Non-Empirical Paper

Interdependent transformations: Integrating insights from relationship science to advance post-traumatic growth and personality change research

Veronica M Lamarche

Abstract
People have a tremendous ability to grow and change for the better following adverse life events. This capacity for growth has captured the attention of psychologists interested in understanding the mechanisms underpinning both personality and well-being. This paper advocates for a greater integration of relationship science into this area of study as a means of advancing post-traumatic growth and personality change research. Relationships, both as an impetus for change and as evidence of growth, have featured consistently in the post-traumatic growth and adversity literatures. Drawing from interdependence theory in particular, this paper highlights how the unique structure of close relationships and relationship dynamics can be applied to address outstanding theoretical questions related to the advancement of post-traumatic growth research as well as offers a critique of the practice of using relationship outcomes (e.g., connection) as evidence of post-traumatic growth. Finally, this paper encourages psychologists across subdisciplines to share their unique skills and insights to help generate more robust psychological theories and methods.

Most people experience adversity at some point in their lives. Despite a general desire to avoid such events, many people often paradoxically express the belief that they have changed for the better as a consequence of their traumatic or adverse life experiences (Linley & Joseph, 2004; McMillen et al., 1997; Tedeschi & Calhoun, 1996; Tedeschi et al., 1998). These purportedly positive changes have been conceptualized as post-traumatic growth (PTG) (Tedeschi & Calhoun, 1996). Originally specific to personality changes following a trauma, PTG focused on self-reported positive changes across at least one of the five domains: embracing new opportunities, greater spirituality, greater gratitude toward life, greater emotional strength and resilience, and improved interpersonal connection. Over time, this definition has expanded to include positive growth and personality change following adversity and negative life events more broadly, and have generated substantial empirical interest across clinical and personality psychology (Jayawickreme & Blackie, 2014; Tedeschi & Calhoun, 2004).[1]

However, researchers have recently raised concerns about some of the methodological and theoretical assumptions often relied on as evidence of PTG and personality change following adversity (Jayawickreme & Blackie, 2014; Jayawickreme et al., 2018). These include questions regarding the importance of event valence in eliciting positive personality change, how PTG manifests in daily life, the processes through which change becomes enduring, and the best methods for addressing these and other questions (Blackie & Jayawickreme, 2014; Infurna & Jayawickreme, 2019; Infurna & Luthar, 2016; Jayawickreme et al., 2018; Jones et al., 2014; Mancini, 2019; Mangelsdorf et al., 2019). As personality psychologists endeavor to address these questions and advance PTG research, this paper argues

Department of Psychology, University of Essex, Essex, UK

Corresponding author:
Veronica M Lamarche, Department of Psychology, University of Essex, Wivenhoe Park, Colchester, Essex, CO4 3SQ, UK.
Email: v.lamarche@essex.ac.uk

that relationship science can help provide a theoretical scaffold to help answer these questions.

Both social and personality psychology have a tradition of operating in silos at the expense of acknowledging their theoretical complementarity (e.g., Funder, 2009). However, integrative approaches to understanding the bidirectional influence personality and the social context have on each other have become more common, leading to more robust theoretical models of human psychology (e.g., Back & Egloff, 2009; Brazeau & Chopik, 2020; Vollrath et al., 2004). This paper suggests that further integration of relationship-centered models into research on personality change and growth could provide additional theoretical richness and predictive power to address outstanding theoretical questions within the field. Existing models of personality change acknowledge the importance of the relationship context in understanding change and growth and account for how personality and the social situation influence each other (e.g., Back et al., 2011; Neyer et al., 2014). This paper provides an overview of one such relationship-centered theoretical model (interdependence theory) and how it can be applied to PTG research. Additionally, based on relationship-centered models of threat regulation, the paper challenges the historical use of relationship connection as evidence of personality change and growth following PTG. The overall aim of this paper is to provide researchers studying PTG and personality change additional insight and theoretical framing through which to extend new lines of research as well as to encourage more cross-pollination and collaboration between sub-fields within psychology.

Interdependence theory: Situating individual change within the relationship structure

Personal growth and change—whether in response to traumatic or adversarial life events or more positive experiences—does not occur in a vacuum but rather within the context of a broader social world. Similarly, relationships are not just a feature of a social environment. Rather, they shape both the context individuals exist within and the individual. Different theoretical models exist to help explain how the social world affects the personal world. For example, adult attachment theory (Hazan & Shaver, 1987) highlights how past interpersonal experiences inform how people see themselves and others as well as constrain how people respond to positive and negative social events (Simpson, 2007). Similarly, evolutionary models of interpersonal relationships highlight not only the important role of relationships in helping people meet their basic needs, but also how they shape motivations and desires (Baumeister & Leary, 1995; Leary & Baumeister, 2000).

Other models focus more specifically on the structure of the relationship context (e.g., Back et al., 2011; Neyer et al., 2014). For example, interdependence theory is a reciprocal dyadic model of interpersonal exchange which focuses on the impact social actors (e.g., romantic partners) have on one another, and how social interactions can transform the individual (Kelley & Thibaut, 1978; Rusbult & Van Lange, 2008; Thibaut & Kelley, 1959). All of these relationship-centered theoretical models can contribute to an understanding of PTG and change. However, this paper limits its focus to the latter model. While the majority of psychological theories take a within-person (i.e., actor-focused) approach to understanding human cognition, motivation, and behavior, interdependence theory highlights the combined importance of both the intra-personal context and the situation structure (Arriaga, 2013; Rusbult & Van Lange, 2008).

There exist already models from personality psychology which account for the interactions between personality and relationships. For example, the PERsonality and SOCial relationships (PERSOC) and transactive models of personality (Back et al., 2011; Neyer & Asendorpft, 2001) provide frameworks for understanding the mutual influence between personality and social relationships and provide theoretical rationale for the types of life events and situations in which these associations are expected to be stronger (Neyer et al., 2014). Interdependence theory complements these models and provides greater predictive power with a taxonomy of interpersonal characteristics through which personal transformation is achieved (Holmes, 2002). These taxonomic dimensions include the extent to which each interaction partner relies on the other (*degree of dependence*), whether interaction partners equally influence each other (*mutuality of dependence*), whether interaction partners are coordinated or conflicted regarding the outcome of the interaction (*covariation of interest*), the means through which interaction partners influence each other (*basis of dependence*), the timing and sequencing of the interactions (*temporal structure*), and the extent to which each interaction partner has access to information about the other's motivations and likely outcomes from the interaction (*information availability*) (Holmes, 2002; Van Lange & Balliet, 2015). Furthermore, according to interdependence theory, relationships are defined as the extent to which two (or more) individuals exert ongoing strong, frequent, and diverse effects on one another (Kelley et al., 1983; Magnusson, 1990; Neyer et al., 2014). Thus, unlike fleeting interactions with strangers, people in close relationships interact repeatedly and experience profoundly good—and bad—outcomes as a consequence (Hartup & Stevens, 1997; Kelley et al., 2003; Reis et al., 2000).

Inherent to the interdependence framework is the "transformation process," or the extent to which

considerations beyond immediate self-interest influence thoughts, feelings, and behaviors (Rusbult & Van Lange, 2008; Van Lange & Balliet, 2015). Thus, the outcome of an interaction is not only shaped by the situation itself (e.g., what each person needs in the moment) but also by the interaction partner's thoughts, feelings, and behaviors in relation to the situation both parties find themselves in. For example, following a cancer diagnosis, Jamal will not only be affected by his own thoughts and feelings about his ability to cope with and grow through the experience (Barskova & Oesterreich, 2009; Hefferon et al., 2009; Zamora et al., 2017), but also how his friends and family members respond to his evolving needs (Cohen, 2004; Cohen & Wills, 1985; Kaniasty et al., 1990; Lakey & Orehek, 2011; McDonough et al., 2014). Likewise, when Samira becomes the victim of a hate crime at work, the adverse experience not only impacts her own personal well-being but also her husband's well-being as he vicariously experiences and responds to her discrimination (Wofford et al., 2019).

The extent to which people transform through trauma and adversity is therefore not only dependent on intra-personal processes but also on the relationship structure in which they exist and how the (real or perceived) thoughts, feelings, and actions of close others influence how the event is experienced and interpreted (Back et al., 2011). Furthermore, the strength of the interdependent bond means that over time, people in close relationships begin to prioritize and automatically act on *relationship-specific* motivations, with or without the actual presence of their close other (Fitzsimons et al., 2015; Holmes, 1981, 2004). The relationship context is therefore guiding change and growth without explicit awareness of the influence of the interdependence structure on the part of the individual. The closer people are, the stronger these interdependent dynamics are (Berscheid et al., 2004). This is because closeness represents the extent to which people have integrated others into their own sense of self, as well as signals to both people in the relationship a sense of security and safety that their well-being will continue to be supported (Agnew et al., 2004; Aron et al., 1992; Clark & Lemay, 2010; Reis et al., 2004). Thus, the greater the degree of dependence between two people, the stronger the interdependent processes in the relationship, and the more they shape both *intra-* and *inter*-personal outcomes across situations.

Applying interdependence theory to PTG and personality change research

The theoretical richness of how relationships impact life events provides an important lens through which to anticipate how people are likely to behave across situations (with or without the immediate presence of another person) as well as how personality, event, and the relationship structure mutually influence each other. This section of the paper examines how the transformative and interdependent nature of the relationship context can be applied to advance PTG research. The example applications include using the interdependence structure to understand how event valence differentially affects personality change and the temporal structure of these changes, two issues that have been the subject of debate within the PTG literature (Blackie & Jayawickreme, 2014; Infurna & Jayawickreme, 2019; Mengelsdorf & Eid, 2015). However, it is important to note these are not the only features of life events that are relevant to PTG research (e.g., Luhmann et al., 2020) and that the interdependence context can interact with many characteristics of the scenario to inform personality change.

Relationship context and event valence

PTG and personality change researchers have questioned the extent to which event valence (i.e., positive vs. negative experiences) matters in the context of PTG, and whether the change that is elicited by both types of valenced-events are similar or different (Mangelsdorf & Eid, 2015; Mangelsdorf et al., 2019). Relationships provide an ideal context in which to explore these issues. As much as relationships can offer joy, connection, and growth, they also represent opportunities for profound loss, rejection, and vulnerability (Baumeister & Leary, 1995; Coan & Sbarra, 2015; Holmes & Rempel, 1989; Rusbult et al., 1999; Simpson, 2007). Inevitably, all partners experience a conflicting covariation of interests, which lead to discord or dissatisfaction despite the positives of the relationship. Existing in relationships requires balancing these rewards against these ongoing risks (Murray et al., 2006). Opportunistically, this means that researchers can contrast the types of personality changes that occur within a single relationship as a consequence of both adversarial and positive interactions with a partner.

The positive personality change that occurs as a result of adversarial or traumatic relationship events, such as relationship dissolution or bereavement, has been well-established in the PTG literature (see, e.g., Anders et al., 2011; Infurna et al., 2017; Michael & Cooper, 2013; Owens & Fowers, 2019; Park et al., 1996; Sbarra & Emery, 2005; Schaefer & Moos, 2001; Tashiro & Frazier, 2003). The impact of relational conflict is especially relevant for scholars looking to advance theories for PTG and personality change. This is because although prolonged periods of conflict can have adverse effects on people and relationships, stand-alone conflicts can lead to both immediate and protracted *positive* changes in individuals. In these instances, the interdependence structure motivates each member of the dyad to make changes

in order to better respond to one another's needs (Murray et al., 2006). For instance, Micha may make a concerted effort to be less self-centered following a fight with his partner Jules who it tired of Micha making plans without consultation. Likewise, Jules might agree to be open-minded toward new activities to keep the extraverted Micha happy. Thus, acute instances of relationship adversity can prompt personality change and growth in each partner, benefiting the individual by providing them with more of what they need to experience a satisfying interdependent life in the dyad. These interdependence dilemmas—instances where the covariation of interests clash—occur regularly in close relationships, and change and adjustment are essential in order to maintain the relationship (Holmes, 1981; Rusbult et al., 1991; Wieselquist et al., 1999). By contrast, people who do not change in response to interdependence dilemmas are more likely to experience dissatisfaction and the dissolution of their relationship (Agnew & VanderDrift, 2015). Ongoing growth and change through adversity are therefore just as likely in a satisfying relationship as it is at the end of a dissatisfying one, albeit for very different reasons.

Relationships have also been shown to provide extensive opportunities for personality change and growth, without the need for adversity (Rusbult et al., 2009). The mutual influence that arises in an interdependent context leads to the cognitive integration of the other (i.e., the partner) into one's own sense of self that transpires as people become more dependent (Aron et al., 1992, 2013). This inclusion of the other in the self results in people to psychologically merge another person's resources (e.g., perspectives, identities, memories, experiences) with their own (Agnew et al., 2004; Aron et al., 1992, 2013). As time goes on, and the interdependence structure strengthens, each partner's individual self-concept begins to blur, leading to personal change and growth. For instance, a study tracking participants over a 10-week period found that people who had recently started a new relationship showed greater change to their self-concept—specifically integrating more of their partner's traits into the self—compared to other periods in their own lives, as well as compared to people who were not in the process of forming a new relationship (Aron et al., 1995). When relationships end—through dissolution or bereavement—some of these psychological resources are lost. This can lead people to struggle without the interdependence structure that previously supported them (Gomillion et al., 2015; Slotter et al., 2010). Thus, not only does the end of a relationship spark change to the self-concept (Bleidorn et al., 2021; Mattingly et al., 2020) but so too does falling in love (Luciano & Orth, 2017; Wagner et al., 2015).

These experiences of change and growth are not restricted to the start or end of a relationship. Rather, these dynamics occur continuously throughout the relationship, albeit at a slower rate. Close others are instrumental in helping people become the best versions of themselves through the affirmation of traits and behaviors consistent with their ideal selves (Kumashiro et al., 2006; Mattingly et al., 2014; Murray et al., 1996; Rusbult et al., 2005, 2009). These changes can arise through provisions of tangible support that assist their partners in achieving their goals (Feeney & Collins, 2015; Fitzsimons et al., 2015) as well as throughout subtle reminders that guide behaviors non-consciously (Ferguson & Bargh, 2004). Overall, consistent with suggestions that growth does not require suffering (Mangelsdorf et al., 2019), there is considerable convergent evidence that the transformative change that occurs within the interdependence structure happens both in response to positive relationship processes (e.g., falling in love; affirmational partners) and negative ones (e.g., conflict; divorce).

Based on this literature, it can speculatively be assumed that the relationship context can lead to similar changes in personality and transformative growth regardless of event valence. For example, Jules may become more extraverted during his relationship with Micha because Micha positively affirmed these qualities or because Jules made the conscious decision to work on that aspect of his self after experiencing a conflict with Micha (or both!). Likewise, Imani may become more extraverted after her divorce from Xavier as she attempts to meet new people and forge new relationships without her ex-partner's antisocial tendencies to hold her back. In these instances, the composition of the change (i.e., increased extraversion) is the same regardless of the event valence that triggered it (i.e., positive (encouragement) vs. negative (conflict; dissolution)). Theoretically then, the valence of the event prompting change may be less important to understanding personality change. Rather, understanding the structure of the interpersonal context in which this change may be shaped (e.g., a supportive partnership vs. the loss of an interdependence structure) may help researchers better anticipate which types of personality traits are likely to change as a consequence of the event and how event valence may influence these changes. For example, self-esteem is a dispositional trait that taps into both intra- and inter-personal processes (Kernis, 2003; Leary & Baumeister, 2000). Positive events within relationships are a boon for self-esteem (Leary et al., 1995), and while positive personality growth has been found following relationship dissolution (Tedeschi & Calhoun, 2004), other dispositional traits, such as self-esteem, have been shown to decline following interpersonal discord and rejection (Bleidorn et al., 2021; Leary & Baumeister, 2000). Thus, event valence may interact with the interdependence structure to elicit positive change in some

instances and negative changes to personality in others.

Temporal structures of interdependence and change

PTG and personality researchers are also interested in disentangling whether personality changes following trauma and adversity are temporary or enduring (Infurna & Jayawickreme, 2019). Taking the temporal structure of the interdependence context into consideration can help further researcher's understanding of how and when growth endures. Relationships are dynamic interactions that occur frequently over time (Arriaga, 2013). This temporal structure of relationships are equally important for understanding personality change and growth (irrespective of event valence). Adverse or traumatic life events have often measured as discrete events with clear temporal cutoffs (e.g., before vs. after a divorce). These temporal landmarks provide useful demarcations that prime people to think about their lives before and after specific moments in time and prime people to anticipate changes to the self (Dai et al., 2014; Peetz & Wilson, 2014). However, although adverse life events can be unexpected and discrete, they are typically the culmination of ongoing interactions between people that make discrete outcomes such as dissolution foreseeable (Joel et al., 2017; VanderDrift et al., 2009).[2]

Consider, for example, divorce or the dissolution of a long-term partnership. Relationship dissolution has been examined as a catalyst for PTG, with several studies finding evidence of positive personality change following the end of a relationship (e.g., Herbert & Popadiuk, 2008; Park et al., 1996; Samios et al., 2014; Tashiro & Frazier, 2003). However, most relationship dissolution is preceded by a protracted period of deteriorating relationship quality and interpersonal conflict. The repeated nature of the interactions people have with their partners may be equally—if not more important—for prompting change than the discrete event that follows as a consequence. For example, Bleidorn et al. (2021) found that changes in divorcees' self-esteem were most pronounced in the years approaching marital dissolution rather than those following. This paper highlights the importance of the temporal structure of the relationship in guiding change before and after discrete life events. Furthermore, because even the implied or imagined presence of an interaction partners from a strong interdependence structures (e.g., a long-term romantic partner) can influence cognitions and behaviors, it is possible for these people to exert influence even after the relationship has ended. For example, Imani may continue to question her abilities at work, affecting her overall self-esteem, because she is still acutely aware of how little faith her ex-husband Xavier had in her. In this instance, the consequences of the discrete event (i.e., lowered self-esteem) appear to persist even after the relationship has ended, when in reality the interdependence structure is still exerting its influence on Imani's life. By contrast, although Safiyah is likely to experience a drop in self-esteem following her breakup with her unsupportive girlfriend of one-month (Slotter et al., 2010), this drop is less likely to endure because their mutual influence on each other was not very strong.

Controlling for the strength of the interdependence structure and quality of this bond before the relationship ends is therefore essential to consider for the temporal structure of the growth trajectory across time. For example, growth or change following relationship dissolution may appear to lead to personality change. However, this change may actually be the consequence of an interdependence structure that has been inhibiting or obstructing a person's natural growth trajectory over an extended period of time. Dissolution may therefore capture an opportunity to disengage from an adversarial interdependence structure (Bleidorn et al., 2021). For example, although relationship dissolution is often associated with declines in life satisfaction (Frazier & Cook, 1993), Bourassa et al. (2015) found that women who were in low-quality marriages reported greater life satisfaction after their divorce. Similarly, Lewandowski and Bizzoco (2007) found that people experienced more personal growth following the dissolution of relationships that was characterized by low self-expansion. The perceived change that followed these dissolutions could therefore reflect the person returning to and realigning with their former self from before the relationship or period of interdependent conflict (Keene & Prokos, 2008; Light & Visser, 2013; Orzeck, 2016; Robinson-Whelen et al., 2001). For example, Imani may appear more ambitious and career focused since her divorce from Xavier. However, in reality, Xavier never supported Imani's career goals, and she is now free to pursue them without his constant insistence that she prioritize family-life. In this instance, has Imani's personality changed and grown, or is she instead acting in a manner that better reflects her personality prior to her relationship with Xavier? Thus, it is imperative to consider the temporal structure of the independence context in order to understand how personality change is likely to manifest over time.

Relationship connection: Evidence of growth or a personal coping resource?

As scholars continue to advance the study of PTG and personality change, an important consideration for future research is whether the need for connection and relating to others should be equated with personality change. Although different measures of PTG growth and personality change exist, one of the

most prevalent is Tedeschi and Calhoun's (1996) Post-Traumatic Growth Inventory (PTGI). This measure includes five subscales, one of which is "Relating to Others." Of the seven items that comprise this subscale, four (sense of closeness, counting on others, willingness to express emotions, putting effort into relationship) are often conceptualized as evidence of the strength of the interdependence structure (i.e., closeness, responsiveness, commitment). The PTGI is not alone in using affiliative and prosocial interpersonal behaviors as an indicator for personality growth and change (e.g., Drabek et al., 1975; Lim & DeSteno, 2016; Mancini, 2019; Solnit, 2010; Vollhardt, 2009). However, the tendency to affirm the availability and reliability of the interdependence structure, and to draw from these structures in times of distress, is not considered an indicator of growth or change per se by relationship scholars. Rather, it is an adaptive response reflecting the value of close relationships in the defense against existential harms (Coan & Sbarra, 2015; Florian et al., 2002; Murray et al., 2018; Plusnin et al., 2018; Slavich, 2020).

The need for close others has been equated to other fundamental needs including the need for food, water, and shelter (Baumeister & Leary, 1995). Thus, the subversion of this need unsurprisingly prompts thoughts and actions consistent with restoring connection with valued others. There are numerous theoretical models which empirically capture this recalibration process, including sociometer theory (Leary et al., 1995), the risk regulation model (Murray et al., 2006), terror management theory (Plusnin et al., 2018), and the social reconnection hypothesis (Maner et al., 2007). Thus, in the context of relationship science, drawing closer to valued social networks following adverse events (relationally based or otherwise) has potentially less to do with changes in personality and more to do with immediate need-fulfillment. Furthermore, many of these theoretical models suggest that motivations to socially reconnect are contingent on dispositional traits to begin with (Brennan & Bosson, 1998; Downey & Feldman, 1996; Girme et al., 2018; Leary et al., 1995; Murray et al., 2008; Plusnin et al., 2018; Simpson et al., 1996), such as whether people perceive close others as a reliable outlet for safety or a potential source of harm. When people are high in dispositional traits associated high interpersonal trust, they are motivated to seek out and rely on their interpersonal networks in times of need (Murray et al., 2006; Simpson, 2007). When people are high in dispositional traits associated with interpersonal mistrust, they are reluctant to rely on others even in times of need (Downey & Feldman, 1996; Mikulincer et al., 2015; Simpson et al., 1992, 1996). Thus, social reconnection following adversity may not reflect changes in personality but instead capture a fundamental human

willingness to draw from existing social connections in times of need.

This has important implications for researchers hoping to understand the temporal structure of personality change following adversity and trauma. This is because the motivation to affiliate following a threat does not necessarily result in long-lasting changes. Rather, these changes reflect the momentary need for people to subvert their feelings of vulnerability (interpersonal or environmental) by cognitively affirming and/or behaviorally engaging with their interdependence structures. Once the threat has dissipated, so too does the motivation to compensate. For example, Imani might be motivated to reconnect with Xavier following a fight about her long work hours and consequently remind herself of the ways in which Xavier is usually a loving and supporting partner (Lamarche & Murray, 2014; Murray et al., 2008; Simpson et al., 1992). So, on days following conflicts with Xavier, Imani's perceptions of his responsiveness as a partner might be relatively higher. These motivated cognitions not only help Imani engage in behaviors that ultimately protect the relationship from deterioration but also provide Xavier with a clear path on how to effectively respond to Imani's needs (Murray & Holmes, 2009; Shallcross & Simpson, 2012). The efficacy of these strategies rest in the interdependence structure itself and ultimately backfire if the interaction partner is incapable of effectively responding to the other person's needs (McNulty, 2010a, 2010b; Schoebi et al., 2012). For Imani, repeatedly trusting Xavier to be a better partner in the future may ultimately result in her dissatisfaction and the deterioration of their relationship, than if she had been more cautious in trusting such an unreliable partner (McNulty et al., 2008; Murray et al., 2015). These motivational dynamics could appear like personality growth when relying on measures that tap into relational processes (i.e., the "relating to others" subscale of the PTGI) but would also create inconsistent patterns of change overtime. At the state level, immediately following the adverse event, people may show positive growth (e.g., more positive interpretation of others) as they engage in cognitive processes that protect the interdependence structure. However, over time, existing in an adverse interdependence structure may lead people to show negative growth (e.g., more negative interpretation of others) than when they started that relationship. Even this change may be inconsistent, as responses to events might vary depending on which interdependence structure is most salient when responding to the assessments (Fraley et al., 2011; Hazan & Shaver, 1987). For example, if Samira is anxiously awaiting an important medical diagnosis, her likelihood of expressing her concerns and expecting support will depend on whether she is primarily thinking about her husband, with whom she has a

loving and secure relationship, or her mother, who tends to be avoidant and emotionally distant.

Future considerations

Instead of assessing personality change and growth through evaluations of interpersonal connection, researchers may be better served by focusing on changes to dispositional traits that are associated with relational behaviors but which also tap into more self-evaluative aspects of the self-concept. For example, self-esteem informs intra- and inter-personal evaluations (Kernis, 2003; Leary & Baumeister, 2000; Leary et al., 1995) as well as guides interpersonal connection motivations (Murray et al., 2008). Similarly, adult attachment style also captures the dispositional working models of the self and other, which inform how people experience stressors, as well as guide how people seek out and connect with others during times of adversity (Simpson, 2007). Focusing on social connection as evidence of growth may obscure the actual dispositional changes pushing those motivations. For example, increased openness to experience following an adverse life event may lead people to engage in novel activities with close others, strengthening those bonds (Muise et al., 2019). Likewise, researchers may be interested in examining whether life events lead to a reduction in personality traits associated with antisocial processes (e.g., narcissism, Machiavellianism, psychopathy; Paulhus & Williams, 2002) and testing whether interpersonal connection improves as a result of the dispositional shift. By conceptualizing interpersonal growth as a consequence of personality change, researchers may more effectively isolate properties of change that are likely to endure across time, rather than relying on interpersonal outcomes that may simply capture temporary motivational and cognitive shifts activated to affirm safety in an unsafe world.

There is no immediate or definitive solution to the question of whether measures of personality growth that tap into perceptions of the interdependence structures, such as the PTGI "Relating to Others" subscale, are appropriate to use as personality change and PTG research advances. In practice, the answer to this question will depend on how personality science further develops its working definitions of "growth" and "change," and whether the inclusion of relational growth is central to those definitions. Furthermore, there are instances where demonstrating changes associated with interpersonal growth are conceptually important (Linley & Joseph, 2004; Schaefer & Moos, 1992; Tedeschi & Calhoun, 1995). For instance, understanding the factors that reliably change interpersonal trust in a sustained way would have important implications for relationship science as well as personality science. Rather, the issues and processes raised in this section are intended to highlight the complexity of existing within these interdependence structures that guide inter- and intra-personal outcomes, as well as the limitations of equating these motivated cognitive processes with change.

Conclusions

Relationships have featured prominently in PTG and personality change research, either as a source of adversity that prompts the need for change and growth or as the means through which people exhibit change and grow following adversity (Anusic & Lucas, 2014; Bonnano et al., 2004; Bourassa et al., 2015; Drabek, 1975; Frazier & Cook, 1993; Mancini, 2019; Tashiro & Frazier, 2003; Tedeschi & Calhoun, 1996, 2004). Close relationships are an essential part of many people's lives and provide an important lens through which to examine the motivational forces that prompt people to change for better or for worse. However, close relationships are more than just a feature within a person's broader environment—they are complexly organized structures that profoundly influence how people experience the world around them (Arriaga, 2013; Back et al., 2011; Holmes, 2004; Neyer et al., 2014; Rusbult & Van Lange, 2008; Van Lange & Balliet, 2015). Building on these theoretical perspectives aimed at explaining these complex processes can help guide expectations for how people will respond to adversity and growth more generally, even when the relationship may seem irrelevant to the experience.

It is important to note that this paper is not meant to represent all of the relationship-centered theoretical perspectives and how they might influence PTG and personality change. Similarly, it is not the aim of this paper to imply that interdependence theory is the only relationship-centered model that has implications for growth and change. Rather, the paper aims to provide a clear description of how the principles of this particular theoretical perspective can be used to inform future research. Thus, the overall intention is to highlight the complementarity and predictive utility of other theoretical frameworks to help expand researchers' proverbial toolboxes. For example, attachment theory (Hazan & Shaver, 1987; Mikulincer et al., 2015) can provide additional insights into how working models of self and others inform reactions to situations within the interdependence structure, and how this interaction guides personality change and PTG. Similarly, this paper has focused on romantic partnerships because romantic partnerships represent one of the strongest interdependence contexts in adulthood. However, there may be differences in how cultural expectations of others inform the taxonomy of interpersonal interactions as well as how the interdependence structure informs personality change in those contexts (Markus & Kitayama, 1991; Vignoles et al., 2016). Furthermore, there may be important differences between people who do not have and do not want

these interdependence structures (DePaulo, 2017). These preferences can be contextual (e.g., absence of quality partners) or dispositional traits (e.g., a preference for singlehood). People who are single by choice may have different expectations and needs from their interdependence structures in times of adversity compared to people who are not single by choice. Similarly, dispositional traits that result in a preference for singlehood over romantic attachment could change how people experience adversity within their interdependence structures (e.g., Pepping et al., 2018; Spielmann et al., 2013), of that these exact same dispositional characteristics could change as a consequence of PTG, leading a person who previously preferred to be single to seek out a reliable relationship structure in the future.

Nonetheless, relationship-centered models, such as interdependence theory, can help guide a deeper understanding of how and when the interpersonal context shapes personality growth and change. With this deeper understanding of how interdependence transforms individuals, PTG and personality growth researchers will have greater predictive power and expectations for how change will manifest across experiences and across time. Finally, the functional utility of relationships in supporting epistemic needs more broadly call into question the theoretical and methodological appropriateness of simultaneously using relationships as catalysts for PTG and personality change as well as evidence that these processes have occurred. This paper also challenges researchers to consider abandoning the use of the social connection as evidence of PTG in favor of focusing more directly on how dispositional changes following adverse life events may alter the interdependence structure and the consequences of these structural shifts.

Relationship scientists have long argued that a basic understanding of close relationships is essential for other disciplines, given how profoundly they influence social, behavioral, and biological processes (Brazeau & Chopik, 2020; Fitzsimons & Finkel, 2018; Joel et al., 2013; Kelley et al., 1983; Reis, 2012). However, as is often the case, psychologists from all subdisciplines can find themselves working in knowledge silos unaware of the cross-disciplinary complementarity of their theoretical frameworks, or of the valuable insights their academic neighbors can offer. Thus, this paper concludes with a call to researchers across all fields to engage in more intra- and inter-disciplinary collaborations in order to facilitate better integration of theories and perspectives across social, personality, and clinical psychology as well as increase scientific communication across psychology and the social sciences as a whole.

Acknowledgments

Declaration of conflicting interests

Funding

Notes

1. In addition to theoretical questions pertaining to the ways in which PTG transpires, some researchers have questioned the broadening of PTG to include the non-traumatic—yet adversarial—life events and to include individual differences in addition to personality traits. We agree that these are important issues for PTG researchers to address. For the purpose of this paper, we are using the currently broad definition. Consequently, some of the examples used in this paper may not align with what some researchers consider "trauma" or "personality change." Nonetheless, we believe that the central argument of our recommendations extends beyond the constrained scenarios in which they are proposed.
2. This is not to imply that all traumatic or adverse life events are foreseeable, and unexpected events may prompt change as much as foreseeable events. Indeed, even minor unexpected events can trigger feelings of anxiety that motivate everything from attitude change to changes in how people feel about their romantic partners (e.g., Murray et al., 2021). Thus, foreseeability may be another important distinction that needs consideration in the context of PTG (Luhmann et al., 2020).

References

Agnew, C. R., Loving, T. J., Le, B., & Goodfriend, W. (2004). Thinking close: Measuring relational closeness as perceived self-other inclusion. In D. J. Mashek & A. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 103–115). Mahwah, NJ: Earlbaum.

Agnew, C. R., & VanderDrift, L. E. (2015). Relationship maintenance and dissolution. In M. Mikulincer, P. R. Shaver, J. A. Simpson, & J. F. Dovidio (Eds.), *Handbook of personality and social psychology, Vol. 3. Interpersonal relations* (pp. 581–604). https://doi.org/10.1037/14344-021

Anders, S., Frazier, P., & Frankfurt, S. (2011). Variations in criterion A and PTSD prevalence rates in a community sample of women. *Journal of Anxiety Disorders*, *26*, 176–184. https://doi.org/10.1016/j.janxdis.2010.08.018

Anusic, I., & Lucas, R. E. (2014). Do social relationships buffer the effects of widowhood? A prospective study of adaptation to the loss of a spouse. *Journal of Personality*, *82*, 367–378. https://doi.org/10.1111/jopy .12067

Arriaga, X. B. (2013). An interdependence theory analysis of close relationships. In J. A. Simpson & L. Campbell (Eds.), Oxford library of psychology. The Oxford handbook of close relationships (pp. 39–65). Oxford University Press.

Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal

closeness. *Journal of Personality and Social Psychology*, *63*, 596–612. https://doi.org/10.1037/0022-3514.63.4.596

Aron, A., Lewandowski, G. W., Jr., Mashek, D., & Aron, E. N. (2013). The self-expansion model of motivation and cognition in close relationships. In J. A. Simpson & L. Campbell (Eds.), *The Oxford handbook of close relationships* (pp. 90–115). Oxford University Press.

Aron, A., Paris, M., & Aron, E. N. (1995). Falling in love: Prospective studies of self-concept change. *Journal of Personality and Social Psychology*, *69*, 1102–1112. https://doi.org/10.1037/0022-3514.69.6.1102

Back, M. D., Baumert, A., Denissen, J. J. A., Hartung, F.-M., Penke, L., Schmukle, S. C., Schonbrodt, F. D., Schröder-Abé, M., Vollmann, M., Wagner, J., & Wrzus, C. (2011). PERSOC: A unified framework for understanding the dynamic interplay of personality and social relationships. *European Journal of Personality*, *25*, 90–107. https://doi.org/10.1002/per.811

Back M. D., & Egloff, B. (2009).Yes we can! A plea for direct behavioral observation in personality research. *European Journal of Personality*, *23*, 403–405.

Barskova, T., & Oesterreich, R. (2009). Post-traumatic growth in people living with a serious medical condition and its relations to physical and mental health: A systematic review. *Disability and Rehabilitation*, *31*, 1709–1733, https://doi.org/10.1080/09638280902738441

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Berscheid, E., Snyder, M., & Omoto, A. M. (2004). Measuring closeness: The Relationship Closeness Inventory (RCI) revisited. In D. J. Mashek & A. P. Aron (Eds.), Handbook of closeness and intimacy (pp. 81–101). Lawrence Erlbaum Associates Publishers.

Blackie, L. E., & Jayawickreme, E. (2014). Promoting change in posttraumatic growth research: Response to commentaries. *European Journal of Personality*, *28*, 312–331. https://doi.org/10.1002/per.1970

Bleidorn, W., Schwaba, T., Denissen, J. J., & Hopwood, C. J. (2021). Charting self-esteem during marital dissolution. *Journal of Personality*, *89*, 9–22. https://doi.org/10.1111/jopy.12525

Bonanno, G. A., Wortman, C. B., & Nesse, R. M. (2004). Prospective patterns of resilience and maladjustment during widowhood. *Psychology and Aging, 19*, 260–271. https://doi.org/10.1037/0882-7974.19.2.260

Bourassa, K. J., Sbarra, D. A., & Whisman, M. A. (2015). Women in very low quality marriages gain life satisfaction following divorce. *Journal of Family Psychology*, *29*, 490–499. https://doi.org/10.1037/fam 0000075

Brazeau, H., & Chopik, W. J. (2020) Integrating personality and relationship science to explain physical and mental health. In P. Hill & M. Allemand (Eds.), *Personality and healthy aging in adulthood: New directions and techniques. International perspectives on aging*, Vol. 26. (pp. 9–25). Springer Nature: Switzerland.

Brennan, K. A., & Bosson, J. K. (1998). Attachment-style differences in attitudes toward and reactions to feedback from romantic partners: An exploration of the relational bases of self-esteem. *Personality and Social Psychology Bulletin*, *24*, 699–714. https://doi.org/10.1177/0146167298247003

Clark, M. S., & Lemay, E. P., Jr. (2010). Close relationships. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), Handbook of social psychology (pp. 898–940). John Wiley & Sons, Inc.

Coan, J. A., & Sbarra, D. A. (2015). Social baseline theory: The social regulation of risk and effort. *Current Opinion in Psychology*, *1*, 87–91. https://doi.org/10.1016/j.copsyc.2014.12.021

Cohen, S. (2004). Social relationships and health. *American Psychologist*, *59*, 676–684. https://doi.org/10.1037/0003-066X.59.8.676

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*, 310–357. https://doi.org/10.1037/0033-2909.98.2.310

Dai, H., Milkman, K. L., & Riis, J. (2014). The fresh start effect: Temporal landmarks motivate aspirational behavior. *Management Science*, *60*, 2563–2582. https://doi.org/10.1287/mnsc.2014.1901

DePaulo, B. (2017). The urgent need for a singles studies discipline. *Signs: Journal of Women in Culture and Society*, *42*, 1015–1019. https://doi.org/10.1086/690956

Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology*, *70*, 1327–1343. https://doi.org/10.1037/0022-3514.70.6.1327

Drabek, T. E., Key, W. H., Erickson, P. E., & Crowe, J. L. (1975). The impact of disaster on kin relationships. *Journal of Marriage and Family*, *37*, 481–494. https://doi.org/10.2307/350512

Feeney, B. C., & Collins, N. L. (2015). A new look at social support: A theoretical perspective on thriving through relationships. *Personality and Social Psychology Review*, *19*, 113–147. https://doi.org/10.1177/1088868314544222

Ferguson, M. J., & Bargh, J. A. (2004). How social perception can automatically influence behavior. *Trends in Cognitive Sciences*, *8*, 33–39. https://doi.org/10.1016/j.tics.2003.11.004

Fitzsimons, G. M., & Finkel, E. J. (2018). Transactive-goal-dynamics theory: A discipline-wide perspective. *Current Directions in Psychological Science*, *27*, 332–338. https://doi.org/10.1177/0963721417754199

Fitzsimons, G. M., Finkel, E. J., & vanDellen, M. R. (2015). Transactive goal dynamics. *Psychological Review*, *122*, 648–673. https://doi.org/10.1037/a0039654

Florian, V., Mikulincer, M., & Hirschberger, G. (2002). The anxiety-buffering function of close relationships: Evidence that relationship commitment acts as a terror management mechanism. *Journal of Personality and Social Psychology, 82*, 527–542. https://doi.org/10.1037/0022-3514.82.4.527

Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The experiences in close relationships—Relationship Structures Questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, *23*, 615–625. https://doi.org/10.1037/a0022898

Frazier, P. A., & Cook, S. W. (1993). Correlates of distress following heterosexual relationship dissolution. *Journal of Social and Personal Relationships*, *10*, 55–67. https://doi.org/10.1177/0265407593101004

Funder, D. C. (2009). Naive and obvious questions. *Perspectives on Psychological Science*, *4*, 340–344.

Girme, Y. U., Agnew, C. R., VanderDrift, L. E., Harvey, S. M., Rholes, W. S., & Simpson, J. A. (2018). The ebbs and flows of attachment: Within-person variation in attachment undermine secure individuals' relationship wellbeing across time. *Journal of Personality and Social Psychology*, *114*, 397–421. https://doi.org/10.1037/pspi0000115

Gomillion, S., Murray, S. L., & Lamarche, V. M. (2015). Losing the wind beneath your wings: The prospective influence of romantic breakup on goal progress. *Social Psychological and Personality Science*, *6*, 513–520. https://doi.org/10.1177/1948550614568160

Hartup, W. W., & Stevens, N. (1997). Friendships and adaptation in the life course. *Psychological Bulletin, 121*, 355–370. https://doi.org/10.1037/0033-2909.121.3.355

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*, 511–524. https://doi.org/10.1037/0022-3514.52.3.511

Hefferon, K., Grealy, M., & Mutrie, N. (2009). Post-traumatic growth and life threatening physical illness: A systematic review of the qualitative literature. *British Journal of Health Psychology*, *14*, 343–378. https://doi.org/10.1348/135910708X332936

Herbert, S., Popadiuk, N. (2008). University students' experiences of nonmarital breakups: A grounded theory. *Journal of College Student Development*, *49*, 1–14. https://doi.org/10.1353/csd.2008.0008

Holmes, J. G. (1981). The exchange process in close relationships. In M. J. Lerner & G. Mikula (Eds.) *The justice motive in social behavior* (pp. 261–284). Springer.

Holmes, J. G. (2002). Interpersonal expectations as the building blocks of social cognition: An interdependence theory perspective. *Personal Relationships*, *9*, 1–26. https://doi.org/10.1111/1475-6811.00001

Holmes, J. G. (2004). The benefits of abstract functional analysis in theory construction: The case of interdependence theory. *Personality and Social Psychology Review*, *8*, 146–155. https://doi.org/10.1207/s15327957pspr0802_8

Holmes, J. G., & Rempel, J. K. (1989). Trust in close relationships. In J. G. Holmes & J. K. Rempel (Eds.), *Close relationships* (pp. 187–220). Sage.

Infurna, F. J., & Jayawickreme, E. (2019). Fixing the growth illusion: New directions for research in resilience and posttraumatic growth. *Current Directions in Psychological Science*, *28*, 152–158. https://doi.org/10.1177/0963721419827017

Infurna, F. J., & Luthar, S. S. (2016). Resilience to major life stressors is not as common as thought. *Perspectives on Psychological Science*, *11*, 175–194. https://doi.org/10.1177/1745691615621271

Infurna, F. J., Wiest, M., Gerstorf, D., Ram, N., Schupp, J., Wagner, G. G., & Heckhausen, J. (2017). Changes in life satisfaction when losing one's spouse: Individual differences in anticipation, reaction, adaptation and longevity in the German Socio-economic Panel Study (SOEP). *Ageing & Society*, *37*, 899–934. https://doi.org/10.1017/S0144686X15001543

Jayawickreme, E., & Blackie, L. E. R. (2014). Post-traumatic growth as positive personality change: Evidence, controversies and future directions. *European Journal of Personality*, *28*, 312–331. https://doi.org/10.1002/per.1963

Jayawickreme, E., Rivers, J., & Rauthmann, J. M. (2018). Do we know how adversity impacts human development? *Research in Human Development*, *15*, 294–316. https://doi.org/10.1080/15427609.2018.1495515

Joel, S., MacDonald, G., & Page-Gould, E. (2017). Wanting to stay and wanting to go: Unpacking the content and structure of relationship stay/leave decision processes. *Social Psychological and Personality Science*, *9*, 631–644. https://doi.org/10.1177/1948550617722834

Joel, S., MacDonald, G., & Plaks, J. E. (2013). Romantic relationships conceptualized as a judgment and decision-making domain. *Current Directions in Psychological Science*, *22*, 461–465. https://doi.org/10.1177/0963721413498892

Jones, A. B., Brown, N. A., Serfass, D. G., & Sherman, R. A. (2014). Traumatic experiences yield changes in the situation experience. *European Journal of Personality*, *28*, 339–340. https://doi.org/10.1002/per

Kaniasty, K. Z., Norms, F. H., & Murrell, S. A. (1990). Received and perceived social support following natural disaster. *Journal of Applied Social Psychology*, *20*, 85–114. https://doi.org/10.1111/j.1559-1816.1990.tb00401.x

Keene, J. R., & Prokos, A. H. (2008). Widowhood and the end of spousal care-giving: relief or wear and tear? *Ageing and Society*, *28*, 551. https://doi.org/10.1017/S0144686X07006654

Kelley, H. H., & Thibaut, J. (1978). *Interpersonal relations: A theory of interdependence*. New York: Wiley.

Kelley, H. H., Berscheid, E., Christensen, A., Harvey, J. H., Huston, T. L., Levinger, G., McClintock, E., Peplau, L. A., & Peterson, D. R. (1983). *Close relationships*. New York: W. H. Freeman.

Kelley, H. H., Holmes, J. G., Kerr, N. L., Reis, H. T., Rusbult, C. E. & Van Lange, P. A. M. (2003) *An Atlas of Interpersonal SItuations*. New York: Cambridge University Press.

Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, *14*, 1–26. https://doi.org/10.1207/S15327965PLI1401_01

Kumashiro, M., Rusbult, C. E., Wolf, S. T., & Estrada, M.-J. (2006). The Michelangelo phenomenon: Partner affirmation and self-movement toward one's ideal. In K. D. Vohs & E. J. Finkel (Eds.), Self and relationships: Connecting intrapersonal and interpersonal processes (pp. 317–341). Guilford Press.

Lakey, B., & Orehek, E. (2011). Relational regulation theory: A new approach to explain the link between perceived social support and mental health. *Psychological Review*, *118*, 482–495. https://doi.org/10.1037/a0023477

Lamarche, V. M., & Murray, S. L. (2014). Selectively myopic? Self-esteem and attentional bias in response to potential relationship threats. *Social Psychological and Personality Science*, *5*, 786–795. https://doi.org/10.1177/1948550614532377

Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. *Advances in Experimental Social Psychology*, *32*, 1–62. https://doi.org/10.1016/S0065-2601(00)80003-9

Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and*

Social Psychology*, 68*, 518–530. https://doi.org/10.1037/0022-3514.68.3.518

Lewandowski, G. W., & Bizzoco, N. M. (2007). Addition through subtraction: Growth following the dissolution of a low-quality relationship. *The Journal of Positive Psychology*, *2*, 40–54.

Light, A. E., & Visser, P. S. (2013). The ins and outs of the self: Contrasting role exits and role entries as predictors of self-concept clarity. *Self and Identity*, *12*, 291–306, https://doi.org/10.1080/15298868.2012.667914

Lim, D., & DeSteno, D. (2016). Suffering and compassion: The links among adverse life experiences, empathy, compassion, and prosocial behavior. *Emotion*, *16*, 175–182. https://doi.org/10.1037/emo0000144

Linley, P. A., & Joseph, S. (2004). Positive change following trauma and adversity: A review. *Journal of Traumatic Stress*, *17*, 11–21. https://doi.org/10.1023/B:JOTS.0000014671.27856.7e

Luciano, E. C., & Orth, U. (2017). Transitions in romantic relationships and development of self-esteem. *Journal of Personality and Social Psychology*, *112*, 307–328. https://doi.org/10.1037/pspp0000109

Luhmann, M., Fassbender, I., Alcock, M., & Haehner, P. (2020). A dimensional taxonomy of perceived characteristics of major life events. *Journal of Personality and Social Psychology*. Advance online publication. https://doi.org/10.1037/pspp0000291

Magnusson, D. (1990). Personality development from an interactional perspective. In L. A. Pervin (Ed.), *Handbook of personality: Theory and measurement* (pp. 193–222). Guilford Press.

Mancini, A. (2019). When Acute Adversity Improves Psychological Health: A Social-contextual Framework. *Psychological Review*. Advance online publication. http://dx.doi.org/10.1037/rev0000144

Maner, J. K., DeWall, C. N., Baumeister, R. F., & Schaller, M. (2007). Does social exclusion motivate interpersonal reconnection? Resolving the "porcupine problem." *Journal of Personality and Social Psychology*, *92*, 42–55. https://doi.org/10.1037/0022-3514.92.1.42

Mangelsdorf, J., & Eid, M. (2015). What makes a thriver? Unifying the concepts of posttraumatic and postecstatic growth. *Frontiers in Psychology*, *6*, 813. https://doi.org/10.3389/fpsyg.2015.00813

Mangelsdorf, J., Eid, M., & Luhmann, M. (2019). Does growth require suffering? A systematic review and meta-analysis on genuine posttraumatic and postecstatic growth. *Psychological Bulletin*, *145*, 302–338. https://doi.org/10.1037/bul0000173

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224–253. https://doi.org/10.1037/0033-295X.98.2.224

Mattingly, B. A., Lewandowski, G. W., Jr., & McIntyre, K. P. (2014). "You make me a better/worse person": A two-dimensional model of relationship self-change. *Personal Relationships*, *21*, 176–190. https://doi.org/10.1111/pere.12025

Mattingly, B. A., McIntyre, K. P., & Lewandowski, G. W., Jr. (2020). Relationship dissolution and self-concept change. In B. A. Mattingly, K. P. McIntyre, & G. W. Lewandowski, Jr. (Eds.), *Interpersonal relationships and the self-concept* (pp. 145–161). Springer. https://doi.org/10.1007/978-3-030-43747-3_9

McDonough, M. H., Sabiston, C. M., & Wrosch, C. (2014). Predicting changes in posttraumatic growth and subjective well-being among breast cancer survivors: The role of social support and stress. *Psycho-Oncology*, *23*, 114–120. https://doi.org/10.1002/pon.3380

McMillen, J. C., Smith, E. M., & Fisher, R. H. (1997). Perceived benefit and mental health after three types of disaster. *Journal of Consulting and Clinical Psychology*, *65*, 733–739. https://doi.org/10.1037/0022-006X.65.5.733

McNulty, J. K. (2010a). Forgiveness increases the likelihood of subsequent partner transgressions in marriage. *Journal of Family Psychology*, *24*, 787–790. https://doi.org/10.1037/a0021678

McNulty, J. K. (2010b). When positive processes hurt relationships. *Current Directions in Psychological Science*, *19*, 167–171. https://doi.org/10.1177/0963721410370298

McNulty, J. K., O'Mara, E. M., & Karney, B. R. (2008). Benevolent cognitions as a strategy of relationship maintenance: "Don't sweat the small stuff" . . . But it is not all small stuff. *Journal of Personality and Social Psychology*, *94*, 631–646. https://doi.org/10.1037/0022-3514.94.4.631

Michael, C., & Cooper, M. (2013). Post-traumatic growth following bereavement: A systematic review of the literature. *Counselling Psychology Review*, *28*, 18–33.

Mikulincer, M., Shaver, P. R., & Solomon, Z. (2015). An attachment perspective on traumatic and posttraumatic reactions. In M. P. Safir, H. S. Wallach, & A. S. Rizzo (Eds.), *Future directions in post-traumatic stress disorder: Prevention, diagnosis, and treatment* (pp. 79–96). Springer. https://doi.org/10.1007/978-1-4899-7522-5_4

Muise, A., Harasymchuk, C., Day, L. C., Bacev-Giles, C., Gere, J., & Impett, E. A. (2019). Broadening your horizons: Self-expanding activities promote desire and satisfaction in established romantic relationships. *Journal of Personality and Social Psychology*, *116*, 237. https://doi.org/10.1037/pspi0000148

Murray, S. L., Derrick, J. L., Leder, S., & Holmes, J. G. (2008). Balancing connectedness and self-protection goals in close relationships: A levels-of-processing perspective on risk regulation. *Journal of Personality and Social Psychology*, *94*, 429–459. https://doi.org/10.1037/0022-3514.94.3.429

Murray, S. L., & Holmes, J. G. (2009). The architecture of interdependent minds: A motivation-management theory of mutual responsiveness. *Psychological Review*, *116*, 908–928. https://doi.org/10.1037/a0017015

Murray, S. L., Holmes, J. G., & Collins, N. L. (2006). Optimizing assurance: The risk regulation system in relationships. *Psychological Bulletin*, *132*, 641–666. https://doi.org/10.1037/0033-2909.132.5.641

Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996). The self-fulfilling nature of positive illusions in romantic relationships: Love is not blind, but prescient. *Journal of Personality and Social Psychology*, *71*, 1155–1180. https://doi.org/10.1037/0022-3514.71.6.1155

Murray, S. L., Holmes, J. G., Griffin, D. W., & Derrick, J. L. (2015). The equilibrium model of relationship maintenance. *Journal of Personality and Social Psychology*, *108*, 93–113. https://doi.org/10.1037/pspi0000004

Murray, S. L., Lamarche, V. M., & Seery, M. D. (2018). Romantic relationships as shared reality defense. *Current Opinion in Psychology*, *23*, 34–37. https://doi.org/10.1016/j.copsyc.2017.11.008

Murray, S. L., Lamarche, V., Seery, M. D., Jung, H. Y., Griffin, D. W., & Brinkman, C. (2021). The social-safety system: Fortifying relationships in the face of the unforeseeable. *Journal of Personality and Social Psychology, 120*, 99–130. https://doi.org/10.1037/pspi0000245

Neyer, F. J., & Asendorpf, J. B. (2001). Personality-relationship transaction in young adulthood. *Journal of Personality and Social Psychology, 81*, 1190–1204. https://doi.org/10.1037/0022-3514.81.6.1190

Neyer, F. J., Mund, M., Zimmermann, J., & Wrzus, C. (2014). Personality-relationship transactions revisited. *Journal of Personality, 82*, 539–550. https://doi.org/10.1111/jopy.12063

Orzeck, P. (2016). Identities in transition: Women caregivers in bereavement. *Journal of Social Work in End-of-Life & Palliative Care, 12*, 145–161, https://doi.org/10.1080/15524256.2016.1165162

Owenz, M., & Fowers, B. J. (2019). Perceived posttraumatic growth may not reflect actual positive change: A short-term prospective study of relationship dissolution. *Journal of Social and Personal Relationships, 36*, 3098–3116. https://doi.org/10.1177/0265407518811662

Park, C. L., Cohen, L. H., & Murch, R. L. (1996). Assessment and prediction of stress-related growth. *Journal of Personality, 64*, 71–105. https://doi.org/10.1111/j.1467-6494.1996.tb00815.x

Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36*, 556–563. https://doi.org/10.1016/S0092-6566(02)00505-6

Peetz, J., & Wilson, A. E. (2014). Marking time: Selective use of temporal landmarks as barriers between current and future selves. *Personality and Social Psychology Bulletin, 40*, 44–56. https://doi.org/10.1177/2F0146167213501559

Pepping, C. A., MacDonald, G., & Davis, P. J. (2018). Toward a psychology of singlehood: An attachment-theory perspective on long-term singlehood. *Current Directions in Psychological Science, 27*, 324–331. https://doi.org/10.1177/0963721417752106

Plusnin, N., Pepping, C. A., & Kashima, E. S. (2018). The role of close relationships in terror management: A systematic review and research agenda. *Personality and Social Psychology Review, 22*, 307–346. https://doi.org/10.1177/1088868317753505

Reis, H. T. (2012). A brief history of relationship research in social psychology. In A. W. Kruglanski & W. Stroebe (Eds.), Handbook of the history of social psychology (pp. 363–382). Psychology Press.

Reis, H. T., Clark, M. S., & Holmes, J. G. (2004). Perceived partner responsiveness as an organizing construct in the study of intimacy and closeness. In D. J. Mashek & A. P. Aron (Eds.), Handbook of closeness and intimacy (pp. 201–225). Lawrence Erlbaum Associates Publishers.

Reis, H. T., Collins, W. A., & Berscheid, E. (2000). The relationship context of human behavior and development. *Psychological Bulletin, 126*, 844–872. https://doi.org/10.1037/0033-2909.126.6.844

Robinson-Whelen, S., Tada, Y., MacCallum, R. C., McGuire, L., & Kiecolt-Glaser, J. K. (2001). Long-term caregiving: What happens when it ends? *Journal of Abnormal Psychology, 110*, 573–584. https://doi.org/10.1037/0021-843X.110.4.573

Rusbult, C. E., Finkel, E. J., & Kumashiro, M. (2009). The Michelangelo phenomenon. *Current Directions in Psychological Science, 18*, 305–309. https://doi.org/10.1111/j.1467-8721.2009.01657.x

Rusbult, C. E., Kumashiro, M., Stocker, S. L., Kirchner, J. L., Finkel, E. J., & Coolsen, M. K. (2005). Self processes in interdependent relationships: Partner affirmation and the Michelangelo phenomenon. *Interaction Studies, 6*, 375–391.

Rusbult, C. E., & Van Lange, P. A. (2008). Why we need interdependence theory. *Social and Personality Psychology Compass, 2*, 2049–2070. https://doi.org/10.1111/j.1751-9004.2008.00147.x

Rusbult, C. E., Verette, J., Whitney, G. A., Slovik, L. F., & Lipkus, I. (1991). Accommodation processes in close relationships: Theory and preliminary empirical evidence. *Journal of Personality and Social Psychology, 60*, 53–78. https://doi.org/10.1037/0022-3514.60.1.53

Rusbult, C. E., Wieselquist, J., Foster, C. A., & Witcher, B. S. (1999). Commitment and trust in close relationships. In J. M. Adams & W. H. Jones (Eds.), Handbook of interpersonal commitment and relationship stability. Perspectives on individual differences (pp. 427–449). Springer. https://doi.org/10.1007/978-1-4615-4773-0_25

Samios, C., Henson, D. F., Simpson, H. J. (2014). Benefit finding and psychological adjustment following a nonmarital relationship breakup. *Journal of Relationships Research, 5*, 1–8. https://doi.org/10.1017/jrr.2014.6

Sbarra, D. A., & Emery, R. E. (2005). The emotional sequelae of nonmarital relationship dissolution: Analysis of change and intraindividual variability over time. *Personal Relationships, 12*, 213–232. https://doi.org/10.1111/j.1350-4126.2005.00112.x

Schaefer, J. A., & Moos, R. H. (1992). Life crises and personal growth. In B. Carpenter (Ed.), *Personal coping: Theory, research and application* (pp. 149–170). Praeger.

Schaefer, J. A., & Moos, R. H. (2001). Bereavement experiences and personal growth. In M. S. Stroebe, R. O. Hansson, W. Stroebe, & H. Schut (Eds.), *Handbook of bereavement research: Consequences, coping, and care* (pp. 145–167). American Psychological Association. https://doi.org/10.1037/10436-006

Schoebi, D., Karney, B. R., & Bradbury, T. N. (2012). Stability and change in the first 10 years of marriage: Does commitment confer benefits beyond the effects of satisfaction? *Journal of Personality and Social Psychology, 102*, 729–742. https://doi.org/10.1037/a0026290

Shallcross, S. L., & Simpson, J. A. (2012). Trust and responsiveness in strain-test situations: A dyadic perspective. *Journal of Personality and Social Psychology, 102*, 1031–1044. https://doi.org/10.1037/a0026829

Simpson, J. A. (2007). Psychological foundations of trust. *Current Directions in Psychological Science, 16*, 264–268. https://doi.org/10.1111/j.1467-8721.2007.00517.x

Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support seeking and support giving within couples in an anxiety-provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology, 62*, 434–446. https://doi.org/10.1037/0022-3514.62.3.434

Simpson, J. A., Rholes, W. S., & Phillips, D. (1996). Conflict in close relationships: An attachment

perspective. *Journal of Personality and Social Psychology*, *71*, 899–914. https://doi.org/10.1037/0022-3514.71.5.899

Slavich, G. M. (2020). Social safety theory: A biologically based evolutionary perspective on life stress, health, and behavior. *Annual Review of Clinical Psychology*, *16*, 265–295. https://doi.org/10.1146/annurev-clinpsy-032816-045159

Slotter, E. B., Gardner, W. L., & Finkel, E. J. (2010). Who am I without you? The influence of romantic breakup on the self-concept. *Personality and Social Psychology Bulletin*, *36*, 147–160. https://doi.org/10.1177/0146167209352250

Solnit, R. (2010). *A paradise built in hell: The extraordinary communities that arise in disaster*. Penguin.

Spielmann, S. S., MacDonald, G., Maxwell, J. A., Joel, S., Peragine, D., Muise, A., & Impett, E. A. (2013). Settling for less out of fear of being single. *Journal of Personality and Social Psychology*, *105*, 1049–1073. https://doi.org/10.1037/a0034628

Tashiro, T., & Frazier, P. (2003). "I'll never be in a relationship like that again": Personal growth following romantic relationship breakups. *Personal Relationships*, *10*, 113–128. https://doi.org/10.1111/1475-6811.00039

Tedeschi, R. G., & Calhoun, L. G. (1995). *Trauma & transformation: Growing in the aftermath of suffering*. Sage Publications.

Tedeschi, R. G., & Calhoun, L. G. (1996). The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress*, *9*, 455–471. https://doi.org/10.1007/BF02103658

Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, *15*, 1–18. https://doi.org/10.1207/s15327965pli1501_01

Tedeschi, R. G., Park, C. L., & Calhoun, L. G. (Eds.). (1998). *Posttraumatic growth: Positive changes in the aftermath of crisis*. Routledge.

Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. John Wiley.

VanderDrift, L. E., Agnew, C. R., & Wilson, J. E. (2009). Nonmarital romantic relationship commitment and leave behavior: The mediating role of dissolution consideration. *Personality and Social Psychology Bulletin*, *35*, 1220–1232. https://doi.org/10.1177/0146167209337543

Van Lange, P. A. M., & Balliet, D. (2015). Interdependence theory. In M. Mikulincer, P. R. Shaver, J. A. Simpson, & J. F. Dovidio (Eds.), Handbook of personality and social psychology, Vol. 3. Interpersonal relations (pp. 65–92). American Psychological Association.

Vignoles, V. L., Owe, E., Becker, M., Smith, P. B., Easterbrook, M. J., Brown, R., González, R., Didier, N., Carrasco, D., Cadena, M. P., Lay, S., Schwartz, S. J., Des Rosiers, S. E., Villamar, J. A., Gavreliuc, A., Zinkeng, M., Kreuzbauer, R., Baguma, P., Martin, M., . . . Bond, M. H. (2016). Beyond the 'east–west' dichotomy: Global variation in cultural models of selfhood. *Journal of Experimental Psychology: General*, *145*, 966–1000. https://doi.org/10.1037/xge0000175

Vollhardt, J. (2009). Altruism born of suffering and prosocial behavior following adverse life events: A review and conceptualization. *Social Justice Research*, *22*, 53–97. https://doi.org/10.1007/s11211-009-0088-1

Vollrath, M., Krahé, B., & Hampson, S. (2004). Personality and social relations. *European Journal of Personality*, *18*, 239–242. https://doi.org/10.1002/per.516

Wagner, J., Becker, M., Lüdtke, O., & Trautwein, U. (2015). The first partnership experience and personality development: A propensity score matching study in young adulthood. *Social Psychological and Personality Science*, *6*, 455–463. https://doi.org/10.1177/1948550614566092

Wieselquist, J., Rusbult, C. E., Foster, C. A., & Agnew, C. R. (1999). Commitment, pro-relationship behavior, and trust in close relationships. *Journal of Personality and Social Psychology*, *77*, 942–966. https://doi.org/10.1037/0022-3514.77.5.942

Wofford, N., Defever, A. M., & Chopik, W. J. (2019). The vicarious effects of discrimination: How partner experiences of discrimination affect individual health. *Social Psychological and Personality Science*, *10*, 121–130.

Zamora, E. R., Yi, J., Akter, J., Kim, J., Warner, E. L., & Kirchhoff, A. C. (2017). 'Having cancer was awful but also something good came out': Post-traumatic growth among adult survivors of pediatric and adolescent cancer. *European Journal of Oncology Nursing*, *28*, 21–27. https://doi.org/10.1016/j.ejon.2017.02.001