that they wanted their children to attend, because they knew the importance of learning for their future plans. However, all this seemed to be part of a ready speech that did not fit the reality seen in school, with frequent absences and little relationship with the students' family.

The knowledge produced or learned in school had little influence on families' lives. Routine data revealed that school-related activities comprised times dedicated to performing tasks related to the school, such as homework, time to get ready, and transportation to school.

The school's limitation in not continuing the years following the fifth grade, together with other factors such as early pregnancy and marriage, decontextualized school content, and unpleasant school experience, contributed to the permanence

and aggravation of a situation of circularity between the way of life and education, as maintainers of certain patterns of precariousness, characteristic of that community over time.

All this set of factors raised assumptions about aspects of the involved macrosystem, since they would be the common elements shared in terms of beliefs and values by the diverse systems considered. The macrosystem refers to consistencies in the form and content of lower order systems (micro-, meso-, and exo-) that exist, or could exist, at the subculture or culture level as a whole, along with any system of belief or ideology underlying to these consistencies (Bronfenbrenner, 1979/1996). In this perspective, despite the good intentions of the teacher and the parent's speech about the interest for education and the involvement of the education secretary in the follow-up of the teacher's activities, there was little active and reciprocal participation involved. The Araraiana community was marked by unequal relations between men and women (Silva, 2006a), among siblings (Silva, 2006b), because they were relations based on dominance, sometimes physical, and blind obedience. The school seemed to maintain the same profile, because the teacher, despite her questioning and affectionate behavior, used a traditional and authoritarian practice. The students were quite submissive in the classroom, and even when it was possible to behave otherwise they followed an inertia of obedience. It is assumed that family and school relations were conflicted by the presence of power in both instances. And finally, the teacher in her relationship with the Local Secretary of Education seemed to repeat the same pattern as her students.

In this scenario, and the justifying elements of the research, a question remains: but, after all, is the school of Araraiana a child development context? In seeking a more incisive answer to the guiding questions of the research concerning the meaning of schooling for child development, or at least indications about the interference of the contextual environment in child development, it can be considered that the development raised by the participants of the study based on the presence of the school in that context apparently was restricted to learning reading, writing, and fundamental mathematical operations. However, it is not enough to make the school available so that the child's development can be perceived, it is essential that the school work as an incentive, challenging, problematizing contextual institution committed to the development of the community it serves, so that the child can reach a significant development and to be an agent of changes of her own context. In this way, the riverine school as an ecological environment, constituted of physical space and the relations established in it, did not present itself as an ideal school standard (neither regarding to the structural and pedagogical resources nor in relation to effective proximal processes for learning of educational concepts related to formal education).

However, when we consider the peculiarities of the community context and forget the institutional objectives, that environment, in some way, may be contributing to the development of healthy relationships. It should be considered that in the riverine school is offered meetings with children and adolescents, because it is a multigrade school, that provides the socialization of students of different grades and ages, which could result in a significant number of continuous and complex interactions.

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Chapter 10

Sexual Exploitation of Children and Adolescents: The Ecological Engagement as a Pathway to Research



Luciana Barbosa da Silva Vega and Simone dos Santos Paludo

This chapter aims to show ecological engagement in the context of the sexual exploitation of children and adolescents (ESCA). The pathways illustrated here refer to the course covered during a master's research that sought to investigate the victim's perception of sexual exploitation on the actual violation and its knowledge, access and evaluation of the existing protection network, as well as to identify the protection network built to address ESCA (Vega, 2011).

Research on the sexual exploitation of children and adolescents is a challenge. After all, how can we identify people, places, and practices that are hidden continuously? The invisibility of the cases, lack of records and notifications, fear and the merchant and criminal character are some hurdles that hinder access to victims and contexts of occurrence. Different methodological strategies have been adopted for this study since sexual exploitation has been discussed as a human rights violation involving a relationship of power, market, and violence over the physical use/abuse of children and adolescents. Ethnographic studies (Diógenes, 2009; Morais, 2009), observational studies (Libório, 2005), case and documental studies (Leal & Leal, 2002), case studies at specialized sites for the treatment of sexual violence (Cerqueira-Santos, Resende, & Correa, 2010; Sousa, 2008), life stories (Botelho, 2003), sampling techniques—Respondent-Driven Sampling (RDS) (Cerqueira-Santos, 2009)—, and ecological engagement (Serpa, 2009; Vega, 2011) are some possible pathways.

In an attempt to understand the dynamics and complexity of the ESCA and capture the social, economic, and cultural diversity that permeates this phenomenon, the Bioecological Theory of Human Development (Bronfenbrenner, 1979/1996; 2005; Bronfenbrenner & Morris, 1998) was chosen as a theoretical–methodological strategy in this study. In taking an ecological look at this issue, care must be taken to ensure that research is conducted beyond the people involved, in this case, besides child and adolescent victims, in order to also consider their interactions and

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transitions with others (especially with clients, solicitors, victims) and with other contexts (family, network of protection, and network of exploitation), contexts of which they often do not participate, but directly influence their development, either by exosystemic decisions or by macrosystemic beliefs (Vega & Paludo, 2011).

The ecological engagement provides for the immersion of the researcher and his team in the context to be investigated (Cecconello & Koller, 2003; Eschiletti-Prati, Paula Couto, Moura, Poletto, & Koller, 2008; Paludo & Koller, 2004). The research team ventured into the arduous context of sexual exploitation for 5 months to understand the victims, their proximal processes, interactions, and life contexts. About 71 field diaries were produced that depict ESCA's observations, experiences, and storytelling.

Context of Research

The survey was conducted in Rio Grande, a municipality located in the southern region of the State of Rio Grande do Sul, with a population of 197,228 inhabitants, as per the latest demographic census (IBGE, 2010). Rio Grande is vulnerable to situations of violation of children and adolescents due to its main characteristic—it is a port city, and is the second largest cargo handling port in Brazil. The Mapping of Points Vulnerable to the Sexual Exploitation of Children and Adolescents in the Brazilian Federal Highways (2009/2010)¹ identified 11 points in highway BR-392 (connecting Rio Grande to Pelotas). Similar data were found in an earlier study by the International Labor Organization (ILO, 2008), which revealed 18 points vulnerable to sexual exploitation in highway BR-392 and 14 points in BR-471 (Rio Grande-Santa Vitória do Palmar), identifying gas stations, bars, nightclubs, motels, and the highway itself as the main sites for the practice of such violence.

Besides this setting, the municipality is experiencing a significant expansion in the naval hub, transforming the region into large, predominantly male construction sites. This fact may further attract the occurrence of situations of sexual exploitation and may enhance the existing socioenvironmental vulnerability in the municipality.

¹ The fourth edition of the Mapping of Vulnerable Points to the Sexual Exploitation of Children and Adolescents in the Brazilian Federal Highways—2009/2010 is the result of an unprecedented and multisector partnership consisting of the Department of Federal Highway Police, Secretariat of Human Rights of the Presidency of the Republic, International Labor Organization, Childhood Brasil, and the private sector.

Before the Ecological Engagement Within the ESCA

The study included the engagement of researchers at different locations (vulnerable streets, port area, areas near motels, and nightclubs) to access girls and boys up to the age of 17 involved in sexual exploitation. Thus, some care was taken. The first step involved the submission of the research proposal to the University's Ethics Committee. All regulations and guidelines regulating human research were observed—Resolution N° 196/96 (National Health Council, 1996), and approved the proposal. The second step involved the qualification of the team, which was prepared theoretically, ethically, and methodologically. Priority was given to the study of the Bioecological Theory of Human Development (ABDH), articulating it with research-focused themes, from ecological engagement to training and the simulation of the interview script that would be used—an instrument adapted from Serpa's study (Serpa, 2009). The team sought to be scientifically instrumented and committed to the promotion of human rights before starting the actual ecological engagement.

The Ecological Engagement within the ESCA

In Vega's study (Vega, 2011), the ecological engagement involved all the immersion process of the team in the context of sexual exploitation (which included the protection network, the exploitation network and the victims). Thus, notes in field journals regarding the moments experienced during 5 months provided data as important as the interviews with the victims. Five districts were systematically visited in this journey, and several vestiges and scenes of sexual exploitation were identified.

The contact with the field of research happened when the team sought the protection network and requested help in mapping the places that are vulnerable and of the victims residing in the municipality. Initially, the Guardianship Council was contacted, as it is the gateway to reports, and the Social Work Special Reference Center (CREAS), due to the direct work in the reception and care of child and adolescent victims of sexual violence and their families. These services reported cases of child and adolescent victims of prostitution and pornography and pointed out a total of 15 vulnerable neighborhoods in the municipality.

The indications provided by the two services were the starting point in the attempt to access the participants for the study. However, there were difficulties in accessing the child and adolescent victims indicated by the services. The information consisted of places and times that did not correspond to reality. Systematic, unscheduled visits were unsuccessful. The shortage of victims in the indicated places revealed two crucial aspects about the ESCA context: (1) the dynamics and movement of the victims and (2) the network's lack of knowledge on these dynamics. Also, it became clear to the team that such venture would be an uphill climb. Researcher Ennew (2008) corroborates the challenges of the ESCA research,

whether regarding access to victims, clients or intermediaries, or to places where sexual exploitation is transacted, “due to the illegal or stigmatized nature of prostitution” (p. 22).

Before this situation, the team decided to resume the established link with the protection network contacted (CREAS and Guardianship Council), and report the difficulties experienced and request help. It is interesting to note that several reasons were pointed out for the mismatch between the victims and the team. The guardianship counselors stated that many victims of ESCA are drug users and are afraid of being punished (removed from circulation and placed in institutional care) and hide if they notice any different movement. One counselor reported: “when we arrive at the places, girls run away with fear” (Field diary, 31/05/2010).

The alleged danger/threat that the presence and action of guardianship counselors trigger in the victims reveals dysfunctional proximal processes of protection and evidences that the service may be far from the reality experienced by ESCA. Faced with the lack of new indications and difficulties reported by the Guardianship Council, the team agreed that it would be interesting to seek other services of the municipal protection network with a closer and less hierarchical relationship with the victims.

A social action service was activated, and a neighborhood leader brokered the team meeting with potential sexually exploited victims. The meeting took place in the parish of the community and counted on the participation of two girls (two sisters, one aged 13 years, and the other 15 years) who arrived accompanied by their grandmother. During the initial contact, they stated that they had been sexually abused by their stepfather, and the 15-year-old was pregnant with his child. However, the girls reported that they were not involved in a situation of sexual exploitation. Although they insisted on this statement, the team was able to observe contradictory elements. The younger girl was wearing a dress that was incompatible with the climate and the occasion (she wore a very short dress, party/nightwear model, shiny, high-heeled shoes, and heavy makeup) and was very uncomfortable with where the conversation was heading, while the other (pregnant) teenager wore warm clothes and sneakers, and evidenced apathy. During the informal conversation, they commented that the stepfather gave gifts, clothes, shoes, sexy lingerie, to make them prettier and more attractive. The fact that objects were exchanged for the sexual act suggested the possibility of sexual exploitation, but the girls insisted that it was abuse and did not authorize the interview.

Cerqueira-Santos (2009) pointed out that the victims resist taking on their involvement with ESCA for fear of being tried and held accountable. When victims claim to have been abused, their victimization becomes evident, a situation that does not occur when victims claim to be involved with ESCA. Perhaps for this reason, the girls have confirmed the abuse and denied exploitation. Another hypothesis is that they do not perceive the exchange of gifts as an exploitation experience.

The conceptual confusion about sexual abuse and sexual exploitation seems to be familiar to the victim itself, as well as to the family, the safety network, and society. The literature does not point out that a victim will also be exploited when being sexually abused as a determining factor (by the nature of their specificities, by the

care and treatment that considers their peculiarities). Leal (1999) affirms it is necessary to identify and typify the different forms of violence.

The team neared a certainty as the ecological engagement occurred and difficulties increased: the ESCA involves different lenses that do not always cross. One pair of lenses sees the situation from the outside and assigns a label (for example, technicians and researchers), and another that experiences the ESCA. The mediators and the services accessed by the team looked for stereotyped cases and were concerned with bringing children and adolescents who believed they were actually being exploited, since those cases that, in the opinion of professionals, involved a “choice” (in the words of professionals: girls and boys who are prostituting themselves because they want to use drugs) did not meet the inclusion criteria of the research. In the face of this misunderstanding, it was essential to have constant contact with network professionals to clarify the profile requested, to explain the concept and dynamics of sexual exploitation and to investigate new indications. It is important to highlight that ongoing team’s contact with the services and with the network also favors the bond of trust and facilitates access to the victims under care in closed environments (psychological and social work services).

For example, when CREAS was first contacted, no victims who had been attended or under care at the referral center were indicated. As the permanent contact was prioritized, after 4 months of the ecological engagement, the team was informed of the existence of three girls who met the inclusion criteria and who had already been under psychological care at the service. The team then went to the site to contact the girls and two of them agreed to participate in interviews that took place within the CREAS. The girls were sisters (11 and 13 years old) and were involved in the same case of sexual exploitation (mentioned earlier). They were interviewed individually and claimed to have been prostituted by the mother to the same perpetrator in exchange for money and gifts. It is interesting to note that the girls evidenced ambivalent feelings vis-à-vis the mother and the perpetrator. According to Diógenes (2009), when sexual exploitation agents are closer to the victims, such as family members or acquaintances, a relationship of domination is in place and the victim behaves as the property of its perpetrator, subjecting itself to being a sexual object that can be offered for a profit. At the time of the interview, the girls were under the guardianship of the father and the mother and the perpetrator had been arrested.

Conducting the interviews after so many frustrated attempts motivated the team, which continued the active search for the girls and boys. CREAS suggested contact with institutional shelters since these are measures of protection received by child and adolescent victims of sexual violence. Visits were scheduled with the two municipal host houses. In an informal conversation, the coordinator of Institution 1, which attends only girls, reported that it received about five cases of sexual exploitation victims between 2008 and 2010, aged 13–15 years and who were being exploited by pornography and prostitution. According to the coordinator, their stay in the shelter was very fast, a maximum of 15 days. In these cases, the exit was always related to the use of drugs. Because of the “strong inclination,” they jumped walls and broke windows panes. It was also reported that the girls had “grown-up”

enticers and did not perceive their victimization because they used their bodies to get drugs, gifts, favors, and money. On the other hand, in Institution 2 that attends only boys, the coordinator reported that there was only one case registered in 2009, that of a 17-year-old boy who was being prostituted. Similarly, the boy stayed only 15 days in the shelter but was reinserted into the family of origin. According to the respondent, the ESCA among boys may have lower incidence or greater silence.

Contact with the shelters again showed that protective networks cannot always establish positive proximal processes with victims, especially when sexual exploitation appears to be associated with drugs. Drug use was also quoted as a severe problem by community leaders, counselors, and health workers. The case of a female teenager who had already been attended in all the services of the municipality was remembered by the professionals. Everyone claimed that drugs were her enticement and that no one could save her. The adolescent was spotted by staff in different neighborhoods, including bars and houses suspected of ESCA, but no personal contact was possible. Drugs seem to be a significant hurdle in the network perspective, but on the other hand, researcher Libório (2005) states that drugs build precisely on the lack of family and institutional support networks and on firm links with the exploitation networks.

The interview with a 17-year-old girl (indicated by the Guardianship Council) showed the relationship between drug use and the poor institutional and family support. The girl said she started using crack at home; her mother was a user, and her stepfather a drug dealer. Drug access was facilitated in this context. However, her mother and stepfather were arrested and she ended up being exploited to keep with addiction:

I'll do it, I'll buy it and I'll smoke it. I'll do it, I'll buy it and I'll smoke it. Then when it was over, I would do it again ... I had to do it, to look out to keep with my addiction ... I had sex with who I did not want to, not because I liked it, but to get the money. It was almost compulsory; it was not that he (the client) that forced you, but the drug.

The teenager also reported that she was looking for customers at the roadside gas stations because of the steady stream of truckers. Her account exposes how far the ESCA's protection network is, although everyone (Guardianship Council, police, community, social organizations, host institutions, among others) knows where the exploitation takes place and the reasons that lead the girls to such locations. The belief that the drug is an invincible enemy and the use of the body in exchange for substance is a choice crystallizes any confrontation. Bronfenbrenner (1979/1996) illustrated that the beliefs and ideologies found in the macrosystem influence care practices. How will care be provided if practitioners believe they cannot do anything to break the craving for drugs? How can they protect young people when they believe they have chosen to be exploited? Although this study did not aim to analyze the professionals' performance, it was impossible not to consider it, because the more the team tried to understand the ESCA, the closer it was to the linkage between the victims and the services/institutions. It became clear to the researchers that sexual exploitation dynamics are through action and lack of the network's action. Thus,

the team continued to count on the collaboration of professionals directly or indirectly involved with the victims.

New indications from the Guardianship Council continued to guide the ecological engagement. Nine names were provided, located and contacted, but only one female adolescent, who according to counselors wandered the streets and was exploited by several men, accepted to participate in the study. The victim, a 16-year-old teenager, was contacted at her own home and the interview was conducted after authorization from her and her caretakers. The girl was pregnant (fruit of the exploitation) and said she did not know who the father of the child was, and that she had been involved in prostitution to help the mother in the household's subsistence. She further stated that she thought it was "normal" to have sex with someone who offered her money to buy what she needed at home and did not perceive that she was being raped.

This interview facilitated the team's ecological discussion regarding the person, the proximal processes established with the perpetrator and the influence of the exosystemic factors (in this case, poverty). The girl's speech shows the difficulty of recognizing the "client" as an exploiter. Trindade (2010) says these situations sustain a violating cyclical movement, by setting up the illusion, the false idea of partnership, in which sexual exploitation is "romanticized" as a victim's way of surviving.

The active search for boys and girls continued to compose the sample. One research team member mediated a contact with the pedagogical coordinator of a state school in the municipality, showing that the school is attentive to the reality of its students and families and that it can and should be a partner in addressing any violence, in this specific case, ESCA.

The coordinator indicated a case, but when more details were available, it was verified that it was a mother who looked for help for her 6-year-old son, suspecting that her other 18-year-old son, who was a drug user, was sexually abusing his little brother. This situation did not fall within the objective of the research, so the interview was not conducted, but guidance was provided to the school and the mother. Again, we could verify the confusion between sexual abuse and sexual exploitation, which emphasizes the need for information and training of the protection network agents, mainly as alternatives/strategies to adequately address, counsel and support victims of sexual violence and their families.

Soon afterward, the team contacted a former guardian counselor who indicated a 16-year-old girl (known as 10 reais), who had a moderate mental disorder, and was enticed by her sister-in-law and her mother. The girl was exploited daily, both at the enticer's home and in the streets, subject to all kinds of violence. The team questioned whether or not it would be possible to interview her in the face of personal characteristics (cognitive limitation). After several discussions, it was agreed that it would be essential to provide this girl with a voice. The literature itself shows that children and adolescents with special needs are the most vulnerable victims (Groce, 2005; Sánchez, 2007). Before the decision, the researcher visited the indicated adolescent, who accepted to participate in the study. The interview was held at the residence where she lives with a legal representative. The girl stated that she had been

enticed and forced to have sex with countless men. Although at times she could not explain in detail what had happened, she duly expressed the pain of one who experienced one of the worst forms of currently known slavery.

The Guardianship Council again suggested some names, and all indications were ascertained, and engagement within the community was being built. The team could get in touch with another 12-year-old girl who, after the informal conversation and explanation of the research, showed no interest in participating or continuing to converse informally. She denied any involvement with ESCA (although she had already been attended by the network's services concerning sexual exploitation). Not realizing oneself as a victim of exploitation was a recurring fact in this research.

Frequent visits and alternative schedules were made regarding another 15-year-old girl living in the same neighborhood. However, she was not found at her home, nor in the places she usually visited. A male teenager dressed a woman was found near a motel but did not let the team approach him. The lack of access to victims allows them to be increasingly silenced in this universe of violence.

Three male adolescents were also indicated as sexual exploitation victims. In different districts of the municipality surveyed, only one of the nominees was found in the place of residence. An initial conversation with the mother revealed the son's homosexuality and the possibility of being involved in sexual exploitation. After the mother's authorization, an informal conversation with the young man began. The 15-year-old provided many confusing responses and was embarrassed to state his sexual orientation, which in his view was more aggravating than having some involvement with ESCA. According to Alencar, Ribeiro, Gorenstein and Sanchez (2009, p. 178), "the macho, patriarchal and prejudiced formation regarding the sexual orientation of Brazilian society induces the dominant thinking to make invisible the sexual violence endured by boys, who are also often targets of this kind of practice." Male children and adolescents are even more affected by this abusive practice because the macrosystemic beliefs permeated with prejudice favor silence and promote the perpetuation of these boys and girls in the world of sexual exploitation.

The operating network was also contacted in this study. Systematic visits were made to establishments that are located in a well-known "prostitution area" in the municipality, and in one of them, it was possible to have an informal conversation with a working adult woman of the place. This woman indicated a nightclub in the same street and pointed out that it would be possible to find teenagers providing "sexual services." Upon arriving at the establishment mentioned, two girls pretending to be 16–17 years or less entered the nightclub but did not return. Waiting for a response or signaling some conversation about sexual exploitation, the moment of insertion became delicate and dangerous, because some "watchman" or "pimp" showed up and questioned the presence of the researcher and with intimidating gestures did not allow any more enlightening conversation about the study. This situation referred to a discussion about the organization of the sex market, where concern for profit/business associated with crime strengthens the exploitation network within the lives of children and adolescents involved.

Five months into the contextual immersion (and only five interviews performed), the team could evaluate that the hard and challenging pathway that had been carried

out brought about valuable information that would not be reached only through the interviews, because when researchers engage ecologically, they begin to look at people, the process, the context, and time (Eschiletti-Prati et al., 2008; Morais, 2009). Thus, many other factors were being exposed while attempting to have access to the victims. As the engagement outlined the research pathway, the team was faced with the relationships and interactions between ESCA victims, their development environments, protection networks, and exploitation networks.

After the Ecological Engagement...

Care with data analysis and feedback of the findings should keep the team busy when the ecological engagement is over (see Chap. 5). In this study, the qualitative analysis of the data gave rise to a master's thesis (Vega, 2011) and the results obtained from the interviews, field diaries, and observations made during the engagement started a critical discussion in the municipal protection network.

The study of sexual exploitation commits the researcher to the coping and protection of the child and the adolescent since this violation is the state of not exercising the right to life and health, freedom, respect, dignity, family and community interaction, education, culture, sport, and leisure. Thus, the main results were compiled and sorted into a summary report that was delivered to and discussed with the participating institutions of the study. The researcher must articulate the scientific knowledge of public social policies and a first step is undoubtedly data feedback. Bronfenbrenner (1974) already addressed this issue by emphasizing the relevance of science to the formulation of public policies for the well-being and development of human beings.

Final Considerations

This chapter showed the ecological engagement within ESCA carried out in Vega's study (2011). When the team entered the context, it hoped to find a familiar and stereotyped setting (girls and boys wandering the streets, bars, gas stations, and customers). These scenes were sometimes visible, but the leading figures were adults. Thus, the research gradually showed that these images were only the team's beliefs, which came to understand how veiled is the involvement of children and adolescents.

Capturing scenes and vestiges of the exploration was a great challenge. We had to use our lenses to their fullest extent and familiarize with the many facets of this violation since evidence appeared all dressed up most of the time. Exploitation was rarely declared in this study. The approach of sexually exploited girls and boys revealed the violence to which they had been subjected but also showed who they

are, where they live and how they dialogue with the protection and exploitation networks.

This study's obstacles were as significant as the information found. Indeed, the pathway described here did not include all ESCA's realms, but had a glimpse of some settings of violence and many silenced stories. The Bioecological Theory of Human Development (ABDH), proposed by Urie Bronfenbrenner (1996/1979), supported the discussion and guided our look on the people investigated. The team's deployment did not only involve the insertion in different neighborhoods and ecological systems, but it also involved the cultural, affective, and social deployment of the research team. All were challenged by the situations observed, the beliefs exposed and the accounts received, and their development changed.

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Chapter 11

The Method in Context: Ecological Engagement in Angola



Airi Macias Sacco and Silvia Helena Koller

This chapter aims at illustrating the use of Ecological Engagement. For that purpose, we will describe the methodological process of a research project held in Angola focused on education and children's rights. The objective of the study was to elaborate a situational diagnosis on the local public primary schools, to investigate how the school of the Angolans dreams would look like, and, based on this, guide the development of an Angolan child-friendly school model (UNICEF, 2009).

We chose Ecological Engagement as the methodological approach due to its close relationship with the Bioecological Theory of Human Development (BTHD) and also because of the low familiarity of the research team (composed of three Brazilian researchers) with the Angolan context. Thus, Ecological Engagement was considered the most suited method to assess the Angolan reality and achieve the study goals. During the 4 months of stay in the Country, the researchers tried to be a part of the context they were inserted in, experiencing local life and learning the most about Angolan history, its culture and its situation regarding education and children's rights.

The elaboration of a situational diagnosis regarding a country's primary schools requires the analysis of several factors related not only to the schools but also to the local communities, human and financial resources, students, educational policies and historical events, among others. This implies the need to consider micro-, meso-, exo- and macrosystem levels. In an ecological study, the best way to be in contact with these and other important topics is, besides observing and engaging in the context, take into consideration what the people directly involved with the daily

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activities have to say. Thus, this study included the opinion from educational authorities, schools' principals and employees, teachers, parents and caretakers, local communities and, especially, the children.

The focus of the study was the public primary education, represented by 15 schools located in 5 out of 18 Angolan provinces: Bié, Cunene, Huíla, Luanda and Moxico. The Ecological Engagement and data collection lasted 4 months. The team stayed a total of 3 months in Luanda, the research headquarters, 1 week in each province and 1 day in each school.

Contextualization

Angola is a country located in the west coast of Africa and has a population of approximately 30 million inhabitants (UNDP, 2018). The national language is Portuguese, but there are several other national languages related to different linguistic groups, such as umbundu, kikongo, and kimbundu, especially in the inland provinces (Zau, 2007).

A Portugal colony until 1975, Angola conquered its independence after 14 years of armed conflict. In this same year, a civil war started and it lasted over 27 years, devastating the national territory. In peace since 2002, the country is under reconstruction. The schools and the education overall were deeply affected by the wars (MED, 2010). The expected years of schooling considering the adult Angolan population are 11.8 years, and 34% of the population is illiterate (UNDP, 2018). With regard to the public primary schools, some of the main difficulties are related to inadequate financial resources, both material and human, infrastructure precariousness, linguistic diversity and low quality of education. Schools have inappropriate furniture and maintenance, and a high number of classrooms are outdoors (MED, 2010).

Procedures

In general, Angola is a country where institutions, mainly the ones related to the government, are strictly hierarchical. Data collection for this research, therefore, encompassed several bureaucratic issues, especially because it was connected to the public primary education. There was no interference to the research, but arrangements for school visits had to be planned well in advance, and, in each province, several authorities had to be contacted in order to get access to the institutions. These logistical issues limited the available time in provinces and schools, but did not affect the results of the study, which focused on the overall public primary education and not in one school in particular. In addition, this process was also a part of the Ecological Engagement and the field research, and constituted an important source of information related to the functioning of the system.

Prior to the team visiting the schools, a few meetings were held with the Ministry of Education (MED) in order to design the study and to better understand the organizational structure of the Angolan education system. With MED's endorsement, the educational leaders from each province, as well as some city leaders, were interviewed individually. They answered the same instrument, composed of open questions regarding the education system as a whole, educational policies, and positive and negative aspects of the schools in the Country, as well as in the specific location where they operated.

After this initial contact with the authorities in each province and city, the researchers were taken to the schools. They conducted individual interviews with the directive bodies which focused on the reality of the local education and on the daily functioning of the institution. The formal moments of the research were also composed of the application of the questionnaires developed specifically for the study and of the implementation of group interviews with parents, caretakers, and local communities—which were formerly invited by the school directors to attend the school—and with teachers, employees and children. In the group interviews, researchers explained that they came from Brazil and that they would like to know the institution that they were visiting, and that, for this purpose, they needed the help of the group participants, which, for all their involvement in the context, were the most suited people to talk about this issue. In each group, participants were invited to introduce their school, describe its positive and negative aspects and talk about their relationship with it. All participants, from authorities to children, were asked to imagine and describe what the school of their dreams would look like.

The involvement in the study was voluntary and open to all people interested in collaborating. All participants were informed of the objectives of the study and of their freedom to discontinue their involvement at any given moment, with no harm for themselves or to others. In knowing that their presence already configured a strange element in the participants daily activities, researchers tried to alter the school daily routine as little as possible, in order not to harm the progress of the classes.

With respect to group interviews, there was not a predetermined limit of participants. The researchers tried to give access to everyone that wanted to manifest their opinion and to let the participants free to express themselves with no apprehension or censorship. The research team tried to develop an empathic attitude with participants, emphasizing their importance to the study development and highlighting that they were the most suited people to talk about this particular educational context. Overall, there was an active involvement of the participants, which demonstrated a high level of interest in collaborating to the research.

All group interviews were held in the schools, but in a wide variety of conditions. Some took place in closed environments. The majority, however, was held in open spaces, in outdoor classrooms, under trees, or around the school, places where classes were normally conducted. Although theoretically, and following the strict methodological rules, these are not the ideal locations to conduct interviews, these conditions were the same that the participants experience every day in the schools, due to the lack of infrastructure they were accustomed to. Thus, considering the aim

of Ecological Engagement and the objective of experiencing the participant's reality in a naturalistic research, taking them to a closed location—supposedly more appropriate—would mean creating an artificial research situation, which would not match the aim of the study. Nevertheless, even in outdoor interviews, researchers paid attention that the only people present were the ones involved in the debate, thus preserving the participant's opinion and the confidentiality of the stories presented by the group. This freed the participants to talk about delicate issues. Children, for example, were able to criticize the school and the teachers with no fear of retaliation, which would not be possible if they were present.

Informal Moments

The participation of communities and institutions in informal moments is one of the main aspects of the Ecological Engagement method. In addition to interviews and application of questionnaires, the team also engaged in a series of activities with the participants, such as games, dancing, walks around the school conducted by children, observations and, especially, informal conversations. These interactions contributed to a better understanding about the functioning of the observed context and enabled the team to be in contact with several different ordinary and unexpected situations, which were part of the schools' and the participants' everyday activities. These moments enabled the emergence of topics and important information that were used to better understand some aspects of the reality. This would not be accessed if only formal interviews and questionnaires were used. It also contributed to strengthen the proximal processes between researchers and participants, as they reinforced the reciprocal character of their interaction.

The information from the informal moments of the study was registered in individual field journals that were filled by all researchers. In them, the team described the main daily events on the institutions, including objective descriptions and personal observations, making sure to separate each of them. The field journal is an important tool for the analysis of proximal processes (Morais, 2009) and was an important part in the discussion of the results, improving the ecological validity of the study. Considering that the context is related to the person's perception of the environment, and not only to the objective characteristics that it might have (Bronfenbrenner, 2005), the ecological validity implies in trying to understand how the participants live the context in which they are immersed in (Bronfenbrenner, 1979/1996). According to Bronfenbrenner (1979/1996), it is not possible, and not even necessary, to obtain a full analysis of how each person perceives the environment around him or her. However, this is a goal that should be aimed by the investigators in order to better understand how the interactions between the developing person and the contexts that surround him/her occur and, therefore, make him/her who he/she is.

PPCT Model

The Ecological Engagement is closely related to the BTHD and to the PPCT model—which is composed by process, person, context, and time (Bronfenbrenner, 2005). The PPCT model guided the view of the team during the research. The proximal processes are the base of investigation and they occur through reciprocal interactions which are progressively more complex between participants, objects, and symbols, as well as between these agents and the research team. Participants and researchers, as beings in constant process of growth, exert influence over each other, over the context and also over the data collected. As such, both were considered in the analysis of the second “P” of the model, referring to the person. In this sense, their perception of the reality was necessarily influenced by their own beliefs, knowledge, and experience (Eschiletti-Prati, de Couto, Moura, Poletto, & Koller, 2008) and this was considered during the analysis of the results.

During the research performed in Angola, Ecological Engagement occurred in the microsystem level, in which the face-to-face, stable, and significant relationships are developed (Bronfenbrenner, 1988). The use of this method, however, requires the consideration not only of the microsystem but also of the four contextual levels and their interactions (Eschiletti-Prati et al., 2008). Thus, micro- and mesosystem characteristics were captured through the participants’ narratives and also from the team observations, performed in the different environments in which they were involved in. For the analysis of the exosystem, researchers considered their experience in the highest levels of the education system, including the city and provincial education departments. In addition, it was considered the participants’ perception over how these contexts, which they did not have direct contact with, influenced their life and the everyday school activities (Cecconello & Koller, 2004). Finally, macrosystem evaluation encompassed the analysis of researchers and participants over the impact of the Angolan socioeconomic conditions, history, culture, and society in the public primary schools.

When considering the macrosystem, it is impossible not to mention the importance of time, intrinsic to any historical and contextual analysis. From the minimum to the longest and complex intervals, time is essential to the phenomena of continuities and changes that affect human beings and societies (Bronfenbrenner, 2005). In order to get a broad understanding of the other three elements of the PPCT model, it is imperative to comprehend the impact of time in the proximal processes, as well as its influence over the historical evolution of cultures and societies. In this research, time played an important role in Ecological Engagement and in the analysis of the influence of historical events over the Angolan educational system. Ecological Engagement and the PPCT model enabled a contextualized analysis that comprised a series of elements of the studied reality, which maybe would not be possible if the research was restricted to closed interviews and questionnaire application.

Operational Adjustments

Ecological Engagement excels over the methodological rigor of its investigations. Rigor, however, is not used in the context of inflexibility. One of the main virtues of the Ecological Engagement is the ecological validity of the data collected. For this reason, several factors initially planned for data collection in this study had to be altered due to peculiarities related to the context and to the participants.

The first main modification that had to be made in the planning was related to group interviews with children. Initially, the plan was to make focal groups with six children: three boys and three girls. After an initial conversation about the institutions where they studied, participants would be invited to draw, first, their current school and, then, the school of their dreams. Drawings would be used as trigger elements to the discussion. When data collection began, however, the team realized that several questions would impair this dynamic. First, there was no adequate physical space to perform these focal groups the way they were designed. With outdoor classrooms, it would not be possible to ensure the necessary privacy to perform the activity. The six children would have to be gathered under a tree, for example, and the others would be curious around it, observing this new situation. Moreover, a large number of students was interested in participating in the interviews, and researchers considered that, instead of performing focal groups with a reduced number of participants, the interaction with all of them would enrich the research. Lastly, the use of drawings as triggers for discussion was considered secondary due to the intense participation and verbalization from the children. Thus, considering these elements, the team decided to alter the initial work plan and replaced the focal groups by group interviews, which effectively contributed to the fulfillment of the objectives of the study.

Another aspect that had to be changed after the start of data collection was the record of information from the group interviews. Initially, the team considered the possibility of audio recording all interviews. The use of a recorder, with the late transcription of the speech, was considered the best way to capture the participants' stories. However, the interviews being outdoors and with a larger number of participants than initially planned rendered this practice impracticable due to the large amount of noise. The recorder captured a lot of different sounds, which made the speech incomprehensible. Consequently, the team opted to drop this instrument and manually register, in field journals, the global meaning of the group responses and, in specific cases, the literal sentences that stood out due to a specific peculiarity, particular emphasis from participants or because they represented the overall group speech. Two researchers made the annotations and the data was discussed a posteriori to try to somehow reduce the unavoidable bias attached to the methodological choice. Since the information from the field journal was related to each researcher's perspective about the data collection, it also helped the data triangulation.

The operational adjustments described above were driven by the characteristics of the environment in which the team was immersed. Researchers working with Ecological Engagement need to be flexible and be able to adapt their techniques

according to the reality experienced by the studied population. In an ecological research, it is the team that has to adapt to the daily activities from the participants, not the opposite. Any methodological option comes with gains and losses, but it is up to the researchers to accept the pros and cons attached to their choice and, if applicable, register them in the contributions and limitations of the study, as done in this research.

Final Considerations

The implementation of this study was a great challenge for the research team. The involvement of Brazilian researchers that did not have prior experience with the Angolan context was possibly a limitation to the development of the study. However, the researchers tried to use Ecological Engagement as a tool to be in contact with the studied reality and, thus, compensate for their lack of experience in Angola. The 4 months of engagement enabled an immersion in the Country's life and a deepened study over several historical and cultural aspects that are a part of it. As recommended by the field literature (Eschiletti-Prati et al., 2008; Morais, 2009), the engagement of the researchers in the participant's context enabled a wide analysis over process, person, context, and time, expanding the reach of the study and increasing the quality of the data collected.

Ecological Engagement supported the collection of information from different sources: (a) observations, perceptions and feelings from the research team; (b) opinion of participants; and (c) ecological lenses provided by the BTHD (Cecconello & Koller, 2004). The PPCT model guided not only the study design but also the researchers' behavior during data collection and the analysis of results. During the 4 months of Ecological Engagement in Angola, the research team interacted actively and reciprocally with the environment they were inserted in, with each other and with the participants of the study. All people involved in the school daily activities played a role as active agents of the research and were always in possession of the most important knowledge for the development of the study, that is, the one related to their experience in this particular context.

In addition to the participants mentioned above, several other people did not participate formally on the study, but collaborated, even if they were not aware of it, so that researchers got to know better both the Country and its inhabitants during the engagement period. At the end, it is possible that the team's inexperience may have represented an addition to the ecological validity of the data. As they did not have previous conceptions about the reality they would be a part of, the researchers were able to face it with a less skewed, maybe even more open look, and take into consideration fundamentally the opinion of the people that were really a part of the studied context. Thus, Ecological Engagement contributed so that the researchers understood the meaning that people attributed to the context in which they were inserted in and to their own experiences.

In promoting the team engagement in the participant's natural environment, Ecological Engagement values the context's own characteristics, also improving the information gathered and the research results (Morais, 2009). The study presented in this chapter aimed at giving turn and voice to the people inserted in the Angolan educational system. Ecological Engagement played an important role so that the proposed objectives were achieved. The qualitative data analysis regarding the children resulted in a Master's thesis (Sacco, 2011) and in a paper (Sacco, Ferreira, & Koller, 2016) that can be accessed for further information on the use of the method and the results obtained.

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Chapter 12

The Ecological Engagement Method and Its Application on the Field of Disaster, Crisis, and Trauma Psychology



Fernanda Menna Barreto Krum and Denise Ruschel Bandeira

This chapter focuses on the use of the Ecological Engagement method—based on Bronfenbrenner’s Biological Model of Human Development (1979/1996)—as part of a qualitative study addressing a community affected by natural disaster. The study addressed here implemented focal groups as the main instrument to collect data from individuals impacted by a tornado. The study’s objective was to assess the impact of such an event and identify coping strategies used by the community. The bioecological model, as previously discussed in this book, is intended to examine human development through the following interrelated components: process, person, context, and time. For a detailed understanding of each of these elements, please consult the first chapters of this book.

Bronfenbrenner and Morris (1998) note that researchers should be attentive to the interactional dynamics of process, person, context, and time, and acknowledge their interdependence. Additionally, considering that a proximal process is bidirectional, there is a need to observe the phenomena from the perspective of all those involved, since relationships that take place in this interim are always reciprocal.

From this perspective, the bioecological model emphasizes the view that proximal processes are key in any scientific investigation. Proximal processes can be understood as exchanges of energy between a developing human being and the individuals, objects, and symbols present in that individual’s immediate environment. This idea assumes that in any research design, researchers interact with participants and, therefore, should approach these processes by focusing on the exchange of energy in the immediate environment (Bronfenbrenner & Evans, 2000). A study combining a qualitative approach with the focal group technique elicits even more frequent and intense interactions because the researcher interacts with the

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participants at a level of reciprocal learning (Banyard & Miller, 1998). Through a focal group, the participants themselves interact with each other and exchange energy, which produces a single content expressed by the group.

Thus, it becomes apparent that the paradigmatic perspective of this qualitative research properly fits the inherent aspects of the ecological engagement's systematization. The assumption posed by Banyard and Miller (1998) reinforces this idea, in which they state that the world is better understood by studying the way people perceive, experience, and give meaning to a phenomenon, and such relationship works as a reciprocal learning. Therefore, according to Cecconello and Koller (2003), a qualitative methodology coupled with the ecological engagement allows researchers to observe, investigate, produce, analyze, and interpret data. Cecconello and Koller (2003) also state that this is why the researcher becomes the main instrument of the research, so that aside from the researcher's personal characteristics, her/his attitudes, stances, and interactions are the main source of instigation that promotes the interviewees discourse. The primary objective is to establish rapport in order to access the phenomenon under study as it actually occurs in its natural environment. The advantages of the focal group technique—mentioned by Carey (1994) as providing the opportunity for insights and awareness to arise through the exchange of experiences among the participants—connect perfectly with the bio-ecological ideas previously discussed. Additionally, De Antoni et al. (2001) note that information introduced by one participant may be considered data originated from the group, revealing a collective understanding of the given topic.

If we consider that all these aspects are interconnected and agree with the idea that the quest to understand the context of a given fact enables acquiring deeper knowledge and understanding of such a fact (Víctora, Knauth, & Hassen, 2000), the conclusion is that these combined methods meet the requirements of an investigation of this nature. Finally, the proximal process approached through the ecological engagement method is the key element, which enables the investigation itself to happen and, therefore, becomes the tool through which the researcher conducts a study and manages the energy produced by the interactions.

Disaster, crisis, and trauma psychology has rapidly progressed in Brazil due to an increase in adverse events, especially natural disasters of catastrophic proportions (CFP, 2011). The World Health Organization and the United Nations High Commissioner for Refugees (2015), together with other humanitarian organizations, understand humanitarian emergencies as a wide range of acute and chronic situations that result from armed conflicts, natural disasters, or industrial (otherwise known as technological) disasters. Emergency contexts often involve the massive displacement of affected populations, exceeding the capacity of local authorities to respond to the basic needs of their citizens. Disaster, crisis, and trauma psychology professionals study and intervene using mental health fundamentals as well as practices from the field of trauma applied to emergency contexts. Multidisciplinary groups from humanitarian aid organizations also apply the psychosocial perspective and approach in these contexts.

Understanding that a study in the field of disaster, crisis, and trauma psychology may include different stages of the respective traumatic event (pre, during, and

post-event), as well as different levels of interactions among those directly or indirectly affected—in addition to the aid professionals—the discussed methods appear to be extremely appropriate for capturing the nuances and complexities of the psychological and social responses that may emerge. The combination of a qualitative approach with the ecological engagement, which includes the collective and individual perspective, enables considerable flexibility to apply the respective instruments and collect data from different sources over the course of the proximal processes, thus providing the ideal tools to conduct a complete and thorough study.

Collecting Data

This research was intended to identify coping strategies and investigate the impact of a tornado that struck a small town called Muitos Capões in southern Brazil. Engagement in the field was initiated after first contact was established with a Major in the Military Brigade on April 16, 2006. During this encounter, he explained his participation in the tornado's emergency response, received clarification of the study's objective, and was informed of the sample's necessary characteristics. Given his role as the leader of the local Civil Defense team, he was able to identify 18 families affected by the tornado for the study's target-population. Ten out of these 18 families consented to participate. The houses of all ten families were in the tornado's path and sustained severe damage. Other actors who took part in different stages of the event (e.g., Civil Defense team members and other residents) also played a role in the study.

The researcher was introduced to the community through a video provided by the Major that was produced by the Civil Defense team. The video portrayed pictures of the city before it was struck by a tornado, along with pictures of the city immediately after the event and of the reconstruction process. Effective contact was established on May 5, 2006, when the Major invited the researcher to participate in a traditional annual feast: *the Pinhão and Rodeo Feast*. The Major believed this was an appropriate opportunity to initiate direct engagement and provide the researcher with a natural introduction to the community. Besides this being an informal introduction, the Major's presence was the main factor to make the first contact more accessible. Every member of the community expressed his/her gratitude and appreciation for the Major and would recount how much he helped the town through the recovery. The Major usually introduced the researcher as: "the lady from Porto Alegre who came to understand why the people of Muitos Capões became even happier after the tornado." Even though this introduction could lead to some bias, the focus on positive aspects after the disaster proved to be a good strategy to help establish rapport. During the festival, the researcher was also introduced to individuals from the community who were important for establishing a support network, including: the city's mayor and city hall employees who helped select and contact the study's potential participants and provided a place to conduct the

research; potential participants—some of whom eventually took part in the study; and health workers.

The third contact occurred the following week, on May 12, 2006, when the researcher returned to Muitos Capões and remained there for 2 days. During this visit, the research worked on the initial approach, recruited participants, and conducted the first focal group. The following questions guided the study: *What was the experience of the disaster like for you? What did you do to face it?* Other questions addressing the psychological relationship between the individuals and the environment were also included, such as: *What was it like living here before the disaster? What is it like to live here now?* Questions that emerged organically during the sessions were also considered in the data analysis.

At this time, the researcher also established her work environment in a room on the premises of city hall where she could access a computer and have an employee available to provide information or data necessary to the investigation. Other locations—such as the city hall auditorium and participants' homes—were also used for group meetings and initial/individual interviews, respectively.

During the fourth and final contact of the data collection phase between May 18 and 19, 2006, the researcher conducted the second focal group and individual interviews. During this farewell, the researcher made sure to exchange contact information with city hall employees in order to share relevant materials and future findings.

Many informal conversations took place during the researcher's stay in the town, which, together with her perceptions and impressions of the environment and interactions, were recorded in a field diary to support the analysis of the results. The researcher, therefore, observed the ecological engagement as something that was established through all the several proximal processes that happened throughout a gradual process over the course of the entire period of data collection.

The initial contact with the Major, his description of the tornado, and the video of the event he shared, proved to be essential to give context to the phenomenon under study. The informal visit to the city and the facilitation of introductions in a social environment were also fundamental for establishing more open attitudes and positive responses from the community towards the study and the researcher. Even without prior planning, this stage of the engagement process established rapport with the participants, precipitated verbal invitations for the researcher to return to the city, and paved the way for the continuation of the process to encompass more complex activities over the course of the study.

During the second visit, the researcher was invited by all ten of the study's families into their homes. This allowed her the opportunity to establish connection with each family and to present the instruments that would be used in the study. In almost all cases, more than one family member was present during the entire interview during which they provided both information about the event and their personal experiences of surviving the tornado.

The reciprocity of this process allowed the researcher not only to collect demographic data and information on the direct experiences of each family and how they faced the event, but also to insert herself directly into the community's environment

and culture. Active listening enabled the participants to engage in the process, showed her exactly where their houses had been struck by the tornado, and methods they used to protect themselves. During many of these activities, each family relived the trauma while remembering the event.

The second and third visits included conducting focal groups. In the focal groups, one representative of each of the ten families participated. The inclusion criteria were: (1) the participant needed to be an adult and (2) they needed to have participated in the initial rapport. The opportunity to share their personal perspectives and the changes they had to face in their lives enabled the participants to reflect upon and elaborate on their experiences. Additionally, the exchange of these experiences gave the participants the chance to construct a collective conception of how the community coped with the event and the lessons they had learned through the process. The participants perceived such lessons as factors that affected them at individual, familial, and community levels. As the researcher interacted with the families and the greater community, she could comprehend—through the units of analysis extracted from their discourses—important analytical categories that gave her a glimpse of some potential answers to the study's initial questions, along with new theoretical and methodological propositions.

In the fourth contact, the researcher conducted individual interviews with five participants randomly drawn from the focal groups. Through their stories, the researcher had the opportunity to deepen her understanding of aspects studied since the beginning of her insertion in the context. She was also able to clarify many of the physical and psychological effects in this last visit.

Along with these proximal processes, other members of the community—who somehow had contact with the researcher—provided their insights and learned something from the interaction. Many of these contacts provided essential information for an even better understanding of the community's dynamics and relationships. The last interview was held with the Major, with the main objective to fill in gaps concerning the characteristics of the phenomenon in geophysical terms, the region's sociodemographic characteristics, socioeconomic effects, and procedures implemented to deal with the disaster.

The instruments adopted were suitably molded to the method. The semi-structured interviews followed no previously established script, which granted enough flexibility to promote the conditions necessary for proximal processes to take place. Interviews became more than mere processes to collect data; rather, they became activities in which both the researcher and the families engaged actively and interactional. All interviews lasted similar durations of time and became increasingly more complex. Some of the encounters with people who the researcher was introduced to during the community's festival progressed to conversations, initial rapport, family interviews, focal groups, and individual interviews. As stated earlier, outside of the more formal processes, the researcher spent time with community members in more informal environments (e.g., afternoon coffees, lunches), demonstrating that concrete engagement in the ecological environment of this community was achieved. All types of instruments previously mentioned provided the opportunity during the entire investigation to establish reciprocity in the relationships by

promoting the attention, exploration, imagination, and the manipulation of objects and symbols represented by questions, dramatizations, and reflections shared.

Despite the aforementioned evidence, the researcher reflected and debated from the beginning of the study to its end whether ecological engagement was actually being effectively implemented. Some of the questions that arose over the course of the process were concerns regarding the criterion of maintaining a standard duration for the interviews and whether they were appropriate for the ecological engagement methodology, as well as whether the activities were in fact becoming increasingly more complex. Constant monitoring of the process became an important tool for verifying both the study's ecological validity and whether the methodology was consistent. Ethical responsibility is paramount in this method, considering that researchers start to participate in the participants' daily lives. The line between ecological engagement and pernicious assimilation is tenuous and researchers should be clear about their role in the process. This study was submitted to and reviewed by the Institutional Review Board to ensure that this study's ethical issues were considered; however, it was entirely the researcher's responsibility to guarantee that the ethical nature of all interactions throughout the study was upheld.

In terms of how ethical the method's applicability is, ecological engagement can be used in isolation to collect data of any nature and serve as a basis for psychopedagogical and therapeutic counseling. It cannot, however, be used as a single tool to make decisions regarding an individual's life in situations where a more specialized diagnostic assessment is required. Ideally, researchers adopt ecological engagement as a research method while bearing in mind the importance of being ethical and ensuring the participants' rights.

Analyzing Data

Studies addressing disasters indicate that understanding the kind of context—which affects not only individuals but also entire communities—should be assessed through a collective discourse (Ibañez, Buck, Khatchikian, & Norris, 2004; Norris et al., 2001). The proposed focal group technique used to collect data had the intention to give voice to the collective—which has since been used in related studies.

Throughout the study period, the researcher also collected demographic data and individual interviews, as well as kept a field diary. These instruments were mainly used to support and confirm the results obtained from the focal groups. The goal of the interviews was to deepen the understanding of the topic and collect additional information regarding the experience with the disaster. The field diary provided additional data and was the main tool to crosscheck the process of ecological engagement over the data collection phase. Finally, the interviews with the Major were intended to gather information regarding the tornado itself and the Major's professional perspective from his capacity as coordinator of the recovery mission. The interconnected analysis of these elements confirmed the ecological validity of

the research. Content analysis was the chosen method to treat the data collected from the focal groups so the collective discourse could be captured.

Bandeira (1999) emphasizes that the fundamental characteristic of this methodology is that it considers an individual's discourse the representation of group thoughts; therefore, it must be analyzed as group discourse. This technique, according to De Antoni et al. (2001), has been widely used in qualitative designs to collect data from group interactions, which, as stated by Carey (1994) and Morgan (1997), enhances the perception of the data and lends reliability. This characteristic is what makes focal groups distinct within the extensive category of group interviews, where the interactions produce not only information but also insights which would otherwise be less accessible. Therefore, the impact of a group setting can be seen as improving the quality of data received.

According to Carey (1994), the concept of focal groups is not precise. It is widely defined as a "semi-structured group session, moderated by a group leader, held in an informal setting to collect information on a specific topic" (p. 226). These types of meetings can bring out information and give the participants a sense of social support; however, such meetings are not of an educational, support, or therapeutic nature, but rather have the intent to collect personal experiences and beliefs concerning a given topic. Carey also affirms that focal groups are not only a useful technique in research, but can be informative, provide support, and engender a sense of communality between participants. Giving people the opportunity to express their opinions regarding a given topic makes them feel important and empowered.

Ibañez et al. (2004) describe that survivors of disasters usually welcome the opportunity to talk about their experiences. This serves more as a way for them to process the traumatic event at hand in healthy ways, rather than as a factor that generates anxiety. Broadly speaking, a focal group is a set of procedures intended to analyze communications (Bardin, 1979). Its principle, according to Laville and Dionne (1999), is to demonstrate the structure and the elements of a content to clarify its different characteristics and extract its meaning. The purpose of a thorough study of the words and phrases is to objectively and systematically describe the content of the communication that arises during the groups (Bardin, 1979; Laville & Dionne, 1999).

The content analysis process per se, consists of some steps determined by Bardin (1979) as necessary for its implementation. It involves pre-analysis, followed by an exploration of material, and finalized by the treatment, inference, and interpretation of results. The richness of this type of analysis grows as the interest in expressions or phrases increases. Often, they reveal themselves until a theme of interest is reached. Laville and Dionne (1999) note that there is difficulty in delimiting themes, considering that they appear intermixed; however, these authors also state that the search for themes may bring the researcher closer to the meaning of the content.

To serve as a basis for examining content during the pre-analysis, the transcripts of the audio recording of the focal groups were organized verbatim in a table according to the words of each participant. Afterwards, the dialogues from the focal groups were deconstructed and the parts that significantly corresponded to the subject at hand were extracted, along with any answers that were connected to the guiding

questions. For example, any reference to a coping strategy used to overcome a disaster situation was marked. The operational definition of coping strategies was “any effort of the participants to deal with the demands generated by the disaster” (Folkman, Lazarus, Gruen, & DeLongis, 1986).

During the second phase of exploration, the researcher coded the extracted discourses to compose units of analysis. These units were gathered and classified as units of contexts and, consequently, themes. The latter were grouped into analytical categories. This classification derived from a mixed model in which some categories were suggested a priori, while others emerged from the units of analysis themselves.

After these two first phases, the research advisor reviewed the analysis. Together with the researcher, they examined the data, discussed any points of disagreement, and honed the analysis together until consensus was found.

In the third phase of inferring and interpreting data, the researcher transformed all of the work into meaningful results based on a qualitative approach which focused on the peculiarities and nuances of meaning between units and categories. Thus, the researcher participated in all phases of the analysis, maintained consistency with the transcription of the meetings, and applied all steps previously described.

The remaining data obtained from individual interviews and the field diary were not interpreted through content analysis. They were only used as additional information to support the results that emerged from the groups when elements were discovered that confirmed or contradicted the categories found. As previously explained, such information was also used to lend authenticity to the study’s ecological validity.

Discussing Data

It is known that using the focal group methodology can evoke participants’ experience with a trauma, which can then possibly lead to emotional reactions or generate anxiety. In order to minimize the risks, rapport was established with the participants at the time of initial contact to help establish relationships of trust as well as to identify any signs which could increase risk. De Antoni et al. (2001) state that this procedure is crucial in situations where the study’s topic has a stressful nature. Those who showed intense reactions were ensured they would receive psychological care during the study and after its conclusion. Even before the researcher initiated her engagement into the community, the city’s mental health network was contacted to discuss the possibility of assistance and support if necessary. Health service professionals showed interest in the study and provided information about potential participants regarding whether they had received or were receiving psychological treatment due to the trauma. The research team also offered mental health support to the community if it was deemed necessary.

Other aspects concerning research addressing human subjects in the field of psychology (CFP, 2000) were also taken into account, such as: submitting the study project to the Institutional Review Board at the Federal University of Rio Grande do Sul; collecting the participants' signatures on free and informed consent forms; and, storing all material in the database of the primary author at the end of the study, thus ensuring confidentiality of data.

In conclusion, reflecting on the five criteria of proximal processes and their relation to the data collection for this study, it was observed that the ecological engagement was achieved as demonstrated below:

1. For a proximal process to take place, individuals have to be engaged in a task, e.g., in this study, the researcher and the participants interacted and became involved in the focal groups and interviews;
2. For interaction to be effective, it has to occur on relatively extended periods of time and regular intervals, rather than in brief encounters or occasional activities, e.g., in this research, several interactions happened between the researcher and the participants over a 2 month span, beginning with first contact and rapport at an informal feast festival and followed by home visits. Then, the same people participated in group sessions; afterwards, they were visited again for individual interviews. On all of these occasions, the participants showed willingness to engage in the tasks;
3. The activities need to increase in complexity, and, for this reason, require a structured period of time, e.g., in this investigation, informal introductions advanced to home visits, which then lead to group meetings, and finished with individual interviews. Each meeting always lasted at least 1 h;
4. To achieve effective proximal processes, there must be reciprocal, interpersonal relationships, e.g., the interaction established in this study between the researcher and participants paved the way for the entire investigation process. The interviews sometimes took the form of conversations and the researcher was available to clarify questions and provide support whenever necessary;
5. Finally, for reciprocal interactions to take place, objects and symbols present in the immediate environment should help stimulate the participants' attention, exploration, and imagination, e.g., the topics addressed in this study's interviews and focal groups promoted the participants' interest because they were related to their own experience with the disaster, as well as with their life histories.

These points reveal that ecological engagement happened gradually and was effective, becoming increasingly more complex as the researcher and participants engaged in the tasks at hand. The opportunity to reflect and develop a collective discourse enabled the participants to elaborate on their traumatic experiences, from which meaning from these experiences emerged.

It is deduced that choosing another method would not have allowed the process to unfold in such a way. A qualitative approach combined with ecological engagement not only met the researcher's goals but enabled her to listen, feel, experience, and reflect upon—as closely and intensely as possible—the event under study in this investigation. From that experience, we can also say that ecological engagement

can be considered a method that equally includes the pre- and post-stages of data collection.

Many questions and ideas guided the ultimate format of this study regarding how and to what extent the essence of the research could be transmitted within a scientific method. Throughout the engagement process, the researcher worked to achieve balance between the participants' need for respect, privacy, and safety with the advancement of scientific knowledge in the field. As noted by Raftery (1997), this attitude often leads to difficult decisions and negotiations, requiring a firm and conscientious attitude from researchers during the entire process. Due to this, one of the essential factors mentioned by Ceconello and Koller (2003) should be restated: in ecological engagement, the researcher becomes the main instrument of investigation and his/her attitude and performance are the main stimulus for the interviewees' discourse. The main objective is precisely to achieve a level of familiarity and intimacy with the situation under study so that one is able to eventually access the phenomenon as it occurs in its natural environment.

In addition, the combination of different methods of analysis enabled a more holistic understanding. The focal group technique, in triangulation with data recorded in the field diary and individual interviews, not only contributed to enrich the study but also rendered a more complex analysis of the event.

The research project presented in this chapter could be expanded, having later stages added to it, such as establishing partnership with the city's mental health network and giving continuity to the focal groups as a clinical method; and expanding focal groups to include other family members so that everyone involved could have contributed to a deeper collective community experience. Unfortunately, this study was the result of a Master's thesis, which precluded possibilities to intervene further given time restrictions. Working on these gaps is a suggestion for future researchers interested in the field of disasters and ecological engagement, which, by itself, provides elements that can be considered clinical.

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Chapter 13

Creating Ecological Contexts of Development and Human Rights for Adolescents



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Ecological Engagement is a research method that inserts researchers in participants' natural contexts (Ceconello & Koller, 2003), which influence the development of individuals by enabling stability in relationships, respect for power hierarchy, as well as the development of affective bonds and reciprocity. The current article reports a research-intervention experience based on a program focused on enabling human rights education and youth agency among adolescents living in social vulnerability condition; the aforementioned program adopted the ecological engagement method.

The aim of the Bioecological Theory of Human Development (BTHD) is to investigate development-related phenomena throughout the human life cycle based on a historical, cultural, and interactionist perspective. Ecological environment was described by Bronfenbrenner (1979/1996) as a set of concentric structures individuals are inserted in. It is a sequence of events involving the biological transformation one's life cycle undergoes in his/her body. The person–environment relationship is

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multidirectional and concomitant, since both influence one another and develop (Bronfenbrenner & Evans, 2000).

The development model was proposed by Bronfenbrenner (1979/1996) as the product from the interlocking of dimensions such as process, person, context, and time (PPCT). The concept of development-in-context (Ceconello & Koller, 2003) comprises several levels of analysis applied to environmental influence on the human development process, as described below.

1. *Person*: the biological, physical, and psychological features interacting with the environment are development products and producers, besides influencing proximal processes through their demand, resource, and strength (Bronfenbrenner, 1993, 1995; Bronfenbrenner & Morris, 1998).
2. *Time*: each particular and unique developmental process is influenced by time, politics, and dominant values. Individuals and groups in the same generation share life stories and experiences (Bronfenbrenner, 1988). Development is understood as a process marked by constancy and transformation (Bronfenbrenner, 2005).
3. *Context*: the *microsystem* or immediate environment of the person—work, home, daycare center—enables stable and reciprocal face-to-face interactions to promote proximal processes. *Mesosystem* is the interrelationship of microsystems. *Exosystem* is a system the person does not participate in, but is influenced by it. *Macrosystem* brings together social and cultural aspects, beliefs, values, and ideologies of other individuals (Bronfenbrenner, 1979/1996).
4. *Process*: the person–environment interaction pattern that encompasses other people, objects, and symbols is defined as *proximal process*, i.e., it is the engine of development (Bronfenbrenner, 1995; Bronfenbrenner & Morris, 1998). They are essential to help creating new Microsystems.
5. *Ecological engagement*: development happens through the establishment of proximal processes in a person's context based on his/her historical time and proximal processes (Ceconello & Koller, 2003).

The current experience report presents a new perspective about ecological engagement through the creation of a new microsystem that did not exist in participants' previous life, but that enabled establishing stable, reciprocal, and face-to-face relationships. Researchers/intervention team and participants under development process have implemented a human-rights education program. Previously, ecological engagement consisted in moving oneself to the context to be studied (Aquino-Morais, 2008; Ceconello, 2003; Morais, 2009; Vasconcelos, Yunes, & Garcia, 2009). Both participants and researchers experienced an ecological transition space for new roles, since they were ecologically inserted in the microsystem while building it.

Proximal processes were essential to individuals' participation in common activities performed on a regular basis; these activities became progressively more complex, aroused the attention and interest of all participants, besides being based on reciprocity, availability, and on the common focus on human-rights education. Regular team meetings enabled having debates, searching for solutions, evaluating the ongoing work and analyzing individual cases. These meetings were an ecological space where the intervention team and participants shared their feelings and

perceptions. Therefore, the aim of the current report is to present a new way to apply the ecological engagement method based on our experience in the program called *Juventude em Cena* (Youth on Scene).

Method

Human Rights Education Program

Youth on Scene was developed as a teaching, research, and extension program (approved by the Research Ethics Committee of the UFRGS Psychology Institute/ Protocol N. 2008/017), which is focused on preparing adolescents to cope with social adversities in their contexts and on encouraging their active participation in the political and social life of their community. The content of the training program was prepared in compliance with principles set by the UN Convention on the Rights of the Child (UN, 1989) and by the Child and Adolescent Statute (ECA—Estatuto da Criança e do Adolescente; Law N. 8069, 1990), based on the three “Ps,” i.e., provision, protection and participation. These principles regulate the child development process and focus on assuring the provision of their needs, protection against neglect and several violence forms, and their participation in decisions made about their lives (Verhellen, 2000). The intervention was based on eight transversal axes: the rights of children and adolescents, identity, solidarity, citizenship, health, risk and protection (violation of rights, life projects comprising school, family and work), public policies, and youth agency/social participation. The Four Pillars of Education for Human Development—“learning to know,” “learning to do,” “learning to live with,” and “learning to be”—were also applied to support the current study (Delors, 1998; Hassenpflug, 2004).

Participants

The program was launched in 2008 and comprised 70 male and female adolescents between 12 and 18 years old. Participants were previously enrolled in social programs, who attended the intervention meetings accompanied by technicians who worked in the child and youth protection network of their counties of origin—all these counties belong to the Metropolitan Region of Porto Alegre, Brazil.

Procedure

Meetings were held twice a month over 5 months. They consisted in theoretical instrumentalization based on films and on explanations to technicians and adolescents about topics such as citizenship, youth agency, and rights. Next, adolescents

participated in small group dynamics, where previously discussed contents were addressed and some insights about the topic were disclosed. All participants were given the opportunity to express what they had learned, thus enabling their integration and the objective conclusion of the activity. The participation of technicians allowed them to work as adolescents' mediators in the agency process; they promoted communication between the intervention team and the adolescents in the day-to-day life of the community, besides becoming key-figures for emerging concerns and for homework support. The intervention process was evaluated throughout its execution, during weekly team meetings and through the record of impressions, feelings, and observations made by all team members in the field diary.

Results and Discussion

Ecological Engagement and the Creation of a New Microsystem

The format of the intervention program led to the construction of a “new” microsystem entitled “Youth on Scene,” in which activities that enabled establishing proximal processes between participants and the intervention team were developed. This microsystem was based on new interactions among people, objects and symbols in an environment different from the ones adolescents were used to have access to. The intervention took place in the university's facility, which implied inserting participants in an unfamiliar environment, putting them in contact with resources available in a schooling-representative place, as well as with learning and scientific knowledge. In addition, physical space configuration enabled new experiences that, although simple, were unusual in the daily life of these adolescents, for instance, the opportunity to use an elevator. The intervention team always focused on the expectations and needs of participants in order to enable a reciprocal relationship between all participants. The increasing adherence to the activities showed that the expectations of all participants were adapted to the propositions of the intervention.

During the intervention, several impressions about participants emerged based on the interaction between them. First, the intervention team encountered agitated adolescents in need of supervision and always curious, although sometimes distrustful and initially resistant to the intervention. The interactions between adolescents and technicians showed the influence—based on the characteristics of individuals' demand—on the environment and provided information about their context to the microsystem under development. Thus, the gradually—closer contact with the adolescents allowed the intervention team to know details of their life stories—characteristics of the individual's resources. Different ways of conducting the activities and establishing relationships—different characteristics of the individual's strength—were always adopted throughout the intervention. The challenges posed by this type of work, and the need of adjustments during its implementation, emphasized the importance of being attentive not only to peculiarities of participants' contexts of origin but also to the characteristics of each participant and of the intervention team.

Significant resilience behaviors emerged throughout the process, since participants comprised adolescents who had scarce opportunities and were exposed to different risk factors such as poverty, violence, and exploitation. Such attributes of the person did not have isolated influence on his/her development, since dispositions, resources, and demands influenced each other and needed to be understood based on the person's interaction with the several contexts that constituted his/her social network (Bronfenbrenner & Morris, 1998).

The activities carried out in the current study became progressively more complex due to the integration of contents such as rights, citizenship, youth agency, among others, in order to enable constant reflection about, and criticism to, the experienced reality. Adolescents gave their opinion about the topics through the interaction with their peers and with the intervention team, as they understood the propositions and felt comfortable with the group in the new microsystem. Small groups enabled proximity among all participants. Some tasks allowed participants to have progressively complex interactions with objects, symbols, and with the social environment, based on their interests and curiosities, thus promoting continuous development. The transformation of behaviors throughout the tasks was evidenced in continuity and changing processes.

The intervention team also noticed changes in its own members, not only personal ones, such as reviewing values and realizing the different realities participants lived in, but also changes in the relationship among its members. Therefore, the developing proximal processes changed behaviors in the entire group and these behaviors became functional throughout the activities and relationships. First, adolescents presented a disorderly, noisy, and unstructured attitude: they constantly left the activity rooms, the physical space of the university was damaged with graffiti and the trash was discarded on the floor. However, these attitudes clearly changed over time, since participants started showing respect for, and adherence to, the proposed rules, besides preserving the space used by the group.

Other ecological systems (family, school, community) experienced by participants could be accessed. Continuous interactions were carried out throughout the program and it enabled knowing and understanding aspects of a broader context based on informal conversations and on structured activities. The four levels of participants' interrelationship contexts in the program (Bronfenbrenner, 1979/1996) were mapped; thus, the social, cultural, and physical reality of adolescents' context(s) was observed in different ways. Consequently, even if the "traditional" ecological engagement (Cecconello & Koller, 2003) did not happen in the person's daily development context, such context was indirectly perceived without minimizing its impact on, and importance in, the development process.

The microsystem allowed establishing new relationships throughout the intervention, and it characterized the ecological transition to an extended social network (Bronfenbrenner, 1979/1996). For example, an adolescent who had started working as an apprentice (Decree N. 5598, 2005) shared with the group his decision to save money to invest in his studies. During the conversation, he said that "his mother did not believe he could grow in life and become a successful man," because he would "ruin his life by getting on drugs just like the other boys in the neighborhood." However, the adolescent said he wanted to prove to his mother that he "was able to do it and to be different."

The macrosystem was expressed through the reality of poverty and its social implication, which marked the topics and reported experiences. Throughout the meetings, it was possible seeing that the feeding factor was one of the main motivations for adolescents to be in the program, since such provision at home was precarious for many of them; thus, the expectation of having lunch and snacks was a motivating factor. Having this issue in mind, the intervention team sought to provide better meals in order to meet the basic needs of the adolescents. These meals were used as adherence strategy throughout the adolescents-program-intervention team bonding process.

Other phenomena such as drug addiction and sexuality were aspects that marked the macrosystemic influences. Informal conversations held during the program allowed the intervention team to identify that the adolescents were starting to drink alcohol. Thus, based on thematic axes such as health, risk and protection, the team sought to create spaces to address such behaviors. The path of understanding was based on acknowledging adolescence and its conflicts, as well as on the social and cultural context.

Comments on sexuality/affectivity were striking since the beginning of the program, when the “flirting” and divergences between adolescents began. They created a mural where they could exchange messages; moreover, they could use the leisure and lunch spaces to get closer to each other and to talk to their group of friends about someone they had a crush on. The intervention team acknowledged the need to talk about sexuality and proposed free times and fraternization spaces. The respect for, and acknowledgement of, other people’s individuality was reinforced on occasions when prejudice or homophobia emerged.

The Youth on Scene program comprised adolescents in the same age group, at the same socioeconomic level, who simultaneously shared a set of activities. The program was developed in a historical time when the sociopolitical context valued the rights of children and adolescents, as well as the importance of youth agency. In addition, it awakened feelings and experiences resulting from other experiences and past events, which were incorporated, transformed, and updated in the current development, as well as influenced by the historical time when they took place. Events that took place outside the prevailing sociopolitical and cultural macro-time and that influenced adolescents’ development at some points in their lives, and in equivalent biological maturation processes, were included in the program. For example, a political candidate was invited to a meeting at the time of the elections due to his youth agency history and political engagement since she was young. She talked to the group about citizenship and about political and social intervention as something that could be individually developed in their lives. The election period was in the macro-time and influenced the program due to changes in the political management of the counties. These exosystemic changes assured or hindered adolescents’ participation and/or permanence in the program.

The concept of micro-time implies the development of activities on a regular basis, followed by progressively complex activities that hold participants’ attention (Bronfenbrenner, 1977). These requirements were met as these activities were developed in meetings held twice a month for 5 months based on a growing interac-

tion and mutual knowledge process. The complexity of the tasks was assured by the development of new propositions that adolescents and intervention team did not have access to in their day-to-day lives.

Issues such as participants' evasion, nonadherence of technicians and activity planning mismatches emerged throughout the program, but they were already expected due to the size and characteristics of the group. As the proximal processes were established, it was possible perceiving the needs of all participants, as well as adapting the activities, and other procedures, to meet their expectations. Dynamic activities such as small cultural competitions were strategic changes made to arouse greater interest in, and engagement to, the activities. As the difficulties were solved and new strategies were implemented, it was possible seeing the development of the established proximal processes, as well as the adherence to, and cooperation during, the activities.

The centrality of the concept of proximal process in the BTHD became evident throughout the ecological engagement in the program, since this process appeared as a crucial analysis unit for better understanding human development. Ecological engagement emerged as a methodological alternative to access development contexts, so that any space where the establishment of proximal processes (domestic, labor, community, school environment of the person, among others) can be identified enables the implementation of studies based on this perspective.

The creation of the Youth on Scene microsystem allowed reflecting about what being ecologically engaged means. Unlike traditional ecological engagement interventions, the herein addressed program created a new context for all participants (Aquino-Morais, 2008; Cecconello, 2003; Morais, 2009). Thus, the establishment of proximal processes based on other ecological systems took place during structured activities, but mainly in the course of free times such as lunch and cultural times.

Final Considerations

Based on the BTHD perspective, research on human development advocates for the inclusion of experiences aimed at improving and restructuring dominant ecological systems, so that preestablished institutional ideologies and rules can be reformulated through the redefinition of goals, roles, and activities capable of enabling participants' bond to new systems (Bronfenbrenner, 1977). Thus, the new microsystem responded to such BTHD demand. The construction of a new microsystem characterized an ecological transition to the extent that relationships were established and allowed all participants to have access to different contents and experiences. The Youth on Scene program enabled different resources—concepts of rights and the possibility of elaborating a life project and of pursuing better living conditions—to be made available and revealed the importance of expanding the multi-environments where developing individuals were inserted in. The greater the possibilities of establishing relationships and the insertion in different microsystems, the greater the

opportunities to obtain resources capable of favoring human development. Giving continuity to the program based on new editions is a way to assure the impact of such resource acquisition on human development.

Behavioral changes and the understanding of roles played in the new microsystem enabled transformations that could be transposed to other systems such as family, school, and community. The protagonist action idealized by the program—in which adolescents, once aware of their rights, could pursue the guarantee to such rights and better living conditions—was developed throughout the intervention. Naturally, this protagonist action was expanded to other contexts as adolescents became multipliers in their communities. This process was followed up through the continuity of the program and through the perception that some adolescents began to engage in other social participation actions in their counties of origin.

Difficulties faced throughout the program allowed reflecting about the need of strengthening partnerships with the child and adolescent care network and with professionals working in these counties in order to minimize barriers presented by each system. Thus, resources were collected from each system in order to implement actions focused on favoring human development. The intervention team's experience and the accomplished results—increased engagement in activities and interest in being protagonists in the pursuit for their rights—emphasize the impact that interventions of this nature can have on human development.

The willingness to establish reciprocal relationships and the personal motivation of the team were fundamental factors for the construction of proximal processes and of the new microsystem. Consequently, these relationships enabled changes throughout the intervention, as adolescents felt looked at, listened to, acknowledged, and valued. As corroborated by Bronfenbrenner (2005), it was possible seeing throughout the program that proximal processes are the basis of human development and the means to achieve results.

It is possible saying that the construction of a political and critical thinking about children and adolescents' rights, and the proposition for adolescents to take a protagonist action in the environment they live in, focused on generating social changes, have succeeded throughout the project. These transformations comply with the core ideology of BTHD, i.e., the application of studies to public and social policies capable of making the difference in people's quality of life (Bronfenbrenner, 2005).

Pillars such as "learning to know" and "learning to live with" were the most important among the Four Pillars of Education for Human Development (Hassenpflug, 2004), since the thematic axes aimed at instrumentalizing adolescents about their rights, as well as about solidarity and citizenship values. However, pillars "learning to do" and "learning to be" were evident in the process and set the articulation among the remaining pillars.

The Youth on Scene program enabled the development of all participants in different human dimensions (cognitive, social, and personal) through the content addressed, the actions taken, and the relationships established throughout the intervention process. The process promoted youth agency by investing in adolescents' individual abilities, and it was done in order to help these participants to perceive and use the human dimensions. Thus, the program boosted participants' interest in

pursuing their rights and encouraged them to make changes in their communities of origin and in their lives.

The current report shows the key role played by universities, which, besides training professionals and producing scientific knowledge, fulfill their social function through extension actions capable of contributing to community development processes. In addition, as social and human scientists, psychology professionals are committed to experience the reality of people they work with—in interventions and research—in order to better understand the characteristics of different systems. Consequently, they are able to build a knowledge capable of enabling a more dignified life to themselves. Programs focused on prioritizing youth participation, and on allowing adolescents to express their needs, can help preventing several risk factors for this part of the population, for their families and for the overall society. The university is a favorable context where initiatives of this nature can be carried out; therefore, future studies based on further in-depth analyses, and focused on promoting changes through interventions, should be conducted.

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Chapter 14

Ecological Engagement and Educational Practices: An Experience in the Context of a Public Policy Implementation on the Protection of Children Victims of Sexual Abuse and Ill-Treatment



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This chapter aims to describe the use of Ecological Engagement in a context of research on the implementation of public policy to protect children victims of sexual abuse and physical abuse in Brazil and on educational practices. The research is a result of the master's dissertation of the first author, approved by the Graduate Program in Psychology of the Federal University of Mato Grosso (PPGpsi/UFMT), and was based on the conceptualization of childhood in the West, on national public policies for the protection of children and adolescents, and on educational practices related to the concepts of resilience and vulnerability in the family system. The theoretical and methodological basis is linked to the Bioecological Model of Human Development—MBDH, proposed by Urie Bronfenbrenner (1917–2005) and developed in researches and interventions around the world from the decade of 1970 of the twentieth century.

When discussing public policies for protecting children and adolescents in Brazil, it is necessary to point out that, like the other development processes, both are socially and historically contextualized, they present nonlinear movements in the production of their senses, and offer numerous approaches. Here the specific content of policies for children is highlighted. Tomazzetti and Silva (2012) describe childhood in the present day as supported in different social, political, economic, and cultural aspects. Facing the construction of a childhood that presents children as active subjects in the sociocultural processes (Sarmiento, 2008) and the need to regulate interactions between them and adults, as well as the social position that children occupy in Western society (Marchi & Sarmiento, 2017), it is necessary to understand, historically, how public social policies began in Brazil as an effective system of social protection, through the Statute of the Child and the Adolescent—ECA (Lei n° 8.069, 1990).

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Until 1990 there was no effective system of social protection to childhood and adolescence in Brazil. The legislation in force became known as the “Code of Minors” and was based on welfare, excluding and pathologizing perspectives, blaming individuals (children and adolescents) and their families, who usually were economically disadvantaged and heavily marginalized (Passetti, 1999). Most of the actions were carried out by institutions that based their actions on “charity” parameters, with a religious character, and rarely had the presence of professionals appropriate to that service (Morelli, Silvestre, & Gomes, 2000).

It is noted that the repeal of the Code of Minors by the institution of the ECA, possible in the period of re-democratization of Brazil, entails a reference of childhood and adolescence based on the Doctrine of Integral Protection (Morelli et al., 2000). It is related to Article 227 of the Federal Constitution (Constituição Federativa do Brasil de, 1988), which assigns the duty of the child, the adolescent and the young care to the family as well as society and the State. Furthermore, Article 5 of the ECA provides that “no child or adolescent shall be subjected to any form of negligence, discrimination, exploitation, violence, cruelty, and oppression, punished in the form of the law any attack, by action or omission, to their fundamental rights” (Lei n° 8.069, 1990, p. 12).

According to Hohendorff, Habigzang, and Koller (2015), with regard to the right to life and health, as stated in Article 11 of the ECA (Lei n° 8.069, 1990), it is an attribution of the Sistema Único de Saúde (SUS) to promote and care for the integral health of children and adolescents. Its role may occur at levels of health promotion, protection, and recovery, with universal and equal access. Concerning care policies, specifically in situations of sexual violence and physical abuse of children, the Article 87, paragraph III of the same law provides that “special services for the prevention and medical and psychosocial care of victims of neglect, mistreatment, exploitation, abuse, cruelty, and oppression” (p. 37) consist of a political action line to serve this population. The authors Bispo, Luz, Gadelha, and Paiva (2011) approach the launch of the National Plan to Combat Sexual Violence in Children and Adolescents in 2000, in order to implement actions that ensure the protection of children and adolescents vulnerable to sexual violence. As it is explained by Hohendorff et al. (2015), the plan is structured in six strategic axes: situation analysis, mobilization and articulation, defense and accountability, care, prevention, and protagonism of children and youth. One of the axes, therefore, is specific to the care and aims that it happens in a specialized and networked way, both for the victims or for the individuals at risk of sexual violence and for their families (Hohendorff et al., 2015).

These services for dealing with situations of sexual violence in Brazil are included in the Sistema Único de Assistência Social (SUAS). It is organized by the Política Nacional de Assistência Social—PNAS (2004), based on Lei Orgânica da Assistência Social—LOAS (Lei n° 8.742, 1993) and coordinated by the Ministry of Social Welfare (Hohendorff et al., 2015). This law establishes different rules and criteria for the social assistance organization. It means that aspects like the complexity of the situations and the population that may be served are contemplated, promoting a division into basic social protection and special social protection, and also into medium complexity and high complexity (Hohendorff et al., 2015).

In addition to these protection and guarantee measures mentioned above, there are the bodies that make up the Sistema de Garantia de Direitos da Criança e do Adolescente, created with the implementation of the ECA. Such bodies receive and verify reports of suspicions or occurrences of sexual abuse. These are: Conselho Tutelar, Delegacia Especializada, Ministério Público, Defensoria Pública in many states, Centros de Defesa dos Direitos da Criança e do Adolescente (CEDECA) and Justiça da Infância e Juventude (Santos & Ippolito, 2009).

However, it is worth noting that the reduced frequency of publications from epidemiological studies on violence against children and adolescents prior to the 2006 period indicates that, although the ECA was promulgated in 1990, the analysis of violence situations records violence has not been consistent since that period. Also, although there is progress in the area, proper reporting of such situations is not yet prevalent (Macedo, Foschiera, Bordini, Habigzang, & Koller, 2019).

In this study, the data collection site was a Specialized Police Station. Santos and Ippolito (2009) describe these police stations as Civil Police bodies responsible for investigating cases in which children and adolescents are victims of crimes. A Delegacia Especializada de Defesa dos Direitos da Criança e do Adolescent of Cuiabá (DEDDICA), place of study, was inaugurated in 2006 and has a multidisciplinary team, formed by policemen, agents, psychologists, and social workers to attend to this specific clientele, being the first police station of this kind in the State of Mato Grosso. Although the study is not epidemiological in nature, the visibility of the work of a public policy enforcement and child and adolescent protection agency in the Central-West region of the country is important, since the region presents a smaller number of studies concerning the notifications and their respective analyses (Macedo et al., 2019).

In view of the use of the Ecological Engagement in the DEDDICA environment and the search for support in the literature, it is important to note that Hohendorff et al. (2015) describe the need for clearly delineated psychosocial and psychotherapeutic interventions, once the objectives, method, and techniques to be applied by professional psychologists of the SUS and of the SUAS are not yet sufficiently defined. With the clarity of the definitions, it is possible for health and social care professionals to know how to conduct their actions in cases of sexual violence against children and adolescents, with interventions appropriate to their roles. For example, psychosocial care can, through its interventions, “strengthen the family’s protective role, improve family relationships, reduce the sense of stigmatization and guilt of victims and promote the social reintegration of children and adolescents” (p. 193). Habigzang, Ramos, and Koller (2011) emphasize that the social and affective support network of the child, when protective, can minimize the effects of sexual abuse at the moment the victim reveals the violence. As examples of constituents of this network, there are family, school, community, services of the social assistance network, Public Prosecutor’s Office, Tutelary Council, and Precinct.

Within this context, the methodological proposal of the Ecological Engagement for the accomplishment of the presented research brought several contributions. It is known that, in order to carry out research on the themes of human development, methodologies and approaches are needed to favor the understanding of the phe-

nomenon in a multifaceted and systemic way. The MBDH, developed by Urie Bronfenbrenner and several collaborators, shows the interaction of four large dimensions: Process, Person, Context, and Time (PPCT), allowing the analysis of the phenomena in a dynamic and an interactionist perspective (Lordello & Oliveira, 2012). The Ecological Engagement presents itself as the methodology that allows the researcher to enter the diversity of the possible PPCT for its research object. It, therefore, refers to research as “ecologically valid,” since the interactive presence of the PPCT in the organization of the theoretical reference, in the creation, experimentation, and application of the instruments, as well as in the analysis and discussion of the data, offers the aspects considered important to ecological research. They are: the presence of the researcher in the natural environment, observation and proposition of ways to emphasize or implement healthy aspects of development, and creativity in the choice, composition and application of the instruments that, in turn, must be contextualized (Prati, Couto, Moura, Poletto, & Koller, 2008).

The epistemology that underlies the MBDH of Bronfenbrenner holds that human development is the result of social and historical construction. Thus, it is not a universal process, but a cultural and specific one, and reality is conceived as depending in part on the culture, history, and ecological systems encapsulated in a given context. Based on this, reality can, in fact, be understood as multiple, since the context encompasses more than one reality experienced (Tudge, 2008).

In a brief overview, the PPCT can be presented as follows: the Process characterizes as reciprocal and progressively more complex interactions of the subject with people, objects, and symbols in their immediate environment, called proximal processes (Bronfenbrenner, 1999). The Person proposes the analysis and understanding of individuals through their biopsychological characteristics and, also, through characteristics built in the interactions established with the environment, as well as with the existing social demands (Bronfenbrenner & Morris, 1998). As highlighted in the description of the Process (Bronfenbrenner, 1999), it is important to note that the Person is as much part of the constitution of these interactions as his/her own constitution is the result of them. The Context is composed of concentric integrated systems, which interact with each other. They are called microsystem, mesosystem, exosystem, and macrosystem. In the microsystem, face-to-face relationships are established in the immediate environment, and the power of the proximal processes in the sustaining development depends on the characteristics of that system. School, family, and a group of friends are examples of the microsystem. The integration of the microsystems, in turn, originates the mesosystem. The exosystem is composed of environments that are not directly attended by the person, but which still influence their development and the direct environment (e.g. parents’ relationship with work). The macrosystem, finally, is composed of all previous systems in a culture. Thus, it is described by values, knowledge, lifestyles, and material resources that pass through the diverse cultures. The Time, the last component of the PPCT, covers both change and permanence, either in the person’s or in the environment characteristics (Bronfenbrenner, 1994).

From the synthesis that identifies the PPCT, the delimitation of the questions about the Ecological Engagement, especially in the context of the research pre-

sented here, is fundamental. It can be accomplished, initially, with the presentation of the general objective of the research. The aim was to describe and analyze educational practices and parental styles in families with a history of physical abuse or child sexual abuse, discussing the aspects of risk and protection involved in the daily lives of children, as well as in the day-to-day care given at the institution of reporting, research and protection of children and adolescents from Cuiabá/MT. In order for the objective to be achieved, the use of the Ecological Engagement proved to be relevant and essential.

Considering the need for studies that covered development-in-context, Cecconello and Koller (2003) presented the Ecological Engagement as a methodological proposal. As described previously, the researcher or the team systematizes the four aspects of PPCT, thus providing the ecological validity. The aim of the proposal is to evaluate the interaction processes of people with the context. In this way, the proximal processes are the basis of the investigation. In there, there is the participant in interaction with his/her environment, of which the researcher/team take part, besides the possibility of sharing individual experiences within the team itself—therefore, the possibility of analysis of the proximal processes within the team, since the researchers also have their processes modified in the interaction with the participants. As for ecological validity, it is not defined only by the environment in which the study is carried out, but rather from the need for the researcher to understand how the proximal processes are established in that context, that is, how the people interacting in that context perceive this interaction (Cecconello & Koller, 2003; Prati et al., 2008). Because it is a new method, Prati et al. (2008) point out that the research planned from this proposal must be carefully analyzed so that the adopted procedures, more and more, can be better systematized.

In the data collection procedures of the research presented here the following steps were delimited: (1) the participation of the researcher in the care provided to families and children in DEDDICA for 3 weeks, with a variable frequency of two to three times a week in the afternoon period. This participation was recorded in field diary; (2) after the initial period of Ecological Engagement, the researcher kept the weekly frequency in DEDDICA, following the cases attended and also carrying out the collection of data specific to the research with the families identified in the participants' profile (families with children aged 6 years or over, victims of sexual abuse or physical abuse). She presented the participant caregiver a semi-structured interview script, the Inventory of Parenting Styles (Gomide, 2011), and the Emotion and Behavior Descriptor (based on Biasoli-Alves, 1995).

Regarding the use of the field diary, Afonso, Silva, Pontes, and Koller (2015) point out that through its writing by the researcher, it is possible to describe spaces, as well as objects, people, events, activities, and conversations at the time the Ecological Engagement is carried out. It is also necessary to report ideas organized by the researcher at the moment of the Ecological Engagement, as well as to record visualized strategies and reflections, both of the people who are inserted in the field of study and of the researchers themselves. It is important to show that, unlike participant observation, when the field diary is used in the Ecological Engagement, the emerging categories within the context are established more immediately, either

at the time of reflection or at the descriptive point of the recorded material. Therefore, with the use of the Ecological Engagement, the researcher is guided in a way of greater understanding and of ecological and systemic analysis of the four nuclei of the MBDH (PPCT) in the research, besides giving opportunities to the validation of the model (Afonso et al., 2015).

As for the instruments used in the research, they were:

- (a) Semistructured interview script: According to Moré (2015), the semi-structured interview is a data collection instrument in which the participant is free to express his or her opinions, experiences and emotions, constituents of their experiences. The researcher is responsible for the control and conduction of the information presented. In the present study, the script covered the family history (origin and composition), the daily life in the family organization, the complaints regarding the abuse occurred, and the expectations and realities in the way of dealing with the children.
- (b) Parenting Styles Inventory—IEP (Gomide, 2011): Sampaio (2007) presents the IEP as possible assistance to professionals who work with families at social risk situations, since it facilitates the detection of parental practices experienced by an individual, in addition to the influence that the practices may have exerted in what would be the antisocial behaviors that this individual presents (e.g. substance abuse and infringing acts). In addition, the instrument provides the identification of parental practices to be modified or improved for the families that seek help, which can be sought in the legal system and in programs provided by public policies.
- (c) Descriptor of emotions and feelings in educational practices: Organized in scale form, the instrument brings emotions (such as caring/affection) and behaviors (authority, freedom, demand, care, punishment, and explanation) that are frequent in educational practices. Participants should locate, for each item, what they often do with their children.

Even before presenting the data obtained and the discussion that reinforces the Ecological Engagement as a methodology that brings the ecological validity to the study conducted, it is relevant to present the theme of educational practices and parental styles and the themes of resilience and vulnerability in the family context.

Within Psychology, a field of study is the relationship between parents and children and educational practices, which are behaviors and skills used by parents in order to direct their children's behavior, inserting and implementing the first conduct rules of the children in social coexistence, seeking that they present adequacy and adaptation to the contexts in which they are inserted (Gomide, 2011).

According to the Manual do Inventário de Estilos Parentais, parental style is the result of the set of educational practices (behaviors, situations, and conditions made to socialize children and adolescents) with the objective of educating, socializing, and controlling the behavior of children. When the parental style is positive, positive educational practices are prevalent over negative ones, and when negative, negative educational practices prevail over positive ones (Gomide, 2011).

In the proposed model, the parental style consists of seven educational practices. Of these, five are linked to the development of antisocial behavior: neglect (lack of attention or affection), physical and psychological abuse (use of corporal punishment, blackmail, manipulation, threats, humiliation), relaxed discipline (inconsistency in recoveries and arrangements), inconsistent punishment (punishments or reinforcements attributed due to the emotional state of the adult at the time of giving it and not to the behavior presented by the child), and negative monitoring (excessive explanations, without demanding compliance with what is being said). On the other hand, the remaining two promote pro-social behaviors, and are called positive monitoring (involves the appropriate use of attention and distribution of privileges, appropriate establishment of rules, continuous and safe distribution of affection, monitoring and supervision of school and leisure activities) and moral behavior (promoting conditions favorable to the development of virtues such as empathy, a sense of justice, responsibility, work and generosity, and knowledge of what is right and wrong) (Gomide, 2011).

In view of the definitions presented above, it is emphasized that a family is a privileged place of socialization and education, enabling the construction of meanings, values, belonging, respect, and dialogue. Moreover, family coexistence can offer opportunities for coping and overcoming conflicts and strategies for resolving disputes, absences, shortages, and aggressiveness. However, parents or caregivers do not always behave properly, leading to situations of risk within their homes. The use of explanations, punishments, or rewards is an example of educational practices which, according to Hart, Nelson, Robinson, Olsen, and McNeilly-Choque (1998), are strategies used by parents to reach specific competencies, under certain circumstances, in different domains (academic, social, and athletic) (Cecconello, De Antoni, & Koller, 2003). The parental style, in turn, is defined by Darling and Steinberg (1993) such as parenting behaviors or child-oriented caregivers in a global way, in different contexts and situations, in which the characteristics that describe the interaction between parents and children create an emotional climate (Cecconello et al., 2003). In addition to parental practices, that is, goal-directed behaviors, the parental style also encompasses behaviors without specific targeting such as gestures and tone of voice. Cecconello et al. (2003) present that “the expression of parental behavior can present affectivity, responsiveness, and authority” (p. 46).

In addition to the numerous forms of violence against children, inadequate educational practices are highlighted in the literature as detrimental to child development and may trigger different vulnerabilizing manifestations in children and in the other one involved. Inappropriate practices include ineffective discipline, neglect, lack of attention and affection, relaxed discipline, and inconsistent punishment (Pesce, 2009).

Within the context discussed, it is important to present the concept of resilience, which is the possibility of reaffirming the capacity of the human being to deal with adverse situations in a healthy way (Junqueira & Deslandes, 2003). This view is distinct from a deterministic look, in which the victim of violence would tend to become an aggressor or to develop risky behaviors. Human development studies consider resilience as the outcome of the game between the so-called risk factors

and protective factors present in the individual's life (Morais & Koller, 2004). De Antoni and Koller (2001) point out that these factors, besides being linked to the concept of resilience, are also linked to vulnerability. According to the authors, the risk factors say of characteristics and events with ineffective results and that, through stressful situations, weaken the person. The protective factors, on the other hand, may make the risk less intense. One of the ways they present themselves is in the care provided by the family in a stable way. In addition, they can be identified in the socially competent personal characteristics, as well as in the self-efficacy, and also in the social and emotional support of other groups than the familiar ones in front of stressful events. It should be emphasized that both factors are not fixed categories and defined a priori since they constitute as such depending on the context in which they occur. According to Fonseca, Sena, Santos, Dias, and Costa (2013), the concept of vulnerability was developed in such a way that the analysis of social problems could be expanded, not being restricted to the income or material assets of the population, and it is linked to the Social Welfare State. As already stated, vulnerability operates only when risk is present and within what is considered risk in the family context.

It is important to understand family resilience, as it brings the possibility of strengthening, potentiality and resources for families in overcoming crises. It can also collaborate in the development of characteristics of the person, which assist in this process in the context of risk or adverse situation. Since resilience protects both the family group and its members, it is important that investigations concerning them take place by considering multiple combinations in contexts and intragroup, and that focus on human development (Rooke & Pereira-Silva, 2012).

Based on what was presented, taking up the general objective of the study presented here and the importance of the methodology of the Ecological Engagement in the scope of the research, it is possible to present briefly the data obtained.

Study participants were six mothers who were in DEDDICA to be hosted by the psychosocial team: four mothers of sexually abused girls and two mothers of physically abused boys. They all responded to the interview script, the IEP, and the Emotion and Behavior Descriptor. Still, the researcher was present in the consultations that the psychosocial team provided to the mothers, having obtained information about the cases that appeared in the field diary.

In summary, the data obtained, analyzed according to the proposal of the Ecological Engagement, which legitimizes the integration of the PPCT at all moments of the research, show that:

1. Description of relevant aspects of families:

In all cases, the mothers were responsible for data collection. Cases of sexual violence were committed against girls, and boys were the victims of physical abuse. Mothers, for the most part, have companions and are in stable relationships. Their schooling is varied, predominating first and second degrees. Most also have activities that generate wage and collaborate in the family's support. It is possible to identify that the children are all over 6 years, with a mean of 9 years of age, enabling the hypothesis that the children are in a development process in

which their skills and competencies have already come a long way, and that they are children who are able to make sense of and relate to the experiences of physical abuse and/or sexual abuse in an integrated and conscious way.

2. Description of the IEP with an emphasis on everyday risk issues:

By means of the results in the application of the Inventory of Parenting Styles (Gomide, 2011), it can be concluded that, of the six families, two families were considered regular, but below the average, and four families considered at risk. It was possible to perceive that, regardless of the occurrence of physical abuse or child sexual abuse in the contexts of these families, they present relationship dynamics with their children that are unfavorable to the healthy development of all involved.

It was identified that negative educational practices prevailed over positive educational practices in most families, and none of the families participating in the research presented a set of positive educational practices that overlapped the negatives in a way that the parental style index could be considered above average or optimal.

3. Descriptor of emotions and behaviors, corroborating the IEP:

It was analyzed how the participating mothers have perceived the education given to their children and what they believe would be an ideal education system. For this, a scale was used in which the caregiver should indicate one of the following options: nothing, little, not much/not very, very, extreme or always for the following emotions and behaviors: caring/affection, authority, freedom, demand, care, punishment, and explanation. The descriptors were analyzed using the qualitative method, in which it was possible to perceive that, for the most part, caregivers differ in what they believe to be ideal and in what is the real care practiced. Evaluating all the participating families, only one family came close to what they understood to be the ideal education in the given one.

4. Description of interview topics:

From the information collected in the interviews and the analysis made, it was possible to identify some themes that became more present and which stood out in the understanding of how the educational practices of the families have been implemented. From what families have brought about routine, beliefs, hypotheses about the fact, and care for their children, it is noticeable that in their routine mothers are overloaded in their multitasking and that the existing support network is disqualified or weakened. The beliefs and values related to educational practices in the ideal field are based on affection and care, but what is present are practices linked to authority and punishment. In the hypothesis about the fact, some families blame the children for their clothes or behaviors that, as reported, would be responsible for inciting violence, whether physical or sexual.

With the analysis of instrument data and field diary information in the Ecological Engagement proposal, the results of the research were discussed according to three large nuclei of sense, identified as transversal in all instruments: (a) family, (b) social, and (c) institutional.

The experience of the Ecological Engagement provided the observation of the four dimensions of the MBDH in constant interaction. The proximal process established by the researcher's interaction with the psychosocial team of DEDDICA, the research participants offering their reports and responses to the instruments, the objects and symbols present in the immediate environment and the engagement of each one in the proposed activities were considered. The sociohistorical aspects that identify the themes of violence against children and the construction of public policies of host and referral of these cases were also researched and studied. This set of procedures enabled the practice of Ecological Engagement, with the qualification of the Bioecological Model of Human Development as a proposal for collecting and analyzing data in natural environments, strengthening the proposal of dialogue between the researcher, the object of research and the possibilities of intervention, arising from the presence in the context and the integrative analyses of the specialized literature and daily practice.

The services of the psychosocial team of DEDDICA occur by means of schedules made by them or by the clerks of the police station. The psychosocial team performed care with the caregivers and the children on the same day and time, but at individual moments. The attendance always occurred with the participation of a professional in the area of Psychology and another of the Social Service. The presence of two professionals from different areas was considered by the team as a safe procedure so that there was no contestation of the report elaborated.

Through Ecological Engagement, it was possible to identify the diversity of the psychosocial team in the treatment of cases. It was observed that part of the team is more committed to bringing improvements to the service and physical space, while the other part remained more plastered amid the possibility of change, considering that these changes would not bring about the desired improvements since there is interference from larger, superior, administrative and legislative bodies. It is perceived that the proposal of the multidisciplinary work enriches the professionals, as it allows discussing diverse strategies, which aim at effective results. Decisions about the procedures to be adopted are taken together after all technicians provide their opinion. Hutz and Koller (1999) point out that at moments proposed by the team, it is possible to expose feelings, frustrations and gratifications, indignation at situations of violence, as well as identify barriers and evaluate the results of work.

Through many opportunities of dialogues with DEDDICA's psychosocial team, the professional and academic qualification space was highlighted. It is understood that through research and academic productions it is possible to inquire and organize improvements in professional practices and in the host of the population, in a more ethical and homogeneous way, giving more security to professionals and those who make use of the service.

Under analysis based on the MBDH, the origin and organization of DEDDICA (Context) is based on a macrosystem of laws, values, and beliefs that seek to promote and reestablish the integral health of children and adolescents violated in their rights. These abstract aspects must be experienced in the proximal processes established within DEDDICA as a microsystem, among its employees and also with the public assisted. Often, because it is still an unknown place to the family, many

aspects of care and attention promotion possible in DEDDICA are neglected and strongly obscured by beliefs and values related to the role of vigilance and punishment, which are in a macrosystem way attributed to the instances of Public Security.

For the discussion of the DEDDICA microsystem, when dealing with network professionals, it is possible to identify the lack of training and the excess of personal beliefs and values that are active in the contexts of care. The interference of beliefs, individual values, and aspects such as social competence and technicians' self-esteem (Person) in the establishment of various proximal processes, which exist for a general and common goal of excellence in attending to the violation of rights, is extremely harmful. Ideally, healthy and sociohistorically contextualized proximal processes that are critical to the beliefs and values that victimize and blame those seeking DEDDICA should be established. For this, there must be a stable and reciprocal interaction pattern lasting (Time), with discussion and argumentation of theoretical, methodological and daily practice aspects within the team, emphasizing relationships of trust and mutual help, with respect to differences and also delimitation of common goals and objectives. That is, the professional's handling of the services, the techniques used by the team and the way the team approaches the topic with the family and the child need to occur homogeneously. Also, they need to be linked to the promotion of resilience and care and attention movements, which allow for the reestablishment of appropriate and healthy ways of dealing with what happened.

It is of paramount importance, in the interdisciplinary work, that all the necessary aspects be considered. Considering that the victim can be physically, psychosocially and emotionally affected, the professional should, in his work, consider the social, cultural and economic spheres, as well as family dynamics, since all aspects interact with the fact that occurred. In the interdisciplinary team, the knowledge and identification of sexual violence should not only fall on a single professional (Meireles & Carvalho, 2018). Therefore, it is essential that both the psychologist and other professionals—nurses, social workers, and lawyers—be trained to identify violence, so that care can be carried out in an integrated way and that intervention strategies can be built together. The need for the integration of knowledge is also described in Macedo et al. (2019), even for notifications to be carried out properly. As the data show, this attitude is even more relevant when, through the evaluation of educational practices and parental styles, the daily risk of family coexistence for all involved is already evident.

It is important to emphasize that the experiences and discussions made opportune to emphasize the professionals of DEDDICA, highlighting their organization and their needs, seeking improvements in the work of these professionals and in the functioning of the institution. In addition, during the research, it was also considered the importance of giving visibility to how the team works with families, how the team thinks and seeks improvements in its performance, and how this work can serve as a model for similar proposals.

Based on the data obtained, it is considered that the phenomenon of violence against children is old and accompanies the changes and permanence of human history; it is possible to identify changes in the type of violence, the type of infraction,

and the social and economic context, but the violation of the rights of the children remains. In terms of public policy, it is possible to perceive that, from the legislative point of view, there is a path to integral protection and organization of social and human life that seeks protection and promotion of development, but what is in the legislation still differs from execution.

Through the process of Ecological Engagement throughout the research, supported in the precepts of MBDH and carried out during the period of 4 months, between conversations, participation of psychosocial team meetings and data collection, it was perceived that it is necessary to enable professionals to act in a more efficient and integrated way in the space and context in which they are inserted. Thereby, it is necessary to look at the space in which these professionals have acted—not only physical space but also a psychosocial one—and to create a model of action that is consistent with what is provided in the legislation, which suggests that they are prepared to deal with children and adolescents who are victims of violence, as well as supporting and training families to improve educational practices and re-signification of parenting styles.

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Part III
Possibilities of Theoretical-Methodological
Dialogues

Chapter 15

Analysis of the Familiar Functioning of Amazonian Riverside Communities: Ecological Engagement, Naturalistic Observations, and Use of Structured Situations



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Developing a study that seeks to understand the dynamics of culture and family and how they influence each other is an arduous task, especially because of decisions that need to be made in methodology. Part of the challenge is to consider the methodological possibilities available, the specificities of the context involved and the operational ways of making ecological research possible.

An ecological conception, such as that of Bronfenbrenner (1979/1996), demands the understanding of context on several levels that are not restricted only to what the person has relations with. In methodological terms for in-context development research, such a concept emphasizes the idea of “ecological validity,” which implies an attention to how much the assumptions made by researchers reflect the way individuals experience a particular environment. As a way to operationalize this concept, Ceconello and Koller (2003) and Eschiletti-Prati, Couto, Moura, Polleto, & Koller (2008) proposed the procedure of “Ecological Engagement” (EI) of researchers in the context of research.

Ceconello and Koller (2003) understand that all research that adopts the Ecological Engagement is possible by the development of proximal processes characterized by the engagement of researchers and participants in activities characterized by regular interactions, progressively more complex, reciprocal, with objects and symbols present in the immediate context which potentially stimulate cognitive processes, such as attention, exploration, manipulation, and imagination.

Mutual involvement is implied in the EI method, since the analysis model is not only for purposes of achieving the objectives of the given research but also for the

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viability of the proximal processes involved in the research itself. In this sense, Cecconello and Koller (2003) understand that “the proximal process, as well as being the focus of research, acquires a function of making it possible, proving itself a procedure through which the researcher conducts research” (p. 521). It seems implicit that such interactions should not occur in occasional encounters, but in extended periods of time. Also, the proximal processes investigated are possible by the proximal processes between researchers and participants and the characterization criteria in both cases are the same.

Every production of knowledge implies a “construction of the object” (Brandão, 2000). Methodological decisions imply, among other aspects, the ability to choose the most appropriate methodological alternative to a given context of analysis. The description of the epistemic path fulfills a task that goes beyond the mere enumeration of the procedures used; it also seeks to explain, justify, systematize established relationships, clarify their links and evaluate their results and applications. This chapter describes, from the EI perspective, the methodological decisions involved in the evaluation of family functioning, that is, naturalistic observation and structured situations in the riverine context.

Research into Family Functioning and Research Challenges

The investigation of family functioning rather than characterizing the structure of the families studied also enables, according to the theoretical presuppositions involved, to know ethnographically the culture of the studied population. In this way, the epistemological approach adopted here looks for identifying family structure and dynamics and revealing the ethnographic profile of the culture in which these families are involved, that is, the specific point revealing the most general one and the most general containing specific properties. In this sense, in investigating the peculiarities of each family, researchers intend to abstract the most general properties that characterize them as members of a particular community.

Research that intends to investigate family functioning as a characteristic of the macrosystem in which the family is involved, particularly in the case of rural populations, has at least three types of challenges. The first refers to the epistemic nature of the available methods of evaluating family functioning, the second refers to aspects of the contextualization of such methods, and the third includes the considerations regarding the operationalization of such adaptations.

From the systemic perspective, family psychology developed a set of instruments for the evaluation of families. According to Baker (2000), the most experienced models are the McMaster model and the process model. The evaluation dimensions used by these models are very similar that can be conceived in task accomplishment, role-playing, communication (including affective expression), affective involvement, control, and values and norms.

Bodin (1968) classifies family assessment methods and techniques into two types: objective and subjective. Subjective techniques are divided into three types: (1) family tasks, (2) inventories of familiar ego force, and (3) family artistic productions. The objective techniques are, in turn, divided by Bodin into three categories: (1) communication-based techniques, (2) techniques based on game theory, and (3) techniques based on conflict resolution.

Carneiro (1983) considers that a more pertinent classification is that which considers objective methods, subjective methods, and the mixed ones, that is, those that maintain both objective and subjective elements. The method he developed, the Structured Family Interview (SFI), can be classified as mixed.

At the same time, several proposals for evaluation tools are being tested and used by the community of researchers and therapists, such as the Family Aperception Test (Eaton, 1988; Lundquist, 1987; Sotile, Julian III, Henry, & Sotile, 1991), Family Adaptability and Cohesion Evaluation Scales—FACES (Olson, Portner, & Bell, 1982; Olson, Portner, & Lavee, 1985), Family System Test—FAST (Gehring, 1998), and Familiogram (Teodoro, 2006; Teodoro & K  ppler, 2003). However, all can still be classified in the parameters that were described by Carneiro (1983).

Considering the specificities of our interests and the characteristics of such instruments of family evaluation, it can be said that such instruments would be of little use for the objectives chosen, both for their epistemological rational aspect and contextualization.

In rational terms, such instruments originate in a logic different from that proposed for our study. Many of the instruments developed are born within the concerns of the therapeutic context, where identifications of family functioning are extremely relevant for identification of pathologies and dysfunctions in the family subsystems. This bias tends to direct the results for family classification, that is, family diagnosis, which may have interests that conflict with the objectives of relations among systems, particularly the cultural one.

However, in the use of the such instruments, the classification of the aspects relating to functionalities or dysfunctions should not be considered, the purpose is just to reveal typical patterns of relationship of a particular cultural context, in other words, ways in which families organize themselves to deal with their tasks (Durham, 2004). Although this is a different use of the proposal for the main methods of family assessment, it is not inconsistent with the systemic perspective that underlies the bioecological model.

Considering the possibility of use, another aspect to be emphasized is the contextualization of such instruments. It is noted that most of the instruments were developed for urban literate populations and require the use of equipment and logics that may be foreign to the rural context. Such aspects may make them difficult to apply or invalidate the results obtained when the instruments are applied to contexts or populations that are different from those that were originally considered; this is also the case with instruments developed in Brazil.

For adaptation, one must first consider the objectives of the task or activity proposed by the evaluation instrument and then adapt it to a contextually relevant equivalent one. For this adaptation to be effective, a certain degree of immersion or ecological engagement is necessary in the context. If that occurs, it is possible for the researcher to identify objects and symbols present in the immediate environment that are capable of stimulating attention, exploration, manipulation, and imagination of the developing person, which characterizes the proximal processes.

On the other hand, such instruments can be useful as long as people know the logic behind them. In fact, the pretension to adapt and validate an instrument tends to be a temporary obstacle in the accomplishment of a certain research schedule. In this sense, the items of a particular instrument can be adapted in an isolated way and become inspiring elements of activities that can reveal the familiar functioning.

If we consider the above aspects, we would expect that one alternative is the use of ethnographic approaches to reveal characteristics of family functioning, since these techniques are closer to the EI procedure. However, the problem is that such techniques require a long period of adaptation, especially considering rural communities. In addition, family environments tend to be the most complicated context for researchers to enter. Time and resources are not always available for research development under such conditions.

Researchers developed in Brazil that are based on the concept of EI were developed in contexts where the researcher's continuous presence was possible, since they were mostly done in urban areas with easy access (see Cecconello, 2003; De Antoni, 2005; De Antoni & Koller, 2000, 2001; Morais, 2005; Neiva-Silva, 2003). In urban contexts, the suggested requirement that researchers and participants have a frequent interaction can easily be met.

However, the required mutual involvement has challenges to be overcome in field research carried out in contexts that have operational difficulties for continuous contact between researchers and participants, due to the geographic distance of the locus of research and the lack of means of transportation and communication in the region - this is particularly the case of research involving Amazonian riverside communities who live distant from large urban centers. In the case of investigations of structure and family dynamics in such communities, the operational obstacles involved could hinder the researchers' ecological engagement process.

In general, family assessment tools have been developed because they reveal familiar patterns that would take a long time to be capitalized in the normal therapeutic setting. The verbal and nonverbal behaviors brought by a set of items and tasks arranged by the available instruments allowed to identify how family members behave in relation to each other, in other words, instruments allow to obtain a maximum of information in a minimum of time.

In this sense, we understand that since established proximal processes, the use of structured situations inspired by family assessment techniques can help elicit a set of elements of family functioning, such as communication, rules, roles, leadership, conflicts, and borders. In addition, the use of such situations can and should be used with a set of ethnographic techniques.

The Specificity of the Amazon Riverside Context

The classification of ecosystems in the Amazon is quite complex (Ab'saber, 2002). However, for the purposes of this work, it is superficially understood that the region is composed of two major types of ecosystems: floodplains (flat ground; igapó, that is a kind of flood forest; and affluents, natively called “furos”) and dryland forests – high and dense forests, low forests, savannas, and natural fields (Scherer, 2004a).

Unlike the caboclo person of the dryland forest, the riverside inhabitants live mostly by the rivers, streams (igarapés), flood forest, and lakes that make up the vast and complex Amazonian estuary, an ecosystem that defines much of their way of life. As the high tide and low tide phenomenon regulates much of its daily life, the world of work and relationships obeys the seasonal cycle (Scherer, 2004a). The daily concerns of the riverside communities are determined by the floods/drains of the rivers, by the sun and rain, by the days and nights. Temporality belongs to those who live in the flat ground (Scherer, 2003, 2004b) and time is defined by nature and culture, by myths and traditions. The belief in several supernatural beings influences hunting and fishing (Wagley, 1952). The reproduction of the ways of life of this population is ensured through oral history (Fraxe, 2000).

The literature defines the people who live by the rivers based on the form of work that is essentially related to extractive and agricultural activities centered on family production (Noda, Noda, Pereira, & Martins, 2001). However, in a more flexible way, survival practices vary, so that it is possible to find communities with only extractive activities and others with agricultural practices. The community we studied (Araraiana) is based on extractive work.

Aside from the ways of survival, the dynamics of living by the Amazon River constitutes a relevant feature in this study. Riverside communities are isolated, not only from the more general culture (without access to written media and little or restricted access to television and radio media) but also from the community's own residents (the distance between the houses is around 200 m). In interactive terms, the river acts as a constraint and source of contact, as a barrier and environmental bridge, creating and restricting the possibilities of interaction mainly among children. For Harris (2000) the river represents the “metonymy of being a person who lives by the river,” which at the same time creates bonds and isolations among people in the community. Thus, the peculiarity of this population is an aspect that outlines the relevance of this study. It is believed that, compared to the families of urban communities, there is a greater frequency of interaction among family members, which can result in family structure and developmental trajectories typically accommodated to this way of life.

Forgotten by the public actions and hidden in the generic denomination of rural worker, riverside communities face problems of all order. In educational terms, the illiteracy rate is very high and most of the schools work until elementary school. There are also serious health problems, for example, lack of basic sanitation; in general, there are no health programs aimed at this population. Economically, there is little possibility of social ascension, given the little technology used in the products they sell. Being left to abandon, some communities have a very low Human

Development Index (HDI). All these factors contribute to a condition of social vulnerability (Scherer, 2004b) that implies political invisibility and leads to easy manipulation during election periods.

The data collected in the project “Contexts of development in a Marajó riverside community: pairs, family and school” (2004–2007) reveal that the riverside culture of the community studied has a specific way of organization which was observed particularly in the development of the family and individual cycles. Based on preliminary data, it is possible to identify that the life cycle is marked by entry into the world of work (mainly by women) and by the early formation of families (young people between 14 and 17 years old). These moments mark the end of schooling and require a reorganization of the relationships, both of the individual and family structure (original and new) and of the roles to play.

The Geographic and Sociodemographic Context Investigated

The island of Marajó, known as the largest river-maritime island in the world, is located in the Amazon region and is part of the State of Pará. It is made up of 13 cities, where Ponta de Pedras—the city where the research was carried out—is one of the poorest in this region, as it has one of the lowest levels of per capita income in the whole island. The city of Ponta de Pedras is part of the geographic region of Marajó, and one of the closest cities of the State Capital (Belém). The area of this city is around 3,365,300 km², with a population of 20,067 inhabitants resulting in population density of 5.96 (Governo do Estado do Pará, 2007). In the city of Ponta de Pedras, it is possible to find several riverside communities, among them, the Araraiana river ones.

The community investigated is composed of a total of 22 families composed by 125 people: 60 adults and 65 children and adolescents. As there is no systematic transportation for this community, the easiest way to get there is by renting a boat. From Belém to the Araraiana River are 32.7 nautical miles (equivalent to 60,570 km). By boat, the journey from Belém to Ponta do Malato takes about 5–6 h. The studied population is characterized by extractive way of survival, due to its geographical and sociopolitical isolation (little or no access to basic education, health, sanitation, and electric energy services), as well as poor contact with people in the mesosystem of the community, such as the neighbors. These aspects reveal a daily social exclusion and relations essentially established within the family.

Structured Situations in the Riverside Context

The fundamental aspect considered by us for the development of structured situations for family assessment in the riverside context was the requirement that such situations should allow the development of proximal processes both among family members and among family members and researchers. For purposes of the research objectives, the proposed situation should allow to elicit aspects related to the

relational patterns of family members. The relations between family and researchers become, in turn, fundamental as they directed the objective and the development of proximal processes among the own family members.

As we have seen, from all Bronfenbrenner's (1999) prerequisites for the development of proximal processes, the most fundamental aspect for the development of structured situations are: objects and symbols present in the immediate environment should stimulate attention, exploitation, manipulation, and imagination of the developing person. In particular, this aspect corresponds to the adequacy of the structured situation to the context so that it is meaningful to the participants, involving them motivationally and emotionally in the proposal.

This prerequisite is difficult to obtain if there is not an engagement of the researchers in the context, so that it allows them to know relevant aspects to the daily life and way of life of the community. Thus, the other characteristic elements of the proximal processes (engagement of researchers and participants in activities characterized by regular interactions, progressively more complex and reciprocal) are fundamental to be reached for the construction of structured situations. It takes a certain period for researchers to insert themselves and have a contact with the context; it is also essential to use field diaries.

Three structured situations were elaborated: the miriti, problem-solving, and the photos. In order to identify the applicability of structured situation in the production of desired effects and possible improvements in the procedure, pre-tests were made with riverside families with similar profiles to those we investigated. The choice of small blocks of situations resulted from the pre-tests when it was identified a greater facility of this population to be bored with tasks of greater duration. For this reason, we chose tasks that lasted a maximum of 20 min, and they were applied at different times. All situations were video-filmed.

Miriti

Task of miriti was developed based on the sixth family task of Minuchin (1974).¹ The use of the miriti² in the research was based on the observations that demonstrated the existence of a true culture around the miriti; all parts of it can be used to do something and most of the residents of the community have the ability to manipulate this palm tree for the manufacture of both utensils and toys. Even children manipulate the miriti with knives to make boats or miniature of furniture.

¹The sixth question of the Minuchin family task has the following command "Graphically copy a wooden model that exists in the room."

²Miriti (*Maurita Flexuosa L.*) is one of the most important palm trees in the Amazon, playing an important role for the population of the region. Also called Buriti do Brejo, it predominates in low and flooded places. Through it, it is possible to take the "wine" from the fruit; from the stem of the palm it is possible to extract material for the construction of miriti toys, used a lot by the children of the region; and it is also possible to extract the splint to make matapi (shrimp trap). Its trunk still serves as a bridge between the river and the mainland in front of the caboclo houses, since it floats in the water and moves along the river.

With all family members together, the researcher asked to see how family “works” with the miriti. Next was given a set of palms of miriti to them who were asked to make any object, which could be a toy, a domestic utensil, etc. It was not established whether this activity should be done in a group or individually.

The similarity of the evaluation proposed by Minuchin, the level of action provoked by the task, which is essentially nonverbal, allows to identify patterns of competition, cooperation, leadership, aggression, etc.

Cultural “intimacy” with the task made the engagement possible and it could happen isolated or in group. In both cases, this situation allowed the emergence of structural aspects of the family, such as roles, competition, cooperation, hierarchy, leadership, and conflict.

Problem-Solving

All problem-solving tasks were inspired by Task 1 of the Structured Family Interview (EFE) instrument developed by Terezinha Féres-Carneiro (Carneiro, 1983).³ The solution of problems consisted in a moment when the family members solved a problem previously established by the researcher from three hypothetical histories. The purpose of this task was to verify how family functions when it needs to do something together based on a request made with some external pressure. Three tasks were chosen for the same purpose in order to provide different possibilities for a better involvement of the family.

Hypothetical History 1

“All of you went out to travel to Ponta de Pedras on a Friday night. When they were already far from the Araraiana, the bay begins to be agitated, the night becomes darker than usual, it begins to rain, a tree trunk loose in the river hits and causes damage on the boat. What would you do?” So, people are asked to tell each other what they would do in this situation.

Hypothetical History 2

“It is Círio⁴ de Nazaré time. The whole family traveled to Belém (state capital) to follow the parade, with a lot of people, a lot of noise, a lot of riot, people pushing them around. So, a child got lost in the crowd. What would you do?” In sequence, each person is asked to talk about what he or she would do in this situation.

³Task 1 was commanded “Let’s just imagine that you would have to move out of your home within a month.” I would like you to plan this change now together.

⁴A traditional religious procession that takes place in Belem do Pará, on the second Sunday of October, considered to be the largest religious event in Latin America, bringing together about a million and a half people on the streets.

Hypothetical History 3

“Imagine that you have won the lottery and you have lots of money, but you will only get the money if you can say five things that everyone wants to buy. If you cannot reach an agreement, you will not receive the money. What things would you choose?” Researcher encourages the participation of everybody and seeks to confront opinions.

In all cases, more important than the content of the answers is the way the family handles the proposal. Like SFI’s objectives, for this work, this task was supposed to reveal how family works together, the family communication, the roles of each member, family rules, how the family deals with conflicts, if they arise, and boundary aspects when verifying how they respect the individuality of each member. In general, the three histories used allowed to evaluate the notion of family unit present in each member of the family. In the first and second histories there is a threat of breakdown or loss of family unity; in the third story the family unit can confront the possible motivational tendencies peculiar to each member. Due to the predisposition to provoke conflicts, these tasks were also supposed to analyze subsystems, alliances, and coalitions.

Photos

Structured situations using photos was based on the third question of the family task of Minuchin (1974).⁵ The members received photos of family people. They were told not to show anyone the photo they had on hand. The researcher requested that in just two words, people would say who the photo was about. Before the verbal cues, the others of the group had to guess who the person was. The only condition in this task is that these two words represent something good and something bad. For example, “I took a picture of a person, so I say, well the photo I took is from a very damn and very affectionate person. Who is the person?” This task was supposed to identify roles and stereotypes in the family group.

This task was very motivating for the participation of family members. Most of families did not have a photograph of their members and confrontation with such images is always funny. The fact that the photographs were delivered to families has become an additional motivating element.

Final Considerations

Developing a study whose aim is, among other things, to describe family relationships and to associate them with the specific way of living in a community is not an easy task in methodological terms. In fact, it is possible to find numerous instruments for evaluation and diagnosis of the functioning of developed family

⁵The third issue of the Minuchin family task has the following command “Assign labels to each member of the family.”

relationships in literature. However, objections can be made at the epistemic and contextual level. In order to overcome both situations, adjustments of objectives and adaptations of these instruments must be made, considering most of them were developed for the purposes of classification of the system's functionality and were taken as parameters, mainly for the urban middle class.

There are only two ways of obtaining information about family dynamics, that is, by observing the relationships between their elements and asking questions that have to do with these relationships. Bogdan and Biklen (1994) advise doing both. In the particular case described in this chapter, data from naturalistic observations and structured situations were combined so that success in the development of structured situations is dependent on the sensitivity of the field notes. The naturalistic observations started since the first contact with the community until the last visits that generated field notes. Those associated with the observations during the structured situations allowed to construct an image of how the families are in their interior, in other words, how the family works.

Considering how they were conducted, structured situations can be organized into two categories: essentially observational situations in which the observer establishes a task and remains in a nonparticipating condition during the activity; and interview situations with observation, where the observer participated actively in the dialogue. In the first case, there was only the situation of the miriti in which the group was asked to make an object with miriti. The second case consisted of two situations: "problem solutions" and "photos."

It is worth mentioning that the situation of the miriti allows the current description of the family's structural patterns, the "problem situations" reflect the symbolic aspects present in the event of stress, and the "photos" metaphorically allow family members to make a photographic record of the group's current image.

Despite the care that the research team had in adapting the situations considering the elements that made sense to the riverside community, it was evident the great difficulty of the people to emit their opinions. In fact, the introduction of the video camera in the domestic space was carried out with extreme care. The contact with the technological instruments was made gradually. A careful approximation was made for systematic desensitization of the instruments used; for a long time, people and digital camera were put together, situation where photos were taken and, later, delivered to themselves. At the moment when it was perceived that there was a relationship of trust, where the subjects felt comfortable in the presence of the researcher, the video camera was introduced.

In these situations, the greatest difficulty was in the verbal communication. Except for some members of some families, most of the people were very difficult to be understood. This difficulty was also evident during naturalistic observations, suggesting that the poor ability to communicate is not due to the presence of the camera, but because of a functioning characteristic not only in the people who live in the context but also in the riverside families studied.

The naturalistic observations generated field notes that were combined with the data obtained, later, through the structured situations. The nature of these field notes changed over the collection period. Initially, these were general records that were

not very focused, since the objectives of the survey were not sufficiently clear. After some time, these notes have become more mature, and more focused on the specific issues of this work. It should be noted that the methodology of “Collective Construction of Knowledge” (Mendes et al., 2008) used, favored the maturation of ideas as perceived in the field notes.

In our view, ecological engagement should be considered as a methodological strategy that enabled both the development and adaptation of a given methodology as well as the analysis of a development context; it mediates and succeeds the interplay between the two main techniques which are indicated here.

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Chapter 16

The Ecological Engagement, the Role of the Research Group and the Collective Construction of Knowledge



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The bioecological approach (Bronfenbrenner & Morris, 1998) proposes the study of human development involving the interaction of four nuclei: the process, the person, the context, and the time (PPCT). For Tudge (2008), theoretically such approach presents features of the contextualistic paradigm. These characteristics stand out from the fact that knowledge is understood as a social construction, of which research must be carried out in the context and, consequently, the research process is usually co-constructive, that is, it involves researchers and participants in the research.

This notion of paradigm refers to what Morin (2008) understands as “a set of fundamental relations of association and/or opposition between a limited number of key notions, relations that will command-control all thoughts, all discourses, all theories” (p. 258). In this sense, paradigm is defined as epistemological notions of transdisciplinary nature.

Considering other ways of characterizing paradigms, one can understand that the bioecological approach presents epistemological links with the contextual thought, ecological, in networks (Capra, 1996), with the thought or systemic model (Vasconcelos, 2002) or what Morin (2008) names systemic paradigm. These connections are justified by the epistemological structure, the parameters of established relations, the terminologies used, and their respective assignments.

In the systemic paradigm, the notion of “system” is widely and intensely used by the bioecological approach. However, this concept needs to be emphasized and articulated so that it is used not only in the metaphorical sense. As a set of mutually related elements, the concept of system for Morin (2008) refers to three terms: system, interaction, and organization. The system expresses the complex unity and phenomenal character of the whole, as well as the complex of relations among the parts, as an organized whole so that its elements are not defined per se, but by the actions that are established. The interaction expresses the combination of relations,

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actions, and feedbacks that take place in the system. And “the organization is the concept that gives constructive coherence, rule, regulation, structure, etc. to interactions” (p. 265). These three terms are indissoluble and refer to each other; system is a macro concept (Morin, 2008).

The use of the concept of system in the sense developed by Morin has implications both in the theoretical and methodological approach. It is understood that the bioecological approach from Bronfenbrenner presents consistent elements with this use, namely:

- understands the integration and mutual dependence of the proposing elements, so that the nuclei are so interrelated that it is almost impossible to refer to only one nucleus;
- proposes that such influence move bidirectionally from the micro level to the macro level;
- focuses on the elements of the process (relations) as the engines of development;
- states that the key is how people perceive and experience their environment;
- proposes its transdisciplinary feature; and
- uses the word *ecology* in a relevant way, in order to highlight the person–context interdependence.

It is evident that Bronfenbrenner does not develop his model within this new paradigmatic field of Morin. He never had this pretense, even because his epistemological matrix of inspiration was never overtly stated. However, it is understood that there is an approximation between the epistemological base of its model and some elements present in the systemic paradigm. This chapter, therefore, proposes a movement of declaration and radicalization of this connection, since it is understood that the enunciation and the articulation of the epistemological bases in which the knowledge is generated is a necessary requirement for the continuous reconstruction of a determined field of knowledge, theory, and or model.

Concerning the methodology, Bronfenbrenner never proposed a clearly operationalized method of research (Ceconello & Koller, 2003; Eschiletti-Prati et al., 2008). Tudge (2008), for example, stated the existence of a certain inconsistency between theoretical model and methodological preferences on the behalf of Bronfenbrenner. It is understood that there is no way to charge Bronfenbrenner of proposing a research method consistent with his theoretical vision, since the challenges he mentioned are greater than his theoretical work. It is up to the interested researchers to develop methodological articulations consistent with the model.

After the execution of some researches based on the bioecological approach, in the need to structure method and theory, a methodological proposal called Ecological Insertion (EI) arises (Ceconello & Koller, 2003; Eschiletti-Prati et al., 2008; Paludo & Koller, 2004). The Ecological Insertion allows not only a connection between theory and method but also an excellent possibility of articulation between method and epistemic matrix, that is, the moment of readjustment and placement on new axes. By the systemic logic involved, by the terminological set that makes it part of

the whole, the PPCT model and the EI proposal inspire and induce possibilities of a reorganization of paradigmatic axis.

This chapter demonstrates the connection between the method of ecological insertion and the systemic paradigm. Based on it certain commitments and postures are stated, among them is the one related to the role of the research team in the production of knowledge. At the end, a strategy is presented that has been used to deal with the process of knowledge construction known as Collective Construction of Knowledge—CCK (Mendes et al., 2008).

The Ecological Insertion and the Observant System

The methodological proposal of Ecological Insertion, developed by Cecconello and Koller (2003), involves the systematization of the four aspects of the PPCT model by the research team. This method aims to evaluate the processes of interaction of people with the context in which they are developing, thus proposing the focus on the development process. It emerges as an alternative to the developmental studies, which dichotomically sometimes emphasize the individuals' characteristics, or highlight the context without a coherent articulation of these elements. The proposal of Ecological Insertion seeks a coherence between bioecological approach and the method, based on the research process itself at the bases of the PPCT nuclei.

It is understood that the articulation between model and method is reflected in the proposal of the Ecological Insertion. Each aspect of the nucleus that refers to the observed system also corresponds to a counterpart of the observer system. It is in this sense that Cecconello and Koller (2003) discuss in relation to the process:

(...) it is possible to affirm that the interaction of the researchers with the participants, the objects and the symbols existing in the research environment constitute proximal processes. In this type of research, researchers are part of the proximal process, assuming an essential role as the manager of this energy. Thus, in certain delineations, the proximal process, besides being the focus of the research, acquires a purpose of enabling its development, proving itself a procedure through which researchers conduct research (p. 521).

More recently, Eschiletti-Prati et al. (2008) added that:

(...) the proximal process arises through the reciprocal, complex and with regular interaction of researchers, participants, objects and symbols present in the immediate context, forming the basis of all research that adopts the Ecological Insertion. The proximal process, besides being the focus of research, is what allows the development of research. The research-in-context process, as proposed by the Ecological Insertion, involves the sharing of information, perceptions and feelings within the team, in which the individual experiences and the aspects observed in the environment are communicated. In this way, the research process also generates proximal processes in the development of the team itself (...). The importance of the presence of the research team in a context, in a serious and committed way, generates the exchange of information and energy, establishing, therefore, proximal processes (p. 161).

With regard to the aspects of the person, in a similar way Eschiletti-Prati et al. (2008) understand that in EI:

(...) the researchers are valued in a similar way to the participants of the research. Each one has his or her interaction processes altered, providing the construction of a common field of development. The research team, inserted in the context under study, establishes relations of reciprocity that are valued and considered in the understanding of data and systematization of results (p. 162).

It is possible to develop parallels between the propositions of the ecological insertion and the paradigm systemic, particularly in opposition to the mechanistic model. If, under the mechanistic model there is a distance, observer–observed phenomenon, to the systematic model this division does not make sense, as observed by Maturana (1997): “all that is said is said by an observer; and to an observer” (p. 53). With this statement, Maturana tries to emphasize that the context is not outside the observers, the observed ones have the mark of those who observe, so that it is impossible to separate the observers from the system observed. It is emphasized that this distinction is clearly reclaimed to the systemic thought from what it started to be called Cybernetics of the Second Order.

The Cybernetics of the Second Order proposes a theory of (an) observer. Observers are incorporated into the observed system, so that the observation of a scientist is related to the characteristics of its structure. The notion given by Foerster (1981) of “observant system” (see Fig. 16.1) emerges. In it, observers, including themselves in the system they observe, observe themselves observing. The observer “A” when observing system “B” creates a system that will integrate both, a system that the observer will observe observing. The system he observes is the object of his observation, since it is the result of the process itself which treats the bioecological approach.

Here we are not talking about the diminution of the observer result. In the traditional models of observation, it is always mentioned the need to diminish the interference role of the observers, so that an ambience or habituation process can diminish the effect of this intervening variable in the research process. What we intend to declare is that the observed system is constructed by the observer system.



Fig. 16.1 Schematic representation of the observing system. “A” represents the observer (researcher) and “B” the participant, each with its own systemic dynamics; however, from the moment that the observer begins to observe the system is created a system that will provide.

Thus, it is impossible to diminish the effect of the observers; it is not an imaginable neutral observation (Silveira, 1996).

While observing the system, observers construct with it another system. What is highlighted is the impossibility of speaking of an objective observation, of an independent reality, free from the influences of the observers; they are inserted in the observation that they accomplish.

The commitment to the epistemological notion of a unity between the observer system and the observed system has a profound impact in the elaboration of a methodology. If applied in the limit, the PPCT model does make sense to understand not only the observed system but also the observing system, or rather, everything investigated about the observed system interacts with processes in action in the observant systems. This issue becomes, on the other hand, more relevant to the mastery of the researchers of the own method which guides them, so that the perceived is organized in the structure of the model, composing the observing system as an element of the system of the observers.

From what is possible to acquire from the described concepts, one can understand the Ecological Insertion as a direction for the researchers in the contact with his or her object of study and in the context of research, being that the rules embedded in the theoretical model become methodological rules. It is also assumed that the investigated processes are not only restricted to the objects of study but are also part of the researchers and, in this sense, return recursively to the object, so that researchers and objects compose a closed system, an “Observant System.”

It is evident that the epistemological connection of the method of ecological insertion to the systemic paradigm implies research challenges, because it cannot be referred to only as a conceptual methodological instrument of research but also as a process of execution of a research, which in turn is responsible by the execution of such instrumental facet.

The Ecological Insertion and the Research Team

A complex model demands not only a method that fulfills such complexity. Considering the variety of elements to be compared, this is only possible to be reached in a research team. In EI, due to the existing interrelation between the four nuclei of the model, the projects that involve such task are mostly integrated projects. Developed by a research team, different researchers focus on different issues from the theoretical model. In some cases, the division of responsibilities in the team is due to the greater emphasis of each researcher involved in one of the nuclei. Another possible strategy happens due to the focus on different objects of one of the elements of the nucleus. It is in this case that a team interested in issues involved in the characteristics of the person can be divided according to the participants who are being investigated.

It should be considered that what would previously apply to researchers or observers is now applied to the team. If we should previously consider the proximal

processes in action in the researchers, now it is applied to the proximal processes in the research team. On the other hand, the components of the team, as members, should consider personal development processes involved, arising not only from the interactions with the study context but also with the research team itself. After all, they are all human beings in development (Eschiletti-Prati et al., 2008).

If the constitution of a research team becomes fundamental, on the other hand, it brings a series of implications with regard to the method of Ecological Insertion. It is not enough for the team members to master the concepts related to the model, procedural aspects in the interaction of team members become fundamental to the research process itself. This has already been mentioned by Cecconello and Koller (2003), Eschiletti-Prati et al. (2008), and Paludo and Koller (2004).

The proximal **processes** involved in the research team itself are fundamental to the success of the research project. The focus is not only on the ultimate goals but also on the processes that may favor the final goal. There must be a special care and attention in the construction and development of the research team. Of the various aspects to be considered in the development of the team, one can highlight two fundamental ones: sharing and integration. The first refers to the essential and necessary exchange and sharing of information. The relationship shared previously preserved between advisors—students advisees is now extended to the research team. There must be a distributed domain of the theoretical concepts, problems, questions, methods, data collected, and interpretations involved. Sharing enables the free flow of ideas, domains, and information on the issues involved as a whole, thus favoring the training of researchers and the approach of the phenomenon concerned.

The integrated projects are in the dimension of individualized responsibilities and distributed information. The traditional individualist idea of “this being my project,” “my research” tends to disappear; the project belongs to the team, and the investigation of a certain topic is no longer the responsibility of a particular single person. The integration of a project can be from simple shared collection to cross-data, so that there are mutual dependencies. Research programs that emerge from a systemic design such as the bioecological approach tend to facilitate the integrated approach. In this case, a set of researches focused on the subsystems of contexts (focus on micro, meso, exo, and macro) or in the approach of a given nucleus (person, process, context, and time) or by focusing on the characteristics of certain people involved in the proximal processes in analysis are easily integrated. On the other hand, the development of an integrated team depends on a research program whose problems should in particular be built together or from the interests of each of the researchers involved. The commitment and involvement of each researcher will depend on how well he or she identifies with his or her special issues interests. Integration can be developed from mutual dependencies either on the collection or on the treatment process.

Thus, in order to better understand “my data,” researchers should be alert to pieces of information that would be of “greater interest” to others. Paludo and Koller (2004) have already emphasized the formation of the research team as a first factor to be considered in the process of Ecological Insertion. As emphasized by

Eschiletti-Prati et al. (2008) “researchers go to the field to observe and collect various data, even those that do not relate to their theme to the research theme” (p. 163).

The structuring of an integrated team is one of the major challenges of such research programs, due to relational factors present in the components of the group and particularly in leadership. Everyone knows that academic activity is not immune to individual vanities, which when burned in research can easily turn the team into ashes. Complaints about member collaboration and performance, nonsharing of information, and authorship disputes are some of the recurring issues. A friendly and cooperative climate should be sought, problematic issues should be addressed in a frank and respectful manner, trying to formulate clear ethical rules within the group. It can be said that the success of the team is in a direct relation to the amount of dialogue among its members. We should have in mind that it is important to invest in caring for the relationships among team members. As with any relationship and group, availability for this investment is fundamental.

In summary, one can understand that the Ecological Insertion presents an external aspect or of result, connected to the objective of the research; and the other internal, of process or of feasibility, linked to the development of the research itself, particularly to the research team. In order to operationalize the proposal of Ecological Insertion and its respective connection to systemic thought, an example of the authors’ experience with a research developed in an Amazonian riverside community is demonstrated. In particular, the contribution of the Collective Knowledge Building (CKB) strategy is discussed. A more detailed description of the research context on the Amazonian riverside community and of the strategies described below can be verified in Mendes et al. (2008).

Among the traditional rural communities, the riverside population presents a different profile of the local people who live on ground, because they live along the rivers, streams, and lakes, their way of life is influenced by this peculiarity. Scherer (2003, 2004b) observes that the daily concerns of the riverside people are determined by the floods/drainage of the rivers, by the sun and rain, by the days and nights, which influence their temporality, myths, and traditions. Another aspect that needs to be highlighted refers to isolation: because they are distant from the urban centers, they have restricted access to the written media, with a relative access to the television and radio media. On the other hand, some riverside communities are socially very fragmented because of the distance between the residences; the river acts as a constrictor and source of contact, as a barrier, and environmental bridge, creating and restricting the possibilities of interaction, especially among the children. The river creates connections and isolations among the people of these populations (Harris, 2000).

The peculiarity of this population outlines methods and the relevance of the research. The isolation tends to foster a higher frequency of contact among relatives, which hypothetically should have implications in the family structure.

Considering the distance of the community investigated from the urban center where the authors live, Belém, and due to the lack of means of transportation to the place, the performance of the research has a dimension of time and costs involved in the transportation and maintenance of the team. Under these conditions, the only

way to enable such enterprise is through teams for intensive periodic gatherings. This form of research presents the challenge of overcoming the ephemerality that such contacts may represent. A research team with the riverside was formed by graduate students, mostly psychology, graduates (master and doctorate), and a professor coordinator. The subprojects were mostly related to dissertation projects and thesis, which sought to focus on different problems and contexts. Undergraduate students had their work plans connected to graduate projects. Although some had contacts with communities and/or riverside people and their way of life, for everyone, that world did not make part of the routine, which represented a challenge for the development of proximal processes and consequent research enterprise.

The purpose of the established research program was to investigate the existing inter-influences of the family system, with the peers and school. For that, a set of procedures was developed that favored the Ecological Insertion of the team of researchers in the community group.

The gathering of information in research team, organized into integrated subprojects, presented a set of positive challenging aspects. A first positive aspect was the possibility of a more general apprehension of the investigated reality. The systemic basis, which grounds Bronfenbrenner's model (1976/1996), demands the knowledge of the mutual influence among several contexts. In this way, researches developed in a team, organized into integrated projects that allow greater control over the various contexts of individuals focused researches.

However, for this objective to be achieved, a true integration of the team is necessary, that is, mastery of all the aspects involved, of objectives, methods, sharing of experiences and information, and extensive discussion. All these aspects lead to the need of a group formation that, regardless of individual interests, is interested and controls all the difficulties of the research.

The formation of the team was only the first step to enable the Ecological Insertion. In the field, the apprehensions should be shared by the research team, for the purpose of a better appropriation of the collective experience. It was in this sense that the strategy of "Collective Construction of Knowledge" (CCK) was developed.

The CCK allowed the improvement the gathering techniques and the data analysis, which allowed the Ecological Insertion and enlargement of the team's perspective of the reality. The CCK consisted in the gathering of the information through naturalistic techniques and participant observation and consequent collective discussion of the impressions obtained. The CCK technique was inspired by the practice adopted by different sections of family therapy, one of the strong points of the Milan school. This practice was characterized by the intense use of the one-way direction mirror in the therapeutic scenario, by which observers participated in the session, and later discussed and established the following intervention steps (Boscolo, Cecchin, Hoffman, & Penn, 1993).

In terms of operational performance, the CCK was set up from the constitution of the team. Before starting the field research, discussions were held on theoretical and methodological relevant topics to the work. Among the themes discussed, the most important were the foundations of systemic thought, bioecological approach,

qualitative methodology, use of field diary and participant research, semi-directed interviews, and the organization of qualitative categories (Bogdan & Biklen, 1994; Morgan, 1988). It was important that during this period, there was a shared domain of the problems, methods, and research interests in the team.

At the headquarters of the research base, which was about 30 min from the community by motorized boat, the researchers were divided into subgroups of dyads or triads. The division of the groups was mainly based on the criterion of experience, thus avoiding the formation of subgroups of less inexperienced people. After the planning of the activities of the day, the team was guided in detail about the work routine of each subgroup. After the gathered period, at the research base, the meetings held were about the field diaries, in which the coordinator or any of the researchers conducted the discussions of the research aspects of their interest.

The discussed methodology obeyed the following sequence and a very little agenda: (1) the objective report of each subgroup of the information gathered (tasks fulfilled, people interviewed, etc.); (2) reports of descriptive field diaries; (3) reports of reflective diaries in the field; and (4) field diaries under discussion. As the field diary should follow the parameters of Ecological Insertion, the axis of description was the PPCT elements. In the discussion, everyone could comment on their impressions, related or not to their research project. The main aspects discussed were noted by the researchers who were most interested in the subject in matter. From the discussions developed in the group, the subgroups met to reorganize the research material, more specifically the field diary, which could incorporate considerations made by the group. In this way, one could say that the field diaries began with an individual written essay and ended up as “gathering field diaries.” The difference of this technique to that of the traditional field diary is that the latter is usually written in the first person, which requires a personal tone. In the “gathering field diary” the personal nature occurs in the perception of the other members of the research. Researchers are required to incorporate the group’s reflection and, if necessary, to argue in an opposite way. In addition, the discussion in group of their perceptions allowed reflection and immediate feedback in the field situation itself. This aspect, in turn, became an educational area in which the sharing of perspectives enabled the exchange of academic, personal, and worldview experiences, besides a methodological training of the researchers.

At the same time, in order to prepare the group meeting, the coordinator summarized the main elements reported in the discussion. At night, after dinner, the group would get together again to make the evaluation of the activities and discussions of the day and the planning of the next day. At the team meetings, the perceptions about the bonds established with the participants were evaluated; essential element for the perception of those involved. The necessity to engage in routine activities was emphasized, which despite being intense should allow participants to talk about their experiences and, thus, better capture relevant units of meaning for the research. We discussed the relationship between the items of analysis proposed in the model and incorporated into the research subprojects.

This systematization enabled the configuration of an integrated research team, so that it allowed the sharing of information and the confrontation of perspectives, an

essential element for derivation and refinement of the object and research problem as well as of the respective methodologies to be used.

The CCK also allowed for greater “ecological validity” for the research, as for the properties supposed or presumed by the researchers of the environment experienced by the participants are confronted with the view of other members of the research team. On the other hand, the intensive sharing of information allowed rapid adaptations and adjustments, necessary in the field researches such as in this research, enabling a better Ecological Insertion of the researchers.

It was also evaluated that the adopted procedure facilitated the process of contact researchers-community. The small community did not have any type of community organization, which could hinder the presentations of the research team for the community as a whole. In this sense, the researchers were gradually presented with the help of the informants (such as the farm foreman, the research base). The Consent Form was given only when it was evaluated that certain components of the community would really participate in the study. The visits in dyads made it always possible to merge someone already known and with more experience in dealing with the community, with less experienced researchers.

The arrival of the research team in the community was always an event that attracted the attention of all its members. Despite the contact being always friendly, some families were more likely to talk about the proposed topics of interest to the research. The progressive contact made possible the adaptation of the techniques and instruments applied to the profile of the residents of the community. In this sense, for example, the reception of the researchers was something that always called the attention of the whole family, and for that reason, many of the interviews were open to the rest of the members. However, the research topics on the relationship of the family members were developed at a separate time and place. In order for the interviews to fit more closely to the flow of the local relations, the formality of questions and answers were avoided; a kind of conversation in which the interviewee was also in charge of the topics discussed should occur. The introduction of the recorder to record the conversations only happened when the team judged that its use would not be a disruptive element in the proximal processes in development. Under these conditions, the field diary was extremely useful, because it is a less “invasive” technique. However, the use of the recorder did not exclude the use of the field diary, which was used consecutively at any meaningful contact with the research participants. The contact procedures and their respective adaptations were part of the group discussions at the evaluation meeting of the day of the research.

The CCK methodology brings with it some ethical issues and concerns, especially those related to the sharing of research information in a larger group—the research group—because in all other aspects, caution is very similar to those of the research field. It is understood that these aspects are similar to the ethical considerations that we must have in the stages of medical center, in which a particular case is shared with the set of trainees. In fact, in the team there must be a deep and ongoing discussion about the need for an ethical posture. This posture should not be limited to the simple use of the Consent Form and post-research responsibilities, since the sharing of field diaries by a larger group should imply at the same time a

discontinuation of such discussions internally to the research group in which such debate is important.

The CCK was also very useful for the adequacy of the posture of the researchers to the subgroups. In this sense, it was noticed that the community, although very small, was divided into subgroups, being in some cases essentially related to family environment, others related to affinities, such as religion or leisure. The CCK made a quick adjustment of the researchers to the natural forms of community organizations possible, treating carefully the issues that could cause embarrassment such as issues of some family relationships, religion, and leisure. The intense contact of confrontation of opinions among observers allowed the refinement of the issues and the problems involved in each subproject. The CCK method reached the role to enable the Ecological Insertion, as the research subprojects involved are integrated base on the units of analysis proposed by the bioecological approach. The CCK allowed a project of a collective nature, a position of collaboration open to the most diverse forms of sharing, ranging from the diversification of people looking at each other and methodologies used to the sensibilities arising from the personal story of each of the researchers involved.

The intensive interaction between researchers in shared residence, the meeting routine of the pre- and post-field situation, the academic atmosphere, and, at the same time, relaxed - after the agreed commitments everyone could enjoy the place— which in most of the time, was done together—, enabled a collective relational dynamic, in which the motives of the involvement were always emphasized on the behave of the project. However, this supposed focus did not hinder the development of independent relations to the motives and concerning other dimensions, aspects that were fundamental to the own involvement of the project.

Final Considerations

If the Ecological Insertion is considered under the CCK patterns, one can verify the creation of a different dynamic in the observing system (Fig. 16.2). The view of only the researchers is no longer considered, but of a team that in its interactional dynamics defines and structures the object of the study. This, in turn, by the proper dynamics of the relational contexts studied, require adjustments by the team.

The bioecological perspective adopted by Bronfenbrenner (1976/1996) may help to understand the game of relationships between the people and the contextual levels identified over the time. However, more than a model of analysis, it is understood that their guidelines have methodological implications, because as Ceconello and Koller (2003) observe, the process of construction of the research is permeated by proximal processes that assume the double feature, both to construct the research focus and to enable its achievement. In this chapter, it was proposed to indicate how these impacts materialize in the research process with a riverside population, whose geographic distance from the academic centers brings challenges for the development of researches based on the Ecological Insertion method.

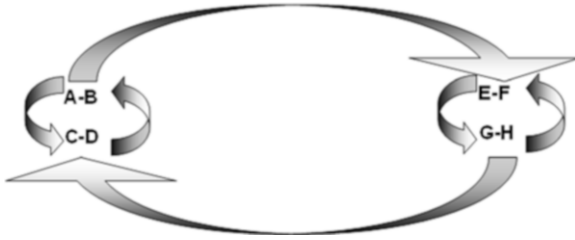


Fig. 16.2 Schematic representation of the observing system in the Ecological Engagement to the molds of the Collective Construction of Knowledge. A, B, C, and D represent members of the research group and E, F, G, H the research participants, each with its own dynamics of its group, yet forming part of the same system.

Proximal processes are at work throughout the research and the consideration of such processes is fundamental to the success of the same. Thus, the analysis of the four components of the bioecological approach—process, person, context, and time—requires that researchers consider that they are dynamically revealed. That is, the aspects related to the proximal process depend on the characteristics of the person, the context, and the changes and continuities that occur over the time (Ceconello & Koller, 2003). The revelation of the dynamics among these components is only possible from the Ecological Insertion of the researchers in the set of interactions and as part of the interactions which happen in the study context and in the research group. The CCK is a strategy that allows, therefore, to provide an effective system to the Ecological Insertion in the performance of these internal components in the research team.

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Chapter 17

The Use of Field Journal in the Ecological Engagement Process



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This chapter describes the use of field journals in research using the Bioecological Approach to Human Development. Initially, some theoretical and methodological assumptions that characterize the Ecological Engagement are presented. Next, aspects of the preparation of the field journal in the course of the research, of the participation of the team in this and in the formulation of the registers are discussed. Finally, we present the use of this instrument from research data on the mental health of adolescents and their caregivers, with 30 adolescents and 28 family members in a context of social vulnerability, as well as the way of analyzing these data. It concludes by highlighting the relevance of the field journal as a way of guaranteeing the quality of the collected data and the ecological validity of the research.

Ecological Engagement and Bioecological Model of Human Development

The Ecological Engagement consists of the theoretical–methodological operationalization of the Bioecological Approach to Human Development proposed by Urie Bronfenbrenner (1979/1996). In all his writings, Bronfenbrenner mentioned a need to use a methodology to investigate human beings in their natural environment, taking into account, in addition to the context in which it is developing, also aspects relevant

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to its history, psychological processes, and perspectives of action. He usually criticized quantitative research using classical methods of investigation, framed in the positivist tradition, which involves the manipulation of variables in an attempt to establish a cause and effect relationship. In the maturity of his theory, Bronfenbrenner proposed the process-person-context-time (PPCT) model, which advocates the interrelation of these components and emphasizes the role of the process component (Bronfenbrenner, 2005; Bronfenbrenner & Evans, 2000; Bronfenbrenner & Morris, 1998). However, the author of the theory did not present a closed methodological proposal on how to carry out a research considering all these aspects.

According to Tudge, Mokrova, Hatfield, and Karnik (2009), any research that aims to effectively contemplate each concept of bioecological theory will be dense and complex. The Ecological Engagement was presented as a methodological possibility to perform research in light of the theoretical assumptions of the bioecological model of the human development of Bronfenbrenner. However, while every study using this method should be based on the bioecological model, the reverse is not equally true. That is, not every study using the bioecological approach needs to use Ecological Engagement.

Cecconello and Koller (2003) proposed the Ecological Engagement based on a study on the processes of resilience and vulnerability in families in situations of social and personal adversity. Later, Paludo and Koller (2004) proposed the use of this method in working with street children. Many questions about the application of the method, however, still existed. In this sense, Eschiletti-Prati, Paula Couto, Moura, Poletto, and Koller (2008) reviewed the method and more clearly delineated the fundamental characteristics of the method, emphasizing that with its use “ecological researchers are concerned with understanding the process of people development” (p. 163). However, some crucial issues still need to be discussed; among them is the development of studies that contemplate the four dimensions (PPCT) both in the design and in the forms of analysis of the results in the light of the bioecological model.

Since Cecconello and Koller in 2003 proposed the Ecological Engagement, its use was applied to a majority of research associating quantitative to qualitative analyzes (Cecconello & Koller, 2003; De Antoni & Koller, 2004; Morais, 2005, 2009; Neiva-Silva, 2003; Paludo & Koller, 2004). Therefore, they aimed at bringing a more ecological view of the quality of the data obtained by combining quantitative instruments (such as scales, inventories, questionnaires) and qualitative ones (interviews, informal conversations, and observations, for example).

Bronfenbrenner and Morris (1998) proposed the PPCT model. The studies based on this model should focus on the proximal processes emphasizing how they influence and are influenced by the characteristics of the person and the context, and should show how these proximal processes are relevant to the development. In the PPCT model, *Process* is the interaction pattern of the person with the environment, other people, objects, and symbols. Defined as a *proximal process*, it is the motor of development (Bronfenbrenner, 1995a; Bronfenbrenner & Morris, 1998).

Person refers to the biological, physical, and psychological characteristics that, interacting with the environment, are both products and producers of development and influence the proximal processes by their demand, resource, and force (Bronfenbrenner, 1995a; Bronfenbrenner & Morris, 1998).

Context is the immediate environment of the people (home, school, work) that provides face-to-face interaction, with stability and reciprocity, promoting the proximal processes (Bronfenbrenner, 1979/1996).

Time influences each particular and unique development process, as well as the policies and dominating values. Individuals and groups of the same generation share life stories and experiences (Bronfenbrenner, 1995b). Therefore, development is understood here as a process marked by constancy and transformation (Bronfenbrenner, 2005).

The concept of the proximal process, considered the motor of development, includes the complexity of the activities in the research, in the sense of advancing the data collected only with observation. At this point, the use of psychological tools may be an alternative, but it may also be a call for the qualification of these findings in addition to the crude data obtained, in the search for contextualization of the same in the development cycle of the human being in interaction. In fact, this is an important point, because the bioecological study of human development implies interaction with other people, objects, and symbols from the environment, taking into account its history, routines, inter-generational, and not simply the person as an isolated being and with its internal psychological processes.

An important point in the design of the Ecological Engagement method was based on the fact that Bronfenbrenner himself, in his studies, although emphasizing data quality, never performed a qualitative research. He called for the ecological validity of the data collected, emphasizing the need to oppose the results of the instruments and the conclusions of the researchers to the contextual facts observed and analyzed that the research had pointed out. In *Two Worlds of Childhood*, he relied heavily on formal and informal observations of childhood and child rearing in the Soviet Union. These data seized by different sources may be complementary or opponents, which requires a more complex understanding of the studied phenomena and their interrelationships. More importantly, it emphasized the importance of applying research results to public and social policies that could make a difference in the quality of life of the people involved (Bronfenbrenner, 2005). However, although his ideas had been widely used for this purpose, he never performed a survey himself that would lead to this possibility.

Using the Ecological Engagement in Research on Health and Mental Illness

Ecological Engagement has been used in qualitative–quantitative studies (Cecconello & Koller, 2003; De Antoni & Koller, 2004; Morais, 2005, 2009; Neiva-Silva, 2003; Paludo & Koller, 2004). Aquino-Morais (2008) sought to know the vision of health and mental illness of adolescents and their caregivers in a community on the outskirts of the city of Porto Alegre. The use of the engagement in this study made it possible to apprehend the reality of the context investigated, to access the

quantitative data, and to guarantee the ecological validity of the research. According to the Ecological Engagement, the phenomena are analyzed in a contextualized way and related to direct and indirect variables with which they interact. Thus, the research examined the four components of human development, according to Bronfenbrenner (1979/1996): the person of the adolescent and of each of his/her parents; their interaction with each other (*processes*); the influence of the environment (*context*) on the development of people; and the length of *time* they occurred. Since the process is the main component responsible for human development to be observed and analyzed in the Ecological Engagement method, reciprocal interactions were recorded in field journals by the team (Bronfenbrenner, 1995a; Bronfenbrenner & Morris, 1998).

The proximal processes were the forms of interaction in the immediate environment experienced by the research participants (the person). In the definition of proximal process, the simultaneous presence of five aspects related to the interaction of the participants with the researchers was identified: (1) engagement in research; (2) interaction established on a regular basis, over extended periods of time; (3) the complexity of activities; (4) the presence of reciprocity in interpersonal relationships; (5) the fact that the objects and symbols present in the immediate environment stimulated the attention, exploration, manipulation, and imagination of the developing people involved in the research. The shape, strength, content, and direction of the proximal processes varied systematically as a joint function of the characteristics of the developing people, the environment—immediate and remote where they occurred, the nature of evolutionary results, changes and social continuities that occurred over time, during the historical period in which the research occurred (Bronfenbrenner & Morris, 1998).

The context was analyzed through the interaction of four environmental levels: microsystem, mesosystem, exosystem, and macrosystem, which made up the ecological environment where the research was carried out. The microsystem was defined as a pattern of activities, roles, and interpersonal relationships experienced by participants and researchers, such as people in development in the attended environments and in where face-to-face relationships were established. The mesosystem consisted of the set of microsystems that people attended and in the interrelationships established in them, for example, the family residences, the community vocational education social training center—where the data were collected—the staff meeting room, among others. This was extended whenever a new person started to enter a new environment. The processes that operated in different environments were interdependent, influencing each other. The exosystem involved environments that people did not attend as active participants, but which indirectly influenced their development, such as the work of the parents, the institutions that are part of the social, health, and community support network. The macrosystem was composed of the standard of ideology, beliefs, values, religions, forms of government, cultures, and subcultures present in the daily life of these people. Values, beliefs conveyed by families and the culture in which they were educated influenced the way parents educated their children by acting on their development (Bronfenbrenner & Morris, 1998).

The Use of Field Journal in Bioecological Research

A field journal is an instrument of notes, comments, and reflections, for the researcher's personal use. The researcher's observations of concrete facts, social phenomena, events, verified relationships, experiences, and subjective perceptions are recorded in it (Falkembach, 1987). This research instrument demands systematic use from the first moment of going to the field until the final phase of the investigation. The richer in annotations, the greater will be the aid that will be offered to the description and the analysis of the studied object (Minayo, 2002).

To provide a more descriptive overview of the process of Ecological Engagement of researchers in context, the use of the field journal can be presented as a fairly appropriate alternative. The description of the context, the people involved, their histories and routines (time), and their proximal developmental processes should be recorded. An important aspect to be remembered here is that researchers are people in development and therefore also participants in their own research. That is, the development processes of the same ones crossed the obtained data and added quality by the psychological processes lived by them like people, in their contexts, and with their life histories. Therefore, the person of each of the researchers was strongly present in the perception of the reality of the research, in their view on the data obtained and in their reports about the same field journals.

The field journal is consisted of written records and was performed by each member of the research team at each field visit. In the journals, there were impressions of the facts witnessed and reported by the participants, during the Ecological Engagement and in the intervals between the researchers' visits to families and the community. When using the method of Ecological Engagement in the research, it was indispensable that the journal writing contained the variables of the person, the process, the context, and the time related to the object of study. In Aquino-Morais (2008), each of these aspects was described in relation to the broader dimension of mental health, since this was the object of study. Thus, all the aspects observed, from the living conditions, dynamics of the institution, community, families, interaction with the health center, among others, were related to adolescent health. It focused on risk, vulnerability and protection factors since they contributed to health promotion or not.

Aquino-Morais (2008) proceeded, as widely recommended in other studies that used this methodology, to the theoretical, methodological, and ethical training of all team members (Paludo & Koller, 2004). This occurred prior to the start of the Ecological Engagement and the data collection. The research team was enriched by the presence of two European Psychology students, one from Finland and one from Belgium that could add a different look on the reality investigated from their perspective and their experiences as foreign researchers. Usually, the team met after the visit to discuss the events and to carry out necessary procedures and referrals. The journal was then drafted individually.

During the research, Aquino-Morais (2008) offered his team weekly supervisions. They last an hour and a half, in which field journals were shared to discuss the

progress of the research and to evaluate its continuity. The Ecological Engagement was assured and specific cases were discussed in each supervision. In this space also the feelings and impressions of the team were shared (affection support); the impasses experienced during the collection were discussed, and bureaucratic and operational aspects related to the use of material, schedules, and availability of the researchers for application of instruments and visits to the community were discussed. This space worked as a permanent supervision of the Ecological Engagement process and of the field journals progress.

During the research, written records of the proximal processes, the contexts and the interaction of the team between themselves and with the participants were elaborated. Each visit to the institution (training center), the community, health centers, schools, community association, and adolescent families was made, in the most faithful and detailed way possible, describing situations, perceptions, visions, lived and known facts (by others' reports), and feelings experienced. These notes were written, preferably on the same day and soon after the end of the visit, so that the expression was more reliable and contained the emotional content of the researchers involved. It was stressed the need to clarify what was described as a fact occurred and observed and differentiated from a personal impression or superficial commentary.

The adolescents and their families were contacted through an important community institution that carries out social work. The first contacts of the research team were made in this context and from it the access and investigation. The vocational center was part of a larger social organization that served the community in the area of education and health, as well as professionalization.

The first space to be explored was the institution, from where the adolescents were accessed. The duration of this process was from September 2007 to April 2008, and the meetings were initially more systematic with weekly visits and later were more spaced, becoming monthly. Monthly follow-up did not minimize the communication and exchange of information with the research team. Faced with the needs and impasses that occurred in other contexts, the team made contact and sought the assistance of the institution.

The initial contacts were established with the management and teachers in order to make them cooperators in the process and to be familiar with the dynamics of the institution. Talking with the professionals was possible to know a little about the life history of some adolescents, who at the time were seen as "problems" and how they affected the daily life of their work. Through these conversations, it was possible to observe how the community and the families of the adolescents were seen by the educators as microsystems that directly influenced the behavior of the adolescents. What happened outside the institution had direct or indirect consequences in this context, more visible in the adolescents' behaviors. Educators knew the students who were involved in drugs, trafficking, child labor, domestic violence, early pregnancy, and abortions, among other situations. These facts had repercussions for the behavior in the institution and the posture of professionals, educators, social worker, psychologists was to seek to mediate these situations, when possible or to offer some form of support.

The engagement in the community was concomitant to that performed at the institution. The psychologist led the team to the community space and presented the main contexts such as health centers, schools, kindergartens, church, library, and community association. The first contact with the community allowed observing general aspects of structure and location. It was only during home visits that it was possible to enter the dynamics of the community. The informal conversations established by the team with pedestrians, merchants, children, and young people made it possible to know aspects of the community that were not foreseen in the beginning. Among these, it was verified that in the period of execution of the research, from September 2007 to April 2008, the community experienced a quieter period in terms of trafficking and homicides, as the biggest trafficker on the hill had been arrested a few months earlier. This fact generated calmness between the agents of the traffic. However, drug outlets continue to be visited, and the research team itself could, on numerous occasions, witness these transactions. Through the Ecological Engagement, the phenomenon of social mobility that occurred within the community and that denoted the socioeconomic castes and iniquities that happened was verified. To know the dynamics of the community, the research team sought to visit the context in different shifts and days of the week, as it made home visits to the adolescents' families. By getting to know the community better, new information was added about the study participants, bringing a more complex view of reality and contextualizing the collected data.

The data obtained in the field journals of the research team allowed knowing the reality of the context, the families and their members, from the perspective of the researchers who carried out the Ecological Engagement. That is, this knowledge went beyond the objective of the research aimed at the study of adolescents and their families' view of their mental health. The interconnection of information and apprehension of reality allowed us to understand how the research was being received and interpreted by the participants and also by the researchers. This posture allowed guaranteeing the ecological validity of the research, minimizing the biases of interpretation, increasing the capture and understanding of the context, as well as a better reliability of the results.

Analyzing the Field Journal

The field journals were analyzed from the organization, repeated and careful reading of their content and discussion of the data, being raised the topics addressed by the researchers in their records. A pre-analysis was performed and the exploitation of the materials produced by the team and then the data processing, inference, and interpretation. In the pre-analysis, the data were organized after the floating reading of all the collected material in questionnaires and interviews, in informal conversations, and the records of the field journals. From this reading a plan of analysis was drawn up. Some hypotheses were emerging, based on the research objectives, and the data were systematized in thematic units. The material exploration phase

consisted of coding the data, taking into account the homogeneity, representativity, completeness, and differentiation (Bardin, 1979; Minayo, 2000). In this way, the established categories were codified from the content analysis of the field journals.

In the reading and analysis of the reports, recurrent themes were identified in the reports of the journals. They were condensed into three thematic units: team, participant/context, and research strength, and then, divided into categories and subcategories. Tables 17.1, 17.2, and 17.3 present the thematic units, the categories, and subcategories extracted from the field journals with citation of reports, which were authorized by the members of the research team.

Table 17.1 shows the points related to the research team since it is also considered a participant in the study itself. As stated earlier, it is understood that researchers are developing people who influence and are influenced as they establish new interactions—proximal processes—in the contexts in which they are inserted or that are constructed; in this case, the context of the research and the group that integrates the execution of this. The categories express, to a certain extent, the processes of development of the researchers when portraying the impact suffered from the conditions of life, with the impasses between being a psychologist and a researcher and the empathic posture to establish a bond that was reflected in the reciprocity of the participants. The detailed description of the social reality in the diaries allows identifying factors that relate to and influence the mental health of adolescents, which were not included in the questionnaires.

Table 17.2 presents data about the context of the research and participants. The subcategories and the exemplifications of the writings reveal aspects of the reality of the community, the families, and the institution. The richness of the details allows us to know a little more about the aspects that characterize the daily life of the research participants, such as the precariousness of the community, the physical and mental limitations of the residents, the high number of children in the families, older siblings who need to play the role of parents in daily care. The identification of these characteristics and situations is useful to subsidize the researcher in the analyzes of the data of the research and to assist him in the more systemic understanding of the factors that can be related to the object of the research, in the case, the mental health. In the family interviews, the occurrence of several mothers with a mental disorder was identified, mainly depression. By interconnecting the data collected by different instruments, it becomes possible to access stereotypy of mental illness and pharmacological treatment and to understand the multifactors that may be related to mental illness, such as low quality of life and high-stress levels. If these social aspects are also not considered, traditional medical treatment will be ineffective since basic needs are not met.

Table 17.3 shows records that express some qualities of the research, which could be perceived through the behavior expressed by the participants. The finding of a trust bond represents and characterizes the constitution of proximal processes that were established between participants and the research team. The reception and the receptivity of the families are expressions of individual, familiar, and even cultural characteristics, since, through the journal of the foreign researchers, it was possible to perceive the positive impact of these characteristics also on the

Table 17.1 Analysis of the thematic unit “extracted from field journals”

Unity thematic	Categories	Subcategories	Examples of entries in the diaries
Team	Impact	Social reality	<i>“There is a quite different situation in the village, where you can see very poor houses and other more structured ones”</i>
		Life perspective	<i>“Lack of information and neglect of the family in relation to a daughter with a mental disability, she has already impregnated four times with different boyfriends and the family takes care of these grandchildren without taking any contraceptive attitude or anything like that”</i>
		Poverty and precariousness	<i>“Going up the hill, we found lack of basic sanitation, streams with garbage, being a focus of dengue and other diseases”</i>
		Extended families	<i>“In total, there were eight people in this house, having only one room with a double bed and one with a bunk bed”</i>
		Generosity of families	<i>“From the ‘nothing’ they owned, they offered us coffee. The mother opens the cupboard and removes a strainer containing coffee powder already passed, warms up water and serves us”</i>
		Solidarity	<i>“The rain was intense and we had no umbrella ... this need was a reason to raise awareness of the first family we visited who lent us the umbrella to then come back and return”</i>
		Receptivity, simplicity and spontaneity	<i>“I confess that I found the boys lovely! That is the word to define them, because they could be teenagers, amid the chaos that seems to be their lives. They played and played with the naturalness of any other”</i>
	Impasses	Support for the participant	<i>“He stated clearly and effectively the adjustments that could be made by the couple so that together they could seek better solutions in order not to lose the positive characteristics that each one could bring to contribute in education”</i>
Themes	Categories	Subcategories	Examples of journal entries
Team		Role of Researchers X Psychologists	<i>“The mother was a very limited person, she did not know how to ask for help, even if she needed it ... I found myself in a stalemate between researcher and psychologist, because I realized that she needed help, and how could I then come to help without that she was a research participant”</i>
		Feeling frustrated with reality	<i>“Another frustrating and irritating situation is the difficulty of joining some families, of having the time and availability to apply the instruments, of committing to answer the questionnaire”</i>

(continued)

Table 17.1 (continued)

Themes	Categories	Subcategories	Examples of journal entries
		Questioning, revolt, restlessness	<i>“How can a human be subject to it? How can he live or survive in such subhuman conditions ... without great prospects, content with the least, what do you think is the maximum?”</i>
	Relationship	Trust, bond	<i>“She trusted her problems, she wanted, a need to talk”</i>
		Perception of foreign researchers	<i>“I have never seen a people like this, the Brazilians are so different, so human, with a big heart, but especially the ones we find in the favela”</i>
		Researchers’ attitude with the participants	<i>“This kind of work demands a lot of patience, a lot of respect, and also some control of your emotions ... not easy, each person has their expectations, their thoughts, each case is unique and different, it is not possible to make a generalization, and have a good answer to everything”</i>
		Promotion of change	<i>“He told me that he went back to his sister, who had not spoken for a year. I was very pleased with the novelty and with the openness and confidence of her, more than that, to realize that a single visit when one is full in context and seeks to become involved with the family, it is possible to be a promoter of change”</i>

researchers. Moreover, the establishment of a reciprocal relationship between staff and families is also due to the researchers’ position in putting themselves open for the encounter (proximal process). This ethical posture of respect and listening enabled the construction of a good relationship which is perceived in the analysis of the diary.

Conclusion

The theoretical–methodological framework of the bioecological model of human development (Bronfenbrenner 1979/1996; Bronfenbrenner & Morris, 1998) and their operation through the method of Ecological Engagement are possible to be used in qualitative, quantitative, and mixed studies. The research team’s vision during the process of Ecological Engagement was based on the premises of the bioecological model and guided by the objective proposed in the research.

The field journal can, therefore, be considered as a useful tool to describe the Ecological Engagement, since it makes possible the detailed recording of the interactional processes that occurred during the research between participants and researchers, the research team, and the research contexts. Through this instrument,

Table 17.2 Analysis of the thematic unit “participants” extracted from field journals

Participants/context	Characteristics of participants during Ecological Engagement	Lack of privacy in homes	<i>“When we arrived at the place we did not know for sure where to enter because in the same number there were three houses that later we saw that they were distinct and unrelated families, different from the majority that divides land with relatives”</i>
		institution	<i>“The school is well maintained, clean and maintained. We were well received by the coordinator” (referring to the vocational center)</i>
		Mental problems	<i>“As we walked down the hill, we passed many people who appeared to have neurological sequelae, developmental disorders, perhaps caused by deprivation, malnutrition or alcohol and drug use”</i>
		Interaction of parents with their children	<i>“The children stay close to us to participate in the conversation, stay in the mother’s lap, playing with the dog or with something nearby ... their way of educating is aggressive with their children, threatening to hit, but at the same time it is affectionate and is respected by the children”</i>
		Brothers caring for siblings	<i>“The house is full of children and the eldest son who takes care of the help of the third. They are very partners and carers of the rest of the children. They play, they bathe, they make the vitamin for everyone, they take care of the cold”</i>

Table 17.3 Analysis of the thematic unit “positive points of research” extracted from field journals

Search + points	Trust Link	<i>“Ana shows us the presents she bought for her daughters, says she loves to see them coming out very neat. Invited to visit the club she works ...”</i>
	Welcoming	<i>“...welcomes us with a big smile and much joy ... It is with confidence that your mother agrees to meet us and speak to us. The people here are amazing: she is so warm, so generous everyone kisses them as if they have known us for many years”</i>
	Receptivity of participating families	<i>“Several sensations and feelings passed me ... the receptivity, this was very present, because everyone was helpful and receptive. They wanted to help the most. They also proved to be quite curious”</i>

it is possible to capture the subtleness of the development process on the personal, cognitive, emotional, and social level of individuals related to the research during the execution of this research, including the team itself.

In addition, the use of the field journal by the researchers, during the process of Ecological Engagement, allowed the registration of several phenomena that apparently occurred isolated. However, when composing the research history and its connection with each analyzed component—process, person, context, and time—the interconnections that explained and helped in the understanding of the studied aspect were observed. In this research, it was possible to understand how individual (illness), contextual (precariousness, violence, and drug addiction), and social factors (poverty) influenced the mental health of adolescents and families.

The records in the field journals also made it possible to identify the positives and negatives points of the research, helping to reformulate the strategies of engagement in the context, enhancing the importance of the link and the *timing* perception of the families/people. These characteristics were essential for the collection of reliable and quality data. In some situations, differences between the data reported in the questionnaires and those collected during the Ecological Engagement were identified, and these could be more complex to confront and comprehend the factor in question (see Aquino-Morais, 2008). When it is possible to identify positive and negative aspects of the research through the field journal, these can be indicated in the studies that make process evaluations.

Thus, the use of the field journal is encouraged in research that uses the Ecological Engagement method, since this instrument can subsidize the structuring, analysis, and comparison of the data collected, including the other instruments used in the study. In addition, through the field journals of the teams, it is also possible to point out or deepen aspects that were not foreseen at the beginning of the research and which later proved to be important. Some examples of these are the perception of the overload of the mothers; the high incidence of mental disorders among them, mainly depression; the finding of lower rates of violence in the community in the months of the research execution, among other situations. These are examples of aspects not advocated in the study that suggests through interviews and informal conversations that are directly or indirectly associated with the mental health of individuals and families. Therefore, it is concluded that the field journal is an instrument that assists the quality of the collected data and favors the ecological understanding of these.

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