

DISTRESS-DISCLOSURE SKILLS AND THE COMMUNICATION THEORY OF  
RESILIENCE (CTR) IN COLLEGE STUDENTS' STRESS AND POSITIVE ADAPTATION

by

SELENA LEI LEI PANG

(Under the Direction of Analisa Arroyo)

ABSTRACT

The study investigates the role of social skills within the framework of the Communication Theory of Resilience (CTR) and its relationship on college students' ability to manage stress and achieve positive adaptation. College students experience significant stress that could lead to mental health outcomes such as anxiety and depression. The study also integrates the Social Skills Deficit Vulnerability Model (SSDV) to examine whether distress disclosure skills moderate the engagement in resilience-building processes. CTR processes were also examined to mediate between stress and positive adaptation. College students completed a survey assessing their stress levels related to a difficult event, distress disclosure, CTR behaviors, and positive adaptation. Results show no significant mediated or moderated relationships. The findings highlight the nuanced role of specific CTR behaviors and contextual factors in fostering adaptation, stressing the complexity of resilience processes and the need for further research to enhance the theoretical and practical understanding of communicating resilience.

INDEX WORDS: Resilience, social skills, Communication Theory of Resilience, Stress,  
Positive adaptation

DISTRESS-DISCLOSURE SKILLS AND THE COMMUNICATION THEORY OF  
RESILIENCE (CTR) IN COLLEGE STUDENTS' STRESS AND POSITIVE ADAPTATION

by

SELENA LEI LEI PANG

B.A., Chapman University, 2015

M.A., University of Delaware, 2017

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial  
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2025

© 2025

Selena Lei Lei Pang

All Rights Reserved

DISTRESS-DISCLOSURE SKILLS AND THE COMMUNICATION THEORY OF  
RESILIENCE (CTR) IN COLLEGE STUDENTS' STRESS AND POSITIVE ADAPTATION

by

SELENA LEI LEI PANG

Major Professor:      Analisa Arroyo  
Committee:              Jiaying Liu  
                                    Soroya McFarlane  
                                    Steven Beach

Electronic Version Approved:

Ron Walcott  
Vice Provost for Graduate Education and Dean of the Graduate School  
The University of Georgia  
May 2025

## DEDICATION

To my pops. Caught up to you 😊.

To my husband, Gary T. Lam, for your endless patience through late-night brainstorming, repetitive spirals, and for providing a safe and loving space. Your steady presence has been my greatest support and a deep comfort to my soul.

To my therapist, Chris Pisarik, for guiding me with clarity and strength throughout this journey. Your wisdom, compassion, and unwavering belief in me have been a source of comfort. Your support has kept me grounded and given me the courage to move forward. I am truly grateful.

To my mom and sisters, my greatest cheerleaders, thank you for lifting me up and sharing in both my joys and disappointments. Your love and unwavering support mean the world to me.

## ACKNOWLEDGEMENTS

This journey has been eye-opening, challenging, and deeply transformative, filled with moments of reflection and discovery. I am extremely grateful to those who have contributed to my growth, both personally and academically, throughout this process.

To Dr. Analisa Arroyo – Thank you taking me under your wing and for lending your expertise to make this project more theoretically substantive. Your “let’s make it happen” attitude became an aspiring mantra. I am also grateful of the support from the rest of my committee. Dr. Jiaying Liu – Your warmth and encouragement, along with your belief in me, gave me hope that I could finish. I am deeply grateful for the time you have given to help me; I truly could not have done this without you. Dr. Steven Beach – your insightful contributions in the psychological field expanded the scope of this dissertation and opened new avenues for exploration. Dr. Soroya McFarlane for graciously stepping in to serve on my committee, offering your time and support during this critical phase.

Of course, many friends along the way have also been there to keep the project moving. Your encouragement and listening ears have been invaluable. I am grateful for each of you.

## TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS .....	v
LIST OF TABLES .....	viii
LIST OF FIGURES .....	ix
CHAPTER	
1 INTRODUCTION .....	1
The Prevalence of Stress in Undergraduates .....	2
Resilience and Positive Adaptation .....	3
Theoretical Foundations.....	5
2 METHOD .....	17
Participants and Procedures .....	17
Measures .....	18
3 RESULTS .....	25
Research Question .....	25
Correlations Among Study Variables .....	26
Hypothesis Testing.....	28
Post-Hoc Analyses .....	31
4 DISCUSSION .....	33
Resilience In Contexts .....	33
Stress' Relationship to CTR Processes .....	35
The Role of Social Skills in Engaging the Resilience Process .....	37

Measuring Communication Resilience with Positive Adaptation .....	38
Mood as a Significant Covariate .....	39
Implications, Limitations, and Future Research .....	41
5 CONCLUSION.....	45
REFERENCES .....	46
APPENDICES	
A Mood.....	64
B Difficult Life Event.....	65
C Distress Disclosure Index (DDI).....	66
D Communication Resilience Processes Scale .....	67
E Positive Adaptation Scale .....	69

## LIST OF TABLES

	Page
Table 1: Covariation Table of Variables.....	26

LIST OF FIGURES

	Page
Figure 1: Conceptual Model .....	13

## CHAPTER 1

### INTRODUCTION

People in the U.S. report suffering from an overwhelming number of external stressors (Bethune, 2022). Chronic stress contributes to various diseases and negatively impacts quality of life (Ribeiro et al., 2018), contributing to headaches, sleep disorder, digestive issues, and other mental health problems (U.S. Department of Health and Human Services, 2022). Talking about and sharing one's thoughts and feelings are common and effective ways of relieving stress (Zech & Rime, 2005). Indeed, during times of loneliness and isolation, seeking meaningful discussions with others should be a priority. Close interpersonal relationships help decrease stress, anxiety, and depression (Vinker et al., 2020; Shah et al., 2021). As individuals seek to manage the impact of stressors on their mental and physical health, the concept of resilience emerges as a guiding process for adaptation. Traditionally thought of as an individual trait (Jacelon, 1997), resilience may be developed through interpersonal communication (e.g., Cameron & Overall, 2018). Thus, it is important to understand how resilience can be fostered through communication.

An assumption in the resilience literature is that resilience arises through proactive behavioral processes, particularly communication and social realms. While considerable research has examined stress management and resilience, the role of social skills in these relationships remains unclear. Thus, there remains limited work on the *ability* to seek and participate in building resilience. This study employs the Communication Theory of Resilience to examine stress, focusing on how communication processes reintegrate individuals after a disruption. Additionally, the Social Skills Deficit Vulnerability Model (SSDV) is integrated into the model

to include social skills. Because the skill to appropriately and effectively communicate one's thoughts and feelings vary at individual levels, social skills may explain an individual's capacity to acquire social resources and express stressors. Ultimately, the goal of the study is to understand how social skills act as a vulnerability factor in enacting a resilience process crucial to adaptation. In other words, social skills as a vulnerability factor means it is a type of moderator variable that impacts the outcome only when a stressor is present, rather than a factor a cause or outcomes of psychosocial problems (Segrin, 1996).

### **The Prevalence of Stress in Undergraduates**

A recent national survey reported that individuals between the ages of 18 and 25 experienced the highest average stress level compared to other adults (Bethune, 2022). Among college students, 66% reported feeling stressed, 51% indicated daily worries, and a significant number considered dropping out the following semester due to stress (Hrynowsky & Marken, 2023). Moreover, Liu et al. (2019) found alarming rates of mental health issues among college students, with one-fifth reporting attempting suicide (9%) and 20% engaging in self-harm. These findings highlight the important need to address stress experiences among college students.

One reason why college students experience heightened stress during the transition from late adolescence to young adulthood is the frequent challenges arising from changes in social situations and personal development (Bruffarets et al., 2018). These challenges include living away from home, sharing living spaces with strangers, maintaining a good academic standing, planning for the future (Flaherty, 2023), newfound autonomy, work, family responsibilities, and identity exploration (Arnett, 2000; Pedrelli et al., 2015). This pressure to adopt 'adult' behaviors can lead to feelings of inadequacy, as many students may struggle with delayed social development (Steinmetz, 2016), which can be challenging if parents have been overly protective,

unintentionally hindering their children's opportunities to learn life skills (Schroth, 2019). Consequently, college students may feel pressure to act like adults while simultaneously struggling with facing delayed social development.

Unfortunately, stress disrupts psychological balance and mental well-being. Coping mechanisms, such as increased blood flow and the secretion of stress hormones, activate the sympathetic nervous system (Yaribeygi et al., 2017). How individuals respond to stressors may determine whether they experience mild or intense stress (Lazarus, 1993). Stress, commonly associated with depression and anxiety (Asif et al., 2020), can trigger mental health diagnoses or suicide attempts, even after just one or two stressful events (Liu et al., 2019). Stress is not always visible, as many individuals mask their feelings. Although a student may be achieving academic success, does not necessarily reflect the internal struggles they may be confronting (Brown, 2018; Liu et al., 2019). Thus, understanding and addressing stress among college students becomes important to promote resiliency and well-being.

### **Resilience and Positive Adaptation**

*Resilience*, defined as the dynamic ability to proactively engage in personal and social constructive behaviors amid challenges, is increasingly recognized as a systems concept in the resilience literature (Masten, 2018). There are four core ideas for a systems framework: 1) several interacting systems on multiple levels shape the development and function of the living system, 2) a system's capacity for adapting is always changing and developing, 3) changes can filter across domains and levels of functioning due to system interconnections, and 4) systems are inter-reliant. Resilience operates as a dynamic process where different levels of the system interact to contribute to a person's overall resilience. This indicates that resilience is not static but a series of dynamic interactions among multiple systems (Masten, 2018). For instance,

Conway et al. (2020) support this notion in their study on couples' coping with one partner experiencing dementia. Participants expressed that their resilience was a continual process that developed over time, wherein one couple stated that their resilience fluctuated depending on the resources they had to manage their stressors. Thus, it is thought that a person does not carry resilience with them in every situation; rather, resilience depends on the context, resources, risk, population, and study outcomes (Fergus & Zimmerman, 2005).

*Positive adaptation* is defined as favorable adjustment patterns an individual attains given their available resources and background (Mahoney & Bergman, 2002). Extensive research highlights the notable outcomes of positive adaptation, including wisdom (Liney, 2003), personal and relational growth (Shoychet et al., 2022), psychological well-being (Ryff, 1989), and life satisfaction (Jimenez et al., 2012). It is thought to result from the resilience process, underscoring personal growth, recovery, and sustainability after a distressing event (Folkman, 2011). While positive adaptation is often studied in conjunction with resilience, both concepts explore how individuals navigate difficult experiences to achieve positive outcomes. The current study examines positive adaptation as the outcome variable because it encompasses well-being, continued functioning, and growth. Research indicates potential protective factors for positive adaptation, including positive personality qualities, supportive families, external conditions outside of the family that provide coping and support, and attachment relationships (Friborg & Hjemdal, 2004; Masten, 2007). Given that positive adaptation often occurs within close relationships, effective communication processes likely serve as protective factors in experiencing positive adaptation.

Effective communication strategies enable individuals to construct meaning from difficult experiences, mobilize social support networks, and cope with life's challenges.

Behaviors such as self-disclosure, seeking social support, and reframing serve as mechanisms for maintaining relationships, processing emotions, and solving problems. Communication theories offer valuable insight into how individuals enact these behaviors that contribute to resilience and adaptation. The growing body of research asserts that resilience can be learned and taught as a process to strengthen coping strategies (Stephens, 2013). Understanding how and to what extent communication behaviors either foster or hinder adaptive outcomes becomes crucial if resilience is indeed a learnable skill (e.g., Mancini & Bonanno, 2009). Therefore, the current study examines positive adaptation as an outcome of engaging in communicative resilience.

### **Theoretical Foundations**

#### ***Communication Theory of Resilience (CTR)***

Communication researchers have made significant progress in understanding resilience as a communicative process. CTR is a theory that describes and explains the communicative process involved in developing resilience through discourse (Buzzanell, 2010). The resilience process is activated when individuals experience a temporary event (such as losing a job) or a lasting event (the loss of a loved one) that creates disruption in their life. The events could be singular or recurring, leading to uncertainty and evoking emotions like sadness, fear, or anger. People then engage in an interactive process to create meaning through stories and messages that help them reintegrate from their life troubles (Lucas & Buzzanell, 2012). Resilience develops as individuals encounter and make sense of new relationships and situations (Buzzanell, 2017; Egeland et al., 1993). The CTR process plays an important role in understanding the behaviors of building resilience, although research has yet to determine how each process may be affected by stress.

According to CTR, resilience is not an inherent trait within individuals; instead, the foundation of resilience is rooted in the exchange of messages, narratives, and conversation. Buzzanell (2010) identifies five fundamental processes that underline resilience. Firstly, *crafting normalcy* refers to an individual's efforts to uphold regular routines and the ordinary aspects of life through communication and familiar rituals, resulting in a new normal that integrates the loss. This might involve maintaining schedules, habits, and completing routine tasks (Wilson et al., 2021). Having a sense of normalcy during stress is important to help offset the imbalance or disruption one feels from the stress. For example, during the COVID-19 pandemic, student accounts of being able to balance normalcy were associated with their academic and personal adjustment. Students who created a routine during the transition from in-person to online schooling stayed organized and motivated, while students who struggled to establish this sense of normalcy experienced decreased motivation (Scharp et al., 2022). CTR describes that people strive to establish a sense of normalcy following a disruptive event, either by talking about how things are normal, or through behaviors that reflect a routine (Wilson et al., 2021; Chernichky-Karcher et al., 2019). However, during stressful periods, people may also construct a new sense of purpose, finding joy alongside their challenges while balancing health, jobs, and family (e.g., Fortuna, 2021), so creating a new normal can be difficult because the process requires transitioning into unfamiliarity territory. Thus, the more stress someone feels about an event, the less normalcy they are likely to perceive in their lives.

Secondly, *affirming identity anchors* refers to the enduring aspects of one's identity to which they turn to when explaining who they are (Buzzanell, 2010). This process highlights how individuals use communication to regain or maintain their sense of self that existed prior to the stressful event (Venetis et al., 2020). This can involve adhering to significant values and

identities, such as gender roles, spiritual beliefs, or expressing affiliations with social groups (Wilson et al., 2021). Consequently, stress may unsettle one's identity (i.e., a person's self-concept and the social roles they enact, such as a worker, friend, parent, spouse; Thoits, 1991). For instance, Buzzanell (2010) found that families where the father had lost their job were affirmed in their identity as the household head, decision maker, and breadwinner. Without an identity anchor to buffer against uncertainties, stress may lessen one's affirmation. When someone experiences stress after a disruptive event, they may rely on spiritual beliefs to reduce the effects of their stress, such as someone saying, "my faith empowers me to be strong." Moreover, taking a strength-based approach to one's identity may help reduce the impact of stress on one's identity. Thus, when stress increases, identity anchors may be injured.

Thirdly, *maintaining and using communication networks* serve as another communicative way to build resilience. Individuals rely on nurturing, sustaining, and drawing upon their networks for resources. This practice includes reaching out to family, friends, professionals, and peers. Extensive literature widely affirms that social support plays a crucial role in fostering resilience across various contexts, thereby enhancing overall well-being (e.g., Alsubaie et al., 2019; Mohd et al., 2019). Social relationships serve as a protective factor in the development of resilience, ensuring that individuals have a support system to rely on during times of emotional, social, or financial need (Harms et al., 2018). Indeed, maintaining and using networks were integral for pandemic college students to endure the transition from in-person to online learning. Students appreciated and adjusted better when they interacted more with their peers and professors (Scharp et al., 2022). That said, stress typically induces anxiety because situations that are stressful are perceived as worrisome (Endler & Parker, 1990) and individuals tend to resort to isolation as a self-induced coping strategy to handle their worries and avoid interpersonal

interactions (Brown et al., 2021). When individuals cope with stress ineffectively, it may worsen mood and increase irritation; and so, they may withdraw into isolation to attempt to manage their stress alone, making it less likely that they reach out to their social network.

The fourth process in fostering resilience involves acknowledging and reframing situations. This helps individuals integrate into their situations or *construct alternative logics*. Alternative logics are rooted in sensemaking, and in the resilience process, people interactively creating meaning within their context and consider various explanations for their situation and experiences (Buzzanell, 2017). For instance, during the pandemic, first-generation college students often reassessed their experiences in a positive light (Scharp et al., 2022). They sought the positivity within a situation, focusing on aspects they could control while accepting what was beyond their control. This approach allowed them to view the situation as a learning experience. Similarly, in response to COVID-19, military spouses relied on military mantras to draw strength during difficulty (Fanari et al., 2023). These mantras were alternative logics to the fear and uncertainty of COVID-19 discourse. Mantras such as “Take it day by day,” “Embrace the suck,” and “Hope for the best, plan for the worst” were repeated discourse used as a sensemaking strategy during the pandemic, providing helpful guidance. Constructing alternative logics closely aligns with cognitive reappraisal, an emotion regulation strategy that reframes the meaning of an emotional stimulus to alter the emotional impact (Lazarus & Alfert, 1964; Ochsner & Gross, 2008; Gross, 2015). Cognitive reframing plays a significant role in reducing negative emotions and enhancing positive ones (Lin & Liu, 2021), as the meaning one assigns to the stressor is important because it influences the behavioral, physiological, and experiential response generated in that situation.

While CTR argues that constructing alternative logics is a way a person reframes a situation and moves beyond conventional ways of thinking to respond to disruptions (Wilson et al., 2021), cognitive resources are likely reduced when someone is stressed. Stress impacts cognitive functioning, particularly sleep disturbance, concentration, (e.g., Eskildsen et al., 2017), attention, memory, decision speed (Mendl, 1999; Korten et al., 2016), and rumination (Sladek et al., 2019). Rumination, a hallmark of depression, involves someone narrowly focusing on negative thinking (Van Vugt & Van Der Velde, 2018). Thus, it is likely that the more stress someone experiences, the fewer cognitive resources they possess to enable the process of constructing alternative logics.

Lastly, *legitimizing negative feelings while foregrounding productive action* involves acknowledging one's negative feelings while intentionally taking productive actions towards important goals (Wilson et al., 2021). An individual enacts this process by moving forward with one's life while recognizing unpleasant experiences such as being a marginalized family member or pursuing career opportunities after a job loss (Wilson et al., 2021). Arguably, legitimizing negative feelings while engaging in productive action results in one's ability to emotionally regulate and cognitively prepare. For example, students who effectively utilize this process describe their behavior during challenging academic periods as striving to do their best, regardless of the resulting letter grade. On the other hand, students who struggle with this process appear to indicate how their emotions overwhelm them, leading them to focus more on the negatives than the positives (Scharp et al., 2022). CTR describes foregrounding productive action while backgrounding negative feelings as a deliberate way to validate negative emotions while recognizing that dwelling on them may be counterproductive to achieving other important goals. However, if one is feeling stressed to the point where they are mentally and emotionally

tired, it would be “easier said than done” to move on from those negative feelings. Moreover, downplaying or harshly judging emotions can backfire, leading to more negative emotions. As such, individuals who judge their emotions as negative tend to have worse psychological outcomes than those who view all their emotions as positive (Willroth et al., 2023). Although CTR encourages people to validate their negative emotions and recognize that dwelling on negative emotions is not being helpful (e.g., “being sad about the situation won’t change it”), excessive effort on backgrounding emotions may impede productive action. Thus, the more stress someone experiences, the less likely they are to take productive action.

### ***Social Skills Deficit Vulnerability (SSDV) Model***

Social skills significantly impact personal and relational health. Individuals with poor social skills and high stress levels often suffer from psychological distress, increased social anxiety, and depression (Segrin, 1996; Segrin, 2000; Segrin & Flora, 2000). However, individuals with robust social skills can mobilize their supportive networks and maintain their quality of life even in challenging circumstances (Segrin et al., 2016). For example, adolescents with good social skills who also participate in extracurricular activities experience improved quality of life with their close relationships and physical well-being (Lemonia et al., 2017). The Social Skills Deficit Vulnerability Model (SSDV) can help explain these varying outcomes. Rather than examined as predictors or outcomes, social skills are seen as vulnerability factors influencing relational and well-being outcomes in stressful situations (Segrin, 1996). According to the SSDV model, individuals with strong social skills can mobilize their social support networks, enabling them to maintain their quality of life in challenging circumstances (Segrin et al., 2016). Moreover, when stress is combined with poor social skills, individuals are more likely to experience higher social anxiety and depression, increasing their vulnerability to the negative

effects of stress (Segrin, 1996; Segrin, 2000), making them more vulnerable to the negative effects of stress (Segrin et al., 2016). This vulnerability of inadequate social skills increases the difficulty in acquiring social support and using effective coping techniques (Segrin & Flora, 2000).

Social skills, sometimes referred to as social competence, communication competence, or interpersonal skills (Segrin et al., 2016; Segrin, 2000), allow people to interact appropriately and effectively with others (Segrin, 1996). Although there is no adequate nor universally agreed-upon single definition of social skills, many scholars concur that a key representation of social skills is the ability to send and receive information (Riggio, 1986). There are many ways to measure social skills. They are often measured by sets of social behaviors that are valued in a culture, leading to positive outcomes and aiding in accomplishing social tasks (Del Prette & Del Prette, 2021). Some of these behaviors include emotional and social *expressivity* (communicating attitudes and self-disclosure), emotional and social *sensitivity* (e.g., decoding others' emotions and understanding one's own), emotional and social *control* (e.g., regulating emotional and verbal behaviors), and social manipulation (Riggio, 1986). Other observable social skill behaviors include civility, making and maintaining relationships, empathy, assertiveness, and managing conflict (Del Prette & Del Prette, 2021). The current study focuses on a specific aspect of social skill, self-disclosure during times of distress. The current study focuses on *distress disclosure skills* as a critical subset of self-disclosure. Distress disclosure skills is a type of self-disclosure that is one's willingness to share personally distressing information to others (Ward et al., 2009).

Self-disclosing involves the voluntary process of sharing personal information with others (Greene et al., 2006), including psychological distress, which prompts support-seeking

behaviors (Han et al., 2015). Self-disclosure generally is associated with improved mental and physical health, stress-related growth, and better emotion-regulation strategies (Pennebaker, 1997; Levi-Belz, 2016; Kahn et al., 2017). Moreover, the ability to self-disclose may not only elicit support from others but also assist in cognitive processing, such as reframing or rumination (Dong et al., 2015). When people self-disclose, they experience authenticity, pride, safety, and reduced anxiety and shame (Farber et al., 2004). Additionally, it facilitates emotional relief, conflict resolution, and decreases depression and interpersonal sensitivity (Paulson et al., 1999; Hemenover, 2003). Alternatively, keeping secrets inhibits the healing process that helps relieve emotional and physical tensions (Farber et al., 2004). Thus, poorer self-disclosure skills appear to be a vulnerability factor that hinders the development the development of positive adaptation.

Self-disclosure is a widely identifiable and measurable skill in interpersonal relationship and as a crucial element of effective communication. Skilled self-disclosures can appropriately share information about themselves that is neither too much nor too little, depending on the context (Hargie, 1986). Research supports its trainability. For example, graduate students trained in self-disclosure assisted in experimental training programs where they trained adolescents in the ability to self-disclose (Haynes & Avery, 1979). As a result, subjects who received training displayed higher self-disclosure and empathy skill levels than untrained individuals. Similarly, Cohen et al. (1986) motioned how self-disclosure, social anxiety, and social competence were skills necessary to cope with stressful events as these behaviors represented one's ability to gain appeal, maintain, and activate other's support. Those who were willing to share about themselves had a greater likelihood of attracting friends and building resourceful networks.

Self-disclosure skills training has also been applied in counseling contexts. Workshops designed to improve self-disclosure helped couples reduce avoidance as well as

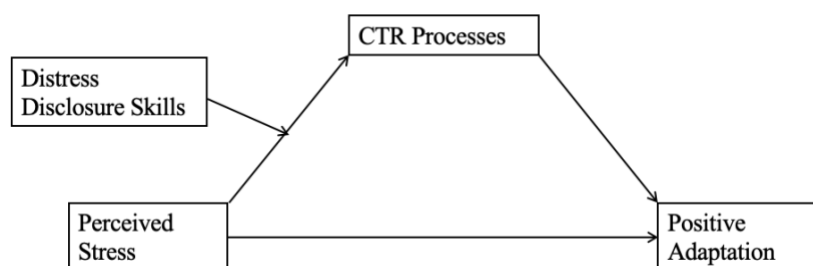
demand/withdrawal patterns (Zarei & Saneimanesh, 2014). A 12-week self-disclosure training program showed an improvement in participant self-disclosure levels (Bek et al., 2019).

Additionally, Arroyo et al. (2022) further identified self-disclosure skills as a crucial social skill, highlighting participants' comfort in sharing feelings with romantic partners, friends, and family and perceived social support outcomes. Given its similarities to self-disclosure skills, distress disclosures skills would involve sharing personal information related to a stressful situation.

### The Current Study

The current study examines the distress disclosure skills in the resilience process (see Figure 1 for conceptual model).

Figure 1. Conceptual Model



CTR posits that individuals are proactive agents in the resilience process, with the capacity to choose and enact resilience behaviors (e.g., Buzzanell, 2010). However, CTR does not consider how distress disclosure skills impact one's capacity to do so. The SSDV model suggests that social skills, such as self-disclosure, play an important role in enabling individuals to seek support and adapt during high stress from life disruptions (Segrin & Flora, 2000, Korem, 2023). If distress disclosure skills play an important role in enabling a person to enact resilience, then those with poorer distress-disclosure skills may be less successful engaging in the five resilience processes and less likely to report positive adaptation after a stressful situation.

Additionally, this study investigates how different life contexts influence the resilience process. Previous research has shown that resilience behaviors vary depending on the situation. For example, job loss often prompts individuals to seek from (e.g., professional services) and informal (e.g., friends and family) support to manage mental health (Mayer & Holleder, 2022). This type of resilience behavior would be analogous to CTR's communication networking. On the other hand, coping strategies like engaging in household routine tasks, similar to CTR's concept of crafting normalcy, are less consistent as an effective means of coping (Mayer & Holleder, 2022). However, strategies like re-evaluation, self-distraction, acceptance, and planning align with CTR's principles of cognitive appraisal and foregrounding productive action that helped during job loss (Navarro-Abal et al., 2018). Across contexts, problem-solving and emotion-focused coping strategies tend to be more common and helpful behaviors (Solove et al., 2015) than routines. The variability in coping behaviors highlight that different situations may elicit specific resilience behaviors. According to CTR, resilience is an intentional behavioral process. Individual choices are influenced by the specific needs of their circumstances. Not all challenging life situations can be or should be addressed the same way. Thus, the following research question is posed:

R1: What difficult life situations elicit specific resilience behaviors?

The study further analyzes associations of the possible indirect effects grounded in CTR. As stated previously, stress may have implications for each of the five resilience processes, such that high levels of stress likely decrease resilience behaviors and, ultimately, positive adaptation. According to CTR, when individuals encounter life disruption, they draw upon discursive and material resources to enact the resilience process (Buzzanell, 2010). Research indicates that individuals who can and do engage in the resilience process have higher reports of post-traumatic

growth, mental health, and less stress following a disruptive event (Wilson et al., 2021). Additionally, communicative families who openly discuss how to navigate difficult times are likely to recall positive and effective messages that help members adapt to change and maintain routines (Boumis et al., 2023). Thus, it appears that without the intervention of resilience behaviors (i.e., CTR behaviors), positive adaptation becomes a challenging outcome after stressful disruptions. The following hypotheses are set forth:

H1: Stress is negatively related to (a) crafting normalcy, (b) identity anchors, (c) communication networks, (d) alternative logics, and (e) foregrounding productive action.

H2: (a) Crafting normalcy, (b) identity anchors, (c) communication networks, (d) alternative logics, and (e) foregrounding productive action are positively related to adaptation.

H3: (a) Crafting normalcy, (b) identity anchors, (c) communication networks, (d) alternative logics, and (e) foregrounding productive action will mediate the relationship between stress and adaptation.

Next, grounded in the SSDV model (Segrin, 1996), self-disclosure skills are hypothesized to make people more or less vulnerable to engaging in CRT behaviors when stress is high. Social skills are essential for effectively navigating and coping with stressors, making it crucial to explore their role in the resilience process. For instance, compared to those with poor social skills, individuals with greater social skills find it easier to engage in personal and social resilience behaviors (e.g., Seema & Kumar, 2018; Riggio et al., 1990; Losa-Iglesias et al., 2017). They also demonstrate a higher likelihood of developing and maintaining social networks and have a heightened sense of emotional and social sensitivity, enabling better understanding and

interpretation of others' communication and social norms (Riggio, 1986). The ability to self-disclose tactfully is a component of social skills, with both excessive and insufficient disclosure having relational implications (e.g., Simpson, 2009; Steuber et al., 2018). Thus, following the SSDV model, the current study explores the interaction between stress and distress disclosure skills, aiming to further understand their part in resilience. The following hypothesis is proposed:

H4: Distress disclosure skills moderate the relationship between stress and (a) crafting normalcy, (b) identity anchors, (c) communication networks, (d) alternative logics, and (e) foregrounding productive action, such that the negative relationship between stress and each of the CTR processes will be weaker for individuals with higher distress disclosure skills and stronger for individuals with lower distress disclosure skills.

## CHAPTER 2:

### METHOD

#### **Participants and Procedures**

Participants viewed the advertisement for the study on the University of Georgia's (UGA) SONA system and signed up for the online survey. Participants over 18 years old were eligible to earn one research credit. After Institutional Review Board (IRB) approval, participants completed an online Qualtrics survey where they identified a difficult life event and responded to questions about their perceived stress levels, resilience process behaviors, distress disclosure skills, and adaptation following the event. The survey took approximately 15 minutes to complete.

One-hundred and thirty-seven participants were recruited from the University of Georgia's Communication Departmental research pool using convenience sampling. Convenience sampling was chosen for its practicality, ease, and efficiency in accessing the desired population of college students. College students report the highest levels of average stress compared to other adults (Bethune, 2022), putting them at risk of dropping out (Hrynowsky & Marken, 2023), engaging in self-harm (Liu et al., 2019), and struggling with various newfound responsibilities (Arnett, 2000; Pedrelli et al., 2015). Considering that this study focused on the college population, recruiting college students as the sample was appropriate. The average participant age was 19.5 years old ( $SD = 0.5$ ). Of the respondents, 66 identified as male (47.8%), 71 as female (51.4%), and 1 preferred not to answer (0.7%). Participants varied in ethnic identity: Asian/Asian American (19.6%;  $N = 27$ ), Black/African

American (8%; N = 11), Hispanic/Latin(x)(a)(o) (9.4%; N = 13), White (60.1%; N = 83), other (1.4%; N = 2), and 2 (1.4%) preferred not to answer.

A post-hoc analysis indicated adequate power (.92) to detect small effect (Cohen's  $f^2 = .15$ ) using a sample size of 137 participants.

## **Measures**

See Appendix A - E for all items. Below are the descriptive statistics, including mean, standard deviation, Cronbach's alpha, and sample items for the study variables.

### ***Difficult Life Event***

Participants responded to a prompt about a recent difficult life event (e.g., Wilson et al., 2021). This prompt asked participants to recall a challenging life event from the past two years. Because a defining characteristic in studying resilience requires adversity (Riley & Masten, 2005), the prompt was appropriate to prime participants to think about a difficult life event. Participants were asked to “[think] of a difficult life event that you had endured or one that disrupted your life and forced you to create a new normal” (Wilson et al., 2021, p. 484). Then participants selected the category indicating what was that disruptive event: death, economic, disaster, relationship, legal, medical, or education/work. Wilson et al. (2021) determined these seven categories by having two of the authors independently code 11% (30 stories) of the data, achieving a high intercoder reliability of  $\kappa = .92$ . This typology was useful to categorize the specific contexts that frame participants' experience of adversity and serves to measure the degree of adaptation following those life challenges. As Luthar et al. (2000) explained, resilience should be studied within certain circumstances because one person might be resilient in one area but not in another. The current study examined whether positive adaptation varies across these different life situations reported by the participants and their reported resilience behaviors.

### ***Perceived Stress***

Participants completed the 22-item Impact of Event Scale – Revised (IES-R) to assess subjective distress following the difficult life event participants identified (Weiss & Marmar, 1997). Total subjective stress included three subscales: *intrusion* (nightmares, intrusive thoughts, feelings, imager, disassociation), *avoidance* (numbing feelings, ideas, responsiveness), and *hyperarousal* (irritability, hypervigilance, difficult concentrating, easily startled, anger) (Buchanan, 2023). Items were rated on a 5-point Likert scale ranging from 0 (*not at all*) to 4 (*extremely*). Past research had supported the reliability with total Cronbach's  $\alpha = .95$ , avoidance  $\alpha = .85$ , intrusion  $\alpha = 0.92$ , and hyperarousal  $\alpha = .91$  (Rash et al., 2008). Because the subscales were moderately correlated (intrusion – avoidance,  $r = .59$ ; intrusion – hyperarousal,  $r = .77$ ; avoidance – hyperarousal,  $r = .55$ ), this study treated stress as a global measure. Indeed, the IES-R is commonly treated as a singular scale that measures total subjective stress (McCabe, 2019). The scale showed excellent reliability ( $\alpha = .93$ ) for the current study. The total mean score for the IES-R was  $M = 2.73$  ( $SD = .83$ ), indicating the average level and variability of perceived stress levels among participants.

### ***Distress-Disclosure Skills***

The Distress Disclosure Index (DDI) (Kahn & Hessling, 2001) is a 12-item scale that measures an individual's tendency to conceal or disclose psychological distress over time. Previous studies have further utilized DDI as a self-disclosure skill measurement in various contexts such as loneliness (Fan et al., 2025) and mental health (Wu et al., 2024). Participants were prompted to recall the stressor they indicated before answering the DDI. Items were rated on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The content validity and reliability of the DDI have been confirmed through both exploratory and

confirmatory analyses across two separate studies. The reliability of the DDI has been previously found to be  $\alpha = .94$  in one study and  $\alpha = .95$  in the other (Kahn & Hessling, 2001). Sample items included, “When I felt upset, I usually confided in my friends,” “I preferred not to talk about my problems,” “When something unpleasant happened to me, I often looked for someone to talk to.” Of the 12-items, six were reverse-coded. Responses were averaged so that higher scores indicated more distress disclosure while lower scores indicated low disclosure. The scale was reliable for the current study ( $\alpha = .93$ ). The total mean score for the DDI index was  $M = 2.88$  ( $SD = .87$ ), indicating the average level and variability of distress disclosure levels among participants.

### ***Communication Resilience Processes***

Participants completed the 32-item Communication Resilience Processes Scale (Wilson et al., 2021) to measure their ability to craft normalcy, affirm identity, communicate networks, utilize alternative logics, and take productive action after the stressful event. Wilson et al. (2021) found the reliability of the overall scale to be above  $\alpha = .80$ , with further support for convergent, divergent, and predictive validity. The overall scale for the current study indicated reliability at  $\alpha = .91$ . Each of the five subscales were rated on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) and examined separately. For the 8-item crafting normalcy subscale, an example item was, “I tried to keep life as normal as possible,” and had a mean score of  $M = 3.00$  ( $SD = .80$ ), and a reliability coefficient of  $\alpha = .77$ . For the 6-item affirming identity anchors subscale, an example item was, “I maintained key aspects of my identity amidst everything that was going on,” and had a mean score of  $M = 5.59$  ( $SD = 1.05$ ), and a reliability coefficient of  $\alpha = .87$ . For the 5-item maintaining and using communication networks subscale, an example item was, “I turned to family and close friends for support,” and had a mean score of

$M = 4.66$  ( $SD = 1.51$ ), and a reliability coefficient of  $\alpha = .92$ . For the 9-item alternative logics subscale, an example item was, “I tried to see the difficult situation in a new light,” and had a mean score of  $M = 4.69$  ( $SD = 1.13$ ), and a reliability coefficient of  $\alpha = .84$ . For the 4-item foregrounding productive action subscale, an example item was, “I focused on actions that would help me move forward even though it was difficult,” and had a mean score of  $M = 5.26$  ( $SD = 1.09$ ), and a reliability coefficient of  $\alpha = .87$ . The responses in each category were averaged. Higher scores indicated more resilience behaviors for that category while lower scores indicated low resilience behaviors.

### ***Positive Adaptation***

Participants responded to the 6-item Brief Resilience Scale (Smith et al., 2008) on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items included, “I bounced back quickly after the stressful time,” “It did not take me long to recover from the stressful event,” and “I came through the difficult time with little trouble.” Previous research indicates the scale to be reliable with Cronbach’s alpha ranging from  $\alpha = .80 - .91$  among four separate samples (Smith et al., 2008). Additionally, convergent and discriminant validity had been assessed and found to be appropriately correlated (Smith et al., 2008). Items were averaged so that higher scores suggested more adaptation and lower scores suggested less adaptation. For the current study, the scale showed reliability ( $\alpha = .86$ ). The total mean score for the BRS scale was  $M = 2.93$  ( $SD = .87$ ), indicating the average level and variability of positive adaptation levels among participants.

### **Covariate Measures**

Several covariates were included to provide a more nuanced understanding of the situational context of the responses surrounding the difficult life event. The covariates included

*event importance, talking about the event, event controllability, and mood*, as each of these factors may contribute to understanding an individual's perception and reaction to the event, offering deeper insights into their resilience behaviors and positive adaptation outcome (e.g., Li et al., 2020; Du et al., 2018; Cohodes et al., 2023).

Event importance, talking about event, and event controllability were measured using items from Lyubomirsky et al.'s (2006) study. To do so, participants completed three single-item, 10-point Likert scale questions to assess their experiences with life situations, including "Think about how important the experience of the situation was to you" (*1 = not at all significant, 10 = very significant*), "How much time have you spent talking to others about the experience?" (*1 = none, 10 = a lot*), and "Was the situation something you could fix on your own or was it out of your control?" (*1 = not easily resolvable, 10 = easily resolvable*).

Assessing mood helped to gain insight into participants' subjective experiences and contextualized their responses during the survey because one's current mood might have shaped both recall and responses (Matt et al., 1992). To assess basic mood-dimensions of valence (V), calmness (C), and energetic arousal (E), participants responded to a single statement with six bipolar items (Wilhelm & Schoebi, 2007). Participants indicated their feelings using statements like "At this moment, I feel": tired-awake (E), content-discontent (V), agitated-calm (C), full of energy-without energy (E), unwell-well (V), relaxed-tense (C). The scale ranged from 0 (*very*) – 6 (*very*), where participants used a slider to represent their current mood. Wilhelm and Schoebi (2007) had indicated that Cronbach's  $\alpha$  for the three categories ranged from  $\alpha = .73 - .89$ . Higher scores indicated higher positive valence (V), calmness (C), and energetic arousal (E). For the current study, the scale was combined for a one total score with a reliability of  $\alpha = .86$ .

## Analysis Plan

A variety of tests were used to explore the research question and test the proposed hypothesized relationships among the study variables. A one-way MANOVA was used to explore the differences between CTR processes across different life situations. An additional one-way ANOVA was used to explore situations to positive adaptation. MANOVAs allow the researcher to determine if there are any statistically significant differences among three or more dependent groups. To explore the relationships of all the main (perceived stress, social skills, CTR, positive adaptation) and covariate (gender, event importance, talking about the event, event controllability, mood) variables, a correlational test was used to identify any significances among the variables. Statistical significance was evaluated using  $p$ -values. Correlational tests help researchers determine the strength and direction of the monotonic association between two variables (Schober et al., 2018). A correlational test can inform the researcher if there are any relationships between variables.

The hypothesized model will be evaluated using SPSS PROCESS Model 7 (Hayes, 2012) to test the direct, indirect, and conditional indirect effects. PROCESS produces indirect and direct effects in moderation and mediated moderation models with one or more mediators. This technique allows the researcher to probe two- or three-way interactions. The current study examines two simultaneous mediators: CTR processes and distress disclosure skills. Additionally, PROCESS can provide estimates for all path coefficients, standard errors,  $p$ - and  $t$ -values, and percentile confidence intervals (Hayes et al., 2017). For a moderation model, PROCESS displays the proportion of the total variance in the dependent variable that is unique to the interaction of the independent to the moderator, as well as the test of significance.

Descriptive statistics will be evaluated for mood and subsequent questions on the stressful event; however, they will not be part of the analysis.

## CHAPTER 3:

### RESULTS

#### **Research Question: Disruptive Life Events, CTR Processes, and Positive Adaptation**

Among the seven disruptive life events, the most identified were the death of a loved one ( $N = 44$ ) and education/work challenges ( $N = 38$ ), followed by relational issues ( $N = 25$ ) and medical situations ( $N = 24$ ). Economic ( $N = 3$ ), natural disaster ( $N = 2$ ), and legal issues ( $N = 2$ ) were less common. Because previous research suggests that resilience could vary across different situations (Luthar et al., 2000), this study examined whether specific CTR processes were linked to different life events. A multivariate (MANOVA) was conducted to examine the research question to see if certain life events elicit specific resilience behaviors. The MANOVA examined the death of a loved one, education/work challenges, relational issues, medical issues, and CTR processes. Results from the MANOVA indicate a statistically significant difference between life situations and only crafting normalcy,  $F(6, 130) = 4.05, p < .001$ .

A post-hoc analysis further revealed which life events were most likely to elicit the engagement in crafting normalcy. The results showed that individuals reported engaging in crafting normalcy significantly more in response to the death of a loved one compared to education/work challenges ( $M_{DIFF} = .64, p = .004$ ). Furthermore, there was a significant difference in between relational events and education/work challenges, with relational issues leading to higher crafting normalcy than education/work challenges ( $M_{DIFF} = .66, p = .019$ ).

A one-way ANOVA was conducted to examine the means among difficult life events and positive adaptation. This analysis aimed to determine whether experiencing different types of

disruptive life events was related to the level of positive adaptation. The results indicated that difficult life events were not related to participants' reports of positive adaptation,  $F(3, 130) = 2.12, p = .10$ . Therefore, difficult life events did not significantly influence how people positive adapted, suggesting that the events themselves are not strong predictors of positive adaptation.

### **Correlations Among Study Variables**

To explore potential correlations among the covariates and key variables, a preliminary analysis was conducted. Table 1 reports the zero-order correlations among all variables in the study. Gender, event importance, talking about event, event controllability, and mood were considered as covariates to the main variables.

**Table 1.** Covariation Table of Variables

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Positive adaptation	2.93	.87	1											
2. Perceived stress	2.73	.83	<b>-.57**</b>	1										
3. Craft normalcy	3.00	.80	<b>-.51**</b>	<b>.92**</b>	1									
4. Affirm identity	5.59	1.05	<b>.28**</b>	<b>-.23**</b>	<b>-.25**</b>	1								
5. Networks	4.66	1.51	<b>.23**</b>	-.16	<b>-.21*</b>	<b>.40**</b>	1							
6. Alt. logics	4.69	1.13	<b>.20*</b>	-.08	-.12	<b>.34**</b>	<b>.36**</b>	1						
7. Foreground action	5.26	1.09	<b>.21*</b>	-.07	-.06	<b>.57**</b>	<b>.32**</b>	<b>.42**</b>	1					
8. Distress disclosure skills	2.88	.87	<b>.22**</b>	<b>-.19*</b>	<b>-.21*</b>	<b>.28**</b>	<b>.78**</b>	<b>.21*</b>	<b>.24**</b>	1				
9. Mood	3.44	1.06	<b>.35**</b>	<b>-.30**</b>	<b>-.24**</b>	<b>.32**</b>	<b>.18*</b>	<b>.22*</b>	.16	.05	1			
10. Event importance	8.65	1.60	-.12	.07	.12	.09	-.00	-.06	.07	-.02	-.12	1		
11. Talking about event	6.46	2.53	-.04	.07	.02	.05	<b>.40**</b>	.15	.08	<b>.44**</b>	.13	<b>.18*</b>	1	
12. Event controllability	3.99	2.94	<b>.24**</b>	<b>-.31**</b>	<b>-.34**</b>	.13	.14	<b>.19*</b>	<b>.21*</b>	<b>.18*</b>	.04	<b>-.32**</b>	.02	1

Note: Bold items indicate \* $p < .05$  \*\* $p < .01$ .

Previous research has indicated gender differences in life satisfaction, depression, and psychological distress, such that female participants reported more stressors in interpersonal contexts than male participants and they react stronger to those stressors in the form of depression (Hankin et al., 2007). Moreover, social support, emotional regulation, and positive outlooks were imperative to female life satisfaction (Ayllon-Negrillo et al., 2024). Social support was just as important to male participants, who also sought novelty for improved life satisfaction.

An independent- samples t-test was conducted to compare levels of positive adaptation, stress, CTR processes, and the covariates between males and females. Gender was coded as 1 = female and 0 = male. The results indicated that there were only significant differences in positive adaptation ( $M_{males} = 3.10, SD = .79, M_{females} = 2.78, SD = .93; t(134.01) = 2.19, p = .030$ ), stress ( $M_{males} = 2.57, SD = .79, M_{females} = 2.88, SD = .84; t(134) = -2.26, p = .025$ ), distress disclosure ( $M_{males} = 2.72, SD = .83, M_{females} = 3.03, SD = .90; t(134.01) = 2.19, p = .034$ ), and mood ( $M_{males} = 3.16, SD = 1.07, M_{females} = 3.73, SD = .96; t(130.73) = -3.31, p = .001$ ). These findings suggest that males report higher levels of positive adaptation than females and females report higher levels in stress, distress disclosure, and mood compared to males.

The current study also shows that talking about the event had significant associations with communication networks, social skills, and event importance. Additionally, event controllability had significant associations with positive adaptation, stress, crafting normalcy, alternative logics, foregrounding productive action, social skills, and event importance. The amount of time participants spent talking about the event was positively associated with communication networks  $r(136) = .40, p < .001$ , social skills  $r(136) = .44, p < .001$ , and event importance,  $r(136) = .18, p = .04$ . This indicates that the more time someone reported spending

talking about the event, the more they reported having communication networks, social skills, and perceived the event to be important.

Regarding event controllability, participants believed the more they could “fix” the situation, the more they would positively adapt after the event,  $r(136) = .24, p = .01$ , find ways to think about the situation differently  $r(136) = .19, p = .03$ , engage in more productive action  $r(136) = .21, p = .01$ , and have better social skills  $r(136) = .18, p = .03$ . Conversely, the more participants felt in control over the event, the less perceived stress they experienced  $r(136) = -.31, p < .001$ , and they showed decreases in crafting normalcy  $r(136) = -.34, p < .001$ , and event importance  $r(136) = -.32, p < .001$ .

Mood positively correlated with positive adaptation  $r(136) = .35, p < .001$ , affirming identity,  $r(136) = .32, p < .001$ , communication networks  $r(136) = .18, p = .03$ , and alternative logics  $r(136) = .22, p = .01$ . On the other hand, mood showed a negative correlation with perceived stress  $r(136) = -.30, p < .001$  and crafting normalcy  $r(136) = -.24, p = .01$ . These results suggest that when participants moods are positive, there is greater positive adaptability, stable identity anchors, more active communication networks, and openness to alternative logics. When moods are negative, participants reported higher perceived stress and more effort in crafting normalcy.

### **Hypothesis Testing**

Hayes’ PROCESS Model 7 was used to examine the moderated mediation effects of stress on positive adaptation, mediated by CTR Processes, and moderated by distress disclosure. Stress was entered as the independent variable (X), CTR processes as the mediator (M), social skills as the moderator (W), and positive adaptation as the dependent variable (Y). All covariates

were also considered in the analysis. All variables were mean-centered to facilitate interpretation of interaction terms.

### ***Hypothesis 1***

H1 predicted that perceived stress would be negatively related to each of the CTR processes (i.e., crafting normalcy, identity anchors, communication networks, alternative logics, foregrounding productive action). Contrary to what was predicted, perceived stress was only positively related to crafting normalcy,  $b = .81$ ,  $SE = .11$ ,  $p < .001$ , indicating that as perceived stress increases, so does crafting normalcy. Perceived stress was not significantly related to identity anchors,  $b = -.59$ ,  $SE = .34$ ,  $p = .083$ , communication networks,  $b = -.22$ ,  $SE = .33$ ,  $p = .503$ , alternative logics,  $b = .12$ ,  $SE = .38$ ,  $p = .755$ , or foregrounding productive action,  $b = -.12$ ,  $SE = .36$ ,  $p = .744$ . Thus, H1 was not supported. However, mood was the only covariate that was significantly related with identity anchors,  $b = .25$ ,  $SE = .08$ ,  $p = .003$ , communication networks,  $b = -.22$ ,  $SE = .08$ ,  $p = .008$ , and alternative logics,  $b = -.27$ ,  $SE = .09$ ,  $p = .004$ .

### ***Hypothesis 2***

H2 predicted that CTR behaviors would be positively associated with positive adaptation. Accounting for each CTR's influence on each other, there was no one behavior that was related to positive adaptation. Crafting normalcy,  $b = .15$ ,  $SE = .20$ ,  $p = .435$ , identity anchors,  $b = .02$ ,  $SE = .08$ ,  $p = .767$ , communication networks,  $b = .04$ ,  $SE = .05$ ,  $p = .373$ , alternative logics,  $b = .05$ ,  $SE = .06$ ,  $p = .455$ , and foregrounding productive action,  $b = .06$ ,  $SE = .07$ ,  $p = .423$ , were not significantly associated with positive adaptation. Thus, H2 was not supported. However, mood was the only covariate significantly related with positive adaptation,  $b = .14$ ,  $SE = .06$ ,  $p = .035$ .

### ***Hypothesis 3***

H3 predicted that CTR process behaviors would mediate the relationship between perceived stress and positive adaptation. A mediation analysis attempts to explain a process that leads the independent to the dependent variable through an intermediary process. In a mediation model, the independent variable is assumed to directly relate to the mediator and the mediator relates to the dependent variable (Wu & Zumbo, 2008). The indirect effect of perceived stress on positive adaptation through CTR was not significant as the confidence intervals contained a zero for crafting normalcy,  $b = .15$ ,  $SE = .20$ , 95%  $CI [-.19, .44]$ , identity anchors,  $b = .02$ ,  $SE = .08$ , 95%  $CI [-.07, .04]$ , communication networks,  $b = .04$ ,  $SE = .05$ , 95%  $CI [-.04, .03]$ , alternative logics,  $b = .05$ ,  $SE = .06$ , 95%  $CI [-.02, .04]$ , and foregrounding productive action,  $b = .06$ ,  $SE = .07$ , 95%  $CI [-.04, .04]$ , did not mediate the relationship between perceived stress and positive adaptation. Thus, H3 was not supported.

### ***Hypothesis 4***

H4 predicted that social skills would moderate the relationship between perceived stress and CTR processes. A moderator adjusts the strength or direction of a relationship between the independent and dependent variable (Wu & Zumbo, 2008). In this case, social skills were predicted to adjust the strength or direction between perceived stress and each of the CTR behaviors. For each analysis, covariates were included to test their potential influence. Overall, the results showed that social skills did not moderate the relationship between perceived stress and CTR processes: crafting normalcy,  $b = .02$ ,  $SE = .04$ ,  $p = .547$ , identity anchors,  $b = .17$ ,  $SE = .12$ ,  $p = .119$ , communication networks,  $b = .09$ ,  $SE = .10$ ,  $p = .397$ , alternative logics,  $b = -.00$ ,  $SE = .12$ ,  $p = .980$ , and foregrounding productive action,  $b = .07$ ,  $SE = .11$ ,  $p = .495$ . Furthermore, the index of moderated mediation show that crafting normalcy  $b = .00$ ,  $SE = .11$ ,

95% *CI* [-.01, .03], identity anchors  $b = .00$ ,  $SE = .02$ , 95% *CI* [-.03, .04], communication networks  $b = .00$ ,  $SE = .01$ , 95% *CI* [-.06, .03], alternative logics  $b = -.00$ ,  $SE = .01$ , 95% *CI* [-.02, .01], and foregrounding productive action  $b = .00$ ,  $SE = .01$ , 95% *CI* [-.02, .04]. Hypothesis 4 was not supported.

### **Post Hoc Analysis**

Most studies examine CTR as a singular measure, meaning, the five behaviors are considered as one unit of resilience processes. Theoretically, each of the five behaviors are positive constructive behaviors, yet for the current study, accounting for each of the CTR behaviors as a unit was not significant to positive adaptation. To further investigate, post-hoc analyses were run to examine each of the five behaviors separately. Post-hoc analyses support the notion that each of the CTR resilience behaviors alone and as a combined measure are related to positive adaptation.

Using a simple linear regression for each CTR behavior, crafting normalcy was negatively related to positive adaptation,  $b = -.56$ ,  $R^2 = .26$ ,  $F(1, 136) = 48.26$ ,  $p < .05$ , while affirming identity,  $b = .23$ ,  $R^2 = .08$ ,  $F(1, 137) = 11.77$ ,  $p < .05$ , communication networks,  $b = .14$ ,  $R^2 = .05$ ,  $F(1, 137) = 7.76$ ,  $p < .05$ , alternative logics,  $b = .16$ ,  $R^2 = .04$ ,  $F(1, 137) = 5.90$ ,  $p < .05$ , and foregrounding productive action,  $b = .17$ ,  $R^2 = .04$ ,  $F(1, 137) = 6.32$ ,  $p < .05$ , were positively related to positive adaptation. When accounting for the variance of each CTR behavior using a multiple regression analysis, only crafting normalcy was a significant predictor of positive adaptation,  $b = -.52$ ,  $SE = .08$ ,  $p < .001$ . Identity anchors,  $b = .05$ ,  $SE = .08$ ,  $p > .05$ , communication networks,  $b = .03$ ,  $SE = .05$ ,  $p > .05$ , alternative logics,  $b = .05$ ,  $SE = .06$ ,  $p > .05$ , and foregrounding productive action,  $b = .08$ ,  $SE = .08$ ,  $p > .05$ , was not significantly related to positive adaptation.

In addition, CTR was analyzed as an averaged variable, in which case, it was positively related to positive adaptation,  $b = .31$ ,  $R^2 = .08$ ,  $F(1, 137) = 11.78$ ,  $p < .05$ . Thus, running CTR as a combined scale and running each CTR behavior independently from each other showed significant relationships to positive adaptation, however, accounting for CTR behaviors together from the hypothesized model on positive adaptation showed no significance, indicating that altogether, CTR behaviors are not strong predictors of positive adaptation.

Another analysis was conducted to see if social skills moderated CTR as a combined measure and CTR as separate behaviors. Social skills did not moderate CTR as a combined measure nor CTR as separate processes.

## CHAPTER 4:

### DISCUSSION

Grounded in the Communication Theory of Resilience (CTR) and the Social Skills Deficit Vulnerability Model (SSDV), this study explored resilience as an active process contributing to positive outcomes. The study examined the relationship between perceived stress from a challenging life event, specific behaviors within the resilience process, and the role of social skills in facilitating positive adaptation. Unlike past research, which views CTR as a holistic process leading to positive outcomes, this study found that isolating specific CTR processes, even when accounting for each other's influences, does not significantly contribute to positive adaptation. In other words, isolated CTR processes are associated with positive outcomes, but accounting for the entirety of CTR behaviors, none of the individual CTR processes, except for crafting normalcy, were significantly related to positive adaptation. These results highlight the complexity of resilience and suggest a need for further investigation into how different resilience processes contribute to positive outcomes. Social skills also were not found to be a strong indicator of an individual's ability to engage in the resilience process, which contrasts with previous literature emphasizing the role of communication and social competence in resilience.

#### **Resilience In Contexts**

Individuals experience difficult life events differently and engage in various behaviors needed to move forward from those difficulties. Life events vary from the nature of the situation, the types of support that are given and needed in those situations, perception of control,

emotional impact, and perceived recovery time. In the current study, only crafting normalcy was the significant resilience behavior used most in the event of a death and relational issues compared to education/work challenges. Crafting normalcy requires effort, and while it may lead to positive outcomes later, the process itself can feel tiresome. The literature frequently suggests that individuals gauge their recovery by how closely they feel they have returned to normal. Crafting normalcy is neither an easy task nor mindset to engage in quickly during times of hardship. Since difficult life events inherently disrupt routines, it is understandable that individuals must try harder to restore normalcy as a way to regain a sense of meaning (Mohideen & Heinzelm, 2023) and control over their lives (DeRidder & Gillabaart, 2017). Most participants in the current study reported that their difficult life event was out of their control, making crafting normalcy an important behavior to help maintain focus and control to move forward.

Arguably, a loved one's death has a stronger intensity and severity than education/work challenges (e.g., Neimeyer et al., 2010; Batista et al. 2024). Although education/work challenges could lead to unfavorable outcomes, death has a permanence that severs a personal bond than the impersonal nature of education/work challenges. It makes sense that in the case of a loved one's death, the emotional impact is stronger, and people must find ways to create a new normal with a deeper intention to heal than with education/work issues. With education/work issues, there could be solutions to those problems, whereas death is an irreversible loss with no readily available solution to "fix" the depth of the emotional pain. Because crafting normalcy is a coping mechanism aimed to help individuals maintain a continuity and familiarity in their life after a disruption, another explanation to why normalcy was stronger for death than education/work issues is because death fundamentally disrupts relationships and the feelings of loss and grief

make it hard to be normal, and so, requires individuals to make more effort to create normalcy. Indeed, surviving family members of COVID-19 identified creating good-bye rituals and normalizing the loss as part of their strategies as their “normal” bereavement process to limit psychological distress (Borghi & Menichetti, 2021).

Crafting normalcy was also an important resilience behavior for relational disruptions such as breakups or divorce, as it helps individuals turn their focus from the relationship to themselves (e.g., Hebert & Popadiuk, 2008). Most unmarried couple engage in relational routines such as leisure activities, couple communication, and sharing meals (Campbell et al., 2011). When a breakup occurs, those routines are severed, and alternative routines must be developed as a healing technique. For instance, college students learned that continuing with their personal goals and engaging in self-focused behaviors was important to their healing process post-breakup (Hebert & Popadiuk, 2008). Overall, death of a loved one and relational issues were the most common life disruptions where crafting normalcy was a significant resilience behavior.

### **Stress’ Relationship to CTR Processes**

Perceived stress was predicted to negatively affect each of the five CTR processes. Interestingly, stress only had a positive relationship with crafting normalcy. It was expected that stress would make crafting normalcy harder, but the results suggested that increased stress motivates a greater need to engage in it. This aligns with the substantial amount of research indicating that crafting normalcy is a goal for those in stressful situations. Indeed, one’s perception of crafting normalcy could depend on their ability to recover from a difficult event (e.g., Lee et al., 2023). For instance, students who adapted better to the quick transition from in-person to online learning engaged in crafting normalcy (Scharp et al., 2022). Individuals with

health issues such as Parkinson's or cancer were motivated to maintain normalcy as a coping strategy through social and physical activities (Haar et al., 2021; Miedema et al., 2007). In the case of job loss or natural disasters, normalcy was determined by the daily routines affected individuals achieved in an attempt to mirror who they were prior to the event (Buzzanell & Turner, 2003; Haney & Gray-Scholz, 2019). The current study's results align with previous research showing that life disruptions reduce general normalcy, thus requiring greater effort to create or maintain normalcy, making this a key goal for adaptation.

Stress had no relationship to communication networks and foregrounding productive action. One explanation for why stress was not related to communication networks could be that individuals might have chosen to internally cope over relying on their social support, even if it was available. Interestingly, most participants rated their situation as very important, so even though the difficult life event was a very important one, they did not seek help from others. People may be unsure how to make connections with others or felt comfortable disclosing their situation. In fact, more people have lost connection with each other (e.g., CDC, 2021), suggesting that people might not know how to seek help or feel comfortable relying on others.

Stress was also not related to alternative logics. Individual differences may account for why this relationship was not significant. Reframing is a psychotherapeutic practice that needs guidance (Mattila, 2001). Perhaps a discrepancy between the life situation and individual ability to reframe accounted for the lack of relationship. Individuals might have found it easier to reframe one situation than another. If participants were in situations where reframing might have been more necessary (i.e., breakup/divorce) than education/work issues, but did not receive or utilize the proper technique to reframe in a way that helps them, that might explain why there was not a significant relationship. Moreover, considering other possible behaviors that someone

engages in with stress, the results show that perhaps alternative logics is not a strong avenue to take in consideration with the other five behaviors. Indeed, reframing was not considered a long-term strategy with loss of a loved one (Eisma et al., 2023) Lastly, although it was posited that the more stress someone experienced, the less that they would engage in productive action, stress did not relate to whether individuals engaged in this resilience behavior.

### **The Role of Social Skills in Engaging the Resilience Process**

Social skills were expected to play a key role in one's ability to engage in the resilience process when facing stress. It was hypothesized that individuals with strong social skills, particularly those who disclose their distresses, would be better able to engage in the resilience process. However, the findings from this study showed that the tendency to disclose distress was not significantly related to participants' engagement in the resilience process. These results indicate that, while disclosure helps build connections and alleviates emotional distress (e.g., Rime et al., 2020), it may not be the most important factor in engaging in resilience.

Other social skills and individual characteristics may play a more significant role in determining how effectively one engages in resilience behaviors. For example, social assertiveness (Lorr et al., 1991) may relate to resilience as it involves not only self-expression but also the ability to seek support proactively (Younes, 2021). Introverts and extroverts may vary in their experiences in relation to resilience-building. Introverts may find it more challenging to engage socially or disclose personal information, while extroverts may more readily participate in social resilience behaviors that involve others. However, introverts might benefit from cognitive introspection, which could be more challenging for extroverts.

Additionally, coping styles such as avoidance may inhibit one's ability to confront distress,

potentially limiting engaging in resilience. Cultural display rules should be considered to understand how appropriate individuals feel in expressing resilience behaviors.

Theoretically, social skills are valuable factors to understand social interactions. However, research on resilience processes could benefit from examining a wider range of social skills that enhance social connections. A more comprehensive approach to social skills, beyond distress disclosure, may be necessary to fully understand resilience-building techniques and maximize social connections.

### **Measuring Communication Resilience with Positive Adaptation**

CTR emphasizes the role of communication in fostering resilience after challenging life events. It identifies five communication behaviors associated with positive outcomes after a difficult event. Previous research developed a unidimensional framework to measure these behaviors, however, this approach oversimplifies the complexity of communication choices and effectiveness involved in the resilience process. The current study aimed to assess the five behaviors separately and their relationship with positive adaptation. CTR has been linked to post-traumatic growth, life purpose, and mental health, but has been treated as a global measure of communication resilience, combining various coping behaviors into one construct (e.g., Wilson et al., 2021). A key insight from the present study was the separation of CTR's sub-measures to examine their independent associations with positive adaptation, while accounting for all of the other behaviors. When each resilience process was examined separately, none were related to positive adaptation. Moreover, when controlling for the unique variance of each behavior, still none of the behaviors were related to positive adaptation.

The current study further considered that individuals may not engage in all five resilience processes because different stress experiences may require specific behaviors. Examining

resilience as a unidimensional measure overlooks the distinct impacts of the five behaviors on positive adaptation. An individual may find that resilience behavior is more effective than others and so does not need to engage in all five behaviors to demonstrate resilience. For instance, the death of a loved one was specifically associated with crafting normalcy, behaviors that may be less prominent in education or work-related challenges. In relational disruptions, such as breakups, crafting normalcy was also significant to help individuals shift their focus from the relationship to themselves (e.g., Hebert & Popadiuk, 2008). Most unmarried couples engage in relational routines such as leisure activities, communication, and sharing meals (Campbell et al., 2011). When a breakup occurs, those routines are severed, and alternative routines must be developed as a healing technique. Thus, certain resilience behaviors, like crafting normalcy, may play a more prominent role in adaptation depending on the context.

The present study's findings suggest that nuances exist within CTR, particularly regarding the relative importance of individual resilience behaviors. While engaging overall in more resilience behaviors lead to adaptation, when the individual behaviors are compared, the individual effects are reduced. However, each of the resilience behaviors may serve a different function and be more or less useful depending on the situation and level of stress the person feels. Interestingly, stress was only related to crafting normalcy, suggesting that stress may be the primary motivator for engaging in that particular resilience behaviors.

### **Mood as a Significant Covariate**

Mood emerged as a significant covariate influencing individuals' engagement with each of the resilience behaviors except crafting normalcy and foregrounding productive action. Mood fluctuations can shape how individuals perceive and respond to stressful events, influencing their ability or motivation to engage in resilience-building behaviors. When individuals are in a

negative mood, they are more likely to expect negative events in the future and less likely to anticipate positive ones (Hepburn et al., 2009). Participants in the current study reported a moderately positive mood while recalling and completing the survey on their difficult life event.

Mood was positively related with several resilience processes, particularly identity anchors, communication networks, alternative logics, and positive adaptation. This suggests that when individuals are in a better mood, they are more likely to engage in resilience behaviors that help them navigate challenges, emphasizing the importance of emotional well-being in fostering adaptive coping strategies. However, mood was negatively related with stress and crafting normalcy, indicating that a better mood corresponds to lower stress and a reduced need to actively maintain a sense of normalcy.

One possible explanation for this finding is that participants were recalling a difficult event from the past two years, with the average event occurring about a year prior. Thus, the emotional significance of the event may have diminished over time, leaving participants in a more neutral or positive mindset. Time may have helped participants to not feel as strong about the event or emotionally process the initial surge. When people are in a positive mood, they may not feel the urgency to engage in the resilience process because their mood while taking the survey was not impactful enough on behavior (e.g., Gendolla, 2000). Mood also affects how individuals interpret positive or negative life events (Seidlitz & Diener, 1993). Mood may enhance the recall of event features but not necessarily the accuracy of the memories (Earles et al., 2016). Since the Communication Theory of Resilience (CTR) focuses on communicative responses to difficult situations, participants' interpretations of their previous engagement the extent to which they used each CTR process, and their current mood could have led them to underestimate or overestimate their actions during the event.

## **Implications, Limitations, & Future Research**

This study is the first to examine CTR's distinct behavioral processes as more than a holistic framework. Resilience remains a complex and multifaceted area of study. The findings from this study suggest a need to explore resilience beyond viewing it solely as a process, raising important questions about whether resilience should be studied as a trait, a process, or a combination of both. While conceptualizing resilience as a trait may seem overly simplistic, viewing it solely as a process also presents challenges. It may be more fruitful to explore how traits and processes interact and contribute to adaptation outcomes. Previously, resilience has been viewed as a personal trait or process that the individual enacts leading to positive outcomes for the person; however, the quality and effectiveness of the support received through the resilience process should also be a focus for future research. For example, reaching out to social networks is a proactive resilience behavior, but if the support provided is inadequate, it may undermine the resilience-building effort (Lee et al., 2024). Future research should explore how traits, learned behaviors, and social responses interact to shape resilience processes and outcomes.

In alignment with Luthar et al. (2000), the current findings suggests that certain situations may require more resilience-building efforts and specific behaviors than others. Resilience behaviors in one context may not translate as an effective means in other situations. Future research should continue identifying which resilience behaviors are most used and effective in specific stressful and difficult situations. Resilience-building behaviors could potentially be categorized based on their effectiveness in meeting the specific needs of different situations.

It could also be valuable to categorize CTR processes into cognitive and behavioral components, or individual and social elements, to better understand the outcomes associated with

each. Although CTR includes several resilience processes, it does not specifically focus on communication behaviors, as the theory suggests. For example, “alternative logics” is primarily a cognitive resilience behavior rather than a communicative one. Also, positive adaptation may vary depending on the level of cognitive engagement, such as using alternative logics, or behavioral actions, such as seeking social networks. CTR is often studied as a unidimensional measure that assesses overall behavioral choices and ability. Yet, the five processes within CTR encompass distinct cognitive, behavioral, and social aspects, each requiring separate evaluations of their outcomes.

The present study has limitations to consider. First, the small sample size limits the generalizability of the results to the broader population. A smaller sample size reduces the study’s statistical power, making it harder to detect relationships that might exist in more diverse populations. Additionally, the homogenous nature of the sample, which consisted predominantly of white individuals, limits the applicability of the results to diverse groups. Given that resilience processes could be influenced by sociocultural factors, the lack of racial, ethnic, and cultural backgrounds within the sample limits a full understanding of how resilience is developed in various cultures. The study design does not allow for claims of causality. As a cross-sectional study, the findings only provide a snapshot of participants’ recalled experiences, making it difficult to determine a cause-and-effect relationship between stress, CTR processes, and positive adaptation.

Furthermore, the reliance on self-report measures introduces potential biases, which may compromise the accuracy of the data collected. Depending on the time elapsed between the difficult event and taking the survey, participants may have unconsciously altered, misremembered, or already have worked through the emotional event, leading to potential

inaccuracies in the data. This becomes problematic given the emotional nature of resilience-building behaviors surrounding difficult events, where recall may be influenced by individual's psychological state or current mood.

Another significant limitation lies in the measure of positive adaptation. While the 6-item scale used in this study showed reliability, it may not have fully captured the complexity or nuanced outcomes associated with positive adaptation to adversity. The scale primarily focused on traditional concepts of resilience, such as the quickness and ease a person can “bounce back” from challenges. However, resilience is a multi-layered process, and moving forward from hardship involves more than simply engaging in ways that return the person to a pre-stress state. A key aspect that the scale did not address is the deeper psychosocial well-being, wisdom, and personal development that often is reported to emerge through resilience. Arguably, positive adaptation is not just about recovery; it also involves a movement forward in personal growth, emotional healing, and a transformed sense of self. These aspects of adaptation better reflect the outcome of a resilience process in which individuals not only cope but thrive after adversity.

To build upon the current study, future research should focus on limiting the time frame in which participants recalled difficult events. As the study's average event was about a year, it may be interesting to capture resilience-building behaviors within an earlier time frame. By categorizing events that recently occurred, researchers could better access how varying situations impact resilience behaviors. Individuals tend to experience the strongest emotional intensity between three to 24 months after a loss, in which social support begins to decline (Castle & Phillips, 2003). During this period, grieving individuals often engage in rituals to help them adjust to their loss. By asking participants to recall difficult events within three to six months, future studies may capture a more accurate representation of emotions, resilience behaviors (e.g.,

Mitima-Verloop et al., 2021) and social support received. Moreover, since death can trigger ‘complicated grief’ (characterized by intense, thematic emotions) (Dodd et al., 2021), it may be more appropriate to study death as a separate event within CTR processes.

Another limitation that future studies can research more comprehensively is the role of social skills in resilience behaviors. Many individuals have lost the ability to engage in small talk, socialize, or interact with others effectively (Samadder, 2021), which could impact their ability to express themselves or seek social support and resources important for resilience. While this study focused on emotional disclosure as the social skill variable, social skills encompass a wide range of behaviors, including nonverbal communication, social expression, self-awareness, and interactional management (Jureviciene et al., 2012). Future research could benefit from investigating other aspects of social skills, such as emotional intelligence (Goleman, 2001), assertiveness (Delamater & McNamara, 1986; Shouhani et al., 2022), and willingness to disclose. Moreover, this study focused on distress disclosure that focused on one’s tendency to disclose their distresses. Future research would benefit to examine a person’s true ability to effectively disclose with a desired effect.

Lastly, although the current study asked participants for their religious identification, a more meaningful approach would have been to measure spirituality. Spirituality, which differs from religiosity (Van Niekerk, 2018), may have a stronger link to resilience (Kim & Esquivel, 2011; Schwalm et al., 2022). Research has shown that the ability to overcome adversity and thrive may be connected to the idea of a purpose in life and meaning (Schwalm et al., 2022). Thus, research could benefit to investigate how spirituality is connected to resilience processes and outcomes, as it could provide deeper insights into how individuals find strength during times of hardship.

## CHAPTER 5:

### CONCLUSION

The current study aimed to examine the processes of the Communication Theory of Resilience (CTR) and their mediating effects on stress following a difficult life event and positive adaptation. Additionally, the study sought to determine the moderating role of social skills, particularly distress disclosure, recognizing that disclosure can enhance or hinder one's ability to engage effectively in the CTR processes. However, the findings indicated that neither the mediating nor moderating relationships were significant. While resilience is increasingly understood as a process rather than a trait, the current results suggest the need to further explore the sequence, quantity, and quality of resilience behaviors that could contribute to positive adaptation. Understanding these nuances will help develop targeted interventions, enhance practical application, and expand theoretical understanding for the construct of resilience.

## REFERENCES

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480.
- Arroyo, A., Curran, T., & Ruppel, E. K. (2022). Direct and indirect associations among self-disclosure skills, social support, and psychosocial outcomes during the transition to college. *Journal of Social and Personal Relationships*, 39(3), 505-525.  
<https://doi.org/10.1177/02654075211036741>
- Asif, S., Mudassar, A., Shahzad, T. Z., Raouf, M., & Pervaiz, T. (2020). Frequency of depression, anxiety and stress among university students. *Pakistan Journal of Medical Sciences*, 36(5), 971-976. <https://doi.org/10.12669/pjms.36.5.1873>
- Alsubaie, M. M., Stain, H. J., Webster, L. A. D., & Wadman, R. (2019). The role of sources of social support on depression and quality of life for university students. *International journal of Adolescence and Youth*, 24(4), 485-496.  
<https://doi.org/10.1080/02673843.2019.1568887>
- Bec, H., & Mirac, A. (2019). The effect of communication skills training on the communication and self-disclosure skill levels of students at Usak University. *Arastirma Makalesi*.
- Bethune, S. (2022). *Stress in America 2022: Concerned for the future, beset by inflation*. American Psychological Association. Retrieved April 25, 2023, from <https://www.apa.org/news/press/releases/stress/2022/concerned-future-inflation>
- Boumis, J. K., Kuang, K., Wilson, S. R., Hintz, E. A., & Buzzanell, P. M. (2023). Family communication patterns predict anticipatory resilience and the enactment of resilience processes. *Journal of Family Communication*, 23(1), 22-40.  
<https://doi.org/10.1080/15267431.2023.2172021>

- Brown, I. M. (2018, September 9). *3 out of 4 college students say they're stressed, many report suicidal thoughts: Study*. Good Morning America.  
<https://www.goodmorningamerica.com/news/story/college-students-stressed-report-suicidal-thoughts-study-57646236>
- Brown, T., Yu, M., & Etherington, J. (2021). Listening and interpersonal communication skills as predictors of resilience in occupational therapy students: A cross-sectional study. *British Journal of Occupational Therapy*, 84(1), 42-53.  
<https://doi.org/10.1177/0308022620908503>
- Bruffaerts, R., Mortier, P., Kiekens, G., Auernbach, R. A., Cuijpers, P., Demyttenaere, K., Green, G. J., Nock, M. K., & Kessler, R. C. (2018). Mental health problems in college freshman: Prevalence and academic functioning. *Journal of Affective Disorders*, 225, 97-103. <https://doi.org/10.1016/j.jad.2017.07.044>
- Buzzanell, P. M. (2010). Resilience: Talking, resisting, and imagining new normalcies into being. *Journal of Communication*, 60(1), 1-14. <https://doi.org/10.1111/j.1460-2466.2009.01469.x>
- Buzzanell, P.M. (2017). Communication theory of resilience: Enacting adaptive-transformative processes when families experience loss and disruption. In D. O. Braithwaite, E. A. Suter, & K. Floyd (Eds.), *Engaging Theories in Family Communication: Multiple Perspectives*. Routledge, New York.
- Cameron, L. D., & Overall, N. C. (2018). Suppression and expression as distinct emotion-regulation processes in daily interactions: Longitudinal and Meta-Analyses. *Emotions*, 18, 465-480. <https://doi.org/10.1037/emo0000334>

- Campbell, K., Silva, L. C., & Wright, D. W. (2011). Rituals in unmarried couple relationships: An exploratory study. *Family and Consumer Sciences, 40*(1), 45-57.  
<https://doi/10.1111/j.1552-3934.2011.02087.x>
- Castle, J., & Phillips, W. L. (2003). Grief rituals: Aspects that facilitate adjustment to bereavement. *Journal of Loss and Trauma, 8*(1), 41-71.  
<https://doi.org/10.1080/15325020305876>
- Chernichky-Karcher, S., Venetis, M. K., & Lillie, H. (2019). The dyadic communicative resilience scale (DCRS): scale development, reliability, and validity. *Supportive Care in Cancer, 27*, 4555-4564. <https://doi.org/10.1007/s00520-019-04763-8>
- Conway, L., Wolverson, E., & Clarke, C. (2020). Shared experiences of resilience amongst couples where one partner is living with dementia – A grounded theory study. *Frontiers in Medicine, 7*, <https://doi.org/10.3389/fmed.2020.00219>
- De Ridder, D., & Gillebaart, M. (2017). Lessons learned from trait self-control in well-being: Making the case for routines and initiation as important components of trait self-control. *Health Psychology Review, 11*(1), 89-99.  
<https://doi.org/10.1080/17437199.2016.1266275>
- Del Prette, Z. A. P., & Del Prette, A. (2021). *Social competence and social skills: A theoretical and practical guide*. Springer, Switzerland AG. <https://doi.org/10.1007/978-3-030-70127-7>
- Dong, C., Gong, S., Jiang, L., Deng, G., & Liu, X. (2015). Posttraumatic growth within the first three months after accidental injury in China: The role of self-disclosure, cognitive processing, and psychosocial resources. *Psychology, Health, and Medicine, 20*(2), 154-164. <https://doi.org/10.1080/13548506.2014.913795>

- Earles, J. L., Kersten, A. W., Vernon, L. L., & Starkings, R. (2016). Memory for positive, negative and neutral events in younger and older adults: Does emotion influence binding in event memory? *Cognition and Emotion*, *30*(2), 378-388.  
<https://doi.org/10.1080/02699931.2014.996530>
- Egeland, B., Carlson, E., & Sroufe, L. A. (1993). Resilience as process. *Development and Psychopathology*, *5*(4), 517-528. <https://doi.org/10.1017/S0954579400006131>
- Endler, N. S., & Parker, J. D. A. (1990). Stress and anxiety: Conceptual and assessment issues. *Stress Medicine*, *6*(3), 242-248. <https://doi.org/10.1002/smi.2460060310>
- Eskildsen, A., Fentz, H. N., Anderson, L. P., Pedersen, A. D., Kristensen, S. B., & Andersen, J. H. (2017). Perceived stress, disturbed sleep, and cognitive impairments in patients with work-related stress complaints: a longitudinal study. *The International Journal on the Biology of Stress*, *20*(4), 371-378. <https://doi.org/10.1080/10253890.2017.1341484>
- Fan, Z., Shi, X., Leng, J., Cui, D., & Li, D. (2025). The impact of stigma of loneliness on psychological distress in older adults: The chain mediating effect. *Psychology Research and Behavior Management*, *18*, 25-38. <https://doi.org/10.2147/PRBM.S494430>
- Fanari, A., Cooper, A., Dajches, L., Beck, G., & Pittz, M. J. (2023). Transferable resilience practices: Communication and resilience of U.S. military spouses during the initial stages of the COVID-19 pandemic. *Journal of Family Communication*, *23*(1), 1-21.  
<https://doi.org/10.1080/15267431.2022.2149528>
- Farber, B. A., Berano, K. C., & Capobianco, J. A. (2004). Clients' perceptions of the process and consequences of self-disclosure in psychotherapy. *Journal of Counseling Psychology*, *51*(3), 340-346. <https://psycnet.apa.org/doi/10.1037/0022-0167.51.3.340>

- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health, 26*, 399-419. <https://doi.org/10.1146/annurev.publhealth.26.021304.144357>
- Ferguson, P., & Walker, H. (2014). 'Getting on with life': Resilience and normalcy in adolescents living with chronic illness. *International Journal of Inclusive Education, 18*(3), 227-240. <https://doi.org/10.1080/13603116.2012.676082>
- Flaherty, C. (2023). Survey: Stress is hurting college students. *Inside Higher Ed*. <https://www.insidehighered.com/news/student-success/health-wellness/2023/05/23/survey-stress-hurting-college-students>
- Folkman, S. (2011). *The Oxford Handbook of Stress, Health, and Coping*. Oxford University Press.
- Fortuna, J. K. (2021). Creating a new normal through engagement in meaningful occupation. *The Open Journal of Occupational Therapy, 9*(1), 1-6. <https://doi.org/10.15453/2168-6408.1828>
- Friborg, O., & Hjemdal, O. (2004). Resilience as a measure of adaptive capacity. *Journal of the Norwegian Psychological Association, 41*, 206-208.
- Gendolla, G. H. E. (2000). On the impact of mood on behavior: An integrative theory and a review. *Review of General Psychology, 4*(4), 378-408. <https://doi.org/10.1037/1089-2680.4.4.378>
- Greene, K., Derlega, V.J., & Mathews, A. (2006). Self-disclosure in personal relationships. In A. L. Vangelisti & D. Perlman (Eds.), *The Cambridge handbook of personal relationships* (pp. 409-427). Cambridge: Cambridge University Press.

- Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Prospects, Psychological Inquiry*, 26(1), 1-26. <https://doi.org/10.1080/1047840X.2014.940781>
- Haahr, A., Groos, H., & Sorensen, D. (2021). 'Striving for normality' when coping with Parkinson's disease in everyday life: A metasynthesis. *International Journal of Nursing Studies*, 118, <https://doi.org/10.1016/j.ijnurstu.2021.103923>
- Han, D., Lin, Y., Liao, S., L. M., Thornicroft, G., & Wu, C. (2015). Analysis of the barriers of mental distress disclosure in medical inpatients in Taiwan. *International Journal of Social Psychiatry*, 61(5), 446-455. <https://doi.org/10.1177/0020764014552865>
- Hankin, B. L., Mermelstein, R., & Roesch, L. (2007). Sex differences in adolescent depression: Stress exposure and reactivity models. *Child Development*, 78(1), 279-295. <https://doi.org/10.1111/j.1467-8624.2007.00997.x>
- Harms, P. D., Brady, L., Wood, D., & Silard, A. (2018). Resilience and well-being. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. Salt Lake City, UT: DEF Publishers.
- Harvey, J., & Boynton, K. (2021). Self-disclosure and psychological resilience: The mediating roles of self-esteem and self-compassion. *Interpersona*, 15(1), 90-104. <https://doi.org/10.5964/ijpr.4533>
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling.
- Hayes, A. F., Montoya, A. K., & Rockwood, N. J. (2017). The analysis of mechanism and their contingencies: PROCESS versus structural equation modeling. *Australasian Marketing Journal*, 25(1), 76-81. <https://doi.org/10.1016/j.ausmj.2017.02.001>

- Haynes, L. A., & Avery, A. W. (1979). Training adolescents in self-disclosure and empathy skills. *Journal of Counseling Psychology*, 26(6), 526-530. <https://doi.org/10.1037/0022-0167.26.6.526>
- Hemenover, S. H. (2003). The good, the bad, and the healthy: Impacts of emotional disclosure of trauma on resilient self-concept and psychological distress. *Personality & social psychology bulletin*, 29(10), 1236–1244. <https://doi.org/10.1177/0146167203255228>
- Henderson, F. M. E., Cross, A. J., & Baraniak, A. R. (2019). ‘A new normal with chemobrain’: Experiences of the impact of chemotherapy-related cognitive deficits in long-term breast cancer survivors. *Health Psychology Open*, 6(1), 2055102919832234. <https://doi.org/10.1177/2055102919832234>
- Hrynowski, Z., & Marken, S. (August, 2023). *College students experience high levels of worry and stress*. Gallup.com. <https://www.gallup.com/education/509231/college-students-experience-high-levels-worry-stress.aspx>
- Jacelon, C. S. (1997). The trait and process of resilience. *Journal of Advanced Nursing*, 25, 123-129. <https://doi.org/10.1046/j.1365-2648.1997.1997025123.x>
- Jimenez Ambriz, M. J., Izal, M., & Montorio, I. (2012). Psychological and social factors that promote positive adaptation to stress and adversity in the adult life cycle. *Journal of Happiness Studies*, 13(5), 833-848. <https://doi.org/10.1007/s10902-011-9294-2>
- Jureviciene, M., Kaffemaniene, I., & Ruskus, J. (2012). Concept and structural components of social skills. *Baltic Journal of Sport & Health Sciences*.
- Kahn, J. H., & Hessling, R. M. (2001). Measuring the tendency to conceal versus disclose psychological distress. *Journal of Social and Clinical Psychology*, 20(1), 41-65. <https://psycnet.apa.org/doi/10.1521/jscp.20.1.41.22254>

- Kahn, J. H., Cox, D. W., Bakker, M., O'Loughlin, J. I., & Kotlarczyk, A. M. (2017). The role of distress disclosure tendencies in the experience and expression of laboratory-induced sadness. *Journal of Individual Differences, 38*(1), 55-62.  
<https://psycnet.apa.org/doi/10.1027/1614-0001/a000222>
- Kim, S., & Esquivel, G. B. (2011). Adolescent spirituality and resilience: Theory, research, and educational practices. *Psychology in the Schools, 48*(7), 755-765.  
<https://doi.org/10.1002/pits.20582>
- Korem, A. (2023). Opening the door of self-disclosure. *European Psychologist, 28*(2), 122-132.  
<https://doi.org/10.1027/1016-9040/a000502>
- Korten, N. C. M., Comijs, H. C., Pennix, B. W. J. H., & Deeg, D. J. H. (2016). Perceived stress and cognitive function in older adults: Which aspect of perceived stress is important? *International Journal of Geriatric Psychiatry, 32*(4), 439-445.  
<https://doi.org/10.1002/gps.4486>
- Lazarus, R. S. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine, 55*(3), 234-247. <https://doi.org/10.1097/00006842-199305000-00002>
- Lazarus, R. S., & Alfert, E. (1964). Short-circuiting of threat of experimentally altering cognitive appraisal. *Journal of Abnormal and Social Psychology, 69*(2), 195-205.  
<https://psycnet.apa.org/doi/10.1037/h0044635>
- Lee, G. et al. (2024). Adjustment to “new normal” after cancer among non-small cell lung cancer survivors: A qualitative study. *Palliative and Supportive Care, 22*, 487-492.  
<https://doi.org/10.1017/S1478951523001815>

- Lemonia, D., Goulimaris, D., & Georgios, M. (2017). Social skills and prediction of the quality of life of adolescents. The case of dance and physical activities. *Journal of Physical Education and Sport*, 76(2), 502-508. <http://dx.doi.org/10.7752/jpes.2017.s2076>
- Levi-Belz, Y. (2016). To share or not to share? The contribution of self-disclosure to stress-related growth among suicide survivors. *Death Studies*, 40(7), 405-413. <https://doi.org/10.1080/07481187.2016.1160164>
- Li, Z., Zha, J., Zhang, P., Shangguan, C., Wang, X., Lu, J., & Zhang, M. (2020). Negative life events and mood states: Emotional resilience as mediator and moderator. *Social Behavior and Personality: An international journal*, 48(5), e8843. <https://doi.org/10.2224/sbp.8843>
- Lin, S. S. H., & Liu, E. T. (2021). Cognitive reframing and socio-affective regulation modes in emotional self-disclosure: A Taiwanese sample. *Asia Pacific Journal of Counseling and Psychotherapy*, 12(2), 170-185. <https://doi.org/10.1080/21507686.2021.1960398>
- Linley, P. A. (2003). Positive adaptation to trauma: Wisdom as both process and outcome. *Journal of Traumatic Stress*, 16(6), 601-610. <https://doi.org/10.1023/B:JOTS.0000004086.64509.09>
- Liu, C. H., Stevens, C., Wong, S. H. M., Yasui, M., & Chen, J. A. (2019). The prevalence and predictors of mental health diagnoses and suicide among U.S. college students: Implications for addressing disparities in service use. *Depression and anxiety*, 36(1), 8–17. <https://doi.org/10.1002/da.22830>
- Lorr, M., Youniss, R. P., & Stefic, E. C. (1991). An inventory of social skills. *Journal of Personality Assessment*, 57(3), 506-520. [https://doi.org/10.1207/s15327752jpa5703\\_9](https://doi.org/10.1207/s15327752jpa5703_9)

- Losa-Iglesias, M. E., Lopez, D. L., Rodriguez, R., & Becerro de Bengoa-Vallego, R. (2017). Relationships between social skills and self-esteem in nurses: A questionnaire study. *Contemporary Nurse*, 53(6), 681-690. <https://doi.org/10.1080/10376178.2018.1441729>
- Lucas, K., & Buzzanell, P. M. (2012). Memorable messages of hard times: Constructing short- and long-term resiliencies through family communication. *Journal of Family Communication*, 12(3), 189-208. <https://doi.org/10.1080/15267431.2012.687196>
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation for future work. *Child Development*, 71(3), 543-562. <https://doi.org/10.1111/1467-8624.00164>
- Lyubomirsky, S., Sousa, L., & Dickerhoof, R. (2006). The costs and benefits of writing, talking, and thinking about life's triumphs and defeats. *Journal of personality and Social Psychology*, 90(4), 692-708. <https://doi.org/10.1037/0022-3514.90.4.692>
- Mahoney, J. L., & Bergman, L. R. (2002). Conceptual and methodological considerations in a developmental approach to the study of positive adaptation. *Applied Developmental Psychology*, 23(2), 195-217. [https://doi.org/10.1016/S0193-3973\(02\)00104-1](https://doi.org/10.1016/S0193-3973(02)00104-1)
- Mancini, A. D., & Bonanno, G. A. (2009). Predictors and parameters of resilience to loss: Toward an individual differences model. *Journal of Personality*, 77(6), 1805-1832. <https://doi.org/10.1111/j.1467-6494.2009.00601.x>
- Masten, A. S. (2007). Resilience in developing systems: Progress and promise as the fourth wave rises. *Development and Psychopathology*, 19(3), 921-930. <https://doi.org/10.1017/S0954579407000442>

- Masten, A. S. (2018). Resilience theory and research on children and families: Past, Present, and promise. *Journal of Family Theory and Review*, 10(1), 12-31.  
<https://doi.org/10.1111/jftr.12255>
- Matt, G. E., Vazquez, C., & Campbell, W. K. (1992). Mood-congruent recall of affectively toned stimuli: A meta-analytic review. *Clinical Psychology Review*, 12, 227-255.  
<https://doi.org/10.1016/0272-7358%2892%2990116-P>
- McCabe, D. (2019). The impact of event scale – revised (IES-R). *General Assessment Series*, 19.
- Mendl, M. (1999). Performing under pressure: Stress and cognitive function. *Applied Animal Behavior Science* 65(3), 221-244, [https://doi.org/10.1016/S0168-1591\(99\)00088-X](https://doi.org/10.1016/S0168-1591(99)00088-X)
- Mitima-Verloop, H. B., Mooren, T. T. M., & Boelen, P. A. (2021). Facilitating grief: An exploration of the function of funerals and rituals in relation to grief reactions. *Death Studies*, 45(9), 735-745. <https://doi.org/10.1080/07481187.2019.1686090>
- Mohd, T., Yunus, R. M., Hairi, F., Hairi, N. N., & Choo, W. Y. (2019). Social support and depression among community dwelling older adults in Asia. *BMJ open*, 9(7), e026667.  
<https://doi.org/10.1136/bmjopen-2018-026667>
- Mohideen, F., & Heintzelman, S. (2022). Routines and meaning in life: Does activity content of context matter? *Personality and Social Psychology Bulletin*, 49(7), 987-999.  
<https://doi.org/10.1177/01461672221085797>
- Ochsner, K. N., & Gross, J. J. (2008). Cognitive emotion regulation: Insights from social cognitive and affective neuroscience. *Current Directions in Psychological Science*, 17(2), 153-158. <https://psycnet.apa.org/doi/10.1111/j.1467-8721.2008.00566.x>

- Paulson, B. L., Truscott, D., & Stuart, J. (1999). Clients' perceptions of helpful experiences in counseling. *Journal of Counseling Psychology, 46*(3), 317-324.  
<http://dx.doi.org/10.1037/0022-0167.46.3.317>
- Pedrelli, P., Nyer, M., Yeung, A., Zulauf, C., & Wilens, T. (2015). College students: Mental health problems and treatment considerations. *Academic psychiatry: the journal of the American Association of Directors of Psychiatric Residency Training and the Association for Academic Psychiatry, 39*(5), 503–511. <https://doi.org/10.1007/s40596-014-0205-9>
- Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science, 8*(3), 162-166. <https://doi.org/10.1111/j.1467-9280.1997.tb00403.x>
- Rash, C. J., Coffey, S. F., Baschnagel, J. S., Drobles, D. J., & Saladin, M. E. (2008). Psychometric properties of the IES-R in traumatized substance dependent individuals with and without PTSD. *Addictive behaviors, 33*(8), 1039–1047.  
<https://doi.org/10.1016/j.addbeh.2008.04.006>
- Ribeiro, I. J. S., Pereira, R., Freire, R., Freire, I. V., Oliveira, B. D., Casotti, C. A., Boery, E. N. (2018). Stress and quality of life among university students: A systematic literature review. *Health Professionals Education, 4*, 70-77.  
<https://doi.org/10.1016/j.hpe.2017.03.002>
- Riggio, R. E. (1986). Assessment of basic social skills. *Journal of Personality and Social Psychology, 51*(3), 649-660. <https://psycnet.apa.org/doi/10.1037/0022-3514.51.3.649>
- Riggio, R. E., Throckmorton, B., & DePaola, S. (1990). Social skills and self-esteem. *Personality and Individual Differences, 11*(8), 799-804. [http://dx.doi.org/10.1016/0191-8869\(90\)90188-W](http://dx.doi.org/10.1016/0191-8869(90)90188-W)

- Rime, B., Bouchat, P., Paquot, L., & Giglio, L. (2020). Intrapersonal, interpersonal, and social outcomes of the social sharing of emotion. *Current Opinion in Psychology*, *31*, 127-134. <https://doi.org/10.1016/j.copsyc.2019.08.024>
- Riley, J. R., & Masten, A. S. (2005). Resilience in Context. In R. D. Peters, B. Leadbeater, & R. J. McMahon (Eds.), *Resilience in children, families, and communities: Linking context to practice and policy* (pp. 13–25). Kluwer Academic/Plenum Publishers. [https://doi.org/10.1007/0-387-23824-7\\_2](https://doi.org/10.1007/0-387-23824-7_2)
- Ross, A., Willson, V. L. (2017). Hierarchical multiple regression analysis using at least two sets of variables (in two blocks). In: *Basic and Advanced Statistical Tests*. SensePublishers, Rotterdam. [http://doi.org/10.1007/978-94-6351-086-8\\_10](http://doi.org/10.1007/978-94-6351-086-8_10)
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*(6), 1069-1081. <https://psycnet.apa.org/doi/10.1037/0022-3514.57.6.1069>
- Scharp, K. M., Wang, T. R., & Wolfe, B. H. (2022). Communicative resilience of first-generation college students during the COVID-19 pandemic. *Human Communication Research*, *48*(1), 1-30. <http://dx.doi.org/10.1093/hcr/hqab018>
- Schober, P., Coer, C., Schwarte, L. (2018). Correlation coefficients: Appropriate use and interpretation. *Anesthesia and Analgesia*, *126*(5), 1763-1769. <https://doi.org/10.1213/ANE.0000000000002864>
- Schroth, H. (2019). Are you ready for Gen Z in the workplace? *California Management Review*, *61*(3), 5-18. <https://doi.org/10.1177/0008125619841006>
- Schwalm, F. D., Zandavalli, R. B., Filho, E., & Lucchetti, G. (2022). Is there a relationship between spirituality/religiosity, and resilience? A systematic review and meta-analysis of

- observation studies. *Journal of Health Psychology*, 27(5), 1218-1232.  
<https://doi.org/10.1177/1359105320984537>
- Seema, G. B., & Kumar, V. (2018). Impact of social skills training on self-esteem among male and female adolescent students. *Indian Journal of Positive Psychology*, 9(1), 147-151.  
<https://doi.org/10.1080/15267431.2023.2172021>
- Segrin, C. (1996). The relationship between social skills deficits and psychosocial problems. *Communication Research*, 23(4), 425-450. <https://doi.org/10.1177/009365096023004005>
- Segrin, C. (2000). Social skills deficits associated with depression. *Clinical Psychology Review*, 20(3), 379-403. [https://doi.org/10.1016/s0272-7358\(98\)00104-4](https://doi.org/10.1016/s0272-7358(98)00104-4)
- Segrin, C., & Flora, J. (2000). Poor social skills are a vulnerability factor in the development of psychosocial problems. *Human Communication Research*, 26(3), 489-514.  
<https://psycnet.apa.org/doi/10.1111/j.1468-2958.2000.tb00766.x>
- Segrin, C., McNelis, M., & Swiatkowski, P. (2016). Social skills, social support, and psychological distress: A test of the social skills deficit vulnerability model. *Human Communication Research*, 42(1), 122-137. <https://doi.org/10.1111/hcre.12070>
- Shah, M. A. S., Mohammad, D., Qureshi, M. F. H., Abbas, M. Z. A., & Aleem, S. (2021). Prevalence, psychological responses and associated correlates of depression, anxiety and stress in global population, during the coronavirus disease (COVID-19) pandemic. *Community Mental Health Journal*, 57, 101-110. <https://doi.org/10.1007/s10597-020-00728-y>
- Shouhani, F., Mihandoost, Z., & Mami, S. (2021). The effect of assertiveness and stress management training on self-regulation and resilience building among adolescent female students. *Journal of Basic Research in Medical Science*, 9(2), 43-51.

- Shoychet, G., Browne, D. T., Wade, M., & Prime, H. (2022). Assessing positive adaptation during global crisis. The development and validation of the family positive adaptation during COVID-19 scale. *Frontiers in Psychology, 13*, <https://doi.org/10.3389/fpsyg.2022.886504>
- Simpson, K. (2009). "Did I just share too much information?" Results of a national survey on faculty self-disclosure. *International Journal of Teaching and Learning in Higher Education, 20*(2), 91-97.
- Sladek, M. R., Doane, L. D., & Breitenstein, R. S. (2020). Daily rumination about stress, sleep, and diurnal cortisol activity. *Cognitive and Emotion, 34*(2), 188-200. <https://doi.org/10.1080/02699931.2019.1601617>
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine, 15*(3), 194-200. <https://doi.org/10.1080/10705500802222972>
- Steinmetz, K. (2016, June 8). *Adulting definition: Millennials favorite new word*. Time. <https://time.com/4361866/adulting-definition-meaning/>
- Stephens, T. M. (2013). Nursing student resilience: A concept clarification. *Nursing Forum, 48*(2), 125- 133. <https://doi.org/10.1111/nuf.12015>
- Steuber, P., & Pollard, C. (2018). Building a therapeutic relationship: How much is too much self-disclosure? *International Journal of Caring Sciences, 11*(2), 651- 657.
- Thoits, P. A. (1991). On merging identity theory and stress research. *Social Psychology Quarterly, 54*(2), 101-112. <https://www.jstor.org/stable/2786929>

- U.S. Department of Health and Human Services. (2022). *Stress*. National Center for Complementary and Integrative Health. Retrieved April 25, 2023, from <https://www.nccih.nih.gov/health/stress>
- Van Niekerk, B. (2018). Religion and spirituality: What are the fundamental differences? *HTS Theologies Studies/Theological Studies*, 74(3), 4933. <https://doi.org/10.4102/hts.v74i3.4933>
- Van Vugt, M. K., & Van Der Velde, M. (2018). How does rumination impact cognition? A first mechanistic model. *Topics in Cognitive Science*, 10, 175-191. <https://doi.org/10.1111/tops.12318>
- Venetis, M. K., Chernichky-Karcher, S. M., & Lillie, H. M. (2020). Communicating resilience: Predictors and outcomes of dyadic communication resilience processes among both cancer patients and cancer partners. *Journal of Applied Communication Research*, 48(1), 49-69. <https://doi.org/10.1080/00909882.2019.1706098>
- Vinkers, C. H., Van Amelsvoort, T., Bisson, J. I., Branchi, I., Cryan, J. F., Domschke, K., ... Van Der Wee, N. J. A. (2020). Stress resilience during the coronavirus pandemic. *European Neuropsychopharmacology*, 35, 12-16. <https://doi.org/10.1016/j.euroneuro.2020.05.003>
- Ward, M., Tedstone, D., & Moran, R. (2009). It's good to talk: Distress disclosure and psychological wellbeing. *Health Research Board (HRB)*. <http://hdl.handle.net/10147/139365>
- Weiss, D., & Marmar, C. (1997). The impact of event scale-revised. In J. Wilson & T. Keane (Eds.), *Assessing psychological trauma and PTSD: A practitioner's handbook* (pp. 399–411). New York: Guildford.

- Willroth, E. C., Young, G., Tamir, M., & Mauss, I. B. (2023). Judging emotions as bad or good: individual differences and associations with psychological health. *Emotion, 23*(7), 1876-1980. <https://doi.org/10.1037/emo0001220>
- Wilson, S. R., Kuang, K., Hintz, E. A., & Buzzanell, P. M. (2021). Developing and validating the communication resilience processes scale. *Journal of Communication, 71*(3), 478-513. <https://doi.org/10.1093/joc/jqab013>
- Wu, A. D., & Zumbo, B. D. (2008). Understanding and using mediators and moderators. *Social Indicators Research, 87*(3), 367-392, <https://doi.org/10.1007/s11205-007-9143-1>
- Wu, J., Dou, J., Wang, D., Wang, L., Chen, F., Lu, G., Sun, L., & Liu, J. (2024). The empathy and stress mindset of healthcare workers: The chain mediating roles of self-disclosure and social support. *Frontiers in Psychiatry, 15*, <https://doi.org/10.3389/fpsyt.2024.1399167>
- Yaribeygi, H., Panahi, Y., Sahraei, H., Johnston, T. P., & Sahebkar, A. (2017). The impact of stress on body function: A review. *EXCLI Journal, 16*, 1057-1072. <https://doi.org/10.17179/excli2017-480>.
- Younes, A. K. A. (2021). The relationship between social support and assertiveness among university students. *The Egyptian Journal of Social Work, 11*(1), 35-56. [10.21608/ejsw.2020.42370.1108](https://doi.org/10.21608/ejsw.2020.42370.1108)
- Zarei, E., & Sanaeimanesh, M. (2014). The effect of self-disclosure skill training on communication patterns of referred couples to counseling clinics. *Iran Journal of Psychiatry and Behavioral Sciences, 8*(3), 50-57.

Zech, E., & Rime, B. (2005). Is talking about an emotional experience helpful? Effects on emotional recovery and perceived benefits. *Clinical Psychology and Psychotherapy*, *12*(4), 270-287. <https://doi.org/10.1002/cpp.460>

## APPENDIX A: Mood

**Mood (Wilhelm & Schoebi, 2007)**

The following statement asks about your current mood. Please rate each of the following statement on your current mood: “At this moment, I feel...”

---

	Not at all						Very
Tired – awake	0	1	2	3	4	5	6
Content – discontent	0	1	2	3	4	5	6
Agitated – calm	0	1	2	3	4	5	6
Full of energy – without energy	0	1	2	3	4	5	6
Unwell – well	0	1	2	3	4	5	6
Relaxed – tense	0	1	2	3	4	5	6

---

## APPENDIX B: LIFE EVENT

**Life event (Wilson et al., 2021)**

In the past 2 years, please identify a difficult event, one that has seriously disrupted your life.

Please select one option.

---

Life Event

---

1. Death of a loved one
  2. Economic (e.g., job loss, financial loss, housing loss, food scarcity)
  3. Natural disaster (e.g., earthquakes, landslides, floods, wildfires, pandemic)
  4. Relationship (e.g., breakup, divorce)
  5. Legal (e.g., being arrested, sued, problems with the law)
  6. Medical (e.g., mental or physical issues, addiction)
  7. Education/work (e.g., challenges at school/work)
- 

Please describe the event you selected [open-ended question]: \_\_\_\_\_

Please indicate whether the difficult event is still ongoing?

1. Yes
2. No

How much did this experience matter to you? Use the scale below to show how important it was.

Not at all important    1 2 3 4 5 6 7 8 9 10    Very important

How much time have you spent talking aloud to (or texting) others about the experience?

None    1 2 3 4 5 6 7 8 9 10    A lot

Was the experience resolvable (meaning, was the experience within or out of your control)?

Not easily resolvable            1 2 3 4 5 6 7 8 9 10            Easily resolvable

## APPENDIX D: SELF-DISCLOSURE SCALE

**Distress Disclosure Index (DDI; Kahn & Hessling, 2001)**

Thinking about the difficult life event you selected, please respond to how you talked to close others about the event (*1 = Strongly disagree, 5 = Strongly agree*).

---

 Items
 

---

1. When I felt upset, I usually confided in my friends.
2. I preferred not to talk about my problems.\*
3. When I remembered the unpleasant event, I often looked for someone to talk to.
4. I typically don't discuss the event that upset me.\*
5. When I felt depressed or sad, I tend to keep those feelings to myself. \*
6. I tried to find people to talk with about my problems.
7. When I was in a bad mood, I talk about it with my friends.
8. If I had a bad day, the last thing I wanted to do is talk about it.\*
9. I rarely looked for people to talk with when I was having a problem. \*
10. When I was distressed, I didn't tell anyone. \*
11. I usually sought out someone to talk to when I was in a bad mood.
12. I was willing to tell others my distressing thoughts.

---

 \*reverse-code

## APPENDIX E: COMMUNICATION RESILIENCE PROCESSES SCALE

Thinking about the difficult life event you selected, how well does each of the following statements describe how you responded to the difficult situation? (1 = *Strongly disagree*, 6 = *Strongly agree*).

---

Items

---

### **Crafting Normalcy**

1. I tried to keep life as normal as possible.
2. I continued to do the things I normally would.
3. I made an effort to keep up with my daily routines.
4. I tried to keep busy doing what I normally do.
5. I started to build new routines.
6. I started to do new things that over time became ordinary.
7. I adjusted my daily habits to the new circumstances.
8. I adjusted my routines in light of what happened.

### **Affirming Identity Anchors**

1. I maintained key aspects of my identity amidst everything that was going on.
2. I kept in mind who I wanted to be throughout the situation.
3. I held onto the most important parts of myself despite everything that went on.
4. I dug deep into what I value the most as the situation unfolded.
5. I tried to act like the person I ideally wanted to be.
6. I focused on my most important roles during this time.

### **Maintaining and Using Communication Networks**

1. I turned to family and close friends for support.
-

- 
2. I turned to other people in my network for what I needed.
  3. I sought guidance from people I know.
  4. I reached out to other people for help.
  5. I relied on my connections with others during the situation.

### **Constructing Alternative Logics**

1. I found a different way to make sense of the difficult situation.
2. I tried to see the difficult situation in a new light.
3. I found a way to reimagine what was happening in the difficult situation.
4. I thought about the situation in ways that I had not considered before.
5. I found ways of thinking outside of the box in the situation.
6. I tried to find humor in the situation even though it was difficult to do so.
7. I relied on humor to get through the challenging times.
8. Despite the seriousness of the situation, I found myself using humor to lighten things up.
9. Even though I didn't expect to, I found myself laughing at something funny that happened in the situation.

### **Foregrounding Productive Action While Backgrounding Negative Feelings**

1. I focused on actions that would help me move forward even though it was difficult.
  2. Despite how I was feeling, I chose to focus on things that were productive.
  3. I focused on what would help me carry on even though it was challenging.
  4. Despite how I was feeling, I focused on taking constructive actions.
-

## APPENDIX E: POSITIVE ADAPTATION

**Positive adaptation (BRS; Smith et al., 2008)**

Please rate the following statements about how you felt, thought, and behaved after the difficult life event (*1 = Strongly disagree, 5 = Strongly agree*).

## Items

1. I bounced back quickly after the difficult event.
2. I had a hard time making it through the difficult event.
3. It did not take me long to recover from the difficult event.
4. It was hard for me to snap back when the difficult event happened.
5. I endured through the difficult time with little trouble.
6. I took a long time to get over that difficult setback in my life.