Coping with stress: person-environment transactions, diversity, and development

Melanie J. Zimmer-Gembeck^a and Ellen A. Skinner^b, ^a School of Applied Psychology, Menzies Health Institute of Queensland, Griffith University, Southport, QLD, Australia; and ^b Department of Psychology, Portland State University, Portland, OR, United States

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Key points

- Coping is a process of adaptation that refers to how individuals deal with actual stressors in real time and over time.
- The study of coping has a long history and has attracted widespread research attention.
- There are many ways of coping and many studies have linked coping responses to resilience, growth, or ill health following stressful events.
- Social relationships and cultural systems contribute to coping.
- Because coping is a multidimensional and dynamic process, many complex research designs have emerged to capture its impact.
- All age groups have ways to cope with stressors, but coping changes with age and is a key player in other developmental outcomes.
- A new direction is the focus on coping flexibility as important to successful coping with stressors.
- Interventions that focus on coping efficacy, control, and competence produce positive mental health outcomes following trauma and other stressors.

Abstract

Coping with stressful events is a basic process integral to adaptation and survival. Coping involves how people of all ages detect, appraise, and respond or deal with stressful encounters, including threats, challenges, and loss. Decades of research has described the complexity of coping as it unfolds over each stressful event episode and develops with age and experience. In particular, researchers have considered how individuals vary in their coping responses to stressful events and how coping helps to explain why stressors can result in ill health, psychopathology, or resilience and growth. New directions include consolidation of the many ways of coping reported across thousands of published studies, developmental theories, complex methodologies that augment cross-sectional studies based on self-report questionnaires, identification of coping flexibility as an adaptive response to stress, and studies of interventions that identify the most important coping responses for recovery from stressful life experiences.

Introduction and definitions

Coping is a process of adaptation, which depicts how people detect, appraise, deal with, and learn from actual and anticipated stressful encounters (Skinner and Zimmer-Gembeck, 2016). Given the continued prominence of transactional views of stress and coping, many researchers continue to draw upon the definition of coping from Lazarus and Folkman (1984) as a starting point: coping is "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 141). Because coping refers to how individuals deal with actual stressors in real time and over time, a major focus of the area has been the identification of different strategies used to cope (ways of coping). A wide variety of ways of coping have been studied, including for example problem-solving, support-seeking, reappraisal, positive thinking, accommodation, information-seeking, constructive venting of emotion, negotiation, avoidance, escape, rumination, denial, helplessness, passivity, confusion, concealment, isolation, withdrawal, and opposition.

The processes used to accomplish coping arise from many levels of human functioning, which means that coping depends on a system of neurophysiological, attentional, emotional, motivational, behavioral, cognitive, social, and interpersonal processes. This view implies that coping involves assembling these processes together to determine action, with the action aimed at internal regulation but also including attempts to modify stressful environmental conditions. Thus, similar to views on emotion regulation and self-regulation (Bridgett et al., 2015; Compas et al., 2014; Eisenberg et al., 2017; Gunnar et al., 2009; Laurent, 2014), conceptualizations of coping have converged on dual process models to differentiate (1) stress reactions, which refer to immediate involuntary physiological, psychological, and behavioral responses to stressful situations (i.e., reactivity) from (2) action regulation, which describes how people mobilize, guide, manage, energize, and direct their behavior, emotion, and orientation (or how they fail to do so) under stress. There is active debate about how these two processes are coordinated, but researchers agree that they mutually influence each other (Compas et al., 1999). Manifest coping responses likely reflect the balance (or more precisely, the imbalance) between reactivity and regulation, with involuntary stress reactions the product of extreme stress reactivity combined with weak or disabled regulatory systems; and volitional coping responses the result of more modest stress reactions and/or well-developed action regulation systems (Metcalfe and Mischel, 1999).

Although overlap between regulation and coping with stress is clear, they differ in at least two important ways (Compas et al., 2014). First, coping focuses only on "regulatory processes in a subset of contexts—those involving stress" (Eisenberg et al., 1997, p. 42). Second, research on regulation, as reflected in its labels, typically examines efforts to manage a single facet of action (e.g., emotion, attention, or behavior), whereas coping, in contrast, is an organizational construct, encompassing the simultaneous regulation of all these processes. When facing stressful events, individuals attempt not only to handle emotions, but also to manage thoughts, behaviors, attention, and even physiological reactions. Coping is essentially concerned with the integration and coordination among facets of action, for example, how a focus on one may have an (often unintended) impact on others, as when rumination undermines problem-solving or when seeking help bolsters persistence. Conceptions of coping as a dynamic regulatory process may contribute to the next phase of work on coping (Aspinwall and Taylor, 1997; Carver and Scheier, 1998; Neufeld, 1999; Skinner and Zimmer-Gembeck, 2016, 2022).

Social relationships and cultural systems also contribute to coping (e.g., Gardner et al., 2021; Perzow et al., 2021 Wadsworth, 2015; Wolchik and Sandler, 1997). For example, an attachment relationship can provide a sense of security and protection during times of distress; an adult close relationship can be a setting where emotional support and information sharing can be found (Gardner et al., 2020; Mikulincer and Shaver, 2019; Zimmer-Gembeck et al., 2017). Thus, coping has a tightly integrated physiological, psychological, and social basis. Also, coping starts early. Humans come prepared to recognize and react to environmental demands in ways that promote survival. In fact, some experiences with stressful life events are necessary for growth—they lead to the kinds of sustained constructive engagement that can facilitate learning and development. However, human responsiveness to stress can also represent a vulnerability; too much stress can overwhelm and damage physical and mental health. In addition, there are enormous differences in how physiological, psychological, social, and cultural resources for coping are distributed across individuals and socio-cultural groups.

Given its complexity and centrality to adaptation, coping has been approached from a wide range of theoretical perspectives. It has been defined as a specific person-context transaction, personality in action under stress, a repertoire of strategies, a hierarchically organized set of ego processes, an indicator of competence, a function of emotion, an outcome of temperament, an expression of stress physiology, and a quality of action regulation. Overall, coping makes a material difference to how stressful interactions are resolved and is a key factor influencing long-term mental and physical heath, well-being, and development in the face of adversity.

History and theory

Coping did not appear as a term in *Psychological Abstracts* until 1967 but ideas foundational to understanding coping can be traced back to psychoanalytic views on defenses (e.g., Freud, 1894/1962) and grew out of early attention to understanding individual variability in the negative effects of stressful events (e.g., Garmezy and Rutter, 1983; Selye, 1950; for historical overviews see Lazarus, 1993; Lazarus and Folkman, 1984; Murphy, 1974; Parker and Endler, 1996; Snyder, 1999). Today, coping has become a topic of widespread interest among social and clinical scientists and practitioners. A search of PsycINFO combining "coping OR cope" with "stress" from 1967 to 2021 yields about 34,000 entries—just searching "coping OR cope" yields about 113,000 entries. This work

has increasingly informed the design of interventions to help people of all ages cope more adaptively with trauma and stressful life events.

Coping and defense

The concept of defense, as it first appeared in psychology in the early writings of Freud (1894/1962), referred to psychological mechanisms (such as repression or projection) used to protect the psyche from disturbing thoughts and emotions, mainly by distorting reality or removing the distressing material from conscious awareness. These ideas were expanded by Freud (1936/1946) who argued that individuals differ in their defense "styles", which are linked to specific forms of psychopathology. This formulation influenced several generations of ego-psychologists (e.g., Haan, 1977; Valliant, 1986; see Cramer, 1998). These theorists argued explicitly for a hierarchical model of ego processes, in which some defenses are more mature than others. For example, Haan (1977) posited a three-tiered taxonomy of ego-processes: coping, considered more forward looking, flexible, largely conscious, and attentive to reality; defense, considered to be inherently organized around issues from the past, rigid in operation, unconscious, and distorting of reality; and ego-failure or "fragmentation", which can be indicated by high levels of negative affect, helplessness, giving up, and/or blunted coping responses when setbacks, threats or challenges occur.

Current theories continue to reflect these early ideas of defense. They include the idea that coping occurs in response not only to environmental demands, but also to intra-psychic pressures; that some ways of coping are inherently superior; and that people consistently show characteristic styles of coping with threat that reflect personality or ego development. Moreover, this work introduced several themes that are resurfacing in current discussions of coping, including the idea that some modes of adaptation are unconscious and unintentional, that distortions of reality can be adaptive, and that the self (or ego) and its regulatory functions are central to processes of coping.

Stress and coping

Contemporary research and views of coping emerged from the recognition that stressful events affect human health and well-being (Selye, 1950). Systematic attempts to link stressor exposure to specific psychological or somatic outcomes revealed marked individual differences in the effects of stress. This sparked interest in the social and individual factors that determine vulnerability or resistance to the effects of stress, which branched into the study of coping (Coelho et al., 1974; Lazarus and Folkman, 1984; Moos and Billings, 1982; Pearlin and Schooler, 1978). Several methodological shifts in research accompanied these new approaches. The measurement of coping shifted from clinical assessment to self-report and efforts were made to unconfound measures of coping from stress appraisals and assessment of outcomes (e.g., depression). In addition to a focus on coping with traumatic or major life events (e.g., life-threatening illness or divorce), research also came to include the study of chronic stressful conditions, and relatively minor everyday stressors or "daily hassles." Moreover, research became more specialized by type of stressor (e.g., health problems, work stress, or bereavement). Even within domains, research has become more finely differentiated. For example, different medical conditions are often studied separately. Most recently, research has also begun to incorporate a focus on coping flexibility as a promising approach to beneficial responses to stressful events, describing how individuals can show flexibility or inflexibility (e.g., rigidity) in responses to stressful events at multiple levels (Zimmer-Gembeck, 2021).

Transactional perspectives on coping

Transactional perspectives, which view coping as an interactive process that unfolds in several recursive steps, have guided much of the research on coping over the last 30 years (Folkman and Moskowitz, 2004; Lazarus and Folkman, 1984). According to this perspective, as pictured in Fig. 1, coping transactions are initiated by encounters with *stressful events*, defined as internal and external events that individuals appraise as important to their well-being and as taxing or exceeding their resources (Lazarus and Folkman, 1984). Appraisals of stressful events, which usually include appraising personal relevance and controllability of the stressor, result in a general perception that the event is a *threat* (i.e., impending harm), a *loss* (i.e., irreversible harm that has already been incurred), or a *challenge* (i.e., a stressor the individual is confident about mastering).

Appraisals link to coping, whereby personal and social resources are called upon in the attempt to solve the stressful problem or manage negative emotional reactions to it. These efforts produce coping outcomes, which, by feeding back to both the stressful event and individuals' reappraisal processes, can terminate or prolong the transaction with the stressful event. According to this perspective, coping can be seen as a process that involves a wide variety of ways of reacting to and dealing with stressors that are organized sequentially, forming an interconnected action sequence or coping episode (Folkman and Lazarus, 1985).

Transactional coping research

Mainstream research that has taken a transactional stress-coping theory approach has tended to concentrate on the impact of differences across individuals in each of the links in the coping process. Typical studies examine a single population at a single time, assess self-reported ways of coping (e.g., problem-solving, help-seeking, avoidance) with either a variety of unidentified stressors or a prespecified narrow class of stressors. Studies examine how these different ways of coping are connected to a variety of outcomes,

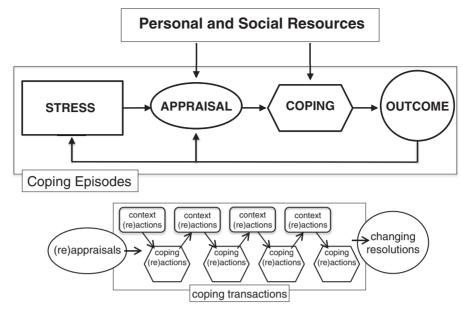


Fig. 1 A transactional model of coping as an episodic process and a transactional process.

usually indicators of mental or somatic functioning (such as emotional adjustment or physical symptoms), to identify adaptive and maladaptive coping strategies. Complementary studies examine the associations of different ways of coping with self-reports of potential personal and social antecedents, focusing both on individual characteristics (such as self-efficacy, optimism, or perceptions of the availability of social support), and characteristics of the social context (such as provision of instrumental aid or emotional comfort). Yet other studies examine coping as a set of responses that might moderate the impact of stressful events on indicators of mental or somatic functioning.

Much has been learned from these decades of research on individual differences and correlates of coping. Certain ways of coping are linked most frequently with indicators of good mental health and functioning, particularly (1) problem-focused coping and the set of control-related factors which support it; (2) constructive thinking and the factors which support it (e.g., optimism); and (3) perceptions of support from trusted others (Compas et al., 2017; Skinner and Saxton, 2019; Skinner and Zimmer-Gembeck, 2016). In contrast, other coping responses reveal the opposite pattern of effects, showing associations with more emotional or physical distress and psychological disorder; the most frequent culprits are escape and social withdrawal, cognitive avoidance, rumination, and venting (Smith and Alloy, 2009; Wadsworth, 2015; Zimmer-Gembeck, 2015; Zimmer-Gembeck and Skinner, 2011, 2016). The status of other ways of coping, such as help-seeking, support seeking, relaxation and emotion suppression, is less clear because they are inconsistent in their connections to mental health and well-being outcomes associated with stressful events. Multiple individual resources for coping have been identified, chief among them are intelligence; optimism; mindfulness and decentering (e.g., the ability to be an objective observer of one's own thoughts and feelings); executive functioning and cognitive flexibility (e.g., the ability to shift attention); self-esteem; sociability; and mastery and perceptions that one has control over life outcomes (Compas et al., 2012; Dvořáková et al., 2019; Duncan et al., 2021; Finkelstein-Fox et al., 2018; Papadakis et al., 2018; Taylor and Stanton, 2007; Zimmer-Gembeck et al., 2021; Zimmer-Gembeck, 2016).

As a body, however, this work has some weaknesses. First, studies are not always founded on theory. For example, researchers do not rely on theory to identify ways of coping and the processes they might evoke. Second, there is often little information to support the selection of which ways of coping to consider, and ways of coping may be defined differently across different studies. Third, research relies heavily on self-report questionnaires, cross-sectional designs, and retrospective reporting about past coping responses to stressful events. As noted by Sommerfield and McCrae, "The seemingly boundless enthusiasm for coping research seen in the 1980s has been replaced by widespread disaffection, intense scrutiny, and corresponding calls for change" (2000, p. 620). In response to these critiques, researchers today more frequently employ several innovative approaches, such as daily diary and ambulatory assessment methods (Duvenage et al., 2019; Finkelstein-Fox and Park, 2019) or laboratory-based experiments (Masters et al., 2022).

Ways of coping

Of central concern to coping researchers are the ways people deal with actual problems on the ground. The study of actual coping categories, such as problem-solving, support-seeking, rumination, or escape, distinguishes research on coping from closely related work on stress, adaptation, risk, resilience, and competence. The examination of a variety of responses distinguishes the study of coping from the disparate programs of research focusing on each of the individual ways of coping. Hence, constructing category

systems to conceptualize and measure coping has been a central endeavor of the field. However, this task is made difficult by the complexity of coping. Coping responses, because they are tailored to particular demands and resources, and attuned to the specific contexts in which they are enacted, are practically limitless in their variety; a review of coping measures described about 400 different category labels (Skinner et al., 2003). Research has been slowed by widespread disagreement about taxonomies of coping. No consensus exists about core categories. Years of exploratory factor analyses have failed to converge on a set of higher-order categories, nor do theorists agree on systems for rational classification. Given the seemingly infinite variety of specific coping responses, even the possibility of identifying a core subset of ways of coping has been questioned.

One promising approach uses theory and confirmatory factor analysis to identify multiple core categories. Over the last two decades, researchers have put enormous effort into conceptualizing and assessing hierarchical models that use higher-order categories or families to organize multiple lower-order ways of coping. Researchers have attempted to conceptually identify a finite set of basic adaptive processes and then to classify ways of coping as belonging to a "family" of ways of coping that serve each function. Examples of theories used in these attempts include functionalist theories of emotion, theories of motivation, regulation, primary and secondary control, and ego processes.

Despite differences in theoretical approaches and dimensions, we have argued for a small number of families of coping, perhaps a dozen or so, that can be used to classify most, if not all, of the ways of coping identified in previous research (Skinner et al., 2003; Skinner and Zimmer-Gembeck, 2007). These families include problem-solving, support-seeking, escape, distraction, cognitive restructuring, rumination, helplessness, social withdrawal, emotional regulation, information seeking, negotiation, opposition, and delegation. Families, however, include not only the lower-order ways of coping depicted in their labels, but also all the other ways of coping that serve that same set of functions. For example, "escape" includes not only physically leaving a stressful situation, but also mental escape, withdrawal of effort, denial, avoidance, and other actions that remove the person from contact with distressing interactions. These twelve families of coping include the most common ways of coping utilized by people and studied by researchers (Skinner et al., 2003; Zimmer-Gembeck and Skinner, 2011). The identification of these higher-order families helps clarify the complex structure of coping and encourages renewed discussions of its adaptive functions (Coelho et al., 1974; Lazarus and Folkman, 1984). Such discussions expand on the distinction between problem-focused vs. emotion-focused coping and on coping styles (e.g., repression vs. sensitization) as well as reopening discussions of the functions of coping in adaptation.

Coping as a process

Coping is a process that necessarily unfolds over time, but research methodologies designed to capture the process of coping with stress have just begun to (re)appear during the last decade. These include case studies, ethnographic narratives, interviews, and observations, which were popular decades ago (Block and Block, 1980; Folkman, 1997; Murphy and Moriarity, 1976; Valliant, 1986) as well as more recent quantitative methods, such as intra-individual time series analysis (Tennen et al., 2000). Designs are longitudinal, repeating measures over short times (e.g., daily) or over several years, often including markers of the progress of stressful events (e.g., diagnosis and surgery, general daily stressors, or caretaking, deterioration, and death of a partner).

For microgenetic approaches, patterns of intraindividual relations among variables (e.g., problem-focused and emotion-regulation coping) across time or across multiple stressors are determined. Then interindividual difference variables (e.g., depression or optimism) are used to form groups that are compared on their patterns of intraindividual relationships (Gardner et al., 2020; Tennen et al., 2000; Titova et al., 2022; Zimmer-Gembeck et al., 2011, 2016). Such an approach has been used to identify coping flexibility, as well (Cheng et al., 2014; Zimmer-Gembeck, 2021). Observations of coping interactions with social partners (e.g., mothers and their children) can also be used to examine the sequential effects of individual coping and partner reactions over time (Skinner and Edge, 2002; Zimmer-Gembeck et al., 2017). Narratives and interviews capture a wider range of experiences and can track their progress over longer intervals (Folkman, 1997). The yield from this labor-intensive research seems promising. For example, such studies already suggest that both generation of and focus on positive experiences are critical in dealing constructively with chronic stress; that depression and other emotional sensitivities can influence day-to-day reactions to chronic pain and other stressful events; and maternal interpretations of negative events shape children's subsequent appraisals and coping.

Two productive empirical strategies for capturing coping processes have been (1) to make particular categories of coping, such as accommodation or rumination, the focus of detailed programs of laboratory and naturalistic research (e.g., Masters et al., 2022; Nolen-Hoeksema et al., 2008), and (2) to study in fine-grained detail how children and adults deal with certain classes of environmental demands, such as failure, unpredictability, action that leads nowhere, separation, loss, interpersonal conflict, victimization, or rejection (e.g., Compas et al., 2012; Gardner et al., 2020; Maier and Watkins, 2005; Zimmer-Gembeck, 2016). These programs of research have produced relatively well-accepted conclusions about positive ways of coping, such as mastery-oriented thinking, disclosure and discussion, constructive thinking, proximity seeking, accommodation, and optimism, and about the generally maladaptive consequences of rumination, helplessness, blaming others, catastrophizing, and social isolation. Programs of research on other ways of coping, such as help- or support-seeking, positive illusions, avoidance, denial, and relinquishing control, have produced less conclusive results, including evidence that their effects depend on characteristics of the situations in which they are employed. It should be noted that almost every activity that is considered a way of coping also has its own well-developed body of research. Most of these areas of research are largely independent of work on coping, although some examine the functioning of these processes under stress, and future research could combine them into a profile or repertoire of coping responses.

Coping, learning, and development

Research studying children and stressful events often concentrates on the potential physical or emotional damage that can come from trauma early in life (Nelson et al., 2020) or how extreme, ongoing, or uncontrollable stress can erode well-being (Chung et al., 2019; Compas et al., 2017; Gardner et al., 2021; Zimmer-Gembeck, 2015). Yet, developmental perspectives also acknowledge that many stressful events are not inherently damaging, and the primary function of coping is not simply to shield people from stressful experiences. Coping, instead, can be a process intrinsic to psychological and relational growth and one that humans are predisposed to do well. Interest in positive coping (Snyder, 1999) and the study of growth from adversity, transformation in the face of trauma, and benefit finding (Infurna and Jayawickreme, 2019; Joseph and Linley, 2006; Kashdan and Rottenberg, 2010), can be viewed as attempts to conceptualize and study the growth facilitating functions of stressful experiences and coping with them. Analysis of the role of coping in resilience in children and the relationship of coping and developmental changes across the lifespan (Aldwin, 2007; Skinner and Zimmer-Gembeck, 2007, 2016) help to clarify these complexities. These developmental views build on transactional perspectives to tie coping back to its roots as a process of adaptation, focusing also on the role of coping as inherently regulatory and as a precursor to learning and development (see Zimmer-Gembeck, 2021 for a model). Here, it is helpful to consider coping as a process of regulation and attempts at adaptation, and to consider how it develops with age and experience and how coping development feeds back to yield new learnings and developmental change.

When coping is returned to its core meaning as a fundamental adaptive process, the transactional steps of coping can be divided into basic tasks: (1) to detect and interpret information about internal and external demands (threat detection and appraisal); (2) to prepare a response based on internal and external guides and capacities (action readiness); and (3) to execute a response by coordinating action tendencies with internal and external demands and resources (action regulation). Moreover, for developmental progress, the coping system also needs (4) to recover and learn from stressful encounters. These tasks are depicted in Fig. 2.

Coping during childhood and adolescence

Child psychologists have had a long-standing interest in the impact of adversity on children and, since the early part of the 20th century, have attempted to document the effects, for example, of maternal deprivation, serious illness, hospitalization, and wartime conditions, as well as more recent attention to the effects of parental mental or physical illness, unemployment, poverty, and divorce. The first formal study of children's coping is often traced to Lois Murphy and her colleagues at the Menninger Clinic, who used intensive observations and interviews to conduct an 18-year longitudinal study of the ways in which normal children cope (Murphy and Moriarity, 1976).

The 1980s witnessed an explosion of quantitative work on children and adolescents, sparked by the publication of two seminal works on stress, coping, and development (Compas, 1987; Garmezy and Rutter, 1983). Although the current wave of research on children and youth closely resembles work on adults (Compas et al., 2001, 2017), it nevertheless highlights several important themes. First, the means of coping, as well as the personal and resources brought to bear during coping efforts, show radical changes and reconfigurations across the lifespan (Aldwin, 2007; Skinner and Zimmer-Gembeck, 2007; Zimmer-Gembeck and Skinner, 2011). In particular, the prominent use of cognitive coping strategies in adults is not so prominent in children prior to the late

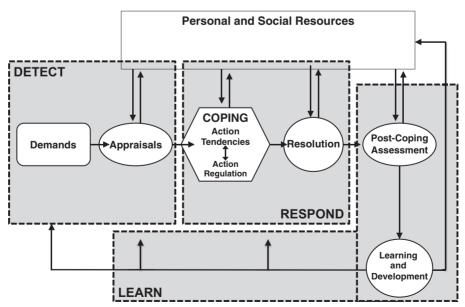


Fig. 2 Coping as a process that allows individuals to detect, deal with, and learn from stressful encounters.

childhood years (Zimmer-Gembeck and Skinner, 2011). Children rely most on behavioral strategies to cope with stress, such as venting, withdrawal, proximity seeking, and distraction with objects. Second, it makes evident that coping among children and youth is inherently shaped by social partners, close relationships, families, and communities (Hetherington and Blechman, 1996; McCubbin et al., 1996). Third, research on children also encourages a renewed consideration of the neurophysiological (Cohodes et al., 2021; Compas, 2006; Gunnar et al., 2009; McEwen et al., 2016; Sheridan and McLaughlin, 2014; Taylor and Stanton, 2007) and temperamental (Caspi and Shiner, 2006; Derryberry et al., 2003) underpinnings of coping.

Overall, age-graded shifts in the basic tasks of coping (i.e., detection and appraisal, action tendencies and regulation, and learning) are shaped, on the one hand, by the development of neurophysiological and psychological subsystems, and on the other hand, by changes in the demands and resources provided by social partners. In childhood and adolescence, social partners, especially caregivers but also friends and teachers (Skinner and Saxton, 2019; Zimmer-Gembeck et al., 2022), play crucial roles in the development of all the subsystems that support coping, both in the emergence and consolidation of these regulatory resources and capacities. Moreover, the caregiver's role in coping *changes* over development, from one in which they are doing most of the coping for newborns based on their infants' expressed preferences, to one of direct participation, then cooperation, and finally acting as a resource and back-up system to the relatively independent coping of which adolescents are capable by the time they reach emerging adulthood.

Coping in adults

A focus on children is important but studying the development of stress and coping across the lifespan has also been critical. Research with adults has followed from interest in how people successfully deal with life transitions, social changes, and the challenges of aging (Aldwin, 2007; Baltes and Baltes, 1990; Brandtstädter and Rothermund, 2002; Brandtstädter et al., 1999). Stress and coping responses may be the principal foundation for adult developmental changes—both growth and decline. For example, research on successful aging, in documenting that most people maintain a high level of psychological functioning despite objective biological declines and social losses, focuses attention on positive coping strategies, like selective optimization, compensation, planning, and proactive coping. It also highlights the importance of "accommodative" modes of coping, which allow people to acknowledge limitations, accept constraints, relinquish goals, withdraw from goal pursuit, and focus on gratitude and joy in current conditions. It also focuses on dyadic coping, considering how dyads share or balance coping responsibilities when they confront stressors together (Falconier et al., 2015).

Coping flexibility

Research has shown that coping responses to stress can be positively intercorrelated with each other and that it is common to rely on multiple coping skills for a single stressful event (Bonnanno and Burton, 2013; Cheng, 2001; Skinner and Zimmer-Gembeck, 2016; Wadsworth, 2015; Zimmer-Gembeck et al., 2018). In fact, rigid use of only a single specific way of coping may be an indicator of high reactivity or a maladaptive coping response. Although research is only emerging (e.g., Cheng, 2001; Galatzer-Levy et al., 2012; Zimmer-Gembeck, 2021; Zimmer-Gembeck et al., 2018), acknowledging the possibility that flexibility may be crucial to adapting well to stress has spurred new directions in the study of stress and coping, as well as in areas of emotion and self-regulation.

Definitions of coping flexibility have incorporated three interrelated processes: (1) perceiving access to or reporting use of a greater repertoire, breadth or variability of coping responses (e.g., Galatzer-Levy et al., 2012; Zimmer-Gembeck et al., 2018); (2) matching coping responses to the situational demands of stress instead of rigidly responding to stressful events with limited responses (e.g., Babb et al., 2010; Cheng, 2001; Zimmer-Gembeck et al., 2018); and (3) the capacity to assess and evaluate whether initial coping responses have been successful, and if not, to flexibly adapt coping after re-evaluating personal and situational circumstances (Bonano and Burton, 2013; Kato, 2012). When defined in these ways, coping flexibility has been shown to be beneficial for personal adjustment in children, adolescents, and adults (e.g., Duncan et al., 2021; Kato, 2012; Zimmer-Gembeck et al., 2018). As such, a next generation of research on stress and coping in children and adolescents should more closely consider coping patterns and coping flexibility, and their development.

Interventions to improve coping

A relatively distinct strand of work involves psychological and behavioral medicine interventions that have succeeded in helping people deal adaptively with traumatic events and their associated ongoing stressors. In contrast to traditional therapy, these interventions focus on provision of information and social support, and on helping people build coping resources and skills for dealing more effectively with a range of different stressors, such as illness, chronic pain, divorce, or bereavement (Compas et al., 2014; Coyne and Racioppo, 2000; Hogendoorn et al., 2014; Kendall et al., 2016; Sandler et al., 1997; Taylor and Stanton, 2007). Stress appraisals and specific ways of coping, and the feelings of efficacy, competence, and control—which support constructive appraisals and coping responses—can be central targets to boost resilience and well-being following stressful events. Important areas of focus in interventions designed to promote positive adjustment outcomes include boosting confidence in coping through supported practice (i.e., increasing coping self-efficacy and reducing feelings of helplessness), training in the use of problem-solving; cognitive re-

structuring and the appropriate use of distraction, relaxation training and mindfulness; and reducing avoidant responses like rumination and social withdrawal (Dorsey et al., 2017; Hogendoorn et al., 2014; Kendall et al., 2016; Sandler et al., 2000).

Conclusion

As the construct of coping heads into its sixth decade as an official term in the psychological lexicon, it continues to inspire researchers and interventionists with its potential to capture important features of "host resistance," that still elusive quality that allows individuals to actively wrestle with intrapsychic and environmental challenges and problems, sometimes besting them, sometimes accepting them, or just plain losing, but still with the possibility to extract from these difficult and painful interactions lessons about how to prevent or approach the next stressful encounter. The promise of the area of coping, and its challenge to researchers, is to examine coping as an engine of development or a catalyst for change, to determine if conceptions of coping can provide a process mechanism that explains how people (individually and collectively), in the face of adversity, are able to find and create opportunities for development.

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