Chapter 2 Understandings of Coping: A Critical Review of Coping Theories for Disaster Contexts

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2.1 Introductory Review of Dominant Approaches

This chapter addresses the behavior, thoughts, experiences, and feelings of individuals who have been exposed to strain or stress. While Chap. 1 covered approaches to understanding and handling "natural" disasters, this chapter addresses the psychological and broader social science-based approaches to handling stress and strain. We then analyze these approaches to determine the extent to which they can be applied in a disaster-related context.

Historically, the subject of coping took root in the mainstream psychologies in the 1960s as a means to mitigate the negative consequences of stress (Folkman 2011). For a long time, the primary psychosocial consequences of disasters were viewed to be the harm and damage suffered by the individual. Generally speaking, an individual's stressful life circumstances were considered only in terms of their potential to negatively affect that individual's ability to function mentally, physically, and socially. It was only later that the positive aspects were recognized as well. Bonanno et al. (2010) and Masten and Narayan (2012) demonstrate the many different ways in which adaptive functioning can occur following a disaster. Under normal circumstances, disasters do not result in psychological and social collapse. In fact, they tend to yield a wide variety of trajectories, most of which are positive in nature. As a result, concepts such as resilience and competence became increasingly important, not only in the macrosocial field of disaster management (see Chap. 1) but also in the area of psychological functioning.

The mainstream psychological coping models can be seen as one specific way of looking at the process of handling strain. These models are similar to the goal-based models of human nature (Carver and Connor-Smith 2010), in which the basic

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motivation of human beings is to move toward (that is, approach) goals while avoiding threats.

From the very beginning, one of the strengths of the psychological coping models was the fact that they were conceived to yield both positive and negative results. These models address both successful and unsuccessful attempts to manage challenges or threats. Another strength of these models is that they attempt to draw a connection between internal and external elements: with coping models, challenges and threats (internal and external, for example, sickness or an earthquake) and personal resources (internal and external, for example, a high perceived self-efficacy and a resource-rich social environment) are viewed as interrelated factors.

In the first part of this chapter, we examine psychological person-centered coping models (PCCMs; Sect. 2.2). We then explore models that emphasize a broader context (Sects. 2.3 and 2.4) which focus on social and material resources. The former represent the dominant models for stress research in the mainstream psychologies (Folkman 2011). Depending on the model in question, the main focus lies either in the cognitive processes of appraisal and emotion regulation (Sect. 2.2.1), attribution of meaning (Sect. 2.2.2), religious forms of coping (Sect. 2.2.3), future-oriented forms of coping (Sect. 2.2.4.), or on the conceptualization as a mental health problem (Sect. 2.2.5).

In contrast, the resource-oriented coping theory addressed in Sect. 2.3 places more emphasis on the social and material contextual features of stress processes. In these theories, stress is generally viewed as a loss of resources (Hobfoll 1998). In the field of community psychology and in research on social support, the social context and social interactions are more central components in considering an individual's ability to combat strain. Social support is examined both as a part of the PCCM approaches (as an individual mobilizable resource) (Sect. 2.2) as well as in approaches that adopt a more context-specific understanding of coping (Sect. 2.3).

Sociology and related social science specializations also feature models in which coping and the resilience of the community in question are studied as social or collective processes. This approach shows strong similarities with the perceptions of disaster management discussed in Chap. 1. When considering community resilience or the application of social capital, the coping capabilities of large social units (for example, villages and neighborhoods) are of primary importance (Sect. 2.4).

The diagram in Fig. 2.1 provides an overview of the numerous perspectives and dimensions covered by the approaches to coping developed in both psychological and social science contexts. The units of analysis vary in size and their interaction with stressful events can be examined over longer or shorter periods of time, as needed. The diagram displays the past or prior history of stressful and overwhelming experiences. A coping episode can also be selected as a unit of analysis for a particular individual. This episodic approach forms the basis for the most influential psychological model, the appraisal-oriented psychological approach (Lazarus and Folkman 1984). In newer approaches in developmental psychology, coping is viewed as an adaptive process associated with a potentially long-term series of interactions with a potentially challenging environment. These approaches take into account the fact that a series of stressful episodes can lead to changes both in the individual and in the

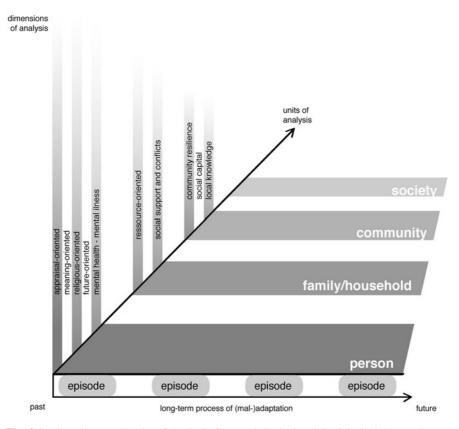


Fig. 2.1 Dimensions and Units of Analysis for Psychological and Sociological Approaches to Coping (DUPS)

environment itself (Skinner and Zimmer-Gembeck 2007; Leipold and Greve 2009). In addition, future-oriented coping is beginning to play an important role (Aspinwall and Taylor 1997; Schwarzer and Taubert 2002). Coping models that take the larger context into account include conceptualizations based on dyadic relationships as well as coping at the level of the household (as shown in the access model proposed by Wisner et al. 2004). Models of adaptation for larger social units in hazardous environments were introduced in Chap. 1. We draw upon these models at the end of this chapter.

2.2 Coping as an Individual Process

One of the most prominent individual approaches to understanding stress is the basic psychological model of coping (Lazarus 1966; Lazarus and Folkman 1984; Sect. 2.2.1). The development of this model led to a major boom in coping research as well as to extensive additions to the model. These revisions are briefly noted in

Fig. 2.1. In certain subfields of psychology (particularly those that concentrated on cognitive processes, health and illness, emotions, development, and personality), the coping approach continued to develop as it was applied to new issues. Following our introduction of the basic model, we address these developments. It was as a result of these changes, for example, that the understanding of "meaning" for the different cognitive appraisals in the context of coping gradually expanded (Schwarzer and Taubert 2002; Folkman and Moskowitz 2004 and Folkman 2011; Sect. 2.2.2).

In the 1990s, Folkman (2011) observed a reorientation toward resilience and well-being in research on stress. This new focus on resilience corresponded to the emergence of the branch of positive psychology. In addition, interest began to grow about the extent to which the search for sense and meaning (meaning-making) and religious orientations (Sect. 2.2.3) help the coping process. This new approach focused on the positive striving of human beings and the processes of growth and accumulation of resources in the face of challenges.

Another new point of interest was to investigate the ways in which individuals employ proactive coping in striving to achieve universal higher-order goals in life (Schwarzer and Taubert 2002; Sect. 2.2.4). The concept of adaptation used in developmental psychology is universalistic and the understanding of coping embedded in this concept utilizes a broader time scale than single episodes. Moreover, adaptation describes the (mutual) interactions between individuals and their environment, while coping refers exclusively to a single interaction with a specific event. Viewed in this way, coping represents a special type of adaptation that is applied to the broader context of human development by developmental psychologists such as Leipold and Greve (2009).

In the final part of Sect. 2.2, we take a comprehensive look at the pathways of coping associated with health and illness or, more specifically, with psychopathological categories and the need for therapeutic support. The process of coping with extreme suffering takes on a special status. Normally, this process is not addressed within the framework of general psychological coping literature and is instead treated as "trauma" in the branch of clinical psychology (Sect. 2.2.5).

2.2.1 Appraisal-Oriented Approaches

This aspect of the coping literature was developed in the 1960s in response to findings on the harmful effects of stress on health and well-being. The primary goal was to identify the factors that could potentially reduce these harmful effects. At first, these factors were purely person-centered; they were viewed as psychoanalytically inspired defense mechanisms and as stable properties of the personality like optimism or extraversion (see Carver and Connor-Smith 2010). This remained the dominant view until Lazarus (1966) proposed a model of coping based on the interactions between the individual and the situation, an approach that ultimately developed into the transactional cognitivist appraisal-oriented model of coping (Lazarus and Folkman 1984).

Person-centered approaches in this tradition claim universal generalizability and explain behavior from the perspective of the individual person. These approaches establish a connection between the external situation and the resources of the person in question. The coping process begins when the internal resources (for example, specific skills or abilities) and external mobilizable resources (for example, social support) no longer correspond to a demanding situation. This is then defined as a stress-inducing situation. One important turning point in what was previously an objective, behaviorist psychology was the assertion that this lack of correspondence was not determined *objectively*, but *subjectively*, by means of the cognitive appraisal of the individual exposed to the situation. This appraisal comprises the individual's subjective evaluation of both the demanding situation as well as the personal (internal) and external (social and material) resources (Schwarzer and Taubert 2002).

Coping is defined as the person's constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the person's resources. (Folkman et al. 1986, p. 993)

According to Lazarus and Folkman (1984), in primary (or demand) appraisal, a person evaluates whether or not there is any challenge, threat, harm, or loss with respect to commitments, values, or goals in his or her interaction with the environment. In secondary (or resource) appraisal, the person evaluates what can be done to overcome or prevent harm or to improve his or her prospects for a beneficial outcome. With regard to personal resources, the individual's subjectively perceived competence (perceived self-efficacy) is considered to be crucial (Schwarzer and Taubert 2002).

A cognitive appraisal is an individual's evaluation of the significance of what is happening in the world for his or her personal well-being (Lazarus 1991). Coping comprises two distinct functions: the internal emotion-focused coping, which serves to regulate emotions, and the problem-focused (or instrumental) coping, which serves to change the problematic person–environment situation. Problem-focused coping changes the relationship between the person and his or her environment, while emotion-focused coping induces internal changes in a person's attention or personal meanings (Folkman and Lazarus 1988). Beginning with the appraisals, emotions accompany the entire coping process. Emotions are analyzed as cognitive systems with an orientation function and tied psychobiologically to an appraisal pattern (for example, sadness to the relational theme of irrevocable loss). Lazarus (1999) emphasizes that emotions are relatively quick reactions in that they flow from the way in which we appraise events as they occur and as more information becomes available:

These appraisals are characterized by negative emotions that are often intense. [...] Emotions continue to be integral to the coping process throughout a stressful encounter as an outcome of coping, as a response to new information, and as a result of reappraisals of the status of the encounter. (Folkman and Moskowitz 2004, p. 747)

Subsequently, Lazarus (1991) incorporated coping into a complex cognitive—emotional system. According to Lazarus, the process of evaluating environmental situations triggers certain specific emotions that have evolved to benefit adaptation

processes. In a debate with Shweder (1993) regarding the universality of emotions, Lazarus (1993) argued that while certain core themes remain constant in any culture, different cultures define specific criteria for identifying these themes (for example, the necessary criteria for defining a personal insult).

Since the introduction of the coping model, a multitude of types of coping strategies were studied which appeared to be similar in empirical studies despite being derived from very different theoretical frameworks. For example, Folkman and Lazarus (1980) distinguished problem-focused coping (active change of the situation) from emotion-focused coping (control of the negative feelings if the situation cannot be changed), but in practice the coping strategies that people use are often mixtures of these strategies that cannot be separated. Skinner et al. (2003) suggested viewing different forms of coping as action types and proposed that these coping forms are adaptive in relation to the environment, the social resources, and the individual's own preferences and orientations. Within this typology, they defined five core categories: "problem solving, support seeking, avoidance, distraction, and positive cognitive restructuring" (p. 239).

The deciding factor in the expansion of coping research was the fact that the newly developed measuring techniques opened up the coping construct to quantification and empirical testing. However, the elaborate coping theory proposed by Lazarus (1991) was difficult to operationalize and presented problems with regard to the stability, generality, and dimensionality of coping (Schwarzer and Schwarzer 1996). In addition, a quantitative, measurement-based approach is limited in its ability to investigate special properties, for example, cultural distinctiveness, and places far more emphasis on universally applicable systems of coping. Subjectivity and subjective meanings are reduced to highly simplified elements (see Shweder 1993). Constructions are understood as part of a private, idiosyncratic process which has its universal roots in the core relational themes of the accompanying emotions. Both are anchored in a biological evolutionary adaptation model. According to Lazarus (1991, 1999), while meaning does not emerge from the sociocultural sphere, it is certainly modified by variables within this area.

2.2.2 Meaning-Oriented Approaches

Lazarus (1991, 1999) abandoned the behavioral model in which mind and behavior were seen solely as a response to environmental stimuli. He suggested examining the relationship between person and environment and introduced a relational perspective. Threat is viewed as a relational meaning that "a person constructs from the confluence of personality and environmental variables" (Lazarus 1999, p. 12) and "appraisal refers to the evaluative process by which the relational meaning is constructed" (p. 13).

Park (2010) further expounded upon the conception of meaning defined in the appraisal-based coping approach: *meaning-making* refers to the processes people utilize in order to reduce the discrepancy between their appraised situational meaning

and global beliefs and goals. It also refers to the development of explanations for varied reactions to adversity and a key distinction is between global and situational meanings. Another construct, *benefit-finding*, relates to the process of identifying benefits in adversity. It refers to perceptions of change as measured by self-report instruments (Pakenham 2011).

Global meaning refers to the individual's general system of orientation. Global meanings form the core schemas through which people interpret their experience of the world. They comprise beliefs, global goals, and a subjective sense of meaning and purpose. Situational meaning is appraised in the context of a particular environmental encounter. Situational meanings focus on the question of whether a particular event is threatening or controllable as well as on the causes of the event, and any implications it might have for the future (Park 2010). According to Park (2010), a discrepancy between appraised situational meaning and global meaning will create distress and result in an intense motivation to reduce this discrepancy through meaning-making. This process makes it possible for an individual to recover from a stressful event. Meaning-making is therefore both an automatic, unconscious process as well as an active coping activity. Automatic processes include, for example, intrusive thoughts about the stressful event and avoidance of reminders, among other things. Active coping may include identity-related appraisals. In some cases, these appraisals may lead to feelings of shame, guilt, or pride (Tracy and Robins 2004).

If the situational appraised meaning is changed as a result, this phenomenon is referred to as assimilation; if global beliefs and goals are changed, this is known as accommodation. The process of meaning-making implies a cognitive component (integrating experience with preexisting schemas) as well as an emotional processing component (experiencing and exploring emotions). The foundation for viewing changes in the external situation versus internal changes to the individual was already established in the distinction between problem-focused versus emotion-focused coping (Lazarus and Folkman 1984). However, in the recent conceptualization, meaning—along with emotion—assumes a more important role. Brandtstädter (2006), Leipold and Greve (2009), and Brandtstädter (2011), for example, expanded the relationship between accommodation and assimilation into a dual-process model of developmental regulation. Given the dramatic changes to the environment, accommodative processes are critical, meaning that individuals' life goals are modified to correspond with the actual situation.

Park (2010) points out that the mere search for meaning in the face of a catastrophic experience may not necessarily be beneficial to the health of the individual. Rumination may involve repetitive thoughts that introduce negative emotions without identifying a solution. The deciding factors are the products of the meaning-making process (*meanings made*). These meanings result in the subjective sense of having *made sense*. This may include a feeling of acceptance, a perception of growth and

¹ For example, a man may be proud that he has coped successfully by fulfilling the social expectations of a man or as the head of a household. Another man may feel a sense of shame with respect to his male identity because of ongoing fear or difficulty managing extreme emotions (Tracy and Robins 2004).

positive life changes, as well as the integration of the event into the identity of the individual. Park (2010) states that while there are complex constructs of meaning in theory, the operationalization of meaning-making efforts and *meanings made* tend to be rather simplistic. Although one of the central assumptions is that highly stressful events cause a *shattering* (Janoff-Bulman 1992) of the general orienting system and global meaning, there is little evidence to indicate that this shattering actually takes place. However, "it is clear that meaning-making attempts and meanings made are reported by most individuals facing highly stressful events" (Park 2010, p. 290).

Examples of Meaning-Making in the Context of Disasters Garrison and Sasser (2009) conducted a qualitative investigation of benefit-finding and meaning-making in families who recovered from the impact of Hurricane Katrina and were able to return to their houses. In their study, a number of different factors were included under the heading of benefit-finding: improved relationships within the family, insight into the importance of building relationships with people rather than objects, and pride about successful coping. The study found that sense-making resulted in the insights that "everything has a reason" (p. 118) and that the "storm taught us to see the important things" (p. 118). Attribution to a higher power could mean that "God had his reason" (p. 118; reference to God by 37% of respondents) or that respondents "interfered with mother Nature" (p. 118). Less than half of the interviewees expressed a "general acceptance" (p. 118) of the storms. Additionally, most of the respondents expressed optimism with regard to their futures and the authors found that humor played an important role in meaning-making.

One interesting question inquires as to whether such challenges can be accepted as mixed experiences. The Western model is one in which the aim is to reduce negative emotions and increase positive emotions. In contrast, Eastern or Asian approaches to emotions often allow for mixed emotional experiences, which combine both positive and negative aspects, to be accepted without attempting to unify these aspects or reduce negative emotions. This acceptance may make it easier to cope with the range of personal and social experiences inherent to the most difficult of circumstances. It is still unclear whether research on stress and disasters supports this view on mixed emotions (what Miyamoto et al. 2010 and Miyamoto and Ryff 2011 call *dialectical emotions*).

In a similar study on the subject of faith, crisis, coping, and meaning-making conducted by Marks et al. (2009), four different age groups were compared in order to draw conclusions about the relationship between disaster and psychological development. Respondents in the younger age groups (average age 37–54) viewed the storm Katrina that occurred 3–6 months and 6–14 months prior to the study primarily as a crisis (in the sense of a developmental challenge or turning point), while respondents from the older age groups (average age 74–91) tended to view the storm as an additional life experience. Respondents attributed the storm to God and "Mother Nature." One prevalent idea was that hurricanes served as a lesson in humility from

which people had to learn to accept a lack of control. However, it is striking that both religious and nonreligious respondents shared the view that it is important to do their best in the face of their struggles and, ultimately, to make the best of the situation.

2.2.3 Religious-Oriented Approaches

Religious coping has two contrasting dimensions: It not only can be seen as a specialized type of meaning-oriented approach to coping, but also represents far more than a search for meaning in situations of stress. Religious coping is often associated with special types of social integration; it is also related to the idea of social support. Orientations, beliefs, and practices associated with spiritual or religious life exert a significant influence upon the appraisal processes and coping strategies.

Spirituality is generally defined as an introspective, individual experience while religiosity describes a community experience. These two ideas are related, rather than being independent constructs. Through a combination of both constructs, individuals are able to seek support from a divine being as well as from other members of a religious community, make meaning in the face of distressing events, and ultimately promote resilience, healing, and well-being (Bryant-Davis et al. 2012).

According to Pargament (2011), religion adds a distinctive dimension to the coping process. In his view, religion is the search for significance in the sacred (Pargament 2011) and "religious coping is a search for significance in times of stress" (Pargament 1997, p. 90). The sacred is the common denominator in both religious and spiritual life. It represents the most important objective sought by religious-spiritual individuals, and, as such, is tightly interwoven in the course of their lives (Hill and Pargament 2008). *Sacred* refers not only to God and higher powers, but indeed to any element that is tied to God and therefore "imbued with spiritual qualities like transcendence, boundlessness and ultimacy" (Pargament 2011, p. 272).

The idea of a universalist conception of religiosity, which is independent of contextual and cultural associations and serves as a universal property of humanity, blossomed in the 1980s and 1990s in line with the development of a number of instruments for measuring religiosity (see Hill and Hood 1999). Pargament (1997, 2011) and Pargament et al. (2000) postulated that, during stressful life events, common religious beliefs can be translated into specific methods of coping. They not only showed how different religions opt for different systems of coping, they also demonstrated how the same religion, applied to different cultural contexts, might stimulate completely different methods of coping with painful and difficult life events. Pargament (1997), like Park (2010; see earlier discussion), states that people bring their own personal *orientation systems* to bear on stressful situations. This orientation system is the special way in which a particular individual perceives and interacts with the world: "It consists of habits, values, relationships, generalized beliefs and personality" (Pargament 1997, 99 f.). Religious orientation makes up a part of this

comprehensive orientation system. The culture helps to shape the coping mechanism and is itself reshaped by these forms of coping. However, Pargament's universalist, person-centered approach makes only minor concessions toward relativizing the culture-specific differences between the world religions.

According to Pargament (2011), every religious coping effort has a common end, that is, to enhance significance. This can be done by conserving or transforming significance. With conservation, the emphasis is on protecting or maintaining that which is of significance. With transformation, significance is maximized by attempts to change the nature of significance itself (Pargament 1997). This concept is very similar to the ideas of assimilation and accommodation used in the meaning-making approach (see Park 2010) as well as to the developmental approaches to coping (see Leipold and Greve 2009). According to Pargament, transformations take place only on an individual basis within the religious belief systems. Believers first seek to interpret the events they encounter in ways that allow them to conserve and confirm their existing meanings. It is only in extreme situations that they then seek to modify or transform the beliefs that make sense to them (for example, in the case of conversion or disavowal of previous beliefs).

The search for meaning filters and influences the interpretation of the situation. The system of religious beliefs, which is in turn a part of the general person-specific belief system, mediates between the situation at hand and the solution to the problem. Pargament portrays this accepted religious belief system (insofar as it is related to coping) as an array of opinions that are shared to variable and measurable degrees by the adherents of that system.

Difficulties arise in the religious coping approaches when it comes to gaining mastery and control because one subcategory of religious coping is relinquishment of control. Cole and Pargament (1999) discuss the paradox of the phenomenon of *spiritual surrender* in which people do their best while still relinquishing control to the higher being. They see this phenomenon as a universal response offered by many religions as an answer to human limitations. As part of this practice, person-centered control itself is surrendered in order to attain emotional and spiritual objectives (Cole and Pargament 1999). We believe that the authors transcend the cognitivist coping model (see Sect. 2.2.1) when they write, "spiritual surrender is much more than a cognitive shift. It is an experiential shift as well, one that involves changes in motivation, affect, values, perception, thought, and behavior" (p. 185).

According to Pargament (1997), the most helpful varieties of religious coping are those associated with a perception of God as supportive and feelings that God is loving and should be trusted to care for one's burdens. Perceptions of God as benevolent are particularly beneficial for coping. For some people, perceptions of a partnership with God are advantageous, and many derive strength from their religious communities. The social support they receive can ease the burden of coping. Overall, those aspects of religious coping were the only ones Pargament considered to be generally advantageous. Other forms of religious coping such as pleading—that is seeking control indirectly by pleading to God for a miracle or a divine intervention—appear to have either mixed or predominantly negative effects (similar to the view of God as punisher).

2.2.4 Future-Oriented Coping

Future-oriented coping is founded on the basic theoretical assumptions of the appraisal-oriented model introduced in this chapter and refers to an individual's strategies for handling future threats and challenges. In this respect, this type of coping represents one psychological approach to risk management. We addressed the collective dimensions of the topic of disaster risk in Chap. 1. We determined that it is difficult to assess the sociocultural-specific ways in which individuals handle risk using existing universalist models.

In the psychological coping research, future-oriented behavior was primarily analyzed in the context of individual health threats. Psychological models were developed with the aim of achieving universal validity. In the field of health promotion, there are both collective and individual strategies for handling risk. In a Western context, there is a heavy focus on the latter approach as well as on the rational control paradigm. It is with this in mind that Schwarzer et al. (2003) formulated the individual stages of the motivational and volitional process in their health action process model.

In the case of both disaster risk management and health-related action, there is still only a tentative relationship between the perception of a risk and the practical action taken to counter this risk. The assumption is that there are a series of universal psychological mechanisms that prevent precautionary behavior. Slovic and Västfjäll (2010) have shown that intuitive action in risk situations can lead to confusion and irrational behavior. Gigerenzer (2008) and Kahneman (2011) analyzed the weaknesses (and strengths) of risk heuristics and demonstrated that it is extremely difficult to weigh up multiple risks simultaneously. Because the perception of a potential threat causes unpleasant feelings, the individual turns to the process of wishful thinking (Lazarus and Folkman 1984). As a result of this process, the individual begins to assume that the threat is not serious or that he or she will not be affected. This corresponds to what is referred to as the optimism bias in risk perception (see Chap. 1). In some cases, a positive illusion in the form of unrealistic optimism was identified (that is, situations in which people believe they will be personally immune to a disaster, such as an impending earthquake; Burger and Palmer 1992). In another strategy, the individual associates any potential effects of the threat with external conditions rather than with his or her own behavior.

On a theoretical level, there are different conceptions of future-oriented coping known as *proactive coping*, that is, a "process of anticipating potential stressors and acting in advance either to prevent them or to mute their impact" (Aspinwall 2011, p. 334). In their conceptualization of proactive coping, Aspinwall and Taylor (1997) and Aspinwall (2011) propose a five-step model of future-oriented coping. This process starts with a general move toward resource accumulation. The process continues with the identification of potential stressors, the initial appraisal of their potential for threat, and the regulation of any accompanying negative emotions. Preliminary coping efforts are focused on relieving or diminishing the effect of the stressor as well as eliciting feedback and using it to regulate the initial appraisal and preliminary coping efforts. Proactive coping as an individual endeavor has mainly

developed in the context of threats to health; however, it has also been extended to threats in the fields of work, aging, and social relations. Although Aspinwall (2011) suggests that proactive coping should be extended to stressors in dyadic relations or families as well as to large-scale collective proactive coping problems, this theoretical framework has yet to be developed.

Schwarzer and Taubert (2002) propose a different, more differentiated terminology. Their terminology takes into account not only the timeline of the threat but also the certainty (or uncertainty) of the risk. This is an important dimension in the context of disasters because some disasters such as earthquakes develop rapidly and the effects are unpredictable. In this model, along with *reactive coping*, which relates to an event in the past, there are three additional forms of coping: preventive coping, anticipatory coping, and proactive coping. With preventive coping, a critical event may or may not occur in the distant future. This type of coping is associated with uncertainty and requires the management of unknown risks. This model corresponds to Aspinwall's (2011) definition of proactive coping. Anticipatory coping refers to a certain, imminent threat. In contrast, the concept of proactive coping proposed by Schwarzer and Taubert (2002) is not directly associated with a threat; instead, it is an "effort to build up general resources that facilitate promotion toward challenging goals and personal growth. In proactive coping, people have a vision" (p. 28). In this reading of proactive coping, future-oriented behavior is not dependent upon a threat. Goal management, rather than risk management, is central to this understanding. The focus of self-regulatory goal management is an active engagement with challenges and "ambitious goal setting and tenacious goal pursuit" (p. 29). Schwarzer and Taubert (2002) therefore categorize lifestyle choices characterized by active, future-oriented planning and accumulation of resources as coping behaviors.

In positive psychology, future-oriented behavior has increasingly been conceived of as separate from risk and threat. In this field, eustress is conducive to development and perceived as a positive challenge. If we view the selection and accumulation of skills and resources as strategies for self-regulatory goal management in the process of individual striving, the individual's stock of resources will make the individual more resilient in the event of a disaster. However, to date there has been little research on the relationship between the cultural context, and environments with fewer resources, and an individual's perceptions of the future.

Future orientations can be viewed as a part of future-oriented coping and developmental psychology as well. In these fields, they are understood as multidimensional processes that combine motivational, cognitive, and behavioral components (Kotter-Grühn and Smith 2011; Seginer 2008). Future orientations tend to be associated with hope, even under stressful circumstances, and, according to Seginer (2008), these attitudes comprise both culturally specific as well as universal components. Seginer shows that individuals who are part of collective societies (see Sect. 2.4) are able to draw upon the goals of their community as a reservoir of communal or religious ideologies that have been practiced since childhood. In contrast, individuals from individualistic societies have less community-based support and must find and pursue their own personal goals.

Resilience has come to serve as a bridge concept between episodic periods of coping and the lifelong objective of human development. Leipold and Greve (2009)

understand development as "the maintenance and implementation of the individual's abilities to use regulation processes to adapt to a challenging situation" (p. 42) and resilience as "successfully overcoming adverse developmental conditions" (p. 40). Following Brandtstädter (2011), there are two equivalent transformation processes working in tandem as part of episodic coping and lifelong development: the first is an intentional, personal assimilative mode in which the individual's life situation is brought into alignment with his or her expectations and goals. The second is a subpersonal accommodative mode which involves revising standards and goals to suit the given possibilities for action. According to Brandtstädter (2011), neither mode has primacy. He criticizes prior coping research, which, in his view, focuses mainly on the persistent pursuit of goals while neglecting the accommodative processes. Leipold and Greve (2009) limit intentional, planned agency by viewing the entire accommodative mode as sub-personal, that is, as a regulation process that takes place partially outside of the individual's personal control, and which, to some extent, is not accessible to the individual on a conscious level. Accommodative processes are necessary when a threat is unavoidable or when a challenge cannot be faced; they play an important role in the individual's ability, for example, to successfully handle the aging process. Developmental psychologists have shown that older individuals modify their life goals and meanings in such a way as to create a kind of wellbeing paradox: in spite of their limited opportunities (and potential illness), they are relatively content with their lives (Baltes 1997; Kotter-Grühn and Smith 2011).

2.2.5 Impacts of Extreme Stress on Mental Health

Following the changes in general coping theory and research, there also has been a considerable shift in the perspective on the impacts of extreme stress on mental health. In the beginning, the field of *disaster psychology* (see Reyes and Jacobs 2006) was identical to the fields of mental health disorders after a disaster and trauma psychology. Since the 1990s, there has been a gradual expansion in the perspective which focuses on the diversity of human responses to extreme stress. Prior to that development, this diversity was buried in trauma discourse, which, with the introduction of the posttraumatic stress disorder (PTSD) diagnosis to the Diagnostic and Statistical Manual of Mental Disorders (DSM III 1980) by the American Psychiatric Association, dominated the psychological research and practice of the time (see Bonanno et al. 2010). The reemergence of this diversity focused on the following aspects:

- Typically, there is a considerable amount of diversity in the longitudinal trajectories of responses to stress including resistance, resilience, recovery, and delayed and persistent dysfunction (Norris et al. 2009).
- Severe manifestations of problems are observed only in a small percentage of exposed individuals (Bonanno et al. 2010).
- Aside from PTSD, disasters may result in other psychological problems such as depression, anxiety, grief, stress-related health problems, substance abuse, and suicidal behavior (Bonanno et al. 2010)

• There is a cultural specificity in responses to extreme stress. These were studied as *idioms of distress* or *cultural syndromes*, triggering a discussion about the cross-cultural validity of PTSD (Hinton and Lewis-Fernandez 2011).

The concept of trauma originated in the context of the two world wars. Extreme suffering was then designated as PTSD in the American diagnostic system (DSM III, then IV and V), thereby laying claim to universal validity. One prerequisite for a PTSD diagnosis is a clearly defined traumatic event. A traumatic event in this sense implies an exposure to a threat of death or grievous bodily injury directed toward an individual or another person. Symptoms of this syndrome include intrusive distressing memories, dreams and flashbacks of the traumatic event(s), and distress at exposure to trauma-related triggers. Additional criteria include negative changes to cognition, mood, arousal, and reactivity. Disturbances cause significant distress and impairment of function which persists for longer than 1 month.

The categorial illness or disorder systems utilized by international classification bodies require universally applicable divisions between sick and healthy individuals. With PTSD, however, the assumption tends to be that there is no qualitative difference with respect to normal processes. According to Bonanno et al. (2011), PTSD is best understood as a continuous dimension and the "specification of a diagnostic cut-point will always be arbitrary to some extent" (p. 513).

The universally constructed psychological explanations take different disruptions in memory (Brewin 2011) as well as emotional and cognitive processing into account (Foa and Rothbaum 1998; Ehlers and Clark 2000; Steil et al. 2003). However, according to Pitman et al. (2012) and Schmahl (2009), the field has yet to identify the definitive disorder model. On a phenomenological level, in the psychiatric literature (for example, Friedman et al. 2011) it has been proven that exposure to a wide variety of different traumatic events (disasters, violent experiences resulting from war, accidents, and rape) results in the same consistently identifiable pattern of disturbances (ensuring coherence and reliability of PTSD identification).

In their broad overview of the costs of disaster for individuals, families, and communities, Bonanno et al. (2010) showed that the psychological cost for survivors (especially the number of PTSD cases) had been overestimated in the literature, whereas the broader impact in other areas had been underestimated. Norris et al. (2002a, b) and Norris (2005) published a comprehensive review and meta-analysis of the empirical literature and concluded:

Samples were more likely to be impaired if they were composed of youth rather than adults, were from developing rather than developed countries, or experienced mass violence (for example, terrorism, shooting sprees) rather than natural or technological disasters. [...] Within adult samples, more severe exposure, female gender, middle age, ethnic minority status, secondary stressors, prior psychiatric problems, and weak or deteriorating psychosocial resources most consistently increased the likelihood of adverse outcomes. (Norris et al. 2002a, p. 207)

Bonanno et al. (2011) estimate that 5-10% of individuals exposed to these conditions developed a PTSD. If the exposure is particularly intense and persists over an extended period of time, the rate may increase, although it seldom rises above 30 %. Hobfoll (2011), on the other hand, disputes these figures and criticizes the "initial"

optimism about how many people are resilient in the face of major stress" (p. 128) with references to the high numbers of mental health problems found in his study of distress during the ongoing terrorism in Israel (Hobfoll et al. 2012). Bonanno et al. (2011) argue that most studies that demonstrate higher numbers of PTSD involve the faulty application of diagnostic methods by emphasizing average differences in a number of symptoms between exposed and nonexposed groups, for instance. Other mental disorders, problems, or impairments may accompany PTSD or become dominant disorders. These phenomena may include grief, depression, anxiety, stress-related health problems, increased substance abuse, and suicidal ideation. The more serious occurrences of these problems tend be under 30 % of a population directly affected by a potentially traumatic event (Bonanno et al. 2010).

The decisive turning point in the study of the psychological repercussions of disasters was proposed by Norris et al. (2009) and Bonanno et al. (2010). Their approaches no longer rely on the frequency of identified cases of illness following a disaster; instead, they focus on the analysis of longitudinal and other trajectories of successful or unsuccessful adaptation in the wake of a disaster. In this approach, resistance is equated with no dysfunction, resilience with a transient perturbation for several weeks, and recovery with dysfunction followed by a return to pre-event functioning (Bonanno 2004). Symptoms may display a cyclical course or emerge after a considerable amount of time (Norris et al. 2009). In chronic dysfunction, the initial stress reaction persists.

This thinking along the lines of trajectories resulted in a theoretical and methodological shift in research on the psychological consequences of disasters (Bonanno and Mancini 2012). Specifically, Hobfoll (2011) demonstrated that PTSD is not necessarily accompanied by dysfunction:

People may experience distress and disease and yet remain committed and absorbed in their life tasks as parents, partners, workers, citizens, and friends. (Hobfoll 2011, p. 128)

The concept of posttraumatic growth (PTG) focuses on the ostensibly counterintuitive and paradoxical finding of apparent gain as a result of the negative experience, that is, that people may experience a significant positive change in life and new meaning (Tedeschi and Calhoun 2004). In the field of positive psychology (Snyder and Lopez 2011), this phenomenon is viewed in terms of its positive effects:

Posttraumatic growth is the experience of positive change that occurs as a result of the struggle with highly challenging life crises. It is manifested in a variety of ways, including an increased appreciation for life in general, more meaningful interpersonal relationships, an increased sense of personal strength, changed priorities, and a richer existential and spiritual life. (Tedeschi and Calhoun 2004, p. 1)

The processes that occur after an experience of extreme stress are now viewed as diverse phenomena and are no longer focused on disease and dysfunction. Research on resistance, resilience, and adaptability has enabled stronger connections to be established between coping concepts and the topics of development and future orientations. However, many studies equate a decreasing severe-to-moderate symptom trajectory with resilience (by Norris et al. 2009 or by Hobfoll et al. 2008), meaning that it is defined from a negative, rather than a positive, standpoint. In addition, studies

also often refer to *partial* or *subliminal* PTSD, thereby increasing pathologization as well as the need for individual therapy (Young 2006). We address different cultural understandings of human suffering and other responses to disasters in Chap. 3.

2.3 Individual Coping Within Social Contexts

When researching human responses to disasters, the disciplinary context influences the formulation of the research question and determines the form of investigation: The mainstream psychological approaches referenced in Sect. 2.2 focus on identifying generalizable rules which are rooted in human mental structures and reflected in social behavior. The individual is the focal point. From a social science perspective, the approach is reversed. The goal is to determine the extent to which individual experiences and actions are affected and produced by sociocultural conditions and topics. Models that rely on a complex interplay—or a reciprocal structure—between the individual and the social represent a synthesis between mainstream psychological models and social science-based models. These models are examined in Sect. 2.4.

Only a few of the psychological approaches focus more on context and emphasize the social embedding of individual behavior, although constructs such as social support and social conflict are becoming influential. In the theoretical approaches by Hobfoll (2001, 2011) and Hobfoll and Buchwald (2004), the conservation of resources theory, coping is explained primarily from the viewpoint of human nature. However, in his integration of real sociocultural and material conditions, Hobfoll demonstrates that the stress process must be understood as a complex set of interactions between these elements.

2.3.1 A Resource-Oriented Approach

The stress coping theory proposed by Hobfoll (2001, 2011), Hobfoll and Buchwald (2004), and Hobfoll et al. (2011) focuses on the objective elements of threat, loss, and common appraisals rather than subjective, idiographic appraisals. In this way, they ensure that exclusive focus is not placed on the individual and prevent the theoretic—analytical dissociation of the individual from his or her sociocultural and material contexts. The theory is based on the premise that human beings will strive for resource gains, that is, for things they value most highly. Value is attributed to resources based on the specific cultural context. These resources may be considered worthy in and of themselves or because they promote the retention or acquisition of other resources:

Resources include object resources (for example car, house), condition resources (for example employment, marriage), personal resources (for example key skills and personal traits such as self-efficacy and self esteem) and energy resources (for example credit, knowledge, money). (Hobfoll 2011, p. 128)

The list of particular resources mirrors the diversity of cultural settings with their individualistic and collective ideals. Hobfoll (2001) uses a cultural term with a hierarchical structure of *individual-nested and family-nested in tribe*. Here, he is referring to Boas (1940).

Resource loss is an important component in the stress process, and it receives a disproportionate amount of emphasis in comparison with resource gain. This principle is known as *loss primacy*. The second principle—termed *resource investment*—is future oriented. This principle posits that individuals invest resources in order to protect themselves from loss, recover from loss, or acquire new resources. This process results in a pool of resources which Hobfoll terms resource caravans. Families and individuals are dependent upon resource-enriching environments; otherwise "they fail to develop their resource caravans mainly out of circumstances that are beyond their and their families' control" (Hobfoll 2011, p. 129). Those who possess resources are more capable of gain, and this leads to further gain. However, loss cycles will be more influential than gain cycles. If the loss of resources continues, individuals become increasingly vulnerable to the effects of stress and fall into a spiral of loss, a process that can have serious consequences. In situations of loss, a paradoxical, opposite process comes into play; here, the salience of gain increases in situations of resource loss. This process, which Hobfoll (2011) refers to as third principle, is reported to play a role in traumatic situations and resiliency efforts.

The Conservation of Resources (COR) theory is less an input—output model of coping with stress than a model for the commerce of stress and resources within social contexts. In this model, both successful and unsuccessful adaptation may occur. In this broader context, the episodes of coping are viewed as adaptation processes. In Hobfoll's model, social support is a valuable resource which is closely related to resiliency. The theory offers an understanding of coping that sees individualistic and communal coping as a continuum:

We need to widen the social aspects of coping efforts and move from self-regulation to self-in social settings regulation. (Hobfoll 1998, p. 130)

According to Hobfoll (1998), there is a *stress crossover* between individuals within the community; that is, the stress experienced by one person influences the stress experienced by another person, a partly involuntary sharing of resource loss. He also analyzes the dynamics of intragroup stress and the different demands within the community (between those who are stronger and those who are weaker in the group or community). In addition to stress crossover, there is also a transfer or crossover of resources. Hobfoll and Buchwald (2004) explain the common sharing of resources by describing the barriers between different individuals within a community to be more or less permeable.

He does not use a typology to represent the different ways of coping. Instead, he relies on a multiaxial model in which individuals are characterized by their position along the axes. On the first axis, we find the degree of coping activity; this axis spans from very active, through cautious action, to passive avoidance. The second axis represents the dimension of prosocial versus antisocial coping. In prosocial coping, the individual seeks social support and mutual cooperation. In antisocial

coping, the individual strives to obtain advantages at the cost of others. On the third axis, which incorporates findings from Japan, a country representing rather inter-connected selves, besides American findings representing predominantly autonomous and independent selves, Hobfoll introduces a distinction between direct and indirect coping strategies. Indirect action is often found in communities that strive to maintain harmony. It is a diplomatic–strategic form of action. An individual acts in such a way as to disguise the intentions of this action from his or her interaction partner. This way, the individual will not lose face if he or she makes a mistake (Hobfoll 1998).

According to Hobfoll (1998), the COR theory can incorporate the idea that coping actions represent not only individual but also collective actions: In this model, actions are embedded in a historical and cultural context, and assessments are not made independently by single individuals, but in fact represent large-scale perceptual and interpretive structures that are shared within the community. This applies to the perceived meaning, relevance, and threats associated with a particular situation as well as to the perception of the individual coping efforts and, in particular, the collective coping efforts, surrounding the situation.

2.3.2 Social Support and Social Conflict

The concept of social support has also begun to draw more attention in mainstream psychology; however, it is important to note that the different approaches to stress each incorporate different conceptualizations of social support:

[Social support] may be regarded as resources provided by others, as coping assistance, as an exchange of resources, or even as a personality trait. Several types of social support have been investigated, such as instrumental or tangible (assist with a problem, donate goods), informational (give advice), and emotional (offer reassurance, listen empathetically). (Schwarzer and Knoll 2007, p. 244)

Social support was integrated into the appraisal-oriented stress approaches and assumed a functional role as one resource factor. Evidence from studies in the field of individual health and illness shows that support has an indirect enabling effect on coping. It increases perceived self-efficacy, which in turn improves an individual's potential to obtain support from social networks. In dyadic relationships, Schwarzer and Knoll (2007) observed a resource transfer from the individual providing the support to the individual receiving it. In the approach proposed by Schwarzer and Knoll, when considering coping in couples in which one partner suffers from severe illness, the focus lies not on the shared process of coping with a severe illness, but rather on the ways in which the sufferer perceives the support provided and the effectiveness of this support. In this respect, an individual's subjective appraisal remains as the dominant function in appraisal-oriented coping.

However, divergent interests and social conflicts are difficult to model from a social support perspective. Hobfoll (1998) states that the availability of social support is dependent upon power and status. According to him, certain people are nested in

settings which offer them rank and privilege. Those lacking in status and power suffer social discrimination almost independently of their own behavior. However, those with power, status, and privilege are faced with developmental conditions—Hobfoll refers to these as "caravan passageways" (Hobfoll 2011, p. 129)— which lead to social exclusion. The concept of passageways can be extended to neighborhoods, work environments, and other contexts. These passageways are responsible for an individual's access to cultural capital, material goods (for example, inheritance), and social support. The mastery and self-efficacy attributed to individuals is therefore viewed as a function of their positions in a privileged passageway for their resource caravans (Hobfoll 2011). The individual's ability to seek social support is dependent upon the availability of this support in a real context, a factor which tends to be neglected in the various appraisal-oriented coping approaches.

The concept of social support has influenced the practice of disaster psychology, that is, interventions to prevent PTSD by education about what to expect rather than reliving the experience such as was the case in critical incident stress debriefing. Kaniasty and Norris (1993), Norris et al. (2005), and Kaniasty (2012) developed a model to illustrate how different subgroups of disaster survivors experience social support or a lack thereof. This model is connected to Hobfoll's COR theory. The authors differentiate between the constructs of social embeddedness (quantity and types of relationships with others), received support (actual receipt of help), and perceived support (the belief that help would be available if needed).² Specific properties of the disaster, such as severity of exposure and displacement as a result of the disaster are relevant to the social support dynamics in coping efforts. The authors proposed a social support deterioration model (Kaniasty and Norris 1993) that they continued to develop over a series of studies on different disaster types (for latest results, see Kaniasty 2012). The model aims to generate general predictions about the dynamic social processes at work after disasters. It links both social support and social conflict with factors such as distress, trauma, and well-being. The model starts with the often-reported finding that "natural" disasters elicit the provision of widespread mutual aid and support. The social support deterioration deterrence model predicts that the experience of having received social support in the initial period of solidarity will distort the perception of reality in which social support is actually deteriorating. According to the model, this exaggeration of perceived available support is the reason behind feelings of well-being or reduced distress and pathology. Postdisaster social bitterness may emerge due to dissatisfaction with aid, social support, interpersonal constraints, and conflicts, leading to increased distress and pathology (Kaniasty 2012).

The sociological approaches to social conflicts and the resolution of these conflicts are more generalized:

Social conflict [is] a struggle over values or claims to status, power, and scarce resources, in which the aims of the conflict groups are not only to gain the desired values, but also to neutralize, injure, or eliminate rivals. (Coser 1967, p. 232)

² It is important to note that the actual amount of support received as determined by the investigation is a value provided by the respondent, not an objectively determined quantity.

In conflict resolution theory and practice, there is an ongoing discussion about the universality or cultural specificity of ideas of fairness and justice (Deutsch 2000). The crucial factor in postdisaster settings is distributive justice:

[It] is concerned with the fair allocation of resources among diverse members of a community. Fair allocation typically takes into account the total amount of goods to be distributed, the distributing procedure, and the pattern of distribution that results. (Maiese 2003)

Wagner-Pacifici and Hall (2012) see the issue of power as a crucial aspect in conflict resolution. Preconflict power relations also factor into postdisaster dynamics. The authors point to the difference between the resolution of a conflict and mere end of the conflict. Both concepts may play an important role in postdisaster conflicts (especially in dealing with possible conflicts along the helping process) as part of the long-term communal process of coping with disaster. The authors question whether reaching a resolution is always desirable. In their introduction to the approach of conflict transformation utilized by Mahatma Gandhi, Kurtz and Ritter (2011) write:

Resolution carried with it a danger of cooptation (Gleichschaltung), an attempt to get rid of conflict when people were raising important and legitimate issues.

Reconciliation processes may also mean that people are no longer given a position to air their grievances. People may be expected not to raise issues of injustice anymore which helps to maintain the status quo instead of allowing for renegotiation for a more just social system. While, for some, participating in reconciliation practices may generate solidarity and even community pride which, in turn, affords healing, others may feel excluded or more isolated.

2.4 Coping as a Social Process

The individual-subjective perspective in psychology has been transgressed primarily as a result of Hobfoll's COR theory (see Sect. 2.3.1). Feelings of stress as well as access to and control over resources all have a collective dimension. The goal is to understand the reasons why as well as how communal coping strategies and prevention measures develop. Hobfoll continues to emphasize the importance of social and gender-related inequalities rooted in the power dynamics within a given society and their effect on an individual's access to and control over resources and opportunities to develop a resource pool. With this notion, he sketches out the sociocultural and material boundaries of human agency. However, to what extent is the current international scientific discourse on coping and related methods itself a cultural product with a Western cultural bias? And to what extent do culture- and gender-specific biases exist in the psychological concept of coping (see Sect. 2.4.1)? In the section that follows, we address a possible synthesis between mainstream psychological models and social science-based models. This synthesis takes the form of complex interactions or reciprocal structures between the individual and the social. These models are addressed in the Sects. 2.4.2 and 2.4.3.

2.4.1 Biases in Psychological Coping Approaches

Certain types of action and experience are ignored in the mainstream psychological coping theories (see Sect. 2.2). The value—or lack of value—attributed to certain elements based on cultural or perspective-based biases tends to remain hidden, rendering these judgments difficult to address or criticize.

2.4.1.1 Androcentric Biases

Based on the models illustrated in the previous sections and the corresponding quantitative measurement instruments, there are significant gender differences that may hint at an androcentric bias. For example, women report more somatic and posttraumatic stress symptoms than men (Zeidner 2006). The lifetime prevalence of PTSD among women is also twice that among men (Breslau 2001; Kimerling et al. 2002). This higher prevalence among women is reported to be independent of the type of traumatic event (Norris et al. 2002b) as well as the cultural background (Norris et al. 2002a) and age of the subject (Kessler et al. 1995). Norris et al. (2002a) also found that women are twice as likely to develop PTSD after a disaster-related experience. On a similar note, Rubonis and Bickman's (1991) meta-analysis demonstrates that women show higher levels of PTSD symptoms and more pronounced affective responses to disaster-related experiences.

Research has shown that women tend to have larger social networks; in addition, they are more willing to offer social support (Schwarzer and Leppin 1989; Kessler et al. 1995) and more likely to implement social strategies when coping with a problem (Thoits 1991; Ptacek et al. 1994). Women rely less on direct strategies and more on prosocial coping (Hobfoll and Buchwald 2004). According to the transactional model, emotional coping is less effective and offers fewer health benefits in comparison with problem-focused methods (Billings and Moos 1981). A number of different studies show that women tend to focus on the emotional aspects of a problem and engage in avoidance behaviors as part of the coping strategy (Billings and Moos 1981; Araya et al. 2007). These empirical findings have been used, for example, as an explanation for the fact that women are more likely to suffer from depression (Aneshensel and Pearlin 1987). Men's emotion-focused coping strategies, on the other hand, frequently take the form of aggression against third parties or drug and alcohol consumption (Carver et al. 1989).

Hobfoll et al. (1994) demonstrate the impact of perceived control over one's own life on the coping process: If the individual has a higher level of perceived control, he or she tends to be more problem-focused. Men report a higher level of

³ The work of Kimerling et al. (2002) provides a solid overview of the existing empirical studies in the area of gender and PTSD. However, it falls short of producing an integrated conceptual framework and there are no explanatory models or clinical recommendations. In general, PTSD and trauma research is limited with regard to gender-related topics, both on a conceptual level as well as on an empirical level (see Simmons 2007).

perceived control in comparison to women. This style of coping is associated with less psychological stress—unless the situation is completely uncontrollable (Zeidner and Hammer 1992).⁴ There is also empirical evidence for gender differences with regard to the critical events that men and women experience over the course of their lives. Here it is assumed that women have been exposed to more situations in which they have had limited authority and control (Billings and Moos 1981; Geller and Hobfoll 1993; Hobfoll et al. 1994; Hobfoll and Buchwald 2004). In contrast, Porter et al. (2000) assume that empirical differences between the genders do not actually reflect gender-specific behavior, but instead can be traced back to different memory processes based on gender role stereotypes (see also Simmons 2007; Hatch and Dohrenwend 2007).

Although different theories emerged to explain the existence of these gender specifities, the empirical research contained assumptions and references that are not immediately apparent. For example, some of these theoretical approaches are based on sociocultural factors while others are based on evolutionary biology. The latter approach is always associated with deterministic assumptions, which can pose problems from a feminist perspective. As implied by the title of the article by Tamres et al. (2002) *Sex differences in coping behavior*, the text focuses on the supposed biologically determined sex differences rather than on socioculturally constructed gender differences. Differences in coping are automatically accounted for based on differences in the biological sex of the individual. Generally speaking, mainstream psychological coping research usually lacks a theoretical and practical definition of gender. There are only a few authors who work to incorporate newer, feminist theoretical discussions (for example Range and Jenkins 2010; Tang and Lau 1995; Hobfoll et al. 1994; Nezu and Nezu 1987; Eisler et al. 1988).

A further problem lies in the fact that the underlying cultural understanding is not expressly stated. Western theorists proposed most of the gender theory applied in international contexts and much of the empirical research has been conducted in Western countries. It is not clear whether these theories adequately represent other sociocultural conditions.

From a feminist psychological perspective, it is crucial for theoretical models to take sociocultural and structural contexts into account instead of relying solely on individual factors. The transactional stress theory does not meet these requirements. Feminist approaches address individual problems in conjunction with institutional frameworks and societal routines (for example Mejia 2005). Without these, there is a risk of adopting an essentialist view with regard to male or female identity, and thereby reinforcing this sexual binary instead of exploring diversity. Hobfoll's COR theory leans in this direction, as it includes the element of social embeddedness. However, only sociological approaches are able to adequately accommodate this idea.

⁴ Empirical studies in the area of problem-focused coping have yielded contradictory findings. In some studies, men show a higher level of problem-focused coping (Folkman and Lazarus 1980), while, in other studies, this form of coping is more common in women (Vitaliano et al. 1985). Further studies showed no differences between the genders (Rosario et al. 1988; Tamres et al. 2002; Zeidner 2006).

2.4.1.2 Ethnocentric Biases

Markus and Kitayama (2010) suggest that psychological concepts display a Eurocentric or North American bias. Most studies have centered on individuals socialized in either a North American or Western European context. In an effort to pursue a universalist model, findings have been generalized without explicit mention of their cultural bias. Generally speaking, we can see the different Western sociocultural contexts as rather distinctive cultural contexts in which the individual person is viewed as the source of all thought, feeling, and action. These assumptions about human nature as focused on individual striving imply specific ideas about the self and human agency, ideas that are reflected in appraisal-oriented coping models.

Cultural psychologists such as Markus and Kitayama (2010), on the contrary hand, differentiate between two types of sociality in which different modes of being or senses of self are represented. The first sense of self is seen as connected, related, or interdependent with others. In this cultural context, prescribed tasks require and encourage individuals to fit in with others, take on the perspective of others, read the expectations of others, and use others as referents for action. These interdependent relationships may be harmonious or prone to conflict. In the second model, an independent self, interaction with others produces a sense of self as separate, distinct, or independent from others. These differences between a primarily independent and a primarily interdependent self are considered to be universalist orientations that appear more or less everywhere around the world. These orientations are heavily dependent upon the social context, and, based on the given context, one or the other tends to emerge as dominant.

When the schema for self is interdependent with others and this schema organizes agency, people will have a sense of themselves as part of encompassing social relationships. People are likely to reference others, and to understand their individual actions as contingent on or organized by the actions of others and their relations with these other. (Markus and Kitayama 2010, p. 425)

In the appraisal-based coping models, which rely upon an independent self, the focus is different: In these models, individuals with a high level of self-efficacy engage in active, problem-solving control over their environment. This type of individual actively pursues social support, seeks out information, etc. The individual always remains the center of action. Even the secondary control process (in the system proposed by Skinner et al., 2003, this is referred to as accommodation) does not imply joint or less conscious action. While primary control involves influencing objective circumstances, secondary control "refers to the process by which people adjust some aspect of the self and accept circumstances as they are" (Morling and Evered 2006, p. 269). The authors stress this twofold property of secondary control and suggest that it is adaptive for coping in interdependent cultural contexts. However, developmental psychologists criticize the Western privilege of active control strategies and emphasize the importance of accommodative processes, particularly for older subjects (Brandtstädter 2006, 2011; Leipold and Greve 2009).

In their meta-analysis, Fischer et al. (2010) draw a connection between the independent and interdependent conceptions of self and religious affiliation. They analyze

the relative importance of interpersonal and intrapersonal coping in Muslim and Christian faiths and connect appraisal-oriented coping with the social psychological conceptions of intergroup behavior and social identity.

The Christian core self is relatively individualistic, whereas the Muslim core self is oriented more toward the collective. As a consequence, it is hypothesized that when confronted with a stressful life event, Muslims are more likely to adopt interpersonal (collective) coping strategies (such as seeking social support or turning to family members), while Christians are more likely to engage intrapersonal (individualistic) coping mechanisms, such as cognitive restructuring or reframing the event. (p. 365)

We, however, believe that religion and cultural context are inherently interdependent and, therefore, that the construction of a global Muslim or Christian identity is impracticable.

In the mainstream psychological approaches reviewed in this chapter, when behavior is explained, the individual—complete with all related structures and functions—is the primary concern. The active, goal-striving, and appraising human being pursues his or her goals, even under adverse circumstances, or is willing to modify these circumstances if necessary.

The opposing model, in this case, would be the conception of subjectivity in the sociological theory proposed by Bourdieu. He views the social aspect as the driving force and subjectivity as a component of an individual's habitus (Bourdieu 2002):

When we speak of habitus, we maintain that the individual, and even the personal and the subjective, are social, collective properties. The habitus is socialized subjectivity. (Bourdieu and Wacquant 2006, p. 159)⁵

On the one hand, the habitus means that the individual is not able to move independently and intentionally within a social context. He or she is confined to certain predefined principles of the social order. The social context itself is shaped by property and power relationships. On the other hand, the habitus remains an open disposition system which is subject to continuous change through new experiences. An individual's actions are not determined solely through the internalization and embodiment of social structures; while these factors may limit the scope of the individual's opportunities for independent action, they do not determine his or her behavior. However, the habitus represents the limits of the individual's conscious knowledge of his or her possible agency.

Normally, the habitus corresponds with the individual's environment. This relationship is based on the fact that the habitus is created by the environment. This approach explains the stability of orientations and opinions. On this basis, it is possible to understand the idea of local knowledge—knowledge which has influenced coping practices in "natural" disasters for generations—embedded in practical behavior as described by Bankoff (see further). However, a dramatic event such as a disaster can also modify the habitus to the point at which it no longer corresponds with reality. The individual loses his or her orientation and must engage in a conscious effort to renew and reconstruct this orientation, a process which subjects it to

⁵ Translation from German by Devin Martini.

possible changes. Structural ritualization theory refers to these effects of disruptions and deritualization. Disasters may result in a breakdown of social and personal ritualized practices, their impacts on the societal order, and the ways people may cope with or adapt to such experiences by reconstituting old or new ritualized practices (Knottnerus 2012).

Even if this conception only partially applies, it could dramatically affect the understanding of coping by limiting the scope of conscious, planned agency. If individuals view their ideas and practical orientations for action as foregone conclusions resulting from their social environment and inherent resource differences with domination and subordination, then coping with a threat must be viewed in this context as well. With this in mind, it is necessary to focus on the types of action that express these foregone orientations. These include performative, ritual, and intuitive actions that pervade everyday social activities and help to reinforce and reproduce these principles or order. It is crucial to possess information about the orientations of the social subgroup and its position in the social power structure in order to investigate the group's habitus (as this strongly influences opportunities for action and potential coping strategies) and gain insight into potential avenues of transformation. This may make it easier to understand the reasons why, after a disaster, it is difficult to establish a risk management strategy by means of persuasion with rational arguments (see Chap. 1 on the subject of handling risk).

A disaster brings about dramatic changes that are perceived as a broadly shared experience of being disaster survivors. Afterward, life is never the same for many people. This makes it necessary to process and manage any changes that may occur. We discussed this on the level of meaning (as the difference between situational and global meaning) as well as in the context of religious coping (as a means of conserving or transforming significance). The transformation models tend to focus primarily on individual, cognitive-based processes.

However, it is also possible to investigate the dynamics between conservation and transformation after a serious disaster and the related relief processes with respect to social negotiation processes (see Schwarz 2012; see Chap. 16). At present, there are few models available to describe collective difference management after major shocks. These types of models might be described as collective constructions and reflexive processes which take the form of collective discourses and forms of cooperative living, for example, in a family or community. In addition to these discursive and practical forms of management, there are also performative types of action that take the form of ritualistic behavior, for example processions, collective commemoration, performances, etc. According to Bhandari et al. (2011), the ritualized social activities enhance the capacity of individuals and groups to adapt or cope with various uncertainties and challenges created by disasters before, during, and after their occurrences as ritualized behavior fosters access to skills and local knowledge:

Rituals also generate and reinforce emotional intensity and collective beliefs, thereby strengthening group ties, social support, and social networks. Furthermore, the reconstitution of RSPs [ritualized social practices] subsequent to disasters, enables people to adapt or cope with disruptive consequences of such events by providing coherence, direction, and a sense of stability (and therefore security) in their lives. (p. 27)

2.4.2 Coping as Collective Agency

If we separate the process of coping with disasters from the individual and view it instead as a broad social process, we must return to the understandings of disaster management covered in Chap. 1. These understandings place less emphasis on psychological concepts and focus instead on the areas of knowledge surrounding wide-ranging social processes, techniques, methods of organization, and physical processes. In disaster literature, the term *coping* is used to designate human agency within the process of dealing with disasters:

Coping is the manner in which people act within the limits of existing resources and range of expectations to achieve various ends. (Wisner et al. 2004, p. 113)

The reasonable course of action follows from a scientifically based prescriptive model which, under ideal circumstances, is adapted to suit the actual life circumstances of the individuals involved. Wisner et al. (2004) understand politically motivated recommendations for action as a type of coping at the level of political action.

There is a long-standing debate in philosophy and social science about the question of whether or not collective agents can be considered legitimate constructs in social ontology, and concerning the nature of their agency (Dubreuil and Hardy-Vallée 2012). It is the question of whether an organization or a community can be viewed as a collective actor. According to Roth (2011), one central problem for the theory of shared or collective agency is how to establish an interpersonal structure of participatory intention. He cites Gilbert (2009), who sees it as essential that each participant has an obligation to do his or her part. According to her, groups form a plural subject whose intentions cannot be reduced to the sum of individual intentions (Gilbert 1989). Dubreuil and Hardy-Vallée (2012) summarize:

An agency collectivist believes that collectives, under certain conditions, can be construed as a single agent. An agency individualist believes that no group or organization, under any condition, can be construed as a single agent; only individuals are agents. (p. 9)

According to Kashima et al. (2005), the tendency to ascribe as much agency to groups as to individuals is more prominent in East Asian cultures than in Western cultures. Although we consider this to be a rather essentialist view of culture, we nevertheless agree with the idea that for the purposes of an everyday understanding of the subject—as well as in social science—collective actors are constructions, and that it can be both productive and beneficial to interpret their actions within a social field or arena as intentional.

We disagree with Dubreuil and Hardy-Vallée (2012) in their objective, mechanistic explanation of agency. If we acknowledge collective actors (such as NGOs and local or national authorities), it is still difficult to estimate the extent of their influence within a social arena filled with competing powers and interests (for example, within a community), and to determine the rationality and values behind the behavior of these actors. In addition, by examining the group as a whole, we fail to acknowledge the diverse interests and power relationships within the group. Another conceptual difficulty lies in the fact that a community is sometimes recognized as a single actor (for example, in the concept of community resilience), while other times it is seen

as a social arena composed of collective actors. Therefore, we understand collective agency as being very limited in its coherence due to diverging interests and power differences within a group. Furthermore, it may apply only at limited times where there are genuinely shared goals and attention; differences might quickly reemerge, for example, after communal rebuilding or rescue activities.

The conceptualization of collective agency is crucial to understanding the ways in which disasters—and responses to these disasters—unfold. Wisner et al. (2004) claim to adopt a realist approach so that they can regard risk as an objective hazard that exists and can be measured independently of social and cultural processes. The corresponding theories and methods associated with this epistemology are technoscientific, statistical, and actuarial. Wisner et al. (2004) add a weak constructionist perspective and make the assumption that objective hazards are mediated by social and cultural processes. The realists aim to promote reasonable strategies that align with the interests of the people living under unsafe conditions. During international meetings, they fight to reach statements of intent to change these situations.

Realists such as Wisner et al. (2004) tend to interpret discursive or system analysis approaches as destructive, negative criticism against humanitarian organizations and, ultimately, the potential of human agency. They express disillusionment toward the approach advanced by Hilhorst and Jansen (2010) called *humanitarian space*. It is a way to analyze the role of social actors in shaping the everyday realities of humanitarian action, and investigate the ways in which these actors interact with disaster survivors and recipients of aid. This perspective is less a means of structuring what needs to be done and more a way of understanding postdisaster social conflicts. Hilhorst and Jansen (2010) question how the reasons for which some people become eligible to receive aid and others do not are conditioned by institutional interests, the local sociocultural fabric, and power differences among aid recipients. Discursive and system analysis approaches view the actors in postdisaster contexts as pawns of social interests and power relationships. These approaches illustrate the limits of individual agency, that is, a person's capacity to influence his or her surrounding and the social structures in which he or she lives.

2.4.3 Social Capital, Community Resilience, and Local Knowledge

The following three key concepts expand the psychological coping theory to include a collective dimension, an experience-based dimension, and a local dimension:

2.4.3.1 Social Capital

Definitions of social capital are diverse; so, too, are the associated understandings of the potential and limits of collective agency. Many authors (Portes and Landolt 1996; Woolcock 2010; Poder 2011) agree that social capital is a very wide-ranging, controversial concept that is not yet founded on solid science. However, even though the strong, theoretical scientific basis behind the approach has yet to be provided, the concept has practical benefits in that it draws together experts on a variety of different subjects.

One of the most popular approaches is Putnam's (1995) conception based on the understanding proposed by Coleman (1988). According to these authors, social capital resides in social relationships, as well as in networks, groups, and voluntary associations formed by members of the community. For Putnam (1995), social capital is characterized by the features of the networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit.

The approach spans the different types of groups and networks that people can call upon (*structural* social capital) and the respondents' subjective perceptions of the trustworthiness of other people and key institutions (often referred to as *cognitive* social capital). There is a distinction between a *bonding* social capital (that relates to people who are demographically similar, like family members, neighbors, close friends, and work colleagues), *bridging* social capital (that relates to people who do not share many of the same characteristics), and *linking* social capital (that relates to people in positions of authority). Bridging and bonding social capital are "essentially horizontal (that is, connecting people with more or less equal social standing), linking social capital is more vertical [...] across power differentials" (Grootaert et al. 2004, p. 4).

According to Poder (2011), there are two fundamentally different approaches to and understandings of social capital. As described above, for Coleman (1988) and Putnam (1995), social capital refers to the nature and scale of a wide variety of informal networks and formal civic organizations. This means that social capital can decline for a given social unit (see Putnam 1995). It resides with the social unit and not with the individual. For Bourdieu (1980) and Portes and Landolt (1996), on the other hand, social capital refers to the resources (like information, ideas, assistances, etc.) available to individuals through their relationships. The main focus lies on individual resources instead of on group characteristics. These resources vary between different individuals, based on their strategic positions within the group. The resources are social in the sense that they are only accessible through the individual's relationships. Social capital is related to power and influence, that is, to features that produce differences between individuals.

In summary, the first version of social capital (as a characteristic of groups) can be described as an integral element in the agency or coping of an entity, for example, a community. Subjective observations of community members are used to estimate the extent to which the community in question deviates from the ideal model of a community that is capable of action. Models such as these often neglect the importance of conflicts, power relationships, and unequal distribution of resources within the community. These are the critical aspects of the resource-oriented model of social capital (Bourdieu 1980; Portes and Landolt 1996).

2.4.3.2 Community Resilience

Social capital can be understood as one element in the broad concept of community resilience. Securing and increasing social capital is the goal of the community-based approaches to disaster risk management (see Chap. 1). Norris et al. (2008) developed a special ideal type model for disasters. They understand community resilience as a

"set of networked adaptive capacities" (p. 135). The community capacities are made up of different elements that need to be strengthened in order to increase communal resilience. To promote economic development, it is necessary to foster a diversity of economic resources and equitable distribution of income and resources against a backdrop of interdependencies at the macroeconomic level. Under the heading of social capital, the authors include network structures and linkages as well as social support, which mainly refers to helping behaviors within family and friendship networks. In the relationships between individuals and their larger neighborhoods and communities, social capital implies a sense of community, a concept which includes a major investment in community issues, place attachment, and citizen participation. This requires information about the danger and behavioral options. Here, communication refers "to the creation of common meanings and understandings and the provision of opportunities for members to articulate needs, views, and attitudes" (p. 140). Community competence is viewed as networked collective agency based on critical reflection, and implies participation, collective efficacy, and empowerment. The model combines many approaches and identifies a number of barriers that stand in the way of achieving the desired level of community resilience. This target outcome of community resilience can be measured in the form of community wellness (Norris et al. 2008). Like any understanding of community resilience, the ideal type model reflects certain value-based ideas about good community functioning. Subjective wellness or well-being represents a controversial method of evaluation, particularly in community psychology.

Critical community psychologists such as Nelson and Prilleltensky (2010) shed light on these core values and differentiate between the personal and collective domains of well-being. The values of self-determination, caring, compassion, and health fall under the domain of personal well-being, whereas respect for diversity, participation, and collaboration are defined as relational well-being, and support for community structure, social justice, and accountability are considered to be aspects of collective well-being. The authors address the way in which value conflicts are handled within this domain. The values formulated by Nelson and Prilleltensky reflect a Western, secular orientation and claim universal validity. However, it is possible that there are many differences between this idea and other sociocultural orientations.

In the social process of coping after a disaster, which includes major interventions by external sources of aid informed by value-based goals and motives, it is important to carry out an intensive discussion of the different understandings of value and justice. We do not approach the local orientations as homogenous, closed, or static. Indeed, we expect to discover diversity, contradiction, and dynamic relationships between local understandings (see Beatty 1999; Ricklefs 2008; Berninghausen et al. 2009; Schlehe 2010).

2.4.3.3 Local Knowledge

Local knowledge represents another means of accessing shared coping resources, one that places these resources in their historical and local contexts. Societies share

an interdependent relationship with the world that they inhabit (Chap. 1). This interdependent relationship produces cultural interpretations and practical behaviors that allow societies that inhabit hazardous environments to develop corresponding cultural adaptations and manage these hazards using historically derived methods. These methods consist of technical, ecological, and historical knowledge as well as practices, beliefs, values, and worldviews (Dekens 2007) that affect different aspects of society: all the way from economic structures and characteristics of social relationships to mental structures (Bankoff 2004).

These context-specific manners are generally referred to in the literature as local knowledge (Sillitoe 2010; Dekens 2007; Bankoff 2004; Jigyasu 2002). Local knowledge is knowledge that is shared and distributed through social channels. As such, this knowledge is produced and reproduced by individuals in historical processes. This does not imply explicit, conscious knowledge. Rather, based on Bourdieu's concept of habitus, local knowledge is integrated in the subjectivity of the individual as agency: individuals are able to react to their environment in a reasonable way without any reliance on conscious, rational planning. Unlike in the appraisal model, the individual does not arrive at the coping response through an individual, conscious engagement with a challenge or strain.

In Chap. 1, we established the fact that, in the process of relief management, control is regained in the situation following a disaster through a rapid mobilization of science-based expert knowledge. This type of mobilization often results in a mixing of local and science-based resources as well as different cultures of knowledge and skills. The experts enter with universal knowledge and aid and meet local people who are equipped with regionally specific, inherited information and abilities. Bankoff (2003, 2007) assumes that environments in which people are repeatedly confronted with hazards result in cultural adaptation. He formulates a local definition of coping which includes this historical dimension:

The strategies adopted by communities to reduce the impact of hazards or avoid the occurrence of disaster are known as coping practices and are based on the assumption that what has happened in the past is likely to repeat itself following a familiar pattern. [...] Variously referred to in the literature more generally as informal security system or local capacities and more specifically as indigenous technical knowledge or appropriate technology such coping practices include the specialized knowledge of skilled individuals as well as the social knowledge held by the communities at large. (Bankoff 2004, p. 32)

The idea of local knowledge therefore contains an *indigenous rationality* that does not necessarily correspond to the Western idea of a goal-oriented individual. This idea is also present in the psychological coping models and approaches to international disaster management. They tend to overemphasize individual capacity for action and control, while local knowledge focuses on the collective capacity.

In addition, the idea of *local knowledge* includes inherently power-critical components. This is due to the fact that local knowledge always serves as an alternative or counterargument to hegemonic knowledge forms which claim universal validity of theories developed in Western countries to be applied worldwide. This applies, for example, to the way in which institutionalized disaster management is handled in the context of a disaster. The indigenous rationality of local knowledge, on the

contrary is neglected, devalued, and marginalized (see Bankoff and Hilhorst 2009). For this reason, some emphasize the necessity of integrating local knowledge into disaster management.

Through its focus on local capacities, local knowledge discourses and practices add a level of cultural identity and cultural identity politics to coping. However, the juxtaposition of local versus global knowledge is somewhat artificial because global elements are long-standing components of local knowledge (even before the disaster).

2.5 Concluding Remarks

In psychological perspectives on coping, the development of important lines of theory and empirical investigation allows for the expansion of an approach to coping with disasters that can include cultural–psychological features. In this field, the general approach is to seek the psychological mechanisms that determine human behavior and experience under challenging or threatening circumstances.

Our first question was about the role of the relational conception of environment and person in coping with stress. Lazarus (1991, 1999) understood this process as a series of transactions in which the situations become a perceived event with a personal connotation. In his model, the goal-striving individual carries out continuous appraisals and reappraisals of situations in such a way that any resulting emotional reactions have an orientation function. This introduced a subjective dimension to stress in which the appraisals of the individual relative to motives are central. Coping behavior, or human agency, can be focused on the situation as an active means of solving a problem, or on the person (through a process in which individuals change meanings and process emotions). Coping was defined as showing effort under pressure, whether or not this process is successful. Change or adaptation in meanings and orientations were expanded into meaning-oriented approaches in subsequent theories and extended to include religious coping approaches because, in times of threat or difficulty, the search for significance becomes particularly salient. However, within the appraisal-based coping approach, the functional role of finding meaningfulness and religious coping was primary that both can have health benefits. Future-oriented coping can be understood as a private form of risk management, although previous research has primarily viewed this type of coping in relation to threats to the health of the individual. In the proactive coping model (according to Schwarzer and Taubert 2002), the focus shifted from specific threats to an accumulation of resources in the sense of a nonspecific increase in resilience. In developmental psychology, these approaches were expanded into adaptive development models with assimilative and accommodative processes (see Brandtstädter 2011).

Perspectives on the possible effects of extreme stress and disasters on mental health have changed in recent years. The clinical model, which held that extreme stress leads to illness, has become less dominant (in both theories and postdisaster practice). Instead, the conception that exposure to extreme stress can lead to a number

of different trajectories—with primarily positive outcomes and infrequent negative outcomes—is now more influential. This new interest shifted attention in theorizing and research to the influences that govern these processes.

Hobfoll's (2001, 2011) COR theory expanded the appraisal-based understanding of coping to include the gain or loss of resources which are considered to be critical to the stress process. Spirals of fatal loss result in extreme stress in traumatizing situations. This focus on resources draws a stronger link between person-centered processes and the context, which, for example, can reveal the orientations that determine the value of certain resources. Social processes such as the exchange of resources between community members or the distribution of stress in social networks are also taken into account. A culture-bound dimension of coping was also added to the model. In the appraisal-based model, social support is viewed primarily in terms of its functional role in the coping process; COR theory, in contrast, differentiates coping based on the conditions of the availability of this social support in the social arena. Kaniasty (2012) developed special postdisaster trajectories concerning the perception of this availability. The research of these dynamics also incorporates social conflicts and the observation of collective coping processes.

Our critical review shows that, in the field of psychology, social and cultural aspects always remain on the outside, as moderating factors, and cannot be addressed in terms that are intermingled with their inner, private, or cognitive aspects. On applying this understanding to gender, the androcentric bias of the common conception of coping becomes disguised and "sex" is mostly viewed as an essentialized, biological variable; a theoretically viable concept of gender is still missing which takes structural and contextual conditions into account. Similarly, cultural context is often reduced to ethnicity which is equated with one's sense of ethnic origin. Cultural and feminist psychology and concepts from the fields of anthropology and sociology, which are highlighted in the next chapter, suggest that these definitions must be expanded. For example, coping models that are considered to be universal contain constructs that are anchored in Western thought and research, particularly the monadic ideology of the subject as an independent self and an expression of active, cognitively directed problem solving or self-improvement.

Of course, it is an exciting prospect to be able to apply certain basic concepts of psychological coping in an expanded model of coping that includes social, cultural, and material resources. It is interesting to be able to both understand externally focused problem-solving activities, as well as work on the leading systems of orientation, as aspects of coping and consider a diverse range of coping methods. The notion that coping is to be viewed as an effort made under demanding situations—regardless of the success of this effort—is productive insofar as each judgment about the success or failure of coping efforts represents a normalizing and therefore questionable proposition. We think that coping must be viewed as a social process; the exclusive reliance on the individual perspective is ultimately an artificial, Western construction, which bears more resemblance to laboratory situations than real-life circumstances. We further address this issue in the next chapter.

In order to expand the understanding of nonindividualistic coping processes, we discussed notions of collective coping and collective agency which were initially

introduced in Chap. 1 as potential criticisms of psychological models of risk reduction. We argued that these models fail to address issues in terms of structures of power, control, and unequal distribution of resources. Moreover, our analysis showed that the capacity of the agency planning and acting in the collective interest is highly limited by structural considerations. Additionally, the actions tend to reflect a habit or a performative means of reinforcing distinctions within social relationships. Social capital cannot be understood merely as part of the capacity of a community carefully attempting to build community resilience, but rather as a series of networks used to promote certain interests. The positive notion of collective agency and related constructions—such as feelings of solidarity, a sense of community, the conception of social capital in civil society, and ideas of participation and empowerment—are concepts that can be treated as options for collective coping within the social arena and which must assert themselves against the interests of other agencies. A discursive analytical approach offers points of access for investigating these types of multiple, probably contradicting processes. The options of local knowledge and practice can also be accommodated by these types of formulations and the question remains as to the conditions under which these factors have a chance to resonate in community and higher-level political arenas.

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References

Aneshensel, C. S., & Pearlin, L. I. (1987). Structural contexts of sex differences in stress. In R. C. Barnett, L. Biener, & G. K. Baruch (Eds.), *Gender and stress*. New York: Free Press.

Araya, M., Chotai, J., Komproe, I. H., & de Jong, J. T. V. M. (2007). Gender differences in traumatic life events, coping strategies, perceived social support and sociodemographics among postconflict displaced persons in Ethiopia. Social Psychiatry Psychiatric Epidemiology, 42, 307–315.

Aspinwall, L. G. (2011). Future-oriented thinking, proactive coping, and the management of potential threats to health and well-being. In S. Folkman (Ed.), *The Oxford handbook of stress, health and coping* (pp. 334–365). New York: Oxford University Press.

Aspinwall, L. G., & Taylor, S. E. (1997). A stitch in time. *Psychological bulletin*, *121*(3), 417–436. Baltes, P. B. (1997). On the incomplete architecture of human ontogeny. *American Psychologist*, *52*(4), 366–380.

Bankoff, G. (2003). Cultures of disaster. London: Routledge.

Bankoff, G. (2004). The historical geography of disaster: 'Vulnerability' and 'local knowledge'. In G. Bankoff, G. Frerks, & D. Hilhorst (Eds.), *Mapping vulnerability* (pp. 25–36). London: Earthscan.

Bankoff, G. (2007). Living with risk; coping with disasters. *Education about Asia*, 12(2), 26–29. Bankoff, G., & Hilhorst, D. (2009). The politics of risk in the Philippines. *Disasters*, 33(4), 686–704.

Beatty, A. (1999). *Varieties of Javanese religion*. Cambridge: Cambridge Univ. Press.

Berninghausen, J., Kerstan, B., & Soeprapto-Jansen, N. (2009). Schleier, Sarong, Minirock, Frauen im kulturellen Wandel Indonesiens. Bremen: Kellner Verlag.

Bhandari, R. B., Knottnerus, J. D., & Okada, N. (2011). Urban ritual events and coping with disaster risk: A case study of Lalitpur. Nepal. *Journal of Applied Social Science*, 5(2), 13–32.

- Billings, A. G., & Moos, R. H. (1981). The role of coping responses and social resources in attenuating the stress of life events. *Journal of Behavioral Medicine*, 4, 139–157.
- Boas, F. (1940). Race, language, and culture. New York: Macmillan.
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *The American Psychologist*, 59(1), 20–28.
- Bonanno, G. A., Mancini, A. D. (2012). Beyond resilience and PTSD: Mapping the heterogeneity of responses to potential trauma. *Psychological Trauma: Theory, Research, Practice, and Policy*, 4(1), 74–83.
- Bonanno, G. A., Brewin, C. R., Kaniasty, K., & La Greca, A. M. (2010). Weighing the costs of disaster: Consequences, risks, and resilience in individuals, families and communities. *Psychological Science in the Public Interest*, 11(1), 1–49.
- Bonanno, G. A., Westphal, M., & Mancini, A. D. (2011). Resilience to loss and potential trauma. *Annual Review Clinical Psychology*, 7, 511–535.
- Bourdieu, P. (1980). Le capital social: Notes provisoires. *Actes de la Recherche en Sciences Sociales*, 31, 2–3.
- Bourdieu, P. (2002). Habitus. In J. Hillier, & E. Rooksby (Eds.), *Habitus* (pp. 27–32). Aldershot: Ashgate.
- Bourdieu, P., & Wacquant, L. J. D. (2006). *Reflexive Anthropologie*. Frankfurt am Main: Suhrkamp. Brandtstädter, J. (2006). Adaptive resources in later life: Tenacious goal pursuit and flexible goal adjustment. In M. Csikszentmihalyi, & I. S. Csikszentmihalyi (Eds.), *A life worth living: Contributions to positive psychology* (pp. 143–164). New York: Oxford University Press.
- Brandtstädter, J. (2011). *Positive Entwicklung. Zur Psychologie gelingenden Lebens*. Heidelberg: Springer/Spektrum Akademischer Verlag.
- Breslau, N. (2001). The epidemiology of posttraumatic stress disorder: What is the extent of the problem? *Journal of Clinical Psychiatry*, 62, 16–22.
- Brewin, C. R. (2011). The nature and significance of memory disturbance in posttraumatic stress disorder. *Annual Review of Clinical Psychology*, 7, 203–227.
- Bryant-Davis, T., Ellis, M. U., Burke-Maynard, E., Moon, N., Counts, P. A., & Anderson, G. (2012). Religiosity, spirituality, and trauma recovery in the lives of children and adolescents. *Professional Psychology: Research and Practice*, *43*(4), 306–314.
- Burger, J. M., & Palmer, M. L. (1992). Changes in and generalization of unrealistic optimism following experiences with stressful events: Reactions to the 1989 California earthquake. *Personality and Social Psychological Bulletin*, 18, 39–43.
- Carver, C. S., & Connor-Smith, J. (2010). Personality and coping. Annual Review of Psychology, 61(1), 679–704.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56, 267–283.
- Cole, B. S., & Pargament, K. I. (1999). Spiritual surrender: A paradoxical path to control. In W. R. Miller (Ed.), *Integrating spirituality into treatment* (pp. 179–198). Washington, DC: American Psychological Association.
- Coleman, J. S. (1988). Social capital in the creation of human capital. The American Journal of Sociology, 94, 95–120.
- Coser, L. (1967). Continuities in the study of social conflict. New York: Free Press.
- Dekens, J. (2007). Local knowledge for disaster preparedness. Kathmandu: International Centre for Integrated Mountain Development (ICIMOD). Online: http://preventionweb.net/go/2693. Accessed 10 May 2013.
- Deutsch, M. (2000). Justice and conflict. In M. Deutsch, & P. T. Coleman (Eds.), *The handbook of conflict resolution: Theory and practice* (pp. 43–68). San Francisco: Jossey-Bass Inc.
- Dubreuil, B., & Hardy-Vallée, B. (2012) Collective agency: From intuitions to mechanisms http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.81.7868. Accessed 10 May 2013.
- Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Theory*, 38(4), 319–345.

- Eisler, R. M., Skidmore, J. R., & Ward, C. H. (1988). Masculine gender-role stress: Predictor of anger, anxiety, and health-risk behaviors. *Journal of Personality Assessment*, 52, 133–141.
- Fischer, P., Ai, A. L., Aydin, N., Frey, D., & Haslam, S. A. (2010). The relationship between religious identity and preferred coping strategies: An examination of the relative importance of interpersonal and intrapersonal coping in Muslim and Christian faiths. *Review of General Psychology*, 14(4), 365–381.
- Foa, E. B., & Rothbaum, B. O. (1998). Treating the trauma of rape. New York: Guilford Press.
- Folkman, S. (2011). Stress, health and coping: An overview. In S. Folkman, & P. E. Nathan (Eds.), The Oxford handbook of stress, health, and coping (pp. 3–14). New York: Oxford University Press.
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Support*, 21, 219–239.
- Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology*, 54(1), 466–475.
- Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, 55(1), 745–774.
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology*, 50(5), 992–1003.
- Friedman, M. J., Resick, P. A., Bryant, R. A., & Brewin, C. R. (2011). Considering PTSD for DSM-5. *Depression and Anxiety*, 28, 750–769.
- Garrison, M. E. B., & Sasser, D. D. (2009). Families and disaster. In K. E. Cherry (Ed.), Lifespan perspectives on natural disasters (pp. 113–130). Dordrecht: Springer.
- Geller, P. A., & Hobfoll, S. E. (1993). Gender differences in preference to offer social support to assertive men and women. *Sex Roles*, 28, 419–432.
- Gigerenzer, G. (2008). Rationality for mortals. How people cope with uncertainty. New York: Oxford University Press.
- Gilbert, M. (1989). On social facts. New York: Routledge.
- Gilbert, M. (2009). Shared intention and personal intention. Philosophical Studies, 144, 167–187.
- Grootaert, C., Narayan, D., Nyhan, J. V., & Woolcock, M. (2004). *Measuring social capital: An integrated questionnaire*. Washington, D.C.: The World Bank.
- Hatch, S. L., & Dohrenwend, B. P. (2007). Distribution of traumatic and other stressful life events by race/ethnicity, gender, SES and age: A review of the research. *American Journal of Community Psychology*, 40, 313–332.
- Hilhorst, D., & Jansen, B. J. (2010). Humanitarian space as arena: A perspective on the everyday politics of aid. *Development and Change*, 41(6), 1117–1139.
- Hill, P. C., & Hood, R. W. (1999). *Measures of religiosity*. Birmingham: Religious Education Press.
- Hill, P. C., & Pargament, K. I. (2008). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *Psychology of Religion and Spirituality*, 58(1), 64–74.
- Hinton, D. E., & Lewis-Fernandez, R. (2011). The cross-cultural validity of posttraumatic stress disorder: Implications for DSM-5. *Depression and Anxiety*, 28, 783–80.
- Hobfoll, S. E. (1998). Stress, culture and community. New York: Plenum Press.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, 50(3), 337–421.
- Hobfoll, S. E. (2011). Conservation of resources theory: Its implication for stress, health and resilience. In S. Folkman, & P. E. Nathan (Eds.), *The Oxford handbook of stress, health, and coping* (pp. 127–147). New York: Oxford University Press.
- Hobfoll, S. E., & Buchwald, P. (2004). Die Theorie der Ressourcenerhaltung und das multiaxiale Copingmodell eine innovative Stresstheorie. In P. Buchwald, S. E. Hobfoll, & C. Schwarzer (Eds.), Stress gemeinsam bewältigen (pp. 11–26). Göttingen: Hogrefe.
- Hobfoll, S. E., Dunahoo, C. L., Ben-Porath, Y., & Monnier, J. (1994). Gender and coping: The dual-axis model of coping. American Journal of Community Psychology, 22(1), 49–82.

- Hobfoll, S. E., Canetti-Nisim, D., Johnson, R. J., Palmieri, P. A., Varley, J., & Galea, S. (2008). The association of exposure, risk and resiliency factors with PTSD among Jews and Arabs exposed to repeated acts of terrorism in Israel. *Journal of Traumatic Stress*, 21, 9–21.
- Hobfoll, S. E., Hall, B., Horsey, K. J., & Lamoureux, B. E. (2011). Resilience in the face of terrorism: Linking resource investment with engagement. In S. M. Southwick, B. T. Litz, D. Charney, & M. J. Friedman (Eds.), Resilience and mental health: Challenges across the lifespan (pp. 253–263). Cambridge: Cambridge University Press.
- Hobfoll, S. E., Hall, B. J., & Canetti, D. (2012). Political violence, psychological distress, and perceived health: A longitudinal investigation in the Palestinian authority. *Psychological Trauma: Theory, Research, Practice, and Policy*, 4(1), 9–21.
- Janoff-Bulman, R. (1992). Shattered assumptions: Towards a new psychology of trauma. New York, NY: Free Press.
- Jigyasu, R. (2002). Reducing disaster vulnerability through local knowledge and capacity. http://ntnu.diva-portal.org/smash/get/diva2:123824/FULLTEXT01. Accessed 06 June 2013.
- Kahneman, D. (2011). Thinking fast and slow. New York: Farrar, Straus and Giroux.
- Kaniasty, K. (2012). Predicting social psychological well-being following trauma: The role of postdisaster social support. Psychological Trauma: Theory, Research, Practice, and Policy, 4(1), 22–23.
- Kaniasty, K., & Norris, F. H. (1993). A test of the support deterioration model in the context of natural disaster. *Journal of Personality and Social Psychology*, 64(3), 395–408.
- Kashima, Y., Kashima, E., Chiu, C. Y., Farsides, T., Gelfand, M., Hong, Y.-Y., et al (2005). Culture, essentialism, and agency: Are individuals universally believed to be more real entities than groups? *European Journal of Social Psychology*, 35(2), 147–169.
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). PTSD in the national comorbidity survey. *Archives of General Psychiatry*, *52*, 1048–1060.
- Kimerling, R., Ouimette, P., & Wolfe, J. (Eds.). (2002). Gender and PTSD. New York: Guilford.
- Knottnerus, J. D. (2012). Ritual as a missing link: Sociology, structural ritualization theory, and research. Boulder: Paradigm Publishers.
- Kotter-Grühn, D., & Smith, J. (2011). When time is running out: Changes in positive future perception and their relationships to changes in well-being in old age. *Psychology and Aging*, 26(2), 381–387.
- Kurtz, L. R., & Ritter, D. (2011). Conflict resolution, provocation or transformation? Ask Gandhi. American Sociological Association. http://works.bepress.com/lester_kurtz/36. Accessed 14 Feb 2013.
- Lazarus, R. S. (1966). Psychological stress and the coping process. New York: McGraw-Hill.
- Lazarus, R. S. (1991). *Emotion and adaptation*. London: Oxford University Press.
- Lazarus, R. S. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology*, 44, 1–21.
- Lazarus, R. S. (1999). Stress and emotion. A new synthesis. London: Free Association Books.
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer.
- Leipold, B., & Greve, W. (2009). Resilience: A conceptual bridge between coping and development, *European Psychologist*, 14(1), 40–50.
- Maiese, M. (2003). Distributive justice. http://www.beyondintractability.org/essay/distributive_justice/. Accessed 31 March 2013.
- Marks, L. D., Cherry, K. E., & Silva, J. L. (2009). Faith, crisis coping and meaning making after Katrina. In K. E. Cherry (Ed.), *Lifespan perspectives on natural disasters* (pp. 195–215). Dordrecht: Springer.
- Markus, H. R., & Kitayama, S. (2010). Cultures and selves: A cycle of mutual constitution. *Perspectives on Psychological Science*, 5(4), 420–430.
- Masten, A. S., & Narayan, A. J. (2012). Child development in the context of disaster, war, and terrorism: Pathways of risk and resilience. *Annual Review of Psychology*, 63, 227–57.
- Mejia, X. E. (2005). Gender matters: Working with adult male survivors of trauma. *Journal of Counseling & Development*, 83, 29–40.

- Miyamoto, Y., & Ryff, C. (2011). Cultural differences in the dialectical and non-dialectical emotional styles and their implications for health. *Cognition and Emotion*, 25, 22–30.
- Miyamoto, Y., Uchida, Y., & Ellsworth, P. C. (2010). Culture and mixed emotions: Co-occurrence of positive and negative emotions in Japan and the U.S. *Emotion*, *10*, 404–415.
- Morling, B., & Evered, S. (2006). Secondary control reviewed and defined. *Psychological Bulletin*, 132, 269–296.
- Nelson G., & Prilleltensky, I. (Eds.). (2010). Community psychology: In pursuit of liberation and well-being. Houndmills: Palgrave/Macmillan.
- Nezu, A. M., & Nezu, C. M. (1987). Psychological distress, problem solving, and coping reactions: Sex role differences. *Sex Roles*, *16*, 205–214.
- Norris, F. H. (2005). Range, magnitude, and duration of the effects of disasters on mental health: Review update 2005. Dartmouth: Dartmouth Medical School and National Center for Posttraumatic Stress Disorder.
- Norris, F. H., Friedman, M. J., Watson, P. J., Byrne, C. M., Diaz, E., & Kaniasty, K. (2002a). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981–2001. Psychiatry: Interpersonal & Biological Processes, 65(3), 207–239.
- Norris, F. H., Friedman, M. J., & Watson, P. J. (2002b). 60,000 disaster victims speak: Part II. Summary and implications of the disaster mental health research. *Psychiatry: Interpersonal & Biological Processes*, 65(3), 240–260.
- Norris, F. H., Baker, C. K., Murphy, A. D., & Kaniasty, K. (2005). Social support mobilization and deterioration after Mexico's 1999 flood: Effects of context, gender, and time. *American Journal of Community Psychology*, 36(1–2), 15–28.
- Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 41(1–2), 127–150.
- Norris, F. H., Tracy, M., & Galea, S. (2009). Looking for resilience: Understanding the longitudinal trajectories of responses to stress. *Social Science & Medicine*, 68(12), 2190–2198.
- Pakenham, K. I. (2011). Benefit finding and sense making in chronic illness. In S. Folkman, & P. E. Nathan (Eds.), *The Oxford handbook of stress, health, and coping* (pp. 242–268). New York: Oxford University Press.
- Pargament, K. I. (1997). The psychology of religion and coping. New York: Guilford Press.
- Pargament, K. I. (2011). Religion and coping: The current state of knowledge. In S. Folkman, & P. E. Nathan (Eds.), *The Oxford handbook of stress, health, and coping* (pp. 269–288). New York: Oxford University Press.
- Pargament, K. I., Koenig, H. G., & Perez, L. M. (2000). The many methods of religious coping: Initial development and validation of the RCOPE. *Journal of Clinical Psychology*, 56, 519–543.
- Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin*, 136(2), 257–301.
- Pitman, R. K., Rasmusson, A. M., Koenen, K. C., Shin, L. M., Orr, S. P., Gilbertson, M. W., et al (2012). Biological studies of post-traumatic stress disorder nature reviews. *Neuroscience*, *13*(11), 769–787.
- Poder, T. G. (2011). What is really social capital? A critical review. *The American Sociologist*, 42, 341–367.
- Porter, L. S., Marco, C. A., Schwartz, J. E., Neale, J. M., Shiffman, S., & Stone, A. A. (2000). Gender differences in coping: A comparison of trait and momentary assessments. *Journal of Social and Clinical Psychology*, 19(4), 480–498.
- Portes, A., & Landolt, P. (1996). The downside of social capital. *The American Prospects*, 26, 18–21
- Ptacek, J. T., Smith, R. E., & Dodge, K. L. (1994). Gender differences in coping with stress: When stressor and appraisals do not differ. *Personality and Social Psychological Bulletin*, 20, 421–430.

- Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1), 65–78.
- Range, L. M., & Jenkins, S. R. (2010). Who benefits from Pennebaker's expressive writing paradigm? Research recommendations from three gender theories. *Sex Roles*, *63*, 149–164.
- Reyes, G., & Jacobs, G. A. (Eds.). (2006). *Handbook of international disaster psychology.* Fundamentals and overview. 4 Volumes. Westport: Praeger.
- Ricklefs, M. C. (2008). Religion, politics and social dynamics in Java. In G. Fealy & S. White (Eds.), *Expressing Islam* (pp. 115–136). Singapore: Institute of Southeast Asian Studies.
- Rosario, M., Shinn, M., Morch, H., & Huckabee, C. B. (1988). Gender differences in coping and social supports: Testing socialization and role constraint theories. *Journal of Community Psychology*, 16, 55–69.
- Roth, A. S. (2011). Shared agency. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy*. http://plato.stanford.edu/archives/spr2011/entries/shared-agency/. Accessed 05 June 2013.
- Rubonis, A. V., & Bickman, L. (1991). Psychological impairment in the wake of disaster: The disaster-psychopathology relationship. *Psychological Bulletin*, 109(3), 384–399.
- Schlehe, J. (2010). Anthropology of religion: Disasters and the representations of tradition and modernity. *Religion*, 40(2), 112–120.
- Schmahl, C. (2009). Neurobiologie. In A. Maercker (Ed.), *Posttraumatische Belastungsstörungen* (pp. 51–64). Heidelberg: Springer.
- Schwarz, S. (2012). Eine kritische und kultursensible Sicht auf das Mainstreaming von Gender in einem Katastrophenkontext: Umstrittene Gendergerechtigkeitsvorstellungen, ein heuristisches Modell sozialen Wandels und Strategieprozessvorstellungen. Betroffenen- und AktivistInnensichtweisen. Doctoral dissertation, Fachbereich Erziehungswissenschaften und Psychologie, Freie Universität Berlin.
- Schwarzer, R., & Leppin, A. (1989). Social support and health: A meta-analysis. *Psychology and Health*, *3*, 1–15.
- Schwarzer, R., & Knoll, N. (2007). Functional roles of social support within the stress and coping process: A theoretical and empirical overview. *International Journal of Psychology*, 42(4), 243–252.
- Schwarzer, R., & Schwarzer, C. (1996). A critical survey of coping instruments. In M. Zeidner & N. S. Endler (Eds.), *Handbook of coping: Theory, research, applications* (pp. 107–132). Oxford: Wiley.
- Schwarzer, R., & Taubert, S. (2002). Tenacious goal pursuits and striving toward personal growth: Proactive coping. In E. Frydenberg (Ed.), *Beyond coping* (pp. 19–35). Oxford: Oxford University Press.
- Schwarzer, R., Sniehotta, F. F., Lippke, S., Luszczynska, A., Scholz, U., Schüz, B., et al. (2003). On the assessment and analysis of variables in the health action process approach. http://userpage.fuberlin.de/~gesund/hapa web.pdf. Accessed 05 June 2011.
- Seginer, R. (2008). Future orientation in times of threat and challenge. *International Journal of Behavioral Development*, 32(4), 272–282.
- Shweder, R. A. (1993). Everything you ever wanted to know about cognitive appraisal theory without being conscious of it. *Psychological Inquiry: An International Journal for the Advancement of Psychological Theory*, 4(4), 322–342.
- Sillitoe, P. (2010). Trust in development: Some implications of knowing in indigenous knowledge. *Journal of the Royal Anthropological Institute, 16,* 12–30.
- Simmons, C. A. (2007). Speculation as to why Women "get" PTSD more often than men. *Women & Therapy*, 30(1/2), 85–98.
- Skinner, E. A., & Zimmer-Gembeck, M. J. (2007). The development of coping. Annual Review of Psychology, 58, 119–144.
- Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping. A review and critique of category systems for classifying ways of coping. *Psychological Bulletin*, 129(2), 216–269.

- Slovic, P., & Västfjäll, D. (2010). Affect, moral intuition, and risk. Psychological Inquiry, 21(4), 387–398.
- Snyder, C. R., & Lopez, S. J. (Eds.). (2011). Oxford handbook of positive psychology. Oxford: Oxford University Press.
- Steil, R., Ehlers, A., & Clark, D. M. (2003). Kognitive Aspekte der Behandlung der posttraumatischen Belastungsstörung. In A. Maercker (Ed.), *Therapie der posttraumatischen Belastungsstörungen* (pp. 91–106). Berlin: Springer.
- Tamres, L. K., Janicki, D., & Helgeson, V. S. (2002). Sex differences in coping behavior: A meta-analytic review and an examination of relative coping. *Personality and Social Psychology Review*, 6(1), 2–30.
- Tang, C. S., & Lau, B. H. (1995). The assessment of gender role stress for Chinese. *Sex Roles*, 33(7/8), 587–595.
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1), 1–18.
- Thoits, P. A. (1991). On merging identity: Theory and stress research. *Social Psychology Quarterly*, 54(2), 101–112.
- Tracy, J. L., & Robins, R. W. (2004). Putting the self-into self-conscious emotions: A theoretical model. *Psychological Inquiry*, 15(2), 103–125.
- Vitaliano, P. P., Russo, J., Carr, J. E., Maiuro, R., & Becker, J. (1985). The ways of coping checklist: Revision and psychometric properties. *Multivariate Behavioral Research*, 20(1), 3–26.
- Wagner-Pacifici, R., & Hall, M. (2012). Resolution of social conflict. Annual Review of Sociology, 38, 181–199.
- Wisner, B., Blaikie, P., Cannon, T., & Davis, I. (2004). At risk: Natural hazards, people's vulnerability and disasters, 2nd ed. London: Routledge.
- Woolcock, M. (2010). The rise and routinization of social capital, 1988–2008. Annual Review of Political Science, 13(1), 469–487.
- Young, A. (2006). Trauma und Verarbeitung in den USA nach dem 11. September. In E. Wohlfart & M. Zaumseil (Eds.), Transkulturelle Psychiatrie. Interkulturelle Psychotherapie (pp. 391–410). Heidelberg: Springer.
- Zeidner, M. (2006). Gender group differences in coping with chronic terror: The Israeli scene. *Sex Roles*, 54(3/4), 297–310.
- Zeidner, M., & Hammer, A. (1992). Coping with missile attack: Resources, strategies, and outcomes. *Journal of Personality*, 60, 709.