Chapter 2
Theoretical Background of COMPASS

Overview: This chapter explains the theoretical framework of COMPASS. Also provided is an overview of the World Health Organization's (WHO) definitions of impairment, disability, and handicap and how this conceptual framework influences COMPASS.

In this chapter, we describe the following:

1. The influences of behavioral, social learning theory, and mental health consultation on COMPASS.
2. How person–environment interactions which are conceptualized in COMPASS are influenced by the WHO framework of impairment, disability, and handicap.
3. Personal challenges and supports and their relationship with competence.

The overall goal of COMPASS is to provide support to the people who help and teach individuals with autism spectrum disorders (ASD) to achieve competence. Although the focus of this manual is on young students in schools, the conceptual model is well suited for older students, adolescents, and adults. The forms provided with the chapters, however, are designed for younger students. Although some of the forms may be appropriate for older individuals, the social skills assessment measures are not.

The model is based on a transactional framework (Sameroff & Fiese, 1990), and highlights the importance of the reciprocal and dynamic interactions between students and their environments. It also incorporates a multicomponent competency enhancement approach adapted from August, Anderson, & Bloomquist (1992) prevention model. Competence is assumed to operate as a protective factor that buffers the student against circumstances that contribute to failure. Because this framework assumes the development of competence results from the transaction between the person and the environment, the degree to which pathology or wellness is viewed as existing solely within the individual is reduced and the contribution of the environment is enhanced. The framework ascertains current personal and environmental challenges (risk factors) and supports (protective factors). Risk factors inhibit the

Fig. 2.1 Balancing challenges and supports
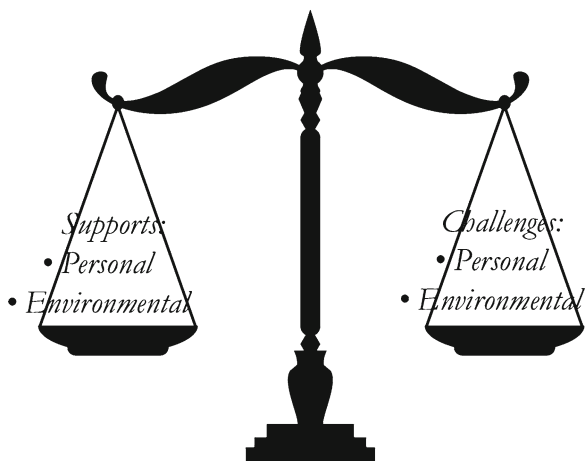
development of competence; protective factors encourage competence (August et al., 1992). Competence results when challenges are minimized by maintaining a balance in favor of supports (see Fig. 2.1).

COMPASS as a Social, Cognitive, Behavioral Model

COMPASS is influenced by multiple theories that include components of behavioral consultation, social learning theory, and the mental health model of consultation. The Behavioral Consultation Model (Bergan & Tombari, 1976) takes into account the functional relationships between behaviors and environmental contingencies and emphasizes analysis of antecedents (what occurs before a behavior) and consequences (what occurs after a behavior).

The mediating effect of internal events (thoughts and feelings) is represented by social learning theory. The COMPASS model considers aspects of social learning theory principles (Bandura, Jeffery, & Gshedos, 1975; Bandura, 1977) by acknowledging that change can be effected by a person's environment, behavior, or cognition. Most new behavior is acquired by observational learning through modeling. Models can be consultants, peers, videos, or books that depict skills. Social learning theory also takes into account consultees' own cognitions about their own self-efficacy (confidence they can perform a task) and appraisal (importance they place on completing a task or attaining a goal). Social learning theory is represented by one of the goals of COMPASS: to enhance consultees' sense of self-efficacy in solving current and future problems.

The Mental Health Model (G. Caplan, R. B. Caplan, & Erchul, 1994) builds from psychodynamic theories and stresses the importance of interpersonal relationships between consultant and consultee. Consultants need to be aware of the necessity of understanding the norms, beliefs, habits, and routines of consultees, and that

ultimately, the consultee is largely responsible for putting the intervention into effect. Therefore, a collaborative approach to consultation is necessary. Consultants who assume an expert role are less likely to achieve positive outcomes compared to consultants who use key concepts of the Mental Health Model. These key factors include the following:

- The relationship between the consultant and the consultee is equitable and nonhierarchical.
- The consultant does not get involved in the personal problems of the consultee.
- The longer-term goal of consultation is to improve the functioning of the consultee for future individuals with autism whom the consultee will teach.

Distinction Between Impairment, Disability, and Handicap

Although ASD are usually considered to be lifelong (a few individuals may not carry the diagnosis over time due to clinically significant improvements), students and adults have the potential to obtain optimal outcomes that lead to productive, fulfilling, and successful lives. One may wonder how a person may achieve a successful outcome if he or she has a diagnosis of ASD. In 1980, the WHO adopted an international classification of impairment, disability, and handicap that occurs along a continuum.

- *Impairment* was defined as "any loss or abnormality of psychological, physiological, or anatomical structure or function." Impairment would relate to the diagnosis of ASD based on the disordered development of socialization, communication, and restricted repertoire of interests and repetitive patterns of behaviors.
- *Disability* was defined as "any restriction or lack [resulting from an impairment] of ability to perform an activity in the manner or within the range considered normal for a human being." The person with ASD is "disabled," for example, when s/he is unable to participate in a role or function as expected for the person's age, such as be a member of a social club at school or participate in a neighborhood play group.
- *Handicap*, on the other hand, was defined as "a disadvantage for a given individual, resulting from impairment or a disability, that limits or prevents the fulfillment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual." Emphasized in this definition is the concept of "disadvantage." One disadvantage is when the person with ASD is not allowed to participate because of the attitudes or perceptions from others about ASD. For example, if a student is not taught or provided a way to communicate with others, then the person is handicapped. If the person is not allowed to use his or her communication system because it makes him or her "look different," then this attitude of others poses a handicap.

These distinctions between impairment, disability, and handicap take into account the influences between the person and his or her environment, a consideration that

is important for setting expectations and developing interventions. It implies that enhancement of environmental supports are part of the therapeutic strategies that are designed to offset personal challenges or impairments that may result in disability or even handicap (Ruble & Dalrymple, 1996, 2002).

Interventions for individuals with ASD should take a two-pronged approach: one aimed at the individual and the other directed toward the environment. Interventions that focus on the individual include psychoeducational and developmental approaches. Interventions directed toward the environment include psychoeducational consultation with people or consultees (family members, teachers, employers) regarding environmental supports for the individual. The ultimate goal is for the individual with ASD to be able to participate as fully as possible and achieve his or her maximum potential and competence.

Competence Enhancement Across the Lifespan

Challenges are a part of everyday life. Depending on your present niche in life, activities requiring vocational, academic, social, communication, or leisure skills present unique challenges. Often, we fail to consider these daily challenges because we have developed the skills to master them. In fact, we often master them so well we develop a sense of competency in our skills leading to personal well-being and an acceptable quality of life for ourselves. Individuals who lack skills in meeting daily challenges fail to develop self-competence and confidence.

Competence looks different across the lifespan of the individual. The competent infant has a complex range of behaviors for meeting daily challenges. Crying, smiling, cooing, and eye contact help the infant meet daily challenges via the effects these behaviors have on caretakers. Toddlers develop early social and communicative behaviors as demonstrated in the use of language and interactive play patterns. The young student increases motor skills and cognitive abilities as evidenced in displays of independence as the student learns to negotiate challenges directly, rather than by influencing the behavior of others. Young students also face challenges in the demands for interactive play requiring that they control their emotions and understand complex social behavior such as sharing.

School provides a unique set of challenges in the development of competence. The student must adjust to being away from home and must adapt to the increased challenges of academic learning. The school setting requires that the student exhibit self-control and competencies in socialization, communication, and emotion. Play skills take the form of organized sports or may require the student to interact in peer-organized activities, such as during recess. Changes in routines also become more pronounced as students are expected to make many new transitions both at school and home. Challenges during early school years expand significantly as the student moves to adolescence and faces new and more complex demands for competency skills.

Transition to adulthood brings with it vocational decisions as well as demands for more independent living skills. The individual no longer is faced with the school

routine but must now develop social and leisure activities on his or her own initiative. The social, communication, self-control, and emotional competencies continue to be refined and utilized throughout adult life. The complexity of adult relationships, including both the emotional and physical aspects, presents new and/or different challenges for individuals with an ASD. In older adults, challenges include transitions from job to job or apartment to apartment. Sometimes, older adults are presented with challenges of having to adapt their lifestyle to changes in skills brought on as a part of the aging process. The ability to cope with challenges at this stage is aided by the acquisition of competency skills early in life.

Individuals with ASD often lack the necessary competency skills to meet these daily challenges occurring across the lifespan. The competence of a person with ASD can be enhanced, however, by understanding how vulnerabilities interact and can be counterbalanced with one's personal and environmental supports (see Fig. 2.1).

Balance Between Risk and Protective Factors

The COMPASS model suggests that a balance between risk (challenges) and protective (supports) factors is an important goal. The greater the challenge for an individual, the greater the imbalance is weighted toward failure. A competent outcome to challenges depends on the balance being tipped in favor of supports. Challenges leading to poor competency include the individual's primary vulnerabilities (personal challenges) and ecological stressors (environmental challenges). Factors that protect the individual from poor competence include personal and environmental resources or supports that, when combined, produce skills to meet challenges.

Challenges

Primary challenges include biological predispositions that increase risks. Neurobiological research indicates that brain function is altered in people with ASD, leading to differences in the way they process information from the environment. The information-processing difficulties are apparent in the social and communication problems of persons with ASD as well as in their narrow range of interests and unusual sensory or motor behaviors. These vulnerabilities are apparent early in life, producing difficulties for the infant in responding competently to the social and communicative demands of the environment. The vulnerabilities lead to further problems as challenges increase with age. Comprehensive, multidisciplinary evaluations are important in identifying the primary challenges.

Adding to the personal challenges are environmental stressors. These are factors that impede competence development. Some possible stressors include misunderstandings about the individual's needs, placement in isolated settings, confusing environments, and punitive behavioral programs. A lack of trained professionals

Table 2.1   Examples of how to use individual interests to enhance other skills

An interest in music can be expanded by introducing similar music to the current repertoire. Slowly add to the repertoire by adding varied beats, vocals, and instruments. Expand experiences to include live music, singing, playing a keyboard, tapping rhythms, and dancing. Music can then be used as a vehicle to share interests with others, to relax and calm down, and for reinforcement after work

who can help plan for the life transitions of persons with ASD can produce additional challenges. Inadequate supports for communication, social, leisure, and sensory needs contribute to failure. Family stressors may lead also to further risk of poor competency development in people with ASD.

Supports

While it is important to assess the personal and environmental challenges of persons with ASD, competence enhancement focuses on the increase of protective factors. Protective factors must balance risk factors to develop competency. During various periods throughout a person's life, the need for protective factors will wax and wane; however, individuals with ASD will always need help to build their personal supports. They also need a variety of environmental supports and resources to meet their needs.

Personal supports are the strengths and interests that can produce competent responses to challenges. Individual strengths and preferences must be identified and then used to enhance other skills. These strengths and preferences also become the motivators and building blocks for the development of functional life skills, the skills essential for everyday living. Interests will change and expand as the person grows. Relative strengths tend to remain stable, but must be enhanced. Sometimes, the interests of individuals with ASD are narrow. However, it is important to begin with current interests, gradually widening and expanding these interests. Music, puzzles, and manipulative items, books and magazines, specific TV shows, the weather, specific foods, riding in a car, rocking, spinning things, routines, sequences, patterns, numbers and letters, and moving—running, pacing, jumping—are samples of preferences that individuals with ASD may demonstrate. See Table 2.1 for more ideas.

Similarly, a liking for water can be used within many activities that help meet sensory needs. Bathing, showering, washing and rinsing dishes, watering or spraying plants, hosing/washing windows or tables, and swimming are some possible water activities. Looking at water in falls, creeks, oceans, fountains, bottles, toilets, and puddles can be exciting or soothing. Pouring, drinking, sipping, spraying, swirling, swishing, and splashing are a few actions to do with water. Experiencing water by being in a shallow pool, deep pool, indoor pool, lake, or ocean broadens the concept of swimming.

Strengths are assets on which to build a strong foundation for competency. These must be discovered and enhanced. Sometimes, the same attribute can be

interpreted as a liability by some and a strength by others. Interpretation and the viewpoint of the observer can set the stage for competency or failure. For instance, stamina can be listed as a strength or be seen as a challenging behavior if it is called hyperactivity. Strengths might include visual and auditory memory, visual/spatial skills, desire to please, word and number recognition, gross motor skills, desire for order, self-care, and perseverance. These strengths and interests lead to competent behavior in particular areas. A person with ASD, for example, may be highly competent at completing a complex puzzle. Unfortunately, puzzle competency does not produce the social and communication competencies needed to meet the challenges of daily activities. By utilizing environmental supports, however, the unique competencies of a person with ASD can be used to develop functional skills for daily life.

Environmental supports are positive. They do not remove challenges from the lives of persons with ASD, but rather they provide the balance on which to build competency. Environmental supports must be community based, system wide, and individualized to meet each person's needs. Consistency and stability through a continuum of services as well as individual and family supports are essential. If we are going to be successful in supporting students and adults with ASD to be competent, we must collaborate across people, agencies, and government.

Some of these environmental supports are as follows:

- Family supports that include respite.
- Recreational opportunities.
- Social networks.
- Access to information and resources and meaningful programs and employment.
- Trained and knowledgeable personnel.
- Longitudinal/future planning that includes transition plans, interagency collaboration, and community access that build in stability and consistency, and promotion of choices and independence.
- Proactive, positive program components that include supports for inclusion; functional meaningful assessments; continuum of services; individual supports; and home/school collaboration. A proactive, rather than reactive, approach to problem behaviors that teaches rather than punishes.
- Positive, individualized programs that focus on using individual learning styles with visual supports, meaningful activities, appropriate pacing, and meeting sensory needs.
- Other components including teaching functional communication and social interaction skills across settings and people and teaching community skill development in collaboration with families and friends.
- Planning and developing vocational and job skills and social supports and networks are also part of positive programs.