

**MAKING MEANING OF ADVERSITY:  
COPING AND SELF-AUTHORSHIP IN UNDERGRADUATE STUDENTS**

by

Kerri Michele Wakefield

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
(Higher Education)  
in the University of Michigan  
2013

Doctoral Committee:

Professor Patricia M. King, Chair  
Associate Professor Daniel Eisenberg  
Assistant Professor Ethan F. Kross  
Associate Professor Janet H. Lawrence

© Kerri Michele Wakefield 2013

## **DEDICATION**

This dissertation is dedicated to my grandmother, Betty Wakefield, and my friend, Shannon Delaney, both of whom crossed over to the spiritual world during the writing of this dissertation. They were two of the funniest, kindest, and most supportive women in my life, and I miss them dearly.

This dissertation is also dedicated to all undergraduate and graduate students who must cope with stressful events on their journeys toward earning degrees. In the words of Ralph Waldo Emerson, “Don’t be pushed by your problems. Be led by your dreams.” The struggle will be worth it in the end.

## ACKNOWLEDGEMENTS

Sometimes the universe has bigger plans for you than you can dream up for yourself. Once the universe decided that I needed to complete this dissertation and earn a doctoral degree, many people appeared in my life to make that possible. In this section, I wish to thank those people for their generosity and promise to pay it forward by applying what I have learned to create positive change in the world.

To my husband Julio, who is nearing completion on his own dissertation, thank you for believing in my ability to complete this dissertation and earn a Ph.D. even when I doubted myself. I am a better student, professional, and person because of you. Now that I can't use graduate school as an excuse, I promise to learn to cook so you can take a well-earned break from the kitchen.

To my parents Mike and Cathy and my brother Kevin, thank you for caring about me enough to call me every week, ask about my progress, and encourage me when I wanted to throw in the towel. Your kindness and support meant the world to me. Even if you pretend to read my entire dissertation but actually only read this page, I will understand.

To my friends near and far, thank you for allowing me to be an absentee friend for the past six years while I toiled away at this degree. Although we did not see each other often, knowing that you were cheering for me kept me going. Special thanks to my friend and dissertation peer debriefer, Ruby Siddiqui, for spending months analyzing

transcripts with me all while juggling a five-year-old and one on the way. You are my hero. I look forward to being your peer debriefer soon!

To my dissertation committee members Patricia King, Janet Lawrence, Daniel Eisenberg, and Ethan Kross, thank you for your interest in my research and your guidance throughout the dissertation process. Each of you brought an important perspective to my work, and I am grateful for the time and energy you spent helping me to be a better scholar. Special thanks to Pat for chairing my committee, editing countless drafts, and teaching this student affairs practitioner how to be a skilled producer and consumer of research.

To my University of Michigan colleagues, thank you for the opportunity to learn from you and work alongside of you. One of the true highlights of this doctoral program has been participating in assistantships, committees, and projects across the university focused on understanding and improving the experiences of undergraduate and graduate students. These projects took place within the School of Education, Rackham Graduate School, and the Division of Student Affairs, among other units.

To the individuals and organizations that contributed funding, data, or statistical support to make this degree possible, I wish to extend my sincerest thanks. I received generous funding from the School of Education and Rackham Graduate School during my time as a doctoral student. In addition, I had the privilege of using data from the Wabash National Study of Liberal Arts Education for this dissertation, a study funded by the Center of Inquiry in the Liberal Arts at Wabash College. I am also grateful to my former colleagues on the Wabash National Study research team who helped collect and summarize the interview data used in this study as well as to Giselle Kolenic at U-M's

Center for Statistical Consultation and Research for providing NVivo support during the data analysis phase of this study.

Finally, to the students whose stories appear throughout this dissertation, thank you for opening up about the stressful events that happened in your lives and how you coped with those. Your honesty was brave, and your resilience was inspiring. It is my hope that by sharing your experiences, I have increased awareness about how stressful the college years can be and why effective coping is critical to achieving success during and after college.

## TABLE OF CONTENTS

DEDICATION .....	ii
ACKNOWLEDGEMENTS .....	iii
LIST OF FIGURES .....	ix
LIST OF TABLES .....	x
LIST OF APPENDICES .....	xi
ABSTRACT .....	xii
CHAPTER I: INTRODUCTION.....	1
Statement of the Problem.....	1
Mental health and well-being defined.....	2
Stress and the undergraduate experience. ....	4
Link between well-being and undergraduate student success. ....	6
Significance of this Study .....	9
Personal Interest in this Topic .....	11
Organization of this Dissertation .....	12
Summary .....	13
CHAPTER II: LITERATURE REVIEW .....	15
Stress-Related Coping.....	16
Influences on undergraduate students’ stress.....	17
Stress-related coping theory.....	20
Assessment of coping. ....	23
Research on coping and undergraduate students. ....	26
Critique of coping research. ....	30
Self-Authorship.....	33
Self-authorship theory.....	34
Assessment of self-authorship. ....	39
Research on self-authorship and undergraduate students. ....	43
Critique of self-authorship research.....	47
Relationship between Coping and Self-Authorship.....	49
Park’s meaning-making model of adjustment to stressful events.....	50
My conceptualization of the coping process.....	52
Summary.....	57
CHAPTER III: METHODS .....	58
Research Design .....	59
Wabash National Study of Liberal Arts Education .....	60
Data collection and preparation for analysis.....	62
Identifying the analytic sample.....	64

Data Analysis Plan.....	68
Phases of analysis. ....	68
Peer debriefer. ....	72
Sensitizing Concepts.....	73
Limitations of the Study .....	76
Summary.....	78
<b>CHAPTER IV: STRESSFUL EXPERIENCES, COPING STRATEGIES, AND</b>	
<b>ANALYSIS OF COPING BY CONTEXT.....</b>	<b>79</b>
Stressful Experiences .....	79
Coping Strategies.....	82
Examples of problem-focused strategies. ....	84
Examples of emotion-focused strategies.....	86
Examples of meaning-focused strategies.....	89
Examples of maladaptive strategies.....	91
Coping Strategies by Stressful Experience Context .....	93
Frequency of coping strategy usage by context.....	93
Examples of coping strategy usage by context.....	96
Discussion of Findings.....	105
Summary.....	108
<b>CHAPTER V: ANALYSIS OF COPING BY YEAR AND SELF-AUTHORSHIP</b>	
<b>LEVEL.....</b>	<b>109</b>
Coping Strategies by Year .....	109
Frequency of coping strategy usage by year.....	109
Examples of coping strategy usage by year.....	112
Coping Strategies by Self-Authorship Level .....	119
Frequency of coping strategy usage by self-authorship level.....	119
Examples of coping strategy usage by self-authorship level.....	122
Patterns in coping strategies by self-authorship level.....	130
Discussion of Findings.....	134
Summary.....	140
<b>CHAPTER VI: DISCUSSION AND IMPLICATIONS .....</b>	<b>142</b>
Revised Conceptual Model.....	142
Potential Pathways through the Model .....	148
Observations about the Relationship between Self-Authorship and Coping.....	150
Implications for Practice.....	153
Teach coping skills. ....	154
Promote self-authorship development. ....	155
Reduce environmental stressors.....	157
Create a culture of caring.....	158
Future Research .....	160
Vary the sample, timing, protocol, and method.....	160
Explore other influences on coping. ....	162
Measure the effect of coping on outcomes. ....	164
Conclusion .....	166
<b>APPENDICES .....</b>	<b>169</b>



REFERENCES ..... 180

## LIST OF FIGURES

Figure 1.1. Mental Health – Mental Illness Continuum .....	3
Figure 1.2. A Social Ecological Model of College Student Stress .....	6
Figure 2.1. A Theoretical Schematization of Stress, Coping, and Adaptation .....	22
Figure 2.2. A Young Adult’s Meaning-Making Developmental Journey .....	38
Figure 2.3. Journey Toward Self-Authorship. ....	41
Figure 2.4. A Meaning-Making Model of Adjustment to Stressful Life Events .....	51
Figure 2.5. Conceptualization of the Cognitive Processes Underlying Coping in Undergraduate Students .....	53
Figure 4.1. Frequency of Reported Contexts among Stressful Experiences.....	81
Figure 4.2. Frequency of Reported Types among Coping Strategies .....	84
Figure 4.3. Frequency of Use of Coping Strategy Categories by Stressful Experience Category.....	94
Figure 5.1. Frequency of Use of Coping Strategy Categories by Year .....	110
Figure 5.2. Frequency of Use of Coping Strategy Categories by Self-Authorship Level .....	120
Figure 5.3. Evolution of Coping Strategies with Self-Authorship Development.....	138
Figure 6.1. Model of the Cognitive Processes Underlying Coping in Undergraduate Students.....	143

## LIST OF TABLES

Table 3.1. Gender, Race, and Self-Authorship Levels for the Analytic Sample .....	67
Table 4.1. Stressful Experience Categories, Contexts, and Examples.....	80
Table 4.2. Coping Strategy Categories, Types, and Examples.....	83
Table 4.3. Frequency of Use of Coping Strategy Types by Stressful Experience Context .....	95
Table 5.1. Frequency of Use of Coping Strategy Types by Year .....	111
Table 5.2. Frequency of Use of Coping Strategy Types by Self-Authorship Level.....	121
Table 5.3. Patterns in Coping Strategies by Self-Authorship Level .....	131

## **LIST OF APPENDICES**

APPENDIX A: Description Of WNS Interview Sample For Years 1-3 .....	170
APPENDIX B: WNS Year 3 Interview Protocol .....	171
APPENDIX C: WNS Year 3 Informed Consent Form.....	179

## **ABSTRACT**

### **MAKING MEANING OF ADVERSITY: COPING AND SELF-AUTHORSHIP IN UNDERGRADUATE STUDENTS**

by

Kerri Michele Wakefield

Chair: Patricia M. King

Stress is one of the most frequently reported health concerns for college students, and learning how to cope with stress is critical to students' success during and after college. The purpose of this qualitative study was to explore the construct of stress-related coping in college students, specifically what types of stressful experiences and coping strategies students reported and how their coping changed across contexts, over time, and by self-authorship level. The analytic sample was comprised of 55 undergraduate students at six institutions who were interviewed annually as part of the Wabash National Study of Liberal Arts Education; the sophomore and junior year interviews were used in this study. The data were analyzed using grounded theory methods, and a new conceptualization of the coping process emerged.

A total of 164 stressful experiences and 728 coping strategies were reported in the 110 transcripts. I identified three categories of stressful experience contexts (*intrapersonal, interpersonal, institutional*) and four categories of coping strategy types (*problem-focused, emotion-focused, meaning-focused, maladaptive*). Across contexts, students were more likely to opt for *problem-focused* strategies when they perceived greater control and for *meaning-focused* strategies when they perceived less control over the situation. Students who reported stressful experiences within the same context in Years 2 and 3 were more likely to choose *maladaptive* strategies in Year 2 and *adaptive* strategies in Year 3. There were variations in the type of strategies students chose as well as the complexity of individual strategies across self-authorship levels; as self-authorship increased, students' strategies evolved from being characterized by deferring to authorities' opinions and avoiding responsibility for coping to filtering others' advice through their own perspectives, accepting responsibility for coping, and learning from their stressful experiences.

This study revealed new insights about the cognitive processes underlying coping for undergraduate students, including the relationships among self-authorship level, cognitive appraisals, perceptions, and coping strategies. Future studies of coping would benefit from taking self-authorship into account and exploring the impact of coping strategies on situational and global outcomes. Implications for practice include engaging students in reflective conversations about their stressful experiences to promote self-authorship development and more adaptive coping responses.

## CHAPTER I: INTRODUCTION

My goal for this inquiry was to better understand how college students cope with stress, including the cognitive processes involved, so that faculty and staff are better equipped to support students as they navigate the stressors of college life. Specifically, I aimed to learn more about the types of stressful experiences students encountered and the coping strategies they chose to deal with them. I was also interested in examining the relationships between students' coping strategies and factors such as the context of the stressful event, previous coping experience, and the complexity with which they make meaning and interpret their experiences (self-authorship).

### **Statement of the Problem**

As educators grapple with how to address the frequency and severity of mental health issues that present in today's undergraduate students, they are often confronted by one of the major contributors to mental health issues for undergraduate students, stress. Many students enter college expecting the undergraduate years to be the best years of their lives, only to discover that they can also be the most stressful years. The illusion of college life as carefree quickly dissipates once the reality of the academic, social, and emotional stressors inherent in the undergraduate experience become apparent (Bray, Braxton, & Sullivan, 1999). In an interview about his book, *What to Do When College Is Not the Best Time of Your Life*, psychiatrist David Leibow explained the gap between new students' expectations and the reality of college:

For some students, then, the reality of college comes as a rude shock, and one with which they're totally unprepared to cope. From psychiatric issues (which have become more common -- or at least more commonly identified -- among college students in recent years) to academic overload to plain old homesickness, many college students find themselves facing stress or unhappiness they didn't expect, from sources that may be totally new – and they may not realize just how normal that is. (Golden, 2010, p. 1)

There is evidence that stress is most acute at the beginning of students' transition to college, when they must adjust to the demands of the undergraduate environment (Gall, Evans, & Bellerose, 2000). According to one recent major national study, the self-rated emotional health of first-year undergraduate students is currently at a 25-year low: "The percentage of students reporting that their emotional health was in the 'highest 10%' or 'above average' when compared to their peers dropped 3.4 percentage points from 2009, from 55.3% to 51.9%" (Pryor, Hurtado, DeAngelo, Palucki Blake, & Tran, 2010, p. 1). Coping with stress is not just an issue for first-year students, however. Anxiety, which is related to stress, recently surpassed depression as the most common reason students visit college counseling centers (Barr, Rando, Krylowitz, & Reetz, 2010). Unfortunately, many students do not seek help to deal with stress either because they accept it as a normal part of college life or assume it is not severe enough to warrant seeking professional help (Alipuria, 2007). This is concerning given that left unchecked, stress has the potential to negatively influence well-being, academic performance, and other outcomes.

**Mental health and well-being defined.** Mental health has been defined as the "state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity" (U.S. Department of Health and Human Services, 1999, p. 1). The



Mental Health-Mental Illness Continuum (Hurl & Burdick, 2010), shown in Figure 1.1, illustrates the range of mental health and mental illness states that people experience. Kessler et al. (2007) found that approximately 75% of mental disorders emerge by the mid-twenties. This means that undergraduate students may be caught off guard by mental disorders that surface just before or during college, adding another layer of complexity to their college experience. Individuals with mental illnesses have demonstrated to be less resilient than their mentally healthy peers (Connor & Davidson, 2003).

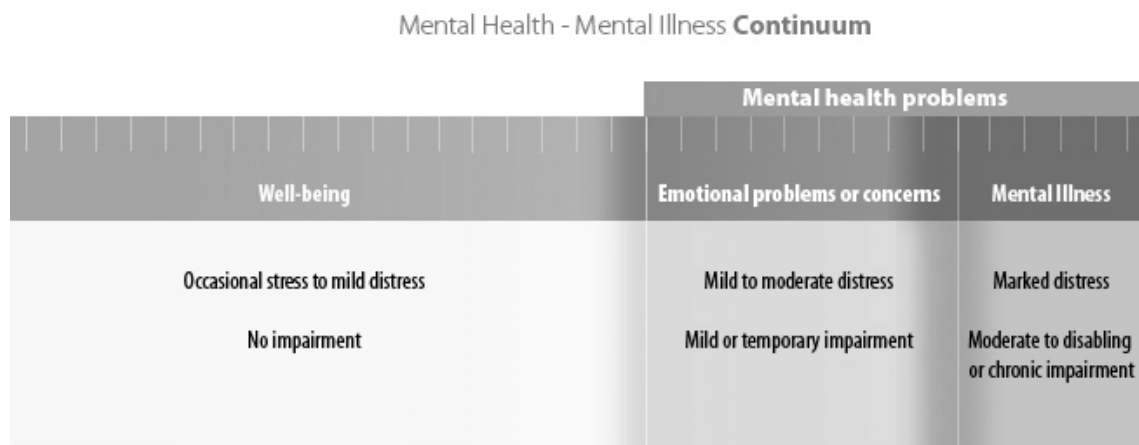


Figure 1.1. Mental Health – Mental Illness Continuum.  
*Source:* Hurl, L., & Burdick, S. (2010). Mental health-mental illness continuum figure. Retrieved from <http://hr.umich.edu/mhealthy/programs>. Reprinted with permission.

According to Ryan and Deci (2001), two definitions of positive mental health, also known as well-being, have dominated research on the construct. The first defines well-being from a hedonic perspective, meaning it focuses on one’s subjective happiness as determined by “more positive affect, less negative affect, and greater life satisfaction” (Ryan & Deci, 2001, p. 161). The second considers well-being from a eudaimonic perspective, meaning it focuses on one’s psychological health as determined by the

capacity to be a “fully functioning person” (Ryan & Deci, p. 161). Ryff’s (1989) scale of psychological well-being is commonly used to measure this type of well-being, and it is comprised of six dimensions: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. McGregor and Little (1998) have found evidence to support both the hedonic and eudaimonic perspectives, leading them to define well-being as a combination of the two.

Folkman (2011a) identified the two major themes of stress-related coping research as “mitigating stress-related harm and sustaining positive well-being” (p. 9). Scholars who study coping are interested not only in how individuals can sustain well-being during a stressful event, but also how they can recover to more positive well-being after the event as a result of stress-related or posttraumatic growth (Joseph & Linley, 2005). This reflects the shift in focus of coping research from how individual deficits increase risk and hinder coping ability, which dominated in the 1970s and 1980s, to how individual strengths confer protection and promote resilience, which has been popular since the 1990s (Folkman).

**Stress and the undergraduate experience.** Many factors have the potential to influence undergraduate students’ stress and in turn, their well-being and other outcomes, during the college years. For instance, a recent national college student health study revealed that a wide range of stressful life events can negatively affect college students’ academic performance (American College Health Association, 2011a). These stressors, which vary in their duration and intensity, may be broadly categorized as hassles (e.g., school or financial problems), chronic role strains (e.g., a tumultuous dating relationship), serious life events (e.g., death of a loved one), and personal traumas (e.g., life-threatening

health issue) (Aldwin, 2007). Howard, Schiraldi, Pineda, and Campanella (2006) identified seven major domains of stressors frequently cited in the scholarly literature on undergraduate students: relationships, role strain (e.g., change in family dynamics), academics, finances, cross-cultural dynamics, secular events (e.g., 9/11), and campus climate (e.g., a culture of violence).

Hochman and Kernan's (2010) social ecological model of college student stress, presented in Figure 1.2, organized factors that can influence students' stress into five levels of influence: intrapersonal, interpersonal, institutional, community, and global. Informed by ecological theories from Bronfenbrenner (1979) and McLeroy, Bibeau, Steckler, and Glanz (1988), Hochman and Kernan's model proposes that multiple levels of individual and environmental factors interact with one another to impact students' vulnerability to stress. Some of the factors trigger stress while others serve as buffers protecting students from stress. In addition, many of these factors may be targets for interventions to promote stress-related coping among students, which shows the variety of strategies and points of entry educators may use to reach students. Research findings related to how specific factors within this model affect undergraduate students' stress are summarized in Chapter II.

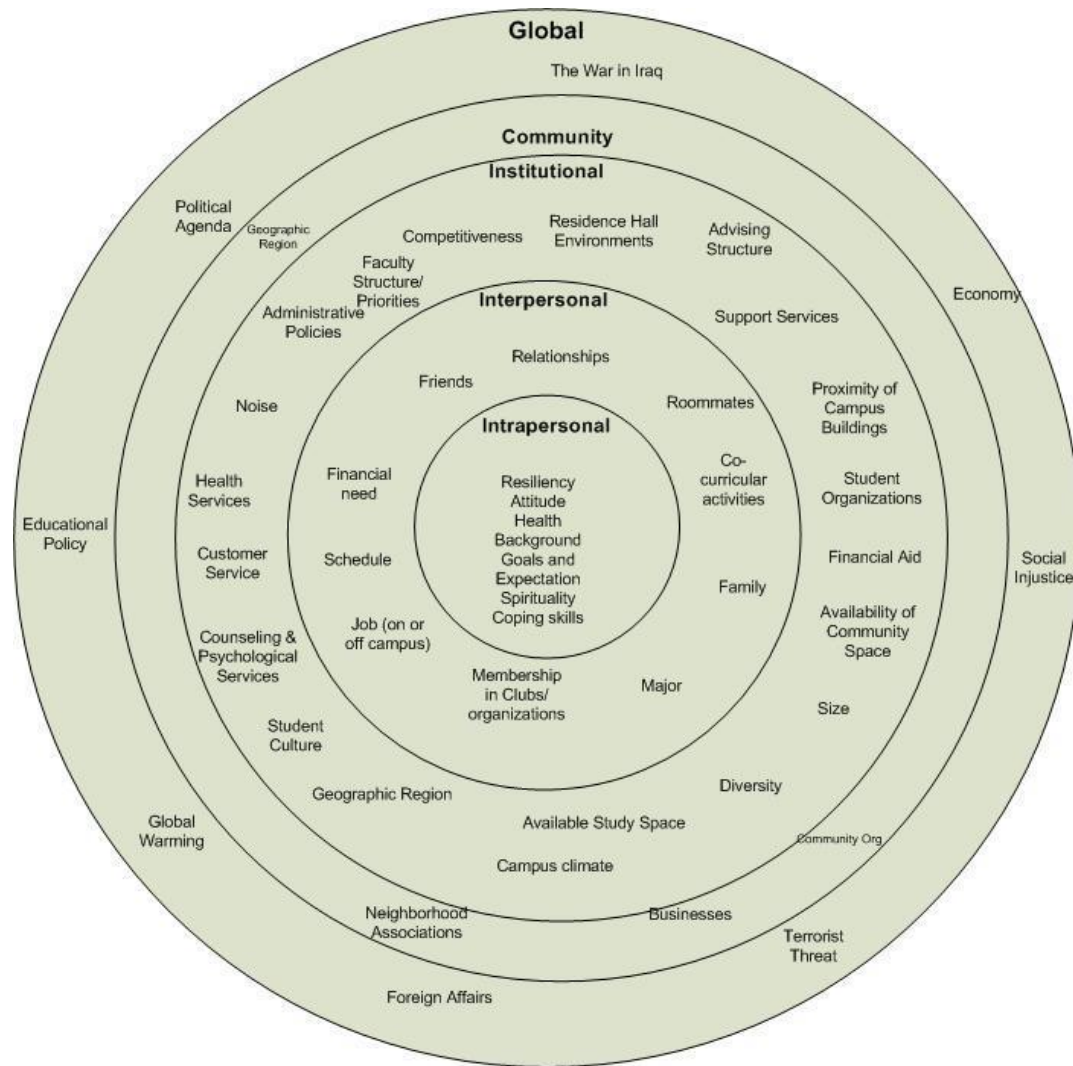


Figure 1.2. A Social Ecological Model of College Student Stress.  
 Source: Hochman, S. R., & Kernan, W. D. (2010). *A social-ecological model for addressing stress on the college campus*, paper presented at the annual meeting of the American College Health Association, Philadelphia, PA. Reprinted with permission.

**Link between well-being and undergraduate student success.** Kadison and DiGeronimo (2004) argued that for undergraduate students, academic success and well-being are inextricably linked. In their book *College of the Overwhelmed*, they asserted that “...the emotional well-being of students goes hand-in-hand with their academic development. If they’re not doing well emotionally, they are not going to reach their

academic potential” (p. 156). Students who are flourishing, meaning they have high levels of psychological, social, and emotional well-being as defined by Keys (2005), have been found to earn higher grades, have more adaptive goals, and more self-control than their peers (Howell, 2009). Howell hypothesized the connection between flourishing and academic success this way:

Like positive affect, the more encompassing state of flourishing may enhance levels of awareness and interest within the learner, such that opportunities and possibilities are considered and sought that would otherwise go undetected. The pursuit of such opportunities may promote further development of skills and abilities which in turn enhance future functioning. (p. 9)

This aligns with the central premise of Barbara Fredrickson’s (2001) *broaden and build theory*, that positive emotions broaden one’s momentary thought-action repertoires, allowing one to see more possibilities for coping with a given situation, and build one’s enduring personal resources, promoting more effective coping in future situations. In other words, approaching stressful situations with optimism can lead to more effective coping immediately and over time.

Thriving, a construct similar to flourishing, has been defined as having five components for undergraduate students: engaged learning, academic determination, positive perspective, diverse citizenship, and social connectedness (Schreiner, 2010). These five components are not fixed traits, but rather qualities that can be developed. Schreiner asserts that students who thrive not only achieve more academic success, but also experience a stronger sense of community on campus and higher psychological well-being, both of which promote persistence. She argues, though, that educators need to redefine undergraduate student success as more than academic performance and persistence: “Rather than defining success solely as grades and graduation, a focus on

thriving encourages a more holistic view of student development that expands to include healthy relationships, sense of community, making a contribution, and proactively coping with life's challenges" (p. 10). This perspective aligns with the shift proposed by several professional associations toward a more integrative view of learning and development (Keeling, 2004, 2006). Educators now strive to help undergraduate students reach their potential as whole people, not just minds. This includes not only their intellectual well-being, but also their physical, emotional, social, spiritual, and occupational well-being.

The belief that well-being is critical to students' learning and development is central to the mission of college student affairs and to the health promotion field in particular. The American College Health Association's (2011b) *Standards of Practice for Health Promotion in Higher Education* suggest that health promotion initiatives promote student learning directly by fostering students' well-being and indirectly by providing healthy learning environments. In 2004, the National Association of Student Personnel Administrators' Health Education and Leadership Program published *Leadership for a Healthy Campus: An Ecological Approach for Student Success*, a document challenging student affairs leaders to think about the ways in which student health is influenced by the social environment and to restructure campus communities so that they are "optimally organized to support, strengthen, and enhance health, enabling students to achieve, learn, and serve" (p. 3). Many educators assume that good grades are an indication that a student is mentally healthy, but grades can be deceiving. In some cases, students are able to maintain strong grades even when their mental health is suffering, which can make it difficult to convince administrators and faculty that there is a problem.

High-profile incidents such as the 2007 mass shooting at Virginia Tech and the 2005 suicide of MIT student Elizabeth Shin demonstrate the impact that student mental health and well-being can have on the success of individual students and college communities. Not only do tragedies such as these weigh heavily on the morale of students, staff, and faculty, they also have serious legal and financial consequences for the institutions. Both of the events mentioned above triggered lawsuits from the victims' families claiming the universities were negligent in preventing the violent acts. National attention to incidents such as these motivated lawmakers to take action on this issue. In May 2011, the *Mental Health on Campus Improvement Act* was introduced in the United States Congress and had the potential to provide funding to college and universities to support their efforts to bolster mental health services and increase outreach to students (U.S. House Subcommittee on Higher Education and Workforce Training, 2011). The act called for the formation of a college campus task force to oversee the status of mental and behavioral health on college campuses. The bill was referred to the committee level for review and unfortunately, was never enacted.

### **Significance of this Study**

As will be shown in Chapter II, research on undergraduate student coping suggests that coping, along with related factors such as motivation and self-efficacy, may act as a mediator between stress and a host of college success outcomes (Struthers, Perry, & Menec, 2000). For instance, students' coping strategies have been shown to influence their social and emotional adjustment to college (Stoeberl, 2002), as well as their ability to engage in social integration experiences (i.e., interactions with their peer group and faculty members outside the classroom) that in turn can affect their institutional

commitment and departure decisions (Bray et al., 1999). The cognitive processes underlying coping in the college student population are not well understood, however.

This study will explore the relationships between students' coping strategies and three factors that have the potential to shape how they perceive and cope with stressors: 1) the context of the stressor, 2) previous coping experience, and 3) self-authorship level. Undergraduate students commonly face stressors that are academic, social, and personal in nature, originating from sources on and off campus. It is plausible that students' perceptions about the context of a stressor are related to how they choose to cope with it. In addition, students' previous experience coping with adversity may affect how stressful an event seems or how confident they feel to cope with it. In the college context, this could mean that more advanced students, those who have been in college longer and have presumably had more coping experience in that setting, perceive and cope with stressful events differently than newer students.

Finally, individual differences in students' degree of self-authorship, as a result of using different stages of meaning-making development, may affect how they interpret stressful situations, which coping strategies they choose, and how they apply those strategies. Although the concept of meaning making has been included in some psychological theories of coping, self-authorship as a specific type of meaning making has been largely absent from studies on stress-related coping. More attention has been paid to the content of coping (i.e., which coping strategies individuals choose) rather than the process of coping (i.e., how individuals apply those strategies). Given that individuals interpret their experiences based on assumptions associated with their self-authorship level, examining how self-authorship influences the coping process has the



potential to make a unique contribution to the coping literature. The specific research questions are delineated at the beginning of Chapter III.

In terms of higher education scholarship, this study has the potential to deepen our understanding of and inform future research about what types of stressful life events and coping strategies undergraduate students report and how individual and environmental factors influence students coping' strategies. In terms of higher education practice, this study has the potential to inform practitioners how to help distressed undergraduate students by teaching them effective coping skills and reducing environmental stressors when possible. At a time when mental health issues are a topic of concern on many college campuses, it is critical to provide educators with as many tools as possible to support students' holistic development and well-being throughout their undergraduate years.

### **Personal Interest in this Topic**

My personal interest in the topic of how undergraduate students cope with stress stems from my professional experiences as a college counselor, academic advisor, and higher education scholar. As an intern counselor in the Master of Education in College Counseling program at the University of Delaware, I led individual and group therapy sessions for undergraduate students and observed the toll that stress took on students' well-being. As an academic advisor at San Diego State University and the University of Maryland, I provided advising to undergraduate students in STEM majors, and observed how the intensity of those disciplines induced stress and affected students' academic performance. As a member of the Wabash National Study for Liberal Arts Education (hereafter, WNS) research team at the University of Michigan, I interviewed the same

undergraduate students across multiple years of college and heard numerous stories about coping with stressful college experiences. Since self-authorship development was one focus of that study, I began thinking about how self-authorship level along with previous coping experience and context might be related to students' perceptions of and reactions to stressful events.

Throughout these interactions with students, I noticed that while some students seemed to naturally manage stress well, others were able to improve their coping skills by learning new cognitive and behavioral strategies. The idea that adaptive coping could be taught was exciting to me because resilience is a key attribute for achieving success in college and throughout life. As I embark on a career as a college administrator, I am interested in learning as much as possible about how to support undergraduate students' well-being and promote their development so that I may apply that knowledge in my work in the field.

### **Organization of this Dissertation**

Chapter I provided a rationale for this study by presenting information on the current state of undergraduate student mental health, explaining the relationship between well-being and success in college, and highlighting gaps in the existing research on stress-related coping in this population. One notable gap is the lack of information about the cognitive processes underlying coping and how those may shape students' perceptions and choice of coping strategies. Chapter II provides a critical review of theories and research related to the constructs of coping and self-authorship in undergraduate students. This chapter concludes with a model depicting how these constructs may be related. Next, Chapter III describes the methodology employed in this

study, including the primary research questions, the data source, and the grounded theory approach to data analysis. Chapters IV and V present the major findings that emerged from analysis and will include excerpts from student interviews to illustrate these findings. Finally, Chapter VI concludes this paper with my interpretation of the findings, implications for future higher education practice and research, and my final thoughts about why the topic of stress-related coping in undergraduate students matters.

### **Summary**

For traditional age undergraduate students, the stress of developmental challenges such as identity exploration and relationship reevaluation combined with the stress of the college environment can create a perfect storm of pressures. Young adults report higher levels of stress than middle-age and older adults; as Aldwin (2011) suggests, this may be because they have more limited coping skills and less experience managing stressful events. Individuals in this phase of life are learning how to self-regulate independently, use more complex problem-solving, and reflect on their own thoughts and emotions via metacognition (Aldwin). When these cognitive skills are not well developed, young adults may turn to maladaptive behaviors to help them cope with stress, which can have negative consequences for their well-being and success in college.

Some undergraduate students cope better than others when confronted with the same stressful situation. The next chapter will consider why this may be by exploring research and theory related to stress-related coping and self-authorship, including how the two constructs may be related. Given that individuals interpret their experiences and make decisions based upon assumptions associated with their self-authorship level, it is plausible that the construct of self-authorship has important implications for the study of

coping. By learning more about how students perceive stressful events and the relationship between perceptions and coping strategies, we may gain insight into the individual differences in coping. As Rutter (2007) argued, “attention needs to be paid to mental operations as well as to individual traits or experiences” (p. 205) when studying resilience in the face of adversity.

## **CHAPTER II: LITERATURE REVIEW**

This chapter critiques existing theory and research related to stress-related coping and self-authorship in undergraduate students, and concludes with a discussion about how the two constructs may be related. Most of the research performed to date on coping has come from the fields of psychology and medicine, in particular from scholars focused on mental health. While some of these studies have investigated the cognitive processes underlying coping, few have explored in depth how factors such as context, previous coping experience, and meaning making shape perceptions of and reactions to stressful events.

Furthermore, to my knowledge, none of these studies has considered how an individual's self-authorship level relates to his or her approach to coping. Given theory suggesting that self-authorship is the developmental foundation necessary to achieve cognitive maturity in learning outcomes such as problem solving and decision making (Baxter Magolda, 2004b), it is reasonable to assume that there may also be a relationship between self-authorship and coping. This study has the potential to bridge the mental health and higher education literatures by examining the role of whether and how undergraduate students' self-authorship levels matter in how they choose and apply coping strategies to deal with stressful experiences.

## **Stress-Related Coping**

Stress is a highly complex phenomenon with interacting physiological, behavioral, and cognitive components. Physiologically, stress activates the body for a fight or flight response, triggering the sympathetic nervous system to increase heart rate, respiration, and perspiration, among other symptoms (Aldwin, 2007). Behaviorally, stress propels one to respond to the stressor by actively trying to address it, managing the emotions or meaning of it, or perhaps trying to avoid it entirely (Lazarus & Folkman, 1984). Cognitively, stress triggers an appraisal process in which one assesses the relevance and intensity of the stressor as well as coping options available to determine how threatening the situation seems (Folkman & Lazarus, 1985). Thus, stress may be defined as “a relationship between the person and the environment that is appraised by the person as relevant to his/her well-being and in which the person’s coping resources are taxed or exceeded” (Folkman & Lazarus, 1985, p. 152). Coping refers to the “thoughts and behaviors used to manage the internal and external demands of situations that are appraised as stressful” (Folkman & Moskowitz, 2004, p. 745). Folkman has also defined coping as “cognitive and behavioral efforts to manage (master, reduce, or tolerate) a troubled person-environment fit” (Folkman & Lazarus, p. 152).

Coping thoughts and behaviors are not inherently positive or negative, just more or less adaptive given the context of the stressful situation (Lazarus & Folkman, 1984). Individuals develop an increased repertoire of coping strategies and more flexibility in applying those strategies differently in different contexts as they progress from childhood through adolescence to adulthood (Aldwin, 2011). This is due to changing biological, psychological, and social factors, including the development of self-regulation. Still,

despite these patterns, substantial individual differences exist in the way people cope with stressful events. Varying self-authorship levels may provide one explanation for individual differences in coping strategies.

**Influences on undergraduate students' stress.** Hochman and Kernan's (2010) social ecological model of college student stress depicts how factors at five varying levels of influence can affect students' stress (see Figure 1.2). This section reviews research findings about the impact of the intrapersonal, interpersonal, and institutional-level factors in the model upon undergraduate students' susceptibility to stress. These three levels were chosen because these factors are more amenable to change than those in the community and global levels.

Within the intrapersonal level of influence, factors such as students' background, attitude, and coping skills affect students' stress levels. In terms of background, college women tend to report feeling stressed more frequently than college men. This finding has emerged in community college students (Pierceall & Keim, 2007), residence hall students (Dusselier, Dunn, Wang, Shelley, & Whalen, 2005), and first-year undergraduate students reflecting on their senior year of high school (Pryor et al., 2010). One possible reason for this is that women seem to exert more pressure on themselves to succeed academically than men (Dusselier et al., 2005), which may explain why women exhibit more active coping behaviors, particularly during the stressful transition to college period (Gall et al., 2000). In terms of attitude, students with higher perceived control have demonstrated lower stress levels than their peers because they feel confident in their ability to manage stressful situations (Skinner & Zimmer-Gembeck, 2011). As mentioned in Chapter I, positive emotions also appear to protect people from the negative

effects of stress by cognitively broadening the range of solutions they can envision and building resources such as self-esteem (Fredrickson, 2001). In terms of coping skills, maladaptive coping behaviors, or “coping mechanisms gone awry” (Kadison & DiGeronimo, 2004, p. 90), may provide a sense of temporary relief for students, but ultimately cause more harm for the student and the campus community. For the student, maladaptive coping can lead to self-destructive behaviors, psychological problems, and damaged relationships (Kadison & DiGeronimo), and for the community, these behaviors tend to be the root of pressing public health concerns on college campuses.

Within the interpersonal level of influence, students’ relationships with peers, authority figures, and family members can be a source of both support and stress. In a study of undergraduate students living in residence halls, for example, roommate conflicts were found to be a significant predictor of stress, as were conflicts with faculty and staff members (Dusselier et al., 2005). For student athletes, conflicts with teammates and especially coaches can exacerbate the stress they already feel due to intense training schedules and pressure to perform at competitions (Giacobbi et al., 2004). Adult students who often must manage school with family and work life can experience role strain, particularly when their families are not supportive of their academic endeavors (Giancola, Borchert, & Grawitch, 2009). In general, research suggests that undergraduate women experience more relationship-related stress than men do, but they also tend to have stronger social support networks than their male peers (Darling, McWey, Howard, & Olmstead, 2007). Taylor (2011) found that social support can protect an individual from the harmful health effects of stress, but only if the type of support matches what the individual needs.



Within the institutional level of influence, academic, financial, and diversity-related variables can have an impact on undergraduate students' stress levels. Academic stressors, including a heavy course load and the lack of adequate study space, were identified by Dussilier et al. (2005) as students' greatest source of stress. Students also have reported feeling stressed when their academic performance failed to measure up to their expectations (Ross, Niebling, & Heckert, 1999). When students must balance part-time or full-time employment with academics for financial reasons, this has the potential to heighten students' stress levels further. In their survey of undergraduate students at a large public university in the southwest, Joo, Durband, and Grable (2008-2009) found that students who dropped courses or withdrew from college entirely were statistically more likely to have been employed at least part-time. In addition, they noted that students who reported experiencing financial stress were more likely to drop out. Researchers at the University of San Diego found that on their campus, students of color experienced more stress related to social issues than their white peers (Baker & Sgoutas-Emch, 2011). For example, African American students, who comprise less than 2% of the student body at the university, reported being most stressed by being the target of disrespectful comments and property damage. In the same study, LGBTQ students at the university also perceived the campus climate as significantly more stressful than their heterosexual peers.

Minority-status stresses have been described by Smedley, Myers, and Harrell (1993) as "unique stresses experienced by minority students that heighten feelings of not belonging and interfere with minority students' effective integration into the university community (for example, experiences with racism, questions about their right to be on

campus)” (p. 435). This type of stress has the potential to influence college adjustment, performance, and retention. Psychologist Claude Steele identified a specific type of minority-status stressor which he labeled as *stereotype threat* (Steele, 1997). The term refers to the threat individuals may experience when they enter a domain where a negative stereotype exists about a group to which they belong (e.g., women and people of color perceived as less capable in STEM fields). In this domain, they may feel threatened by the stereotype and even internalize the stereotype, exhibiting lower performance as a result. It appears that some students, however, manage to convert diversity-related stresses into increased agency and academic motivation. When students are able to help one another make meaning of their collective struggle, it can confer educational resilience, as O’Connor (1997) found in her research on African American high school students.

**Stress-related coping theory.** One of the most frequently cited theories of stress-related coping originated with Lazarus (1966; Lazarus & Folkman, 1984). Unlike previous theories on coping, which assumed that situations are objectively stressful and that coping ability is a fixed trait, Lazarus proposed that stress is subjective, based on perceptions of the situation and self, and that coping is situational. He and his colleagues framed coping as a complex, multidimensional, dynamic construct influenced by characteristics of the individual, the environment, and transactions between the two. Since characteristics of the individual and the environment are constantly changing, one’s perceived stress and ability to cope are also always in flux. While Lazarus and Folkman acknowledged that coping involves both deliberate and automatic cognitive processes,

they chose to focus their research on the deliberate processes, meaning individuals' conscious thoughts and actions in response to stressful situations.

Lazarus and his colleagues argued that stress is inherently perceptual due to cognitive appraisal, which is “a process through which the person evaluates whether a particular encounter with the environment is relevant to his/her well-being, and if so, in what ways” (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986, p. 992). Lazarus and Folkman's (1984) stress-coping theory, illustrated in Figure 2.1, purports that a series of cognitive appraisals mediates the immediate and long-term effects of stress on an individual. According to the theory, when a potentially stressful event occurs, triggered by personal and/or environmental causal antecedents, one's primary appraisal of that event determines what is at stake for the individual and whether the event seems benign-positive, irrelevant, or stressful. Those events that are perceived as stressful may be categorized as harm-loss (i.e., stress related to a past event), challenge (i.e., positive stress related to a future event), or threat (i.e., negative stress related to a future event) (Folkman & Lazarus, 1985).

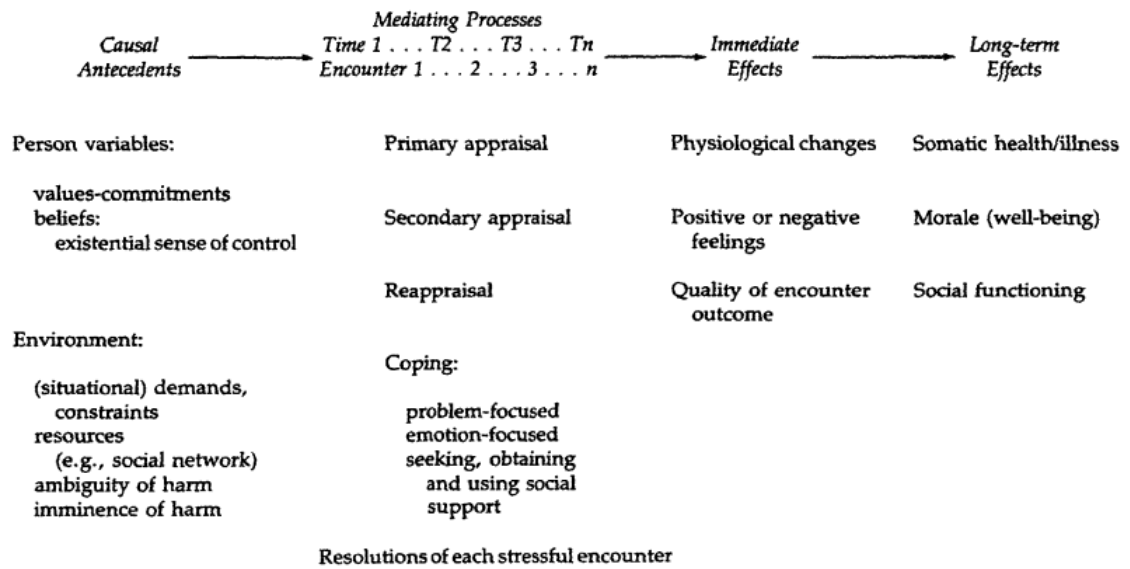


Figure 2.1. A Theoretical Schematization of Stress, Coping, and Adaptation.  
 Source: Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Pub. Co. Reprinted with permission.

The primary appraisal influences and is influenced by one's secondary appraisal, an assessment of the internal and external coping resources available, which determines perceived ability to cope. The outcomes of the primary and secondary appraisals influence choice of coping strategies. Lazarus and Folkman (1984) classified coping strategies into two major categories based on their primary functions: problem-focused and emotion-focused. They defined problem-focused, or problem-solving, strategies as those that aim to address the stressor, and emotion-focused strategies as those that aim to alleviate distress. They noted that problem-focused strategies are more adaptive in that individuals are taking action to solve the problem, but emotion-focused strategies can be useful in situations that are not amenable to change. For example, in the case of college exam stress, problem-focused coping strategies were found to be more effective before an exam when students could still change the exam outcome, while emotion-focused coping

strategies were more useful after the exam when they could no longer change the outcome and instead had to focus on managing their stress (Folkman & Lazarus, 1985).

Throughout the stressful encounter, the individual reappraises the stressfulness of the situation and the efficacy of his or her coping strategies, making adjustments as needed. Eventually, he or she achieves resolution of the situation. The immediate effects of a stressful encounter include the positive or negative feelings that the encounter triggers, which can provide important information about how successfully one feels he or she is coping:

Emotions are products of how people construe (appraise) their ongoing transactions with the environment. Emotions are thus of tremendous diagnostic value, because their intensity and quality reveal how people think they are managing what is important to them in any particular context. As a person's appraisals of a transaction change, so too will his or her emotions. (Folkman & Lazarus, 1985, p. 152)

According to Folkman and Lazarus, the more one has at stake in a situation, the more likely one is to exhibit emotions.

Over time, the byproducts of stress have the potential to harm individuals' mental and physical health. Stress-related changes in the brain have been associated with depression, anxiety, suicidal behavior, and a suppressed immune system (McEwen, 2000). Undergraduate students' perceptions of the stressfulness of college are also a risk factor for heavy drinking and drinking-related problems (Fenzel, 2005). Evidence that coping appears to mediate the effect of stress on one's health (Folkman, 2011b) hints at how important coping may be in sustaining and promoting well-being.

**Assessment of coping.** As Folkman and Moskowitz (2004) noted, there is "no gold standard for the measurement of coping" (p. 751). As of 2006, there were more than 200 different coping assessment instruments (Aldwin, 2007). One reason that coping is

difficult to measure is that it is “embedded in a complex, dynamic stress process that involves the person, the environment, and the relationship between them” (Folkman & Moskowitz, p. 748). Still, after thirty years, the field of coping research is maturing, reflected by an increase in the number and quality of studies being performed (Lazarus, 2000). Improved research designs have significantly enhanced our understanding of the variability in the coping process between individuals, across contexts, and over time.

The most commonly used coping assessment instrument is the questionnaire, and two of the earliest questionnaires developed were the Ways of Coping Questionnaire (WAYS) (Folkman & Lazarus, 1980, 1985) and the COPE Inventory (Carver, Scheier, & Weintraub, 1989). Developed in 1980 and revised in 1985, the WAYS is a 66-item questionnaire designed to measure the thoughts and actions one used to cope with a specific stressful experience. Individuals respond to statements using a Likert scale to indicate how often they used a certain problem-focused or emotion-focused coping strategy during the experience. Examples of the questionnaire items include “I got professional help,” “Found new faith,” and “Tried to forget the whole thing” (Folkman & Lazarus, 1988, p. 11). An important contribution of the WAYS is that it measures actual coping processes rather than coping dispositions or styles.

Carver, Scheier, and Weintraub (1989) and others criticized the WAYS, however, because some of the items do not load onto either the problem-focused or emotion-focused factor, suggesting that the dichotomy may oversimplify the array of coping strategies that people use. Carver and his colleagues developed the COPE Inventory (COPE) to respond to this criticism and to develop an assessment tool better grounded in theory. Their objective was to more precisely measure specific types of problem-focused

coping (active coping, planning, suppression of competing activities, restraint coping, seeking social support for instrumental reasons), emotion-focused coping (seeking social support for emotional reasons, positive reinterpretation & growth, acceptance, turning to religion) and maladaptive coping (denial, behavioral or mental disengagement) to determine the implications of each for coping effectiveness. Examples of the inventory items include “I make a plan of action,” “I look for something good in what is happening,” and “I sleep more than usual” (Carver et al., 1989, p. 272). The COPE has been used to measure both situational coping (i.e., how one has coped with a specific past or present situation) and dispositional coping (i.e., how one usually copes with stressful situations). As with any assessment instrument that depends on participant recall, however, both the WAYS and the COPE are only as accurate as the participants’ memories of their coping experiences.

In recent years, coping assessment instruments have become more sophisticated, allowing them to capture fluctuations in the coping process, according to Litt, Tennen, and Affleck (2011). They explain that near-real-time instruments, such as electronic diaries, can track coping multiple times per day, giving scholars a better understanding of the dynamic and transactional nature of this construct. Somerfield and McCrae (2000) argue that research should be more targeted and focused on identifying the most effective solutions for specific people in specific situations:

Discovering what works best for whom under what circumstances requires more conceptually and methodologically sophisticated research than has typified the field in the past. And it requires more work: New designs are likely to replace one-time, omnibus self-report questionnaires with longitudinal and daily-diary methods, with instruments specially developed and validated for use in particular contexts, with multiple ratings from observers or experts. (Somerfield & McCrae, p. 624)

They urge scholars to discontinue searching for universal coping strategies that will work for all people in all situations, because they likely do not exist.

Folkman and Lazarus (1985) have suggested that in order to effectively study coping as a process, one should: 1) assess coping in response to a specific stressful experience, 2) assess actual strategies employed rather than hypothetical ones, and 3) assess coping at multiple times throughout the stressful experience to see how it changes. Although these recommendations may present logistical challenges for researchers, they represent a more rigorous approach to strive for as the field of coping assessment continues to evolve.

**Research on coping and undergraduate students.** Research on coping in undergraduate students has revealed that students' coping strategies are an important determinant of how well they manage stressful situations and succeed in college. For instance, students who use problem-focused strategies to deal with stress, also known as active coping, have exhibited improved academic and personal/emotional adjustment to college over those who do not (Leong, Bonz, & Zachar, 1997). Struthers, Perry, and Menec (2000) found that students who used problem-focused strategies (i.e., those that aim to address the stressor) were more motivated and earned better grades than those who employed emotion-focused coping strategies (i.e., those that aim to alleviate distress). Domain-specific active coping strategies (e.g., using academic-related strategies to cope with academic stressors) seem particularly effective for promoting adjustment in that domain (Gall et al., 2000). Shields (2001) found that undergraduate students who persisted through an entire academic year were more likely to implement active coping



strategies in response to stress than students who did not persist past the first term of an academic year.

While evidence about the effectiveness of emotion-focused coping strategies is mixed, this is at least partially due to the way these strategies are measured on most coping assessment instruments. According to Stanton (2011), many of these instruments include more examples of maladaptive than adaptive emotion-focused strategies and confound adaptive emotion-focused strategies (e.g., seeking emotional social support) with maladaptive strategies (e.g., lashing out), which can lead to the interpretation that all emotion-focused strategies result in dysfunctional outcomes. This discounts how beneficial adaptive emotion-focused strategies can be when coping with stressors that cannot be changed. For example, the ability to psychologically distance oneself while reflecting on a distressing situation appears to be promote adaptive reflection as opposed to immersing oneself in one's emotions which can lead to maladaptive rumination (Ayduk & Kross, 2010).

Meaning-focused coping strategies have also shown to be effective in helping undergraduate students deal with stressful events and avoid rumination. Some scholars distinguish this category of strategies from problem-focused and emotion-focused strategies because they help individuals cope by making meaning of a difficult situation rather than by addressing the source of the problem or by alleviating distress. Bereavement studies, for instance, have shown that making sense of a loss (i.e., trying to understand why the event happened), finding benefits in the loss, and relying on faith can help undergraduate students adjust positively after a relationship ending or death of a loved one (Michael & Snyder, 2005; Stein et al., 2009). Making meaning of a traumatic

experience by disclosing it through writing also appears to be therapeutic for individuals' physical and mental health (Pennebaker, 1997).

Over time, coping with adversity can lead one to develop resilience, which is the “relative resistance to environmental risk experiences, or the overcoming of stress or adversity” (Rutter, 2007, p. 205). Resilience differs from coping in that coping represents the actual strategies that individuals use to deal with adverse events while resilience represents the ability to adapt in a healthy way to those events. Resilient people tend to maintain stability during difficult times, and if they do falter, they tend to recover more quickly. In addition to internal assets such as cognitive style, resilient people tend to have external resources such as strong social connections (Fergus & Zimmerman, 2005). The phenomenon of resilience is common in that many people exhibit it (Masten, 2001), and similar to coping strategies, resilience can be learned.

In the college context, resilience education programs are being used to help students gain knowledge and strategies to assist with the transition to college life and to support students at risk for mental health issues. The Student Curriculum on Resilience Education (LEAD Pittsburgh and 3-C Institute for Social Development, 2012), known as SCoRE, is a structured resilience education curriculum that can be taught in a variety of formats. It contains lessons for college students about self-care, goal-setting, stress management, and healthy relationships. The Penn Resilience Training for College Students (Seligman, Schulman, DeRubeis, & Hollon, 1999) is a prevention program for freshmen at risk for depression. The program utilizes techniques from cognitive therapy to teach students how to evaluate their existing thoughts, feelings, and behaviors and replace them with healthier alternatives as needed. Resilience in college students has

been associated with numerous positive outcomes including academic achievement, effective coping skills, increased protective factors, and decreased symptomatology (Reynolds & Weigand, 2010; Steinhardt & Dolbier, 2008).

Research on the use of maladaptive coping strategies by undergraduate students indicates that they can be as detrimental as adaptive coping strategies can be beneficial. Maladaptive coping strategies, which include escape-avoidance and self-blaming, have been shown to impede students' persistence to the second year of college by contributing to low first-year grade point averages (DeBerard, Spielmans, & Julka, 2004). In addition, students who use maladaptive coping strategies have exhibited poorer adjustment to college as measured by their physical health and alcohol use (Pritchard, Wilson, & Yamnitz, 2007). There is some evidence, however, that focusing one's attention away from a stressful situation can actually promote resilience. Coifman, Bonanno, Ray, and Gross (2007) found that those who use repressive coping, which involves directing one's attention away from negative emotions, have exhibited fewer health problems and better adjustment during bereavement than those who do not use repressive coping. They concluded that repressive coping may be protective, especially following traumatic events.

In the face of more powerful forces such as institutional barriers, even adaptive coping strategies may not be enough to tip the scales toward persistence. For example, Ryland, Riordan, and Brack (1994) found that coping strategies did not have a significant influence on the persistence of high-risk students early in college once contextual factors such as sociocultural barriers were factored in:

Nonpersisters may have the stress coping resources to persist, but these are less potent when pitted against more intractable social, historical, and demographic

barriers to continuing in school... Demographic and retention variables may be more valuable in contributing to successful retention in the early quarters of college, while in later quarters, stress coping skills may become more important. (p. 57)

This is further evidence that longitudinal studies that assess coping over time are needed to determine whether and how stress-related coping in college students changes as contextual factors change.

**Critique of coping research.** Important gaps remain in the coping scholarship, particularly as it relates to undergraduate student coping. In their review of the theoretical and empirical literature on coping, Folkman and Moskowitz (2004) suggested that these gaps relate to three major challenges involved with researching the phenomenon of coping: how to measure coping, what nomenclature to use to categorize coping strategies, and how to determine the effectiveness of coping. Although the authors were referring to coping research based largely on adult samples, these challenges also apply to research on undergraduate student coping.

Existing efforts to measure coping are limited by the assessment instruments and the research designs typically used. Many of the most common coping assessment instruments were empirically rather than theoretically derived, meaning that “the scales tend to be linked to theoretical principles only somewhat loosely and post hoc” (Carver et al., 1989, p. 268). The instruments tend to be self-report questionnaires that prompt individuals to indicate how they typically cope with stress or how they would anticipate coping with a hypothetical stressor by choosing from a prescribed checklist of coping strategies. This ignores the fact that coping is often situation-specific and precludes students from reporting strategies not included on the checklist as well as making

meaning of their experiences, which narrative assessment approaches encourage them to do:

A great deal can be learned by asking people to provide narratives about stressful events, including what happened, the emotions they experienced, and what they thought and did as the situation unfolded. Narrative approaches are helpful in understanding what the person is coping with, which is especially important when the stressful event is not a specific event named by the investigator, such as coping with exams. (Folkman & Moskowitz, 2004, p. 750)

Furthermore, cross-sectional research designs make it difficult to measure the effects of coping over time or track coping as it unfolds, unless students are asked to reflect on these processes retrospectively. Just as stressors are continually changing, “coping changes moment to moment or day to day depending on the situational determinants and the coping processes that have occurred before” (Litt et al., 2011, p. 387). Theoretically, as individuals have more life experiences and develop more self-authorship, they should become better equipped to place stressful events in perspective and select effective coping strategies (Aldwin, 2007). More multi-year longitudinal studies, such as those from Aspinwall and Taylor (1992), DeBerard, Spielmans, and Julka (2004), and Lo (2002), are needed to deepen understanding about the dynamic nature of coping.

A second major gap in stress-related coping research is the lack of a common nomenclature to define coping strategies. Many different schemes have been developed, each with its own terminology and system for classifying strategies. There is even lack of agreement about how to define commonly used terms such as *problem-focused* and *emotion-focused* strategies, which makes it difficult to compare findings across studies. Many of the existing classification schemes emerged from studies on adults (e.g., Folkman et al., 1986), and thus their applicability to undergraduate students is unknown. Furthermore, most of these schemes were developed by Euro-American scholars who

conceptualized coping from a Western perspective, placing value on individualistic constructs such as self-efficacy and internal locus of control over collectivistic constructs such as relying on social support from the community (Wong, Wong, & Scott, 2006). More cross-cultural psychological studies on stress-related coping are needed to “narrow the gap between theory and application, and make research more relevant to the everyday struggles of individuals in different cultural contexts” (Wong et al., p. 6). In particular, research from multicultural perspectives would shed light on aspects of coping that are universal and others that are culture-specific.

A third perplexing issue in coping research involves how to assess the effectiveness of coping strategies. There is debate about who should assess the effectiveness of coping, an observer or the person implementing the coping strategies (Folkman & Moskowitz, 2004). In addition, some studies frame successful coping as progress toward a specified outcome, while others frame it as goodness of fit between the situation and the coping strategies employed. The undergraduate student coping literature tends to measure the effectiveness of coping using academic outcomes, such as adjustment to college, grade point average, and persistence. Fewer studies have measured the success of coping using emotional outcome variables, such as having a sense of well-being. Given the relationship between emotional health and college success outcomes outlined earlier, this is a concerning omission.

The theory and research just presented suggests that undergraduate students face a distinct set of stressors in the college environment, and the way they choose to cope with those stressors can be critically important to their personal well-being and academic success. It remains a mystery, however, how the stress-related coping process unfolds for

students and whether coping changes due to factors such as self-authorship level. The next section will introduce self-authorship theory and research and their significance to a study of coping in undergraduate students.

### **Self-Authorship**

Meaning-making theory broadly focuses on the cognitive structures underlying how people think. These structures serve as interpretive filters through which individuals understand the world. According to the constructive-developmental approach to cognitive development, meaning making evolves over time according to these three major principles:

- (a) individuals actively construct and organize their interpretations of experience;
- (b) there are discernable age-related patterns in the ways individuals organize their thinking; and
- (c) development occurs in context, in interaction with one's environment, and thus is highly variable from individual to individual. (King, 2009, p. 599)

Although there are many approaches to studying meaning making, the theory of self-evolution including the concept of self-authorship are particularly relevant to a study about coping in undergraduate students.

Self-evolution theory (Kegan, 1994), which will be described in depth in the next section, rests on the premise that meaning making evolves over the course of one's lifetime. This developmental journey has been described as a gradual transformation from externally-defined to internally-defined meaning making, the latter of which is also known as self-authorship. Self-authorship is the "ability to internally coordinate external influence in the process of defining one's beliefs, identity, and social relations" (Baxter Magolda & King, 2012, p. vii). Self-authorship is not a state of self-centeredness, but rather a state of balance between agency and communion (Baxter Magolda & Crosby,

2011); self-authored individuals understand the importance of weighing multiple perspectives. Fostering self-authorship development in undergraduate students is critical because it may serve as the foundation for college learning outcomes that require cognitive, intrapersonal, and interpersonal maturity (Baxter Magolda, 2004b). According to Robert Kegan (1994), originator of the concept of self-authorship within his broader theory of self-evolution, successfully managing the mental demands of modern life requires that individuals develop the capacities associated with self-authorship so that they can navigate complex situations at work, at home, and throughout the rest of their lives.

**Self-authorship theory.** Piaget's (1950, 1964) groundbreaking research on how cognitive structures or schemas develop in children inspired similar lines of research on cognitive development in college students and adults. Piaget found that when children encountered an idea that conflicted with the way they understood the world, they experienced cognitive disequilibrium or dissonance. To regain equilibrium, they first attempted to assimilate the idea into their existing cognitive structures. If this was unsuccessful, they accommodated these structures to create a revised conception of the world so that the new idea fit. Mezirow's (1997) exploration of how cognitive structures evolve in adults focused on the concept of *transformative learning*, which he defined as changing our frames of reference through "critical reflection on the assumptions upon which our interpretations, beliefs, and habits of mind or points of view are based" (p. 7). He viewed transformative learning as a key component of the process by which adults become independent thinkers and responsible citizens.



Inspired by Piaget and Mezirow, Kegan (1982, 1994, 2000) chose to study the transformation of adults' consciousness as they become aware of aspects of themselves and their environments of which they were previously unaware. His theory of self-evolution proposed a series of five increasingly complex orders of consciousness, later renamed forms of mind, through which people progress as they reconstruct their relationship with their environment: Impulsive Mind, Instrumental Mind, Socialized Mind, Self-Authored Mind, and Self-Transforming Mind. Development from one form of mind to the next is achieved by taking what was *subject* (i.e., not in one's consciousness so one was subject to it) and making it *object* (i.e., in one's consciousness so one can reflect on it and hold it as object). For example, in the third form of mind known as Socialized Mind, one is subject to relationships, meaning that one's identity is closely aligned with the social environment and meaning making is dictated by others' opinions. Once one is able to distinguish identity from relationships and reflect on the social environment as object, one's approach is characteristic of the fourth form of mind known as Self-Authored Mind. In this form, one develops an internal voice to evaluate external opinions and guide meaning making. Kegan's first two forms, Impulsive and Instrumental Mind, characterize the consciousness of children who are driven by impulses and by their own needs. His third form, Socialized Mind, characterizes the consciousness of many young adults, including many undergraduate students. His fourth and fifth forms, Self-Authored and Self-Transforming Minds, do not typically emerge until adulthood if at all.

Baxter Magolda (2001) was intrigued by Kegan's concept of the Self-Authored Mind and launched her own line of research to explore the developmental journey toward

self-authorship. Based on her 25-year longitudinal study tracking the self-authorship development of a group of individuals from their college years into their forties, she identified four phases in the developmental journey, each with interrelated cognitive, intrapersonal, and interpersonal dimensions: *following formulas*, *crossroads*, *becoming self-authored*, and *building an internal foundation*. Individuals in the *following formulas* phase relied primarily on others to define their knowledge, identities, and relationships for them, until they realized the limitations of doing so: “Recognizing the shortcomings of external formulas, whether about career directions, relationships, faith systems, racial or ethnic identity, or sexual orientation, led participants in these studies to enter a crossroads where their internal voices began to emerge” (Baxter Magolda, 2009a, p. 629). Individuals in the *crossroads* phase began to use their internal voices to make meaning in some situations but still relied on following external formulas in other situations, which led them to feel conflicted. Once individuals realized the shortcomings of not consistently listening to their internal voice, this triggered movement toward the *self-authorship* phase. Self-authored individuals are able to “integrate multiple perspectives and make informed judgments” (Baxter Magolda, 2005, p. 93). Finally, in the *building an internal foundation* phase, individuals intentionally create a self-authored framework through which to interpret their experiences and as a result, exhibit higher tolerance for ambiguity and greater interdependence in relationships.

Taylor’s (2008) depiction of the developmental journey toward self-authorship is shown in Figure 2.2. Taylor integrated Baxter Magolda’s (2001) four phases of self-authorship development with Renn and Arnold’s (2003) social-ecological model of college student development to conceptualize how the person-environment relationship

changes as individuals become more self-authored. Similar to Hochman and Kernan's (2010) social-ecological model of college student stress presented in Figure 1.2, multiple levels of individual and environmental factors interact with one another to impact students' meaning making. In Taylor's model, cognitive dissonance and individual and environmental factors have the potential to stimulate development, regression, or stagnation, as indicated by the forward arrows, backward arrows, and stop signs, respectively. As one's internal voice gets stronger, one "gradually gains the developmental capacities necessary to reflect on, critique, and reshape his or her social context" (p. 229). Taylor illustrated this transformation by showing the circles representing environmental factors fading into the background as the image of the individual grows bolder with increasing self-authorship.

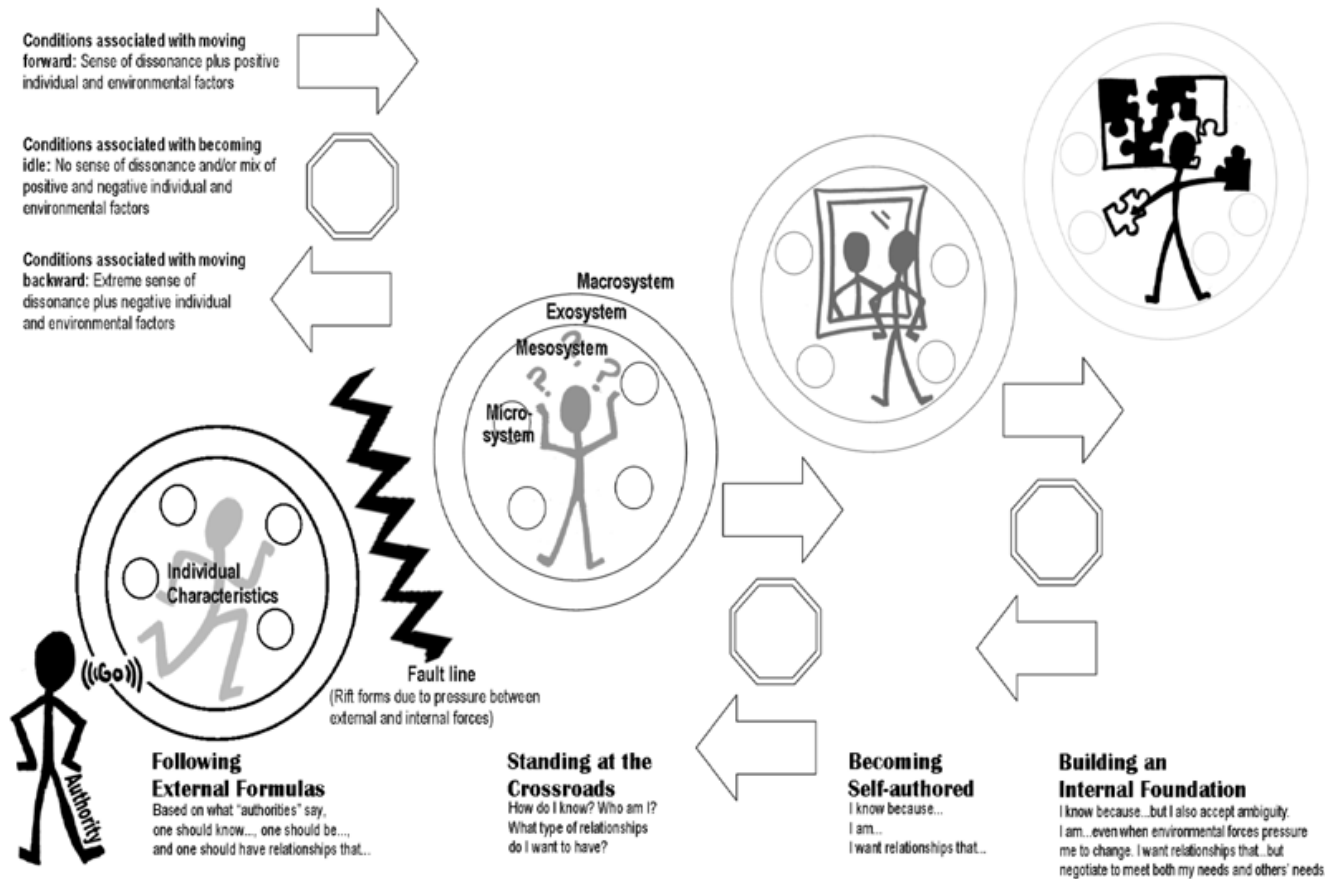


Figure 2.2. A Young Adult's Meaning-Making Developmental Journey.

*Source:* Taylor, K. B. (2008). Mapping the intricacies of young adults' developmental journey from socially prescribed to internally defined identities, relationships, and beliefs. *Journal of College Student Development*, 49(3), 215-234. Reprinted with permission from the American College Personnel Association (ACPA), One Dupont Circle, NW at the Center for Higher Education, Washington, DC 20036.

**Assessment of self-authorship.** Semi-structured interviews have been the primary tool used to assess self-authorship, although a few quantitative measures have also been created. This section will present an overview of the most common instruments used and how each contributes to the measurement of self-authorship.

Kegan and his colleagues developed the Subject-Object Interview (SOI) (Lahey, Souvaine, Kegan, Goodman, & Felix, 1988), one of the first assessment tools created to measure how individuals constructed their sense of self. The SOI had two distinct features that set it apart from other instruments. The first feature was the use of emotional prompts to cue participants to reveal how they were making meaning of a current difficult situation in their lives. For example, a participant might choose a card with the word “anger” on it and then share a story about a current conflict he or she was having with a partner. Participants were permitted to choose the content of the interview conversation because the researchers were more interested in their thought process than the content of their thoughts. The second feature of the SOI worth noting was that researchers gave each participant a single score representing a holistic assessment of his or her meaning making during that particular interview. The researchers determined this score by asking questions as a participant described a difficult situation to identify the boundaries or outer limits of their assumptions. Thus, the score reflected the researchers’ assessments of the participant’s subject-object balance at that point in time.

Baxter Magolda (2001) developed the Self-Authorship Interview for use in her longitudinal study. This interview was constructed to be conversational in nature and promote a learning partnership between the researcher and participant. The researcher (Baxter Magolda) would prompt participants to give an overview of their significant

experiences from the past year and how those experiences affected them. Just as with the SOI, participants were permitted to choose the context of the interview, and then the researcher would use probe questions to encourage participants to reflect on and articulate their meaning making. Given that Baxter Magolda's study spanned more than two decades and that she conducted all of the interviews herself, she was able to establish a strong rapport with her participants, which led to interviews rich in meaning making about the triumphs and tribulations of their lives.

As Baxter Magolda and King (2007) noted in their summary of interview strategies for assessing self-authorship, the Wabash National Study for Liberal Arts Education (WNS) Interview represented an opportunity to test whether a modified version of the Self-Authorship Interview would be useful to study self-authorship development in a diverse sample of undergraduate students from a diverse group of institutions using a team of trained interviewers rather than a single researcher. The objective of the WNS annual interviews was to assess students' self-authorship development, overall and in the cognitive, intrapersonal, and interpersonal dimensions of meaning making, as well as how that development related to students' growth along seven liberal arts learning outcomes. Analysis of these interviews (Baxter Magolda, King, Taylor, & Perez, 2008; King, Baxter Magolda, Perez, & Taylor, 2009) revealed ten distinct positions within three major self-authorship levels<sup>1</sup>; this is illustrated by the continuum in Figure 2.3. Students in the *external* level (i.e., positions Ea, Eb, and Ec) trusted external authorities to define their beliefs, identities, and relationships. Students

---

<sup>1</sup> I chose to use the term "self-authorship level" throughout this paper as opposed to "meaning-making structure" which is used elsewhere in the self-authorship literature (e.g., Baxter Magolda & King, 2012) in order to avoid confusion with the concept of meaning-focused coping.

in the *crossroads* level (i.e., positions E(I), E-I, I-E, and I(E)) had begun to move away from relying on external sources and toward constructing an internal voice. These students often felt torn between adhering to the opinions of others and listening to their own opinions. Finally, students in the *internal* level (i.e., positions Ia, Ib, Ic) consistently trusted their internal voices to guide decision-making and filter contextual influences.

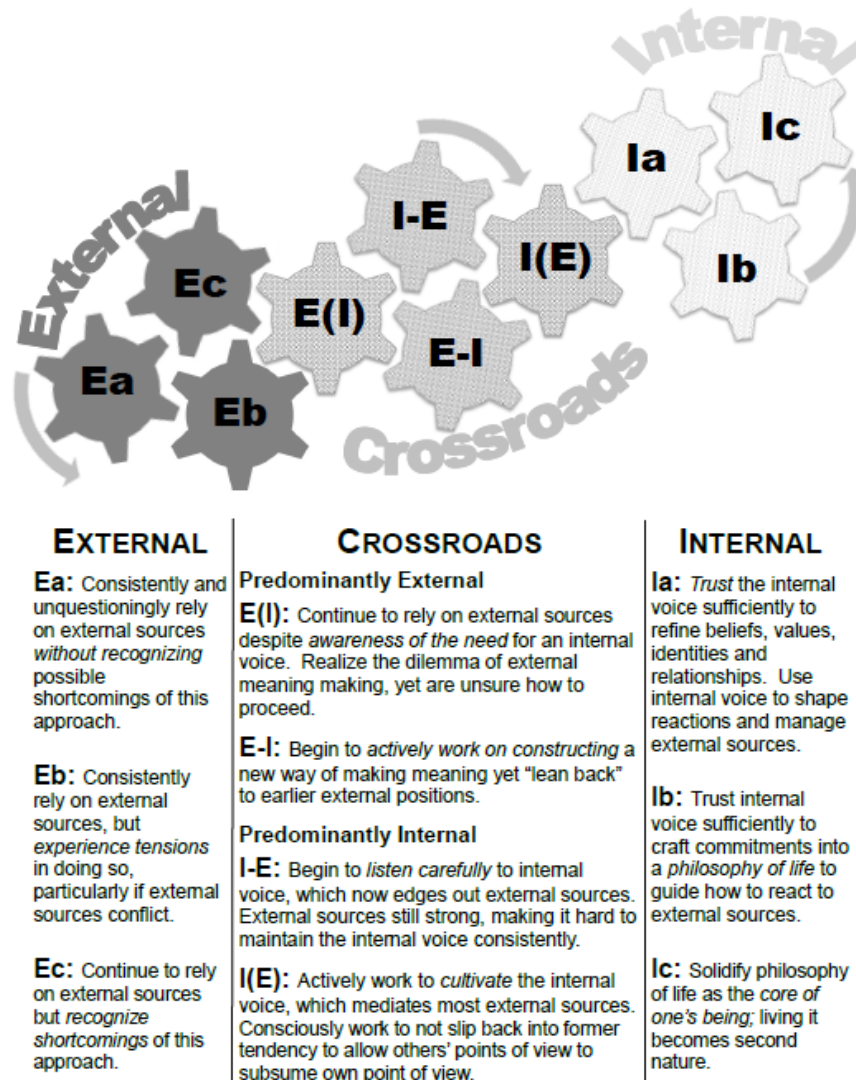


Figure 2.3. Journey Toward Self-Authorship.

Source: Baxter Magolda, M. B., King, P. M., Taylor, K. B., & Wakefield, K. M. (2012). Decreasing authority dependence during the first year of college. *Journal of College Student Development*, 53(3), 418-435. Reprinted with permission from the American College Personnel Association (ACPA), One Dupont Circle, NW at the Center for Higher Education, Washington, DC 20036.

Several scholars have crafted quantitative survey instruments in an attempt to measure self-authorship, and these have met with mixed results. As Creamer and Wakefield (2010) explained, “the central challenge is to design survey questions that capture underlying reasoning accurately and that measure the range of expressions of this complex construct” (p. 40). Creamer, Baxter Magolda, and Yue (2010) assessed self-authorship using 18 questions on the Career Decision Making Survey, which asked students to indicate their level of agreement with statements that reflected several different self-authorship levels. Their findings suggested a causal relationship between self-authorship level and how students made their career decisions. Students in the *external* level tended to uncritically accept the career advice of family members or peers while those with in the *internal* level weighed multiple perspectives, scrutinized the credibility of those offering career advice, and considered nontraditional career options. Pizzolato (2007, 2010) developed the Self-Authorship Survey, a questionnaire to elicit information about students’ beliefs and actions related to self-authorship, to be administered with the Experience Survey, a short essay asking students to describe a time when they made an important decision. Her analysis revealed that students’ responses to the two components of her instrument were only moderately correlated, suggesting that students’ reasoning and behavior may not always align, particularly in the face of environmental constraints.

The assessment of self-authorship continues to be a subject of discussion and debate among higher education scholars as they strive to identify effective, efficient strategies for measuring the construct. Those strategies developed to date have been used



in a growing body of research related to self-authorship in undergraduate students, which is described in the next section.

**Research on self-authorship and undergraduate students.** Existing research on self-authorship in undergraduate students reveals important patterns related to how self-authorship evolves, how culture shapes self-authorship, how the three dimensions of self-authorship are related, and how to structure learning environments to promote self-authorship. This section will highlight key findings in each of these four areas.

Research regarding the evolution of self-authorship has provided insights about how one's self-authorship transforms over the lifespan and what mechanisms affect the pace of change. The gradual development of meaning making from simple to complex is marked by periods of differentiation and integration. The periods of integration are typically referred to as phases of development defined by relatively stable cognitive structures (e.g., Kegan's (1994) five forms of mind, Baxter Magolda's (2001) four phases on the journey toward self-authorship). Progression through these phases appears to be helical or circular as opposed to linear (Baxter Magolda & King, 2012). Individuals can occupy different self-authorship levels across different situations as well as across the cognitive, intrapersonal, and interpersonal dimensions. When an experience provokes cognitive dissonance for an individual, it may trigger self-authorship development, regression, or stagnation depending on individual and environmental factors, as Taylor (2008) depicted in Figure 2.2. Kegan (1994) and Baxter Magolda (2001) both found that many individuals do not achieve the advanced levels of self-authorship until adulthood, if ever. Most students enter college in the *external* level and then slowly develop internal voices when the academic and social demands of the college environment require them to

do so (Baxter Magolda, 2001; Baxter Magolda, King, Taylor, & Wakefield, 2012). This pattern has also emerged in studies focused specifically on cognitive development (Baxter Magolda, 1992; Belenky, Clinchy, Goldberger, & Tarule, 1986; King & Kitchener, 1994) and moral development (King & Mayhew, 2002). Notably, a few studies have detected emerging self-authorship in students during and even prior to college (Abes & Jones, 2004; Pizzolato, 2003; Torres & Hernandez, 2007), and these have largely been the result of marginalizing experiences that forced students to confront discrepancies between others' perceptions of them and their views of themselves.

The influence of culture on self-authorship has been explored in a second strand of research focused on traditionally marginalized populations. Findings suggest that these cultural variables have the potential to promote or hinder self-authorship development. In her studies on Latina/o undergraduate students, Torres (Torres & Hernandez, 2007) noted that these students had "distinct issues resulting from their Latino/a identity, culture, and experiences" (p. 571) that provoked cognitive dissonance and for some, self-authorship development. For example, students had to learn how to recognize racism (a cognitive task), how to manage the effect of stereotypes on their self-perception (an intrapersonal task), and how to renegotiate relationships to honor their cultural values while respecting others' values (an interpersonal task), each of which demanded self-authored meaning making. Abes and Jones (2004; Abes, Jones, & McEwen, 2007) also noticed that the lesbian students in their studies developed more advanced self-authorship due to coping with discrimination and reflecting on their sexual identity. Marginalizing experiences have the potential to trigger self-authorship regression as well. In Pizzolato's (2004) study of 27 academically high-risk students,

most of whom were underrepresented minorities, she observed that although these students exhibited self-authorship upon entry to college, due to overcoming marginalizing experiences in high school, they reverted back to external meaning making once confronted with a hostile college environment. Those students who were able to employ problem-focused coping strategies to deal with environmental stressors eventually returned to using self-authored meaning making. She noted that students' actions did not always align with their self-authored reasoning, particularly in threatening situations when they did not feel safe revealing their authentic selves (Pizzolato, 2007).

A third strand of research has focused on the relationships across the cognitive, intrapersonal, and interpersonal dimensions of self-authorship. King (2010) asked whether or not the cognitive dimension should be considered the “strong partner” among the three dimensions. On the one hand, she speculated that it is possible that self-authorship development in the cognitive dimension may drive development in the other two dimensions, given that meaning making is inherently a cognitive concept. On the other hand, she also noted that several scholars have found evidence that the three dimensions are equally important and highly intertwined (Abes et al., 2007; Baxter Magolda, 2001; Torres & Baxter Magolda, 2004; Torres & Hernandez, 2007). In a study of racist attitudes in college students, for instance, Torres (2009) discovered that while both racially privileged and racially oppressed students initially relied on the cognitive dimension to help them recognize and reinterpret racist attitudes, racially privileged students turned to the interpersonal dimension next to test out their new interpretations in relationships whereas racially oppressed students turned to the intrapersonal dimension to determine how their new interpretations would influence their sense of self. King and

Baxter Magolda (2005) proposed that effective intercultural skills require maturity in all three dimensions, including “complex understanding of cultural differences (cognitive dimension), capacity to accept and not feel threatened by cultural differences (intrapersonal dimension), and capacity to function interdependently with diverse others (interpersonal dimension)” (p. 574).

Structuring learning environments to promote self-authorship development has been the focus of a fourth strand of research. The Learning Partnerships Model (LPM), developed by Baxter Magolda (2004a), proposes that educators can promote self-authorship development in students by providing adequate challenge and support. According to the LPM, educators should challenge students by: 1) portraying knowledge as complex and socially constructed, 2) conveying that self is central to knowledge construction, and 3) creating environments where expertise is shared in the mutual constructions of knowledge among peers. Educators should also support students by: 1) validating learners’ capacity to know, 2) situating learning in the learners’ experience, and 3) mutually constructing meaning. In their book reviewing how the LPM has been applied in practice, Baxter Magolda and King (2004) showed how learning partnerships were used to promote self-authorship in various educational contexts. Learning partnerships fostered students’ identities as scholars capable of producing knowledge in a writing curriculum (Haynes, 2004), as informed citizens forming their own opinions about the people and places they visited during internships (Egart & Healy, 2004), and as community members balancing their own and others’ needs to construct community standards in residence life settings (Piper & Buckley, 2004). The unifying thread throughout these experiences was that students learned to “internally define their belief

systems and identities in ways that helped them organize and make decisions about how they would engage in mutual relations with others in the larger world” (King & Baxter Magolda, 2004, p. 305).

Kegan (1994) used the term *evolutionary bridge* to describe the concept of designing educational environments to foster students’ self-authorship development. The idea is to tailor learning opportunities such that they meet students at their current self-authorship level and trigger development toward a more complex level. In one study of institutional themes using qualitative data from the WNS pilot study, King, Baxter Magolda, Barber, Kendall Brown, and Lindsay (2009) noted that students’ self-authorship development was promoted by collegiate experiences that increased their openness to diversity, increased their sense of responsibility for their own learning, required them to establish a basis for their beliefs, and helped them develop a sense of identity to guide their choices. In addition, there is evidence that when educators expect students to formulate their own opinions and contribute constructively to a team effort, such as a research project, they can motivate students to develop an internal voice (Barber, King, & Baxter Magolda, 2012). In the context of academic advising, Pizzolato (2006) found that “student decision-making and self-authoring abilities were enhanced by advising sessions that focused explicitly on goal reflection and associated volitional planning” (p. 32) and allowed students to discuss non-academic as well as academic topics.

**Critique of self-authorship research.** Given that self-authorship is a relatively new concept in student development theory, research on the topic is somewhat limited in

its breadth and depth. This section will highlight the limitations of the studies performed to date, particularly as they relate to undergraduate students.

One shortcoming of the existing research on self-authorship development is that it has been limited by the data collection and analysis methods currently available.

Longitudinal, semi-structured interviews, which have proven effective for eliciting details about how students' self-authorship varies across contexts and over time (Abes & Jones, 2004; Abes et al., 2007; Baxter Magolda, 1992, 2001, 2009b; Torres & Baxter Magolda, 2004; Torres & Hernandez, 2007), require a larger investment of time and funding than other forms of data collection, making them prohibitive for scholars with fewer resources. Furthermore, data analysis can be hindered by the fact that self-authorship development is difficult to identify and measure given its complexity. When interpreting the words of undergraduate students, for example, it can be challenging to decipher the content of their thoughts from the structure of their thinking (Baxter Magolda & King, 2012).

Researchers need sufficient time, resources, and training to be able to execute data analysis effectively: "The [grounded theory] process of interpretation...is labor intensive and highly subjective despite the systematic process through which multiple researchers unitize, code, and categorize data" (Baxter Magolda & King, 2007, p. 505). For these reasons, the group of scholars conducting research on self-authorship remains small at this time.

A second critique of self-authorship theory and research is that the foundational studies have largely involved White participants from Western cultures. In recent years, scholars have begun to conduct studies of self-authorship in other cultures (Torres & Baxter Magolda, 2004; Torres & Hernandez, 2007) and to consider whether self-

authorship should be the goal of cognitive development in cultures that value interdependence over autonomy. For example, Pizzolato, Nguyen, and Chaudhari (2008) noted that in many Asian cultures, individuals are socialized toward “culturally agreed-upon ways of being and knowing [such that] the self is always in relationship to others” (p. 192) and that as a result, meaning-making pathways may look different, and the interpersonal and intrapersonal dimensions may be highly intertwined. In a videoconference with other self-authorship scholars, Kegan proposed that there may be multiple ways of being self-authored with varying degrees of emphasis on connectedness versus separateness (Baxter Magolda, 2010). These studies illustrate the importance of continuing to evaluate the relevance of self-authorship for those in non-Western cultures and learn about how self-authorship development varies across cultural contexts.

### **Relationship between Coping and Self-Authorship**

When one compares the constructs of coping and self-authorship, several similarities become clear. Both are cognitively driven and situational in nature, influenced by characteristics of the individual and the environment. Both evolve over the course of a lifetime as individuals mature and accumulate life experiences. Yet there is an important distinction between these constructs. In the context of a stressful situation, self-authorship refers to the lens through which individuals interpret the situation, while coping refers to the thoughts and behaviors individuals use to manage the situation.

The influence of meaning making on coping has been explored to a small extent in the existing mental health research. For example, Wilson and Gilbert (2008) developed a model of affective adaptation based on evidence that making meaning of the causes and consequences of an emotional event can reduce the significance of it and

speed recovery. In addition, Park developed a meaning-making model of adjustment to stressful events based on her extensive review of relevant literature and Park and Folkman's (1997) model of global and situational meaning; this model will be described in depth below.

To my knowledge, however, mental health studies of coping have not taken into account the fact that self-authorship levels vary across individuals, which we know from the higher education research presented earlier in this chapter. This means that the cognitive structures through which people interpret stressful events are different, and this has the potential to influence which coping strategies they choose (i.e., the content of coping) and how they apply those strategies (i.e., the process of coping). Explicating the potential contribution of the concept of self-authorship to coping research was one of my key motivations to undertake this study.

**Park's meaning-making model of adjustment to stressful events.** Before I describe my own conceptualization of how the constructs of coping and self-authorship may be related, I wish to introduce Park's (2010) integrative model of meaning making in the context of stressful life events for comparison shown in Figure 2.4. According to Park, when individuals experience a potentially stressful situation, they cognitively appraise the situation and assign meaning to it, which she terms *situational meaning*. Individuals then compare this situational meaning to their global meaning, which refers to their "general orienting systems, consisting of beliefs, goals, and subjective feelings...[that] form the core schemas through which people interpret their experiences of the world" (Park, 2011, p. 258).



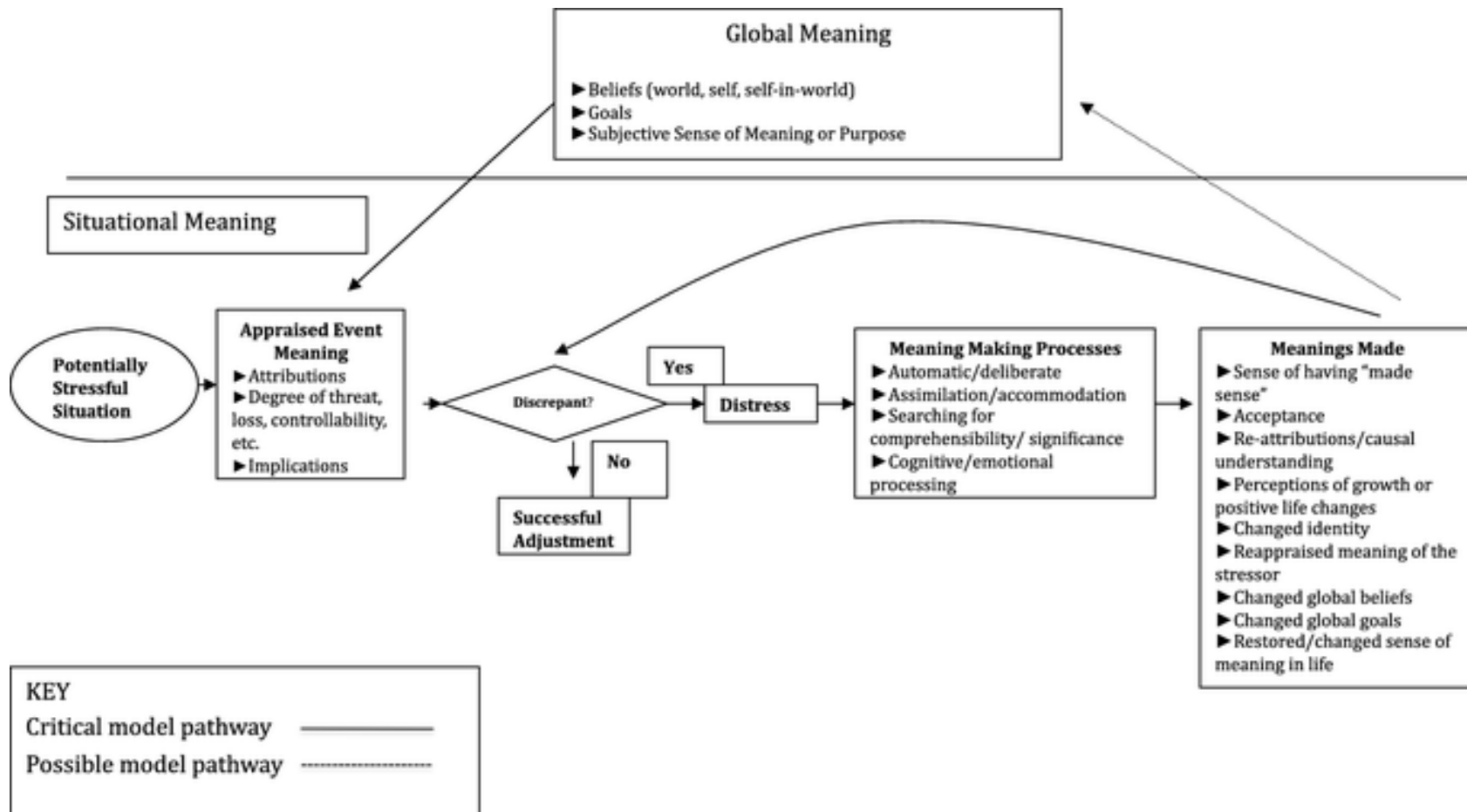


Figure 2.4. A Meaning-Making Model of Adjustment to Stressful Life Events.

Source: Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin*, 136(2), 257-301. Reprinted with permission.

If individuals do not perceive a discrepancy between situational and global meaning, they adjust successfully to the situation. However, if they do perceive a discrepancy, this causes distress which then triggers meaning-making coping processes:

Meaning-focused coping aims to reduce discrepancy by changing either the very meaning of the stressor itself (situational meaning) or by changing one's global beliefs and goals (global meaning); either way, the goal of the coping is to improve the fit between the appraised meaning of the stressor and global meaning. (Park, 2011, p. 230)

The outcomes of meaning-focused coping, which Park terms *meanings made*, can include a sense of having “made sense” of the situation, acceptance, perceptions of growth, and reappraised situational meaning. In some instances, meanings made also promote change in individuals' global meanings, which is depicted as a possible model pathway indicated by the dotted arrow. When the accommodation in one's global meaning is positive, this is known as stress-related or posttraumatic growth (Joseph & Linley, 2005).

**My conceptualization of the coping process.** Park's (2010) model inspired me to develop my own model to describe the cognitive processes underlying coping in undergraduate students, based on my review of the literature presented throughout this chapter. My objective in creating the model, shown in Figure 2.5, was to integrate the coping and self-authorship theory and research and offer one possibility about how these constructs may be related. This model is not intended to serve as a conceptual framework for this study, although I will be exploring a few of the constructs depicted in the model.

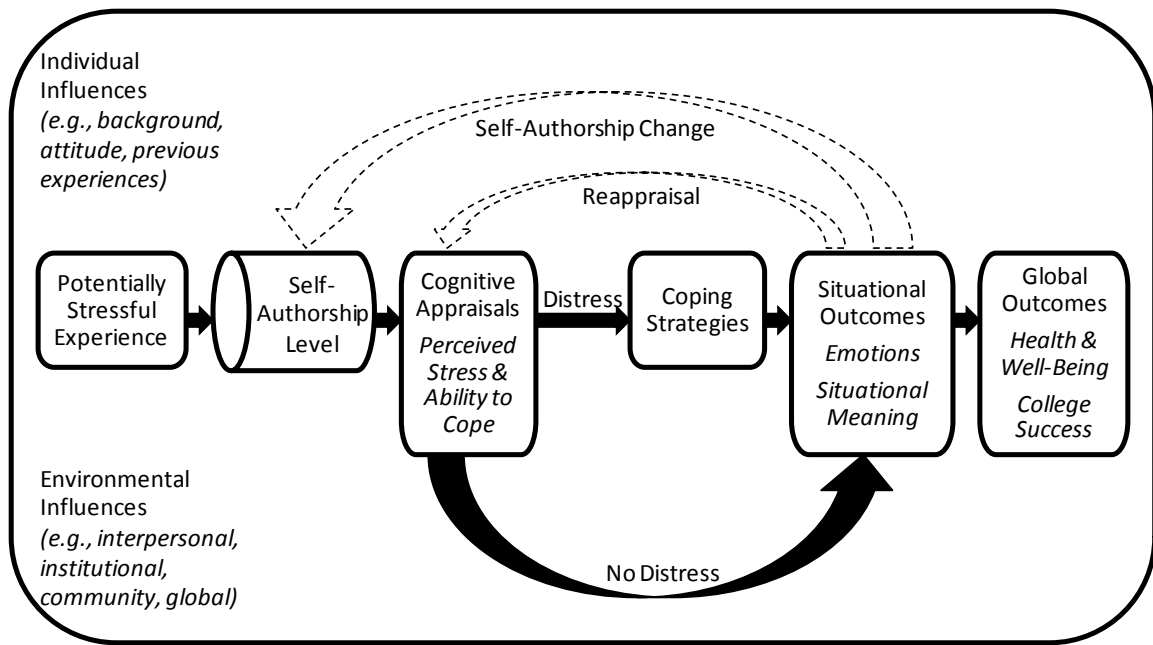


Figure 2.5. Conceptualization of the Cognitive Processes Underlying Coping in Undergraduate Students

Starting on the left side of the model, the construct labeled *potentially stressful experience* refers to any event that a student may perceive as stressful. Just as Park (2010) did in her model, I included the word “potentially” because stress is “generally understood as perceptual” (Rice, Vergara, & Aldea, 2006, p. 470). Whether one deems an experience as stressful depends on one’s appraisal of its relevance to well-being and its potential to tax coping resources (Folkman & Lazarus, 1985). As described earlier, potentially stressful experiences can vary substantially in their intensity and duration (Aldwin, 2007) as well as their source (Hochman & Kernan, 2010). In this model, I propose that a potentially stressful experience is filtered through the lens of a student’s *self-authorship level*, which is the extent to which one internally defines one’s beliefs, identities, and relationships. This is based on Abes, Jones, and McEwen’s (2007) findings that self-authorship level serves as an interpretive filter through which

individuals perceive their experiences and themselves, and those who are more self-authored are better equipped to filter contextual influences.

The results of this filtering process are a student's *cognitive appraisals* of the stressfulness of the situation and his or her ability to cope (Folkman & Lazarus, 1985). A student who appraises the situation as non-threatening will not experience distress and thus will adjust without having to implement any coping strategies (Park, 2010). A student who appraises the situation as threatening to his or her well-being, however, will experience distress and will implement one or more *coping strategies* in an attempt to resolve the situation. As mentioned earlier, coping strategies may be adaptive or maladaptive thoughts or behaviors aimed at managing the demands of the situation (Folkman & Lazarus, 1985). These strategies may be intended to address the stressor itself (i.e., problem-focused), alter the meaning of the stressor (i.e., meaning-focused), or alleviate distress in the event that the stressor cannot be changed (i.e., emotion-focused).

The success of a student's coping strategies then impacts their short-term or *situational outcomes*. These outcomes may include a student's emotions (Folkman & Lazarus, 1985) as well as the meaning he or she makes of the situation (Park, 2010). Situational outcomes have the potential to trigger two different feedback loops indicated by the dotted arrows in Figure 2.5. The arrows are dotted to denote that while these paths are possible, they will not occur in every situation. The arrow labeled *reappraisal* refers to the possibility that situational outcomes may motivate a student to reappraise the situation to determine how threatening the situation seems after having implemented coping strategies (Lazarus & Folkman, 1984). The arrow labeled *self-authorship change* refers to the possibility that the outcomes of coping will motivate a student to

accommodate their meaning making, either in the direction of growth or regression (Park, 2010). Although growth is an intrinsic human value, Joseph and Linley (2005) noted that because cognitive structures are quite stable, people are more likely to assimilate information into their existing meaning-making structures rather than adapt those structures. In order for an experience to trigger development, one must feel sufficiently challenged such that accommodating one's current meaning making seems necessary and sufficiently supported such that one believes he or she has the internal and external resources necessary to make the change.

The outcomes of a specific stressful situation can influence long-term or *global outcomes*, including a student's well-being, mental and physical health (Fenzel, 2005; McEwen, 2000), and college success outcomes including adjustment, persistence, and academic performance (Bray et al., 1999; Howell, 2009; Schreiner, 2010; Stoeber, 2002). Each step of the model may be shaped by individual and environmental influences, represented by the border surrounding the pathway in Figure 2.5. *Individual influences* such as a student's background and attitudes (Hochman & Kernan, 2010) and previous coping experiences (Aldwin, 2011) can trigger or buffer a student from stress. Similarly, *environmental influences* such as a student's interpersonal relationships, institutional climate, and community and global forces can facilitate or inhibit his or her ability to cope with stress (Hochman & Kernan). For example, if a student experiences a potentially stressful marginalizing experience but has strong social support, he or she may not feel distressed and may not need to implement coping strategies (Pizzolato, 2004). On the other hand, as mentioned earlier, highly hostile environments can be

difficult for students to overcome even with support and adaptive coping strategies (Ryland et al., 1994).

There are several important distinctions between Park's (2010) model and my own. First, although Park's definition of global meaning is very similar to Kegan's (1994) definition of self-authorship which I have used throughout this paper, they are not identical. Park defines global meaning as "orienting systems...that provide [individuals] with cognitive frameworks with which to interpret their experiences and with motivation" (p. 257). In her model, global meaning is comprised of one's beliefs, goals, and a sense of purpose. Kegan's definition of self-authorship, however, extends beyond the cognitive dimension to include how one thinks and feels about his or her identities and relationships. Second, the majority of the studies Park reviewed involved adult participants, as opposed to college students, and trauma-related stressors (e.g., cancer diagnosis), as opposed to a range of types of stressors. Third, Park did not address how individual and environmental factors, such as cultural differences, have the potential to influence the steps in her model as I have in my model. Finally, the coping strategies in Park's model are limited to meaning-focused strategies while I included other types of strategies, including problem-focused and emotion-focused types.

In her integrative review of the literature on meaning making and stressful events, Park (2010) conceded that theory has outpaced research on this topic, and as such, more empirical evidence is needed to test her assumptions about the relationships between the constructs depicted in her model. The same is true about my assumptions of the relationships depicted in the conceptual model in Figure 2.5. Although my conceptualization is grounded in two robust bodies of research, one on coping and

another on self-authorship in undergraduate students, studies integrating coping and self-authorship are scant. More research is needed to test whether and how coping changes with self-authorship development in this population.

### **Summary**

Up until now, scholarship on the relationship between coping and self-authorship has been scant, largely because coping tends to fall under the domain of psychology and medicine research while self-authorship tends to fall under the domain of higher education research. Given that coping and meaning making are both cognitively-driven processes, it stands to reason that they may be related. Self-authorship level may influence not only which strategies undergraduate students elect to cope with stressful events but also how they apply those strategies. In addition, most of the coping studies performed to date have not focused specifically on college students; thus, we lack a solid understanding of the types of stressful experiences and coping strategies commonly reported by this population. The research design for this study will address these gaps by focusing on the intersection of self-authorship and stress-related coping in undergraduate students across multiple years of college. My objective is to conceptualize the cognitive processes underlying the coping process in undergraduate students, including how students perceive stressful events and how those perceptions shape their coping strategies. I will also consider the relationships between students' choice of coping strategies and the context of the stressful experience, their previous coping experience, and their self-authorship levels.

### **CHAPTER III: METHODS**

The previous two chapters outlined the need for further research on stress-related coping in undergraduate students, particularly regarding learning more about how students perceive stressful events and the relationship between their perceptions and coping strategies. This chapter will present the methods used in this study including descriptions of the data source, analytic sample, and analytic approach.

The primary objective of this study is to examine the stress-related coping process in undergraduate students, including the types of stressors and coping strategies students report and how context, students' prior experience, and self-authorship level shape their coping strategies. This topic has important implications for students' ability to overcome adversity and thrive in the college environment. The four research questions guiding this study are:

1. What types of stressful experiences do undergraduate college students report, and what strategies do they use for coping with these experiences?
2. Are there observable patterns between the contexts of students' stressful experiences and the coping strategies they use in response to these experiences?
3. Do students' coping strategies change over time, and if so, how?
4. What is the relationship between students' self-authorship levels and their coping strategies?



## **Research Design**

In order to answer these questions, I used a qualitative research design and a grounded theory approach to data analysis. This was an intentional departure from most of the coping research to date, which has been quantitative in nature. Corbin and Strauss (2008) defined qualitative analysis as “a process of examining and interpreting data in order to elicit meaning, gain understanding, and develop empirical knowledge” (p. 1). For this exploratory study, I chose to use qualitative data because I was interested in the cognitive processes underlying stress-related coping in undergraduate students and how those evolve. Specifically, I sought to explore how and why students cope the way they do as opposed to simply what strategies they choose. To understand these mechanisms, I needed detailed descriptions of students’ coping experiences at multiple points in time which qualitative, longitudinal data provide. This approach enabled me to identify patterns among students’ perceptions of stressful events, their coping strategies, and factors such as context, previous coping experience, and self-authorship level, in order to yield a more nuanced understanding of stress-related coping in this population.

Grounded theory methodology (Charmaz, 2006; Glaser & Strauss, 1967) is well suited to the study’s purpose, which is to discover more about a relatively unknown and complex phenomenon (i.e., stress-related coping and self-authorship in undergraduate students). The goal of grounded theory is to “construct an interpretive rendering of the worlds we study rather than an external reporting of events and statements” (Charmaz, p. 184). Grounded theory emphasizes starting with the data and constructing theory based on one’s interpretations of those data, rather than starting with hypotheses based on preexisting theories. Grounded theory techniques, which are both rigorous and flexible,

facilitate the systematic coding of interview data, identification of themes, and integration of these themes into theoretical conceptualizations, here, in the context of stress-related coping in the undergraduate student population. This methodology enabled me to compare stressful experiences and coping strategies across students and over time. It also assisted me with recognizing and exploring patterns between students' coping strategies and self-authorship levels.

### **Wabash National Study of Liberal Arts Education**

The data to be analyzed in this study were collected via the Wabash National Study for Liberal Arts Education (WNS), a multi-institution, multi-year longitudinal, concurrent mixed methods study conducted from 2006-07 (Year 1) through 2009-10 (Year 4)<sup>2</sup>. The purpose of the study was to assess students' progress on seven liberal arts outcomes and the effects of selected educational practices as well as to assess their journey toward self-authorship. The liberal arts learning outcomes measured were: well-being, inclination to inquire, integration of learning, effective reasoning and problem solving, leadership, intercultural effectiveness, and moral character (King, Kendall Brown, Lindsay, & VanHecke, 2007).

A two-stage sampling strategy was used to select participating institutions for the quantitative (survey) portion of WNS (Center of Inquiry at Wabash College, 2011). In the first stage, 19 institutions were selected for the quantitative portion of WNS from more than 60 colleges and universities responding to a national invitation to participate. These institutions were selected based on their commitment to liberal arts education as well as institutional characteristics including institutional type, size, and geographic

---

<sup>2</sup> Because of the longitudinal nature of the Wabash National Study of Liberal Arts Education, portions of this methods section have appeared in prior publications.

location. Quantitative surveys were administered to a group of students ( $n = 4501$  at Time 1) at 19 institutions twice during Year 1 and once during Year 4 of the study to measure students' growth along the liberal arts learning outcomes. Demographic data was also collected via the surveys.

In the second stage, six colleges and universities were selected from the 19 participating institutions to participate in the qualitative (interview) phase of the study. Among the six institutions were liberal arts colleges, research and regional universities, two Hispanic serving institutions, and two same-sex institutions. Students at those institutions who completed the survey in the fall of Year 1 were also invited to participate in the qualitative portion of the study. Annual semi-structured interviews were conducted during fall term; these were held on campus during Years 1-3 and via phone during Year 4. The major purpose of the interview was to learn about students' significant experiences and their capacity for self-authorship.

The participating students were full-time, traditional-age undergraduate students; men and students of color were oversampled to yield a diverse sample. A total of 315 students comprised the Year 1 interview sample. Of those, 228 students returned for the Year 2 interview, 204 students for the Year 3 interview, and 177 students for the Year 4 interview. Details on the institutions, samples sizes, return rates, and racial and gender composition of the Year 1-3 samples in the qualitative portion of WNS may be found in Appendix A.

The WNS interview data are appropriate for use in the present study for several reasons: 1) the high frequency with which students reported coping with stressful college experiences during the qualitative interviews, 2) the multi-year longitudinal format of the

interviews, allowing for analysis of students' coping strategies over time, and 3) its emphasis on self-authorship as the filter through which students interpreted their experiences. These features allowed me to analyze the stress-related coping process in undergraduate students across multiple types of stressful experiences, multiple years of college, and multiple self-authorship levels.

**Data collection and preparation for analysis.** The semi-structured interview format was chosen for the qualitative portion of WNS because it provides both the structure and freedom necessary to help students make meaning of their undergraduate experiences. Throughout the interviews, students were asked to identify those experiences that best promoted their learning over the past year, and were invited to choose which experiences they wanted to discuss in depth. While many of these experiences occurred within the college environment, students were also free to discuss experiences that were off campus (e.g., family situations). As a student described an experience, the interviewer used probe questions to elicit details about the content of the experience and the thought process the student used to understand the experience. This allowed the interviewer to gather information about the experiences that fostered students' learning and about the self-authorship levels students used to make sense of their experiences. In their article introducing the WNS Interview, Baxter Magolda and King (2007) explained that "the conversational nature of the interviews creates a learning partnership between interviewer and interviewee that serves the dual role of assessment and developmental intervention" (p. 491). In other words, the interaction between the interviewer and student offers a glimpse at how students make meaning of the world and, at times, triggers students to think about their experiences in new ways.

The interview protocol remained very similar across all four years of the study and included three major sections. The first section was designed to establish a connection and build trust between the interviewer and student as well as to elicit relevant background information, such as the student's academic program and cocurricular interests. The second and longest section of the interview was intended to elicit students' descriptions of those educational experiences that contributed most to their growth over the past year and how they made meaning of those. The third and final section of the interview prompted students to synthesize what they learned across all of their experiences and to identify how those lessons changed the way they thought about their beliefs, identities, or relationships. The interviews, which were digitally recorded, averaged 60-90 minutes in length; students were compensated \$30. At the conclusion of each interview, the interviewer recorded a brief commentary with his or her reflections about the interview and any observations that might not be reflected on the transcript (e.g., nonverbal cues, distracting noises). Interviews were conducted by a team of professional staff and graduate student research assistants from the University of Michigan, Miami University, and Eastern Michigan University. The team was trained by Drs. Marcia Baxter Magolda and Patricia King, the co-principal investigators of the qualitative portion of WNS. Examples of the interview protocol and informed consent form are included in Appendices B and C respectively.

Once the interviews had been transcribed, many of the interviewers also participated in data analysis, the first step of which was referred to as summarization. Summarization involved a process of creating two summaries of each interview transcript. The Phase 1 summary highlighted the content of the interview, including the

student's background information, most significant experiences, and the effect of those experiences on their learning related to the liberal arts learning outcomes. The Phase 2 summary offered an assessment of the student's self-authorship level overall and in the cognitive, intrapersonal, and interpersonal dimensions, using ratings based on Baxter Magolda, King, Taylor, and Wakefield's (2012) model of the journey toward self-authorship introduced in Figure 2.3. Summarizers also included relevant excerpts from the transcript in both Phase 1 and 2 summaries to illustrate summarizers' observations or the basis of their interpretations. (A detailed description of the assessment process is available in Baxter Magolda and King (2012)). I was a member of the interviewing and summarizing teams during Years 2, 3, and 4 of the WNS study, so am personally familiar with these processes.

**Identifying the analytic sample.** To answer the research questions posed at the beginning of this chapter, I sought to identify an analytic sample comprised of students who had reported coping with stressful experiences during multiple years of the WNS and who, as a group, exhibited a range of self-authorship levels. To start, I included students from all six of the institutions that participated in the qualitative portion of WNS; this would allow for a sample that varies by institutional type and geographic location. Next, I chose to include only students who participated in Year 2 and Year 3 interviews. The Year 1 interview data were excluded given that the Year 1 interviews were designed to yield baseline data, and liberal arts learning outcomes were not coded until Year 2. The Year 4 interview data were excluded given that the transcripts were still being summarized when this study was conducted and thus were not yet ready for

data analysis. The use of Year 2 and Year 3 interview data allowed for a comparison of students' coping strategies from one year to the next.

Having identified the general sample of students, I then created a process by which to determine which students to include in the analytic sample. I started with a list of those experiences reported during the Year 2 and Year 3 interviews that students identified as significant. This list, which was compiled by the summarizing team, contained 823 Year 2 experiences ( $n = 228$  students) and 800 Year 3 experiences ( $n = 204$  students). Next, I reviewed a description of each experience, including the nature and effect of the experience, to determine whether it related to one or more dimensions of the student's well-being. The definition of *well-being* I used was the four-part definition developed for use in the WNS based on Ryff's (1989) definition:

Subjective well-being is associated with happiness, life satisfaction, and life quality. Psychological well-being is the pursuit of meaningful goals and a sense of purpose in life. Social well-being refers to positive social health based on one's functioning in society. Finally, physical well-being is characterized by positive health-related attributes. (King et al., 2007, p. 5)

Although the WNS team had previously assessed whether and how each experience related to the four dimensions of well-being during summarization, I chose to repeat this process myself in case my interpretation of these four dimensions differed from the team's interpretations. In both the Year 2 and Year 3 data, I found more examples of experiences related to well-being than the summarizing team did, perhaps because I was solely coding for well-being while they were also coding for six other liberal arts outcomes. In Year 2, the summarizing team identified 298 of the 823 total experiences as being related to well-being; I omitted 31 and added 274 experiences to this list for a total of 541 Year 2 experiences ( $n = 210$  students). In Year 3, the summarizing team identified

347 of the 800 total experiences as being related to well-being; I omitted 51 and added 277 experiences to this list for a total of 573 Year 3 experiences ( $n = 193$  students).

Once I narrowed the list of experiences to those I judged as related to students' well-being, I reviewed the description of each experience once again to determine whether it was stressful in nature, meaning whether it taxed the student's coping resources (Folkman & Lazarus, 1985). To accomplish this, I paid particular attention to the summarizer's description of the effect of the experience on the student. Given the subjective nature of stress, only those experiences that the students described as stressful were retained in the sample rather than those I would identify as stressful. This meant that occasionally, I excluded a seemingly stressful experience from the sample if the student did not appear stressed by it. For example, although most students reported feeling stressed when a relationship ended, a few students did not report having difficulty coping with this situation, particularly if they did not feel emotionally connected to the person. Thus, I did not code these instances as stressful experiences. This review of the data narrowed the sample to 162 Year 2 experiences ( $n = 114$  students) and 147 Year 3 experiences ( $n = 105$  students). A total of 55 of these students reported at least one stressful experience during both the Year 2 and Year 3 interviews; this subsample thus met my desired criteria for this study. These 55 students, who reported a total of 79 stressful experiences in Year 2 and 85 in Year 3, comprised the analytic sample for this study; descriptive data about these students are provided in Table 3.1.



Table 3.1. Gender, Race, and Self-Authorship Levels for the Analytic Sample

	<b>YEAR 2</b>	<b>YEAR 3</b>
<b>GENDER</b>		
Female	38 (69%)	
Male	17 (31%)	
<b>RACE</b>		
Asian/Pacific Islander	5 (9%)	
Black	9 (16%)	
Hispanic	3 (5%)	
Hispanic/White	4 (7%)	
White	31 (56%)	
International/Asian	3 (5%)	
<b>SELF-AUTHORSHIP LEVEL</b>		
External (Ea, Eb, Ec)	25 (45%)	18 (33%)
Early crossroads (E(I), E-I)	25 (45%)	21 (38%)
Late crossroads (I-E, I(E))	5 (9%)	14 (25%)
Internal (Ia, Ib, Ic)	0 (0%)	2 (4%)

The analytic sample of 55 students represented roughly 25% of the overall interview samples in Year 2 ( $n = 228$  students) and Year 3 ( $n = 204$  students). It included participants from all six institutions that participated in the qualitative portion of the WNS. (Additional descriptive data about these institutions and the overall interview samples can be found in Appendix A.) Although the demographic composition of the analytic sample was about two-thirds female and just over half white, it did contain both male and female participants from each of the four co-educational institutions as well as students of color from all six institutions. The analytic sample was more racially diverse than the overall interview samples in Years 2 and 3, with 42% students of color compared to 32% in the overall samples.

The self-authorship level categories shown in Table 3.1 were derived from Figure 2.3. The percentages of students per level (*external*, *early crossroads*, *late crossroads*, *internal*) each year were similar to those of the overall sample, except that in the overall sample more students exhibited *external* meaning making than the other two developmental levels, which was not the case in the analytic sample as Table 3.1 indicates. The low frequency of students exhibiting *internal* meaning making was also characteristic of the overall sample. The diversity of the analytic sample in terms of institutional type, demographic information, and self-authorship levels provided a wide range of experiences from which to analyze students' stress-related coping.

### **Data Analysis Plan**

I next outline how I analyzed the experiences in the analytic sample in order to answer the four research questions introduced at the beginning of this chapter. This section will describe the phases of analysis as well as the role of the peer debriefer. I used QSR International's NVivo 9 qualitative data analysis software throughout all phases of analysis to organize transcripts, assign properties to each transcript (e.g., interview year, self-authorship level), create codes, identify patterns in the codes, and record memos.

**Phases of analysis.** The first phase of analysis corresponded to the first research question about the types of stressful experiences and coping strategies reported by students in the Year 2 and Year 3 interviews. To investigate this question, I analyzed a total of 110 Year 2 and Year 3 interview transcripts for the 55 students in the analytic sample, and coded all stressful experiences and coping strategies reported in these transcripts. Many students reported multiple stressful experiences and coping strategies

per interview, all of which were coded individually. Each stressful experience was coded to only one context; however, that stressful experience may have had several types of coping strategies coded to it. For example, if a student reported stressful experiences related to academics and family in a single interview, I coded each experience to the one context that was most relevant and then coded all coping strategies that emerged related to that experience. Thus, the student may have used one strategy to cope with the academics stressor and several other strategies to cope with the family stressor. Using this process, I observed and coded a total of 164 stressful experiences and 728 coping strategies.

I utilized the constant comparative process to compare new themes that emerged from the data with existing themes in order to refine and organize my interpretations. This involved “comparing one segment of data with another to determine similarities and differences” (Merriam, 1998, p. 18). This process involved two levels of coding, defined as *initial coding* and *focused coding* (Charmaz, 2006). During initial coding, I reviewed each interview transcript to note important ideas related to stressful experiences and coping strategies, develop tentative codes for those ideas, and gather descriptive information about those codes. During focused coding, I reviewed each interview transcript once again to refine and merge the codes that emerged during open coding. The codes then served as the “working skeleton” (Charmaz, p. 45) around which I constructed my analytic framework. This involved an inductive process of reflecting on what the codes meant and how they were related to each other in order to identify abstract themes and integrate them into a framework. I continued the constant comparison process until theme saturation was reached; this is the point at which themes are

sufficiently developed and further data analysis is not likely to add much value (Corbin & Strauss, 2008).

The second phase of data analysis addressed the second research question which asked whether there were observable patterns between the contexts of students' stressful experiences and the coping strategies they used in those contexts. To address this research question, I merged the Year 2 and Year 3 data to create one group of examples for each of the stressful experience contexts so that I could compare students' coping strategies across contexts. I was interested to explore whether students were more likely to utilize certain coping strategies within certain contexts and if so, why.

The third phase of data analysis focused on the third research question concerning whether and how students' coping strategies changed over time, as the students gained more experience coping with stressful events. First, I examined whether there were differences between the Year 2 and Year 3 cohorts by comparing the coping strategies that emerged from my coding of the interview transcripts for each year. Next, I analyzed longitudinal change at the individual level for four students in the sample by comparing the coping strategies they reported in the Year 2 and Year 3 interviews. Although the coping theory reviewed in Chapter II suggested that coping strategies change over time, in accordance with grounded theory, I refrained from making hypotheses and constructed my interpretations based on the themes that emerged from the data.

The final phase of data analysis corresponded to the fourth research question about how students' self-authorship levels related to their coping strategies. Table 3.1 shows the number of students in the analytic sample who exhibited self-authorship reflective of the *external* (Ea, Eb, Ec), *early crossroads* (E(I), E-I), *late crossroads* (I-E,

I(E)), and *internal* (Ia, Ib, Ic) levels during Years 2 and 3, and Figure 2.3 provides a description of each self-authorship position. The data in Table 3.1 represent the overall self-authorship level ratings assigned to students each year during Phase 2 of the WNS transcript summarization process. Due to the small number of students who exhibited self-authorship characteristic of the *internal* positions and the negligible differences in coping strategies between students exhibiting *late crossroads* and *internal* meaning making, I chose to combine the *late crossroads* and *internal* positions into a single level (hereafter, *late crossroads/internal*) for ease of interpretability. This decision is a reflection of the distribution of scores in this analytic sample only and is not a recommendation for future assessment. Future studies may want to explore whether there are nuanced differences in coping strategies between these two levels that did not emerge in this sample.

To address this research question, I merged the Year 2 and Year 3 data to create three groups of transcripts, one for each self-authorship level (i.e., *external*, *early crossroads*, *late crossroads/internal*). I then compared the coping strategies that emerged from my coding of the transcripts within each level, looking for patterns using both quantitative and qualitative approaches. My objective was to determine whether there were patterns between students' self-authorship levels, the types of coping strategies they used, and the nature of those strategies.

Throughout each phase of analysis, I wrote memos as a way to record my observations and to contemplate emergent themes. Earlier memos stayed close to the data, capturing emergent concepts, while later memos were more abstract, speculating about connections between the concepts and situating my findings within an argument, as

recommended by Charmaz (2006). The memos became the building blocks that I used to develop a framework to conceptualize the stress-related coping process in undergraduate students. I used grounded theory, including the memo-writing process, to “dig deep into the empirical and build analytic structures that reach up to the hypothetical” (Charmaz, 2006, p. 151).

**Peer debriefer.** In this study, I used a peer debriefer to improve the authenticity and consistency of my results. Peer debriefing has been defined as “the process of exposing oneself to a disinterested peer in a manner paralleling an analytic session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind” (Lincoln & Guba, 1985, p. 308). My peer debriefer was a fellow doctoral candidate in my academic program and a former member of the WNS research team. I chose her for this role based on her familiarity with the WNS data, with qualitative research methods, and with the personal subjectivities that I brought to this work. For example, as a religious woman of color, she was more attuned to how faith-based and culturally-based factors may have influenced students’ stressful experiences and coping strategies than I was as a spiritual but non-religious white woman. In addition, our WNS interviewing and summarizing experiences involved students at different institutions, so she was well positioned to challenge me when she sensed that my interpretations were one-sided based on those institutions I knew best.

I utilized my peer debriefer in several important ways to refine my analysis, based on recommendations from Barber and Walczak (2009). After orientating her to my analytic sample and research questions, she performed initial and focused coding on 24 of the 110 transcripts in my sample (22%) and wrote memos throughout the coding process.

Both of us kept detailed memos about our coding procedures, assumptions, and conclusions so that we could share how we made sense of the students' experiences. We met regularly to compare our findings and talk through our interpretations and any discrepancies in our coding. She provided a check on my identification of stressors and coping strategies, interpretation of emergent themes, and assumptions about the data by challenging my assessments and suggesting alternative interpretations. Ultimately, by introducing another perspective into the analytic process, I aimed to improve the authenticity of the conceptualization I developed by staying as true as possible to the participants' experiences.

### **Sensitizing Concepts**

Given the role of the researcher in qualitative studies, it is important that I am transparent about the sensitizing concepts I brought to this study. The term sensitizing concepts originated with Blumer (1969) to refer to "preconceptions that emanate from such standpoints as class, race, gender, age, embodiment, and historical era (and) may permeate an analysis without the researcher's awareness" (Charmaz, 2006, p. 67). In other words, they are the preexisting assumptions that may inadvertently influence the way a researcher analyzes data and draws conclusions.

To start, as previously mentioned, I was a member of the research team responsible for collecting the data used in this study. Although that means that I am quite familiar with the data, particularly from the campuses where I personally interviewed students, it also means that I had some preconceived ideas about what I might find in the data. I anticipated that certain types of stressful experiences (e.g., academic pressures) and coping strategies (e.g., seeking support) might surface more frequently than others

based on my recollection of what the students I interviewed discussed. I also expected that institutional contexts might influence which coping strategies students reported, such as a higher frequency of religious coping at the two faith-based institutions in the study. Furthermore, I suspected that how students made meaning about coping with stressful situations might evolve over time as they learned from their experiences and became more self-authored. These assumptions may have led me to inadvertently focus on certain associations in the data while overlooking less expected ones.

The stress I personally experienced as an undergraduate student in a STEM major and as a graduate student in two highly demanding academic programs may have also influenced my interpretation of the data. At times, I coped well, and at other times, I struggled to persist. I attribute my stress to the academic rigor coupled with the lack of emotional support in these programs, which was overwhelming and led to symptoms of both anxiety and depression. Eventually, I connected with counselors who taught me strategies for coping with the stress. One counselor in particular taught me that while there was little I could do to change the environment of my academic program, I could change the way I made meaning about my situation. For example, instead of allowing the opinions of faculty members and peers to dictate my decisions about which elective courses to take, I learned to critique those opinions and take my own needs, interests, and professional goals into account when making decisions. These self-authorship skills made a world of difference for my well-being, which was one of my motivations to conduct this study. Therefore, as I reviewed the data, I was particularly attuned to ways in which the college environment exacerbated or mitigated students' stress.



Finally, my personal social identities had the potential to influence my perspective on the data and are worth mentioning here. I am a married, white, U.S. American woman from a middle class socioeconomic background. Aside from my gender, all of these identities give me power and privilege in U.S. American society, so I have limited firsthand knowledge of the stressors associated with being part of a disenfranchised group. I am, however, part of an interracial marriage, and I have also participated in many social justice training opportunities that have broadened my knowledge of how issues of power, privilege, and discrimination on college campuses and in society at large can create stress for students. Another relevant social identity is my identification as spiritual but not religious. The fact that I do not identify as a religious person and do not rely on faith-based coping strategies may have hindered my understanding of religious modes of coping when they arose in the data.

I strived to remain cognizant of all of the sensitizing concepts mentioned above through diligent memo-writing and conversations with my peer debriefer. Writing memos gave me an outlet to record my assumptions throughout data analysis so that I could reflect on them and consider how they may have been influencing my interpretations of the data. My goal was to remain as authentic as possible to the students' experiences. Sharing my sensitizing concepts with my peer debriefer prior to data analysis also helped me manage my subjectivities. By alerting her to my potential blind spots, she was able to challenge me when my preconceptions were inappropriately influencing my interpretations and conclusions about the data. I did the same for her regarding her sensitizing concepts to improve the credibility of our findings.

## **Limitations of the Study**

The major limitation of this study was the use of secondary data from the WNS, given that it was not specifically designed to study stress-related coping in undergraduate students. Rather, the focus of the WNS was on the educational experiences that contributed to students' growth on liberal arts learning outcomes and their self-authorship development. Thus, the interview protocol did not contain questions that explicitly asked about how students coped with stress. However, the most substantive section of the protocol did contain several questions that did elicit information about stress and coping. These included questions about the challenges students encountered, support systems they relied upon, pressures they felt due to the demands on their time, difficult decisions they faced, and conflicting opinions they had with others. These interview questions, along with the interviewers' probes related to meaning making, resulted in many students discussing stressful experiences with which they had coped over the past year. Nevertheless, as with any study relying on participant interviews, the analytic sample was limited to those students who were able to articulate their stress-related coping experiences during the interviews. The data analyzed in this study were also limited to those experiences that students were willing to share with the interviewer, meaning that they may have experienced other stressful events that they did not report.

A second potential limitation of this study was a lack of triangulation of methods, given that I focused the analysis only on the WNS qualitative data. Although quantitative measures of students' well-being were available, I chose not to use them because the surveys were administered in Years 1 and 4 of the study and thus they did not align with the interview data I was using from Years 2 and 3. In addition, I was interested in

students' rich descriptions of their stressful experiences so that I could explore the connection between their coping strategies and self-authorship levels. I did, however, strengthen the credibility of my findings through other types of triangulation. Data triangulation was achieved by analyzing interview data from multiple students, institutions, and points in time. In addition, theory triangulation was achieved given that both coping and self-authorship theories informed the conceptualization of this study, and the grounded theory derived from data analysis informed the interpretation of the study's findings.

A third limitation was that all of the institutions in the study were four-year colleges or universities, four of the six institutions were liberal arts colleges, and all of the students in the analytic sample were traditional-age second- and third-year students. It is possible that stressors and coping strategies vary across types of students and institutions. It is also possible (even likely) that the cognitive processes underlying coping are different during the first and last years of college. These are questions that could be addressed in future research.

Lastly, a fourth possible limitation was that the overall self-authorship level scores were used in this study as opposed to the scores in the cognitive, intrapersonal, and interpersonal dimensions of self-authorship. I chose to use the overall score because it provided the best approximation of a student's self-authorship level throughout a given interview. It is possible that the scores in the individual dimensions may have differed from the overall score and provided insight about why a student chose to cope with a specific type of stressor the way he or she did. For example, a student's self-authorship score in the interpersonal dimension may have been particularly relevant when he or she

was coping with interpersonal stressors. This is another topic that deserves attention in future studies.

### **Summary**

This chapter described the procedures I used to analyze how the undergraduate students in my analytic sample coped with stressful experiences. It was my hope that through the use of grounded theory, multi-year longitudinal qualitative data, and a diverse group of participants and institutions, I would gain insights into the types of stressors and coping strategies reported by undergraduate students. I also hoped to explore whether and how students' coping strategies changed across contexts, over time, and according to their self-authorship levels as well as the mechanisms underlying these changes. My ultimate objective was to translate those insights into a new conceptualization of the cognitive processes underlying coping in undergraduate students with the potential to inform future higher education research and practice. The next two chapters will report the major findings of the study as they relate to the four primary research questions.

## CHAPTER IV: STRESSFUL EXPERIENCES, COPING STRATEGIES, AND ANALYSIS OF COPING BY CONTEXT

This is the first of two chapters dedicated to presenting the findings of my grounded theory analysis to explore the phenomenon of stress-related coping in undergraduate students. This chapter will focus on my first and second research questions: 1) What types of stressful experiences do undergraduate college students report, and what strategies do they use for coping with these experiences?, and 2) Are there observable patterns between the contexts of students' stressful experiences and the coping strategies they use in response to these experiences? It will include sections detailing the stressful experiences that emerged, the coping strategies students reported, and finally the connections between the contexts of students' stressful experiences and the coping strategies they used. This chapter sets the stage for the next chapter, which reports how students' coping strategies changed over time as well as by students' self-authorship levels.

### **Stressful Experiences**

Among the 164 stressful experiences in the data set, three categories emerged, and these categories contained eleven distinct contexts. The categories – *intrapersonal*, *interpersonal*, and *institutional* experiences – represent the level at which the stressor originated. *Intrapersonal* stressful experiences originated at the individual level and included situations related to students' *health, goals, and identities*. *Interpersonal*

stressful experiences occurred within relationships and reflected stressors associated with students' *family, friends, partners, and roommates/neighbors*. *Institutional* stressful experiences were triggered by institution-level influences such as *academics, activities/employment, campus climate, and administration/authorities*. The categories and contexts that emerged are presented in Table 4.1 along with examples of each context.

Table 4.1. Stressful Experience Categories, Contexts, and Examples

<b>Stressful Experience Categories</b>	<b>Stressful Experience Contexts</b>	<b>Examples</b>
INTRAPERSONAL ( <i>n</i> = 25; 15%)  Occurred at the individual level	Health ( <i>n</i> = 9; 6%)	Injuries, illnesses, emotional problems, safety threats
	Goals ( <i>n</i> = 10; 6%)	Choosing a major/career/graduate school, meeting financial needs
	Identities ( <i>n</i> = 6; 4%)	Questioning one's sexual/religious/racial identities
INTERPERSONAL ( <i>n</i> = 87; 53%)  Occurred within relationships	Family ( <i>n</i> = 22; 13%)	Clashes over values or decisions, dealing with a family crisis
	Friends ( <i>n</i> = 24; 15%)	Ending friendships, difficulty finding friends
	Partners ( <i>n</i> = 17; 10%)	Breakups, incompatibilities
	Roommates/neighbors ( <i>n</i> = 24; 15%)	Different living habits or standards, roommate's personal problems
INSTITUTIONAL ( <i>n</i> = 52; 32%)  Occurred at the institutional level	Academics ( <i>n</i> = 20; 12%)	Difficult courses, conflicts with professors, academic policies
	Activities/employment ( <i>n</i> = 18; 11%)	Conflict related to student organization or athletic team, leadership challenges
	Campus climate ( <i>n</i> = 11; 7%)	Racism, party culture, poor fit with college environment
	Administration/authorities ( <i>n</i> = 2; 1%)	Institutional policies, authority figures (e.g., resident assistant, police)

N = 164

Just over one half of all stressful experiences reported were *interpersonal* in nature, and the stressors were divided fairly evenly across the four contexts within that

category (*family, friends, partners, roommates/neighbors*). In addition, nearly one third of the stressful experiences reported were *institutional* in nature, most notably in the *academics* and *activities/employment* contexts. A pie chart illustrating the relative frequencies with which stressful experience contexts were reported may be found in Figure 4.1. The relative frequency data presented in this paper should be interpreted in light of its source, the WNS Interview, which was not designed to directly assess characteristics of stressful experiences and coping strategies. Thus, it may have elicited some types of experiences and strategies more than others, which would subsequently affect the frequencies reported here.

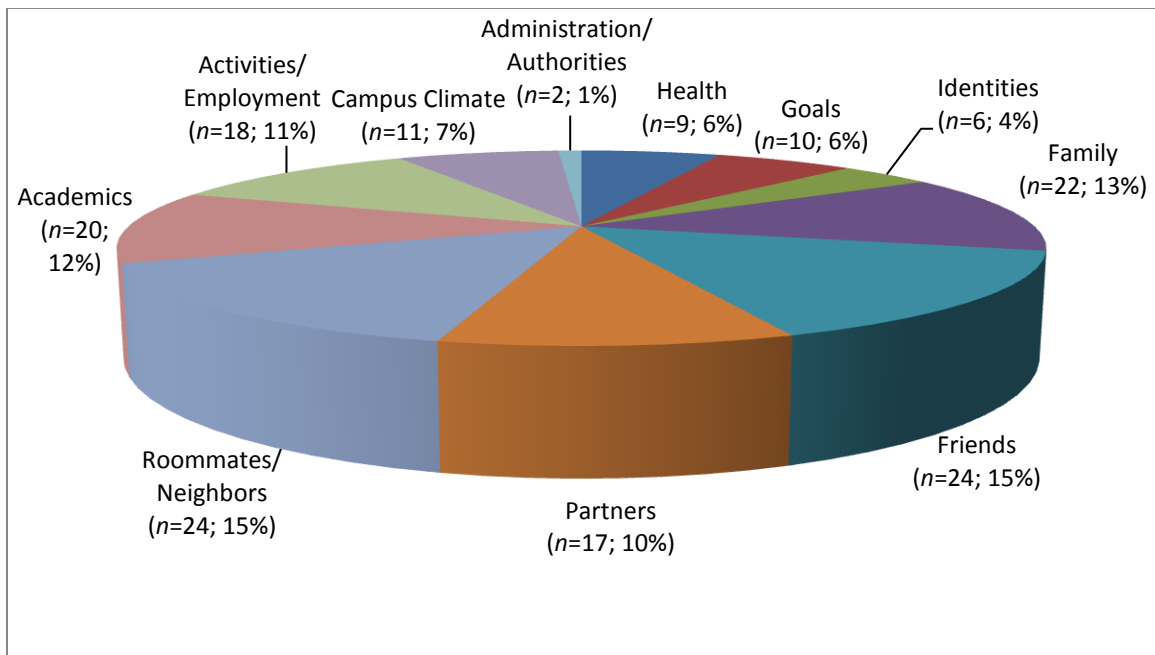


Figure 4.1. Frequency of Reported Contexts among Stressful Experiences

Overall, findings from my analysis of students' stressful experiences revealed that students reported an average of 1.5 stressful experiences per interview (164 stressful experiences in 110 transcripts). These experiences originated from a wide range of

*intrapersonal, interpersonal, and institutional* contexts. Students were most likely to report stress stemming from *interpersonal* contexts, followed by *institutional* contexts, and finally *intrapersonal* contexts. In order to cope with their stressful experiences, students employed many types of coping strategies, which will be the focus of the next section.

### **Coping Strategies**

A total of four categories containing twelve distinct coping strategy types were associated with the stressful experiences reported in the analytic sample. The categories of coping strategies – *problem-focused, emotion-focused, meaning-focused, and maladaptive* – represent how the student attempted to deal with the stressor. *Problem-focused* strategies involved trying to address the problem and included *sought informational or instrumental support, prepared for action, and took action*. *Emotion-focused* strategies were used to alleviate distress and included *sought emotional support, reduced tension, and distanced self*. The third category of coping strategies, *meaning-focused* strategies, referred to attempts to cope by making meaning of the situation; these included *reinterpreting the problem, accepting the problem, learning from others' experiences, and relying on faith*. In addition to these three categories of adaptive coping strategies, it became clear that some students were using a fourth category of strategies that provided them with temporary relief from problems, but did not resolve them. These *maladaptive* strategies included instances when students *avoided the problem* or *disengaged* entirely from the situation. The coping strategy categories and types that emerged are presented in Table 4.2 along with examples of each type.



Table 4.2. Coping Strategy Categories, Types, and Examples

Coping Strategy Categories	Coping Strategy Types	Examples
<b>PROBLEM-FOCUSED</b> (n = 237; 33%)  Aimed at addressing the problem	Sought informational or instrumental support (n = 78; 11%)	Sought advice or tangible aid
	Prepared for action (n = 41; 6%)	Made a plan, exercised self-control
	Took action (n = 118; 16%)	Attempted to solve or get around problem, used confrontation, suppressed competing activities
<b>EMOTION-FOCUSED</b> (n = 156; 21%)  Aimed at alleviating distress	Sought emotional support (n = 74; 10%)	Sought empathy or belonging from others
	Reduced tension (n = 28; 4%)	Took medication, used humor, spent time with others, vented emotions
	Distanced self (n = 52; 7%)	Separated from the problem or one's emotions
<b>MEANING-FOCUSED</b> (n = 289; 40%)  Aimed at making meaning of the problem	Reinterpreted the problem (n = 133; 18%)	Viewed from another perspective, found the positive
	Accepted the problem (n = 99; 14%)	Learned to live with it, accepted responsibility
	Learned from others' experiences (n = 36; 5%)	Learned from others or helped others cope with similar problems
	Relied on faith (n = 21; 3%)	Relied on spirituality or faith in oneself
<b>MALADAPTIVE</b> (n = 46; 6%)  Aimed at providing relief but can exacerbate problem	Avoided the problem (n = 37; 5%)	Denied a problem existed, refused to ask for help
	Disengaged (n = 9; 1%)	Allowed the problem to defeat him or her, gave up trying to reach goals

N = 728

Forty percent of the coping strategies reported were *meaning-focused* in nature, making this the most frequently referenced category of coping strategies. Among the specific types of *meaning-focused* strategies, students were more likely to *reinterpret the problem* and *accept the problem* versus the other two types. *Problem-focused* strategies were the second most frequently reported category of coping strategies, comprising one

third of the strategies reported. In particular, students tended to *take action* and *seek informational or instrumental support* in an attempt to address the stressful situation. A pie chart illustrating the relative frequencies with which coping strategies were reported may be found in Figure 4.2.

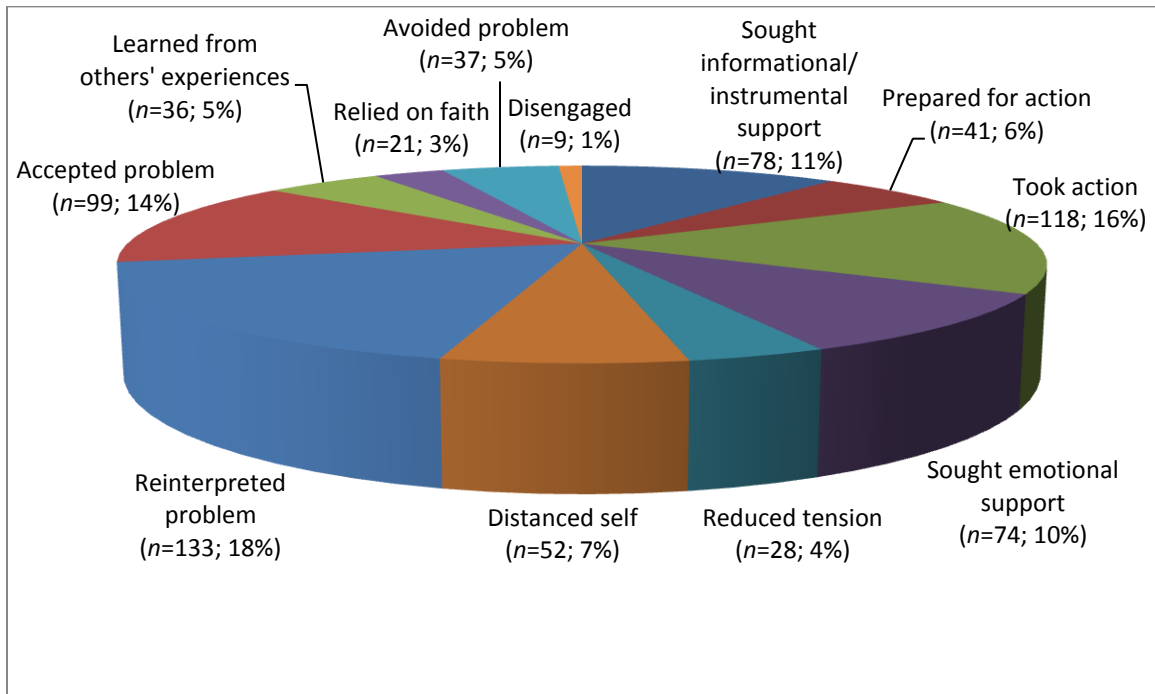


Figure 4.2. Frequency of Reported Types among Coping Strategies

The following four sections provide quotes that exemplify each of the coping strategies mentioned above.

**Examples of problem-focused strategies.** Students who *sought informational or instrumental support* tried to address the situation by requesting help from others in the form of advice (informational support) or tangible aid (instrumental support). Second-

year student Jenna<sup>3</sup> demonstrated this particular coping strategy when she sought help with her writing from her professor after experiencing stress in the *academics* context:

I actually met with him for two and a half hours straight once because it really took a long time for me to be able to grasp this concept that he was getting at and that I needed to grasp in order to write a good paper, but once I got that, then everything started to gain momentum. So it was definitely worth it. It was hard to meet with him because it's hard to go up to anybody and basically be like, "I don't know what I'm doing." He definitely didn't sit there and say, "Oh, okay. You just need to do this, this and this." He worked with me and made me realize it on my own, which I think ultimately helped.

It is clear that Jenna was initially uncomfortable approaching her professor for tutoring, but she knew that in order to improve her grades on papers, she needed instrumental support to assess her own writing and determine how she could improve.

At times, although a student had not yet taken action to address the source of his or her stress, it was clear that he or she was taking steps to prepare for action. The *prepared for action* strategy generally took the form of developing a plan or exercising self-control to avoid acting too quickly. In this example, third-year student Lena reported stress in the *goals* context related to her desire to achieve greater balance between her academic and social life. Her coping strategy involved planning ahead to fit more social activities into her study schedule:

I'm hoping that when I come back, since I have made a list of all the things I definitely want to do when I get back at school and things that I want to do on the weekends, I'm hoping that since I've already thought about it ahead of time, I'll be more willing to give up that time later on. I'm hoping that because [country] is supposed to be less academically rigorous – that will have an effect on me too. Not that I will focus less on schoolwork but that I'll be able to spend a decent amount of time but still enjoy myself. I'm hoping that the semester abroad will help balance my academics and my social life more.

---

<sup>3</sup> All students were given the opportunity to choose their own pseudonym.

Even though Lena expressed doubt elsewhere in the interview about her ability to follow through with her plan given her tendency to prioritize academics to the exclusion of everything else, the fact that she made a list of social activities in which she hoped to participate showed her commitment to addressing her current situation; accordingly, this was coded as *prepared for action*.

Similarly, when third-year student Franny's grandmother made some culturally-insensitive remarks, she was upset and decided to confront her grandmother about them. Confrontation was a commonly reported form of the *took action* coping strategy; others included attempts to solve or get around the problem and efforts to suppress competing activities in order to focus on dealing with the problem. Here is how Franny described taking action about this stressor in the *family* context:

I feel that I'm more opinionated now with certain issues that go on in my family and if I feel that something is wrong, normally I wouldn't have said anything but now if I feel something is wrong, I'll tell you in a respectful way that that's wrong. And I did go through a situation this summer with my grandmother actually. She said some things that I just felt were inappropriate and I told her. Maybe everyone thought, "Oh my God, you shouldn't have done that," but I told her that that was wrong. You shouldn't say something like that because if the shoe was on the other foot, you wouldn't want someone to do that to someone in your family. And that really kind of made my relationship with my grandmother different. She said she wasn't going to speak to me anymore. So I'm the type of person if you say you're not going to talk to me anymore, I'm just going to leave you alone. I'm just – "Okay, you're not going to talk to me." And it really did hurt me a lot that my grandmother said that.

Even though Franny knew that confronting her grandmother could damage their relationship, she was willing to take that risk to stand up for what she believed was right. This was her attempt to address the problem that had caused her stress.

**Examples of emotion-focused strategies.** As described earlier, this category of coping strategies is aimed at alleviating distress as opposed to addressing the problem

itself. One common way that students opted to relieve stress was by seeking emotional support. Students in stressful situations who *sought emotional support* turned to others for empathy or a sense of belonging. Third-year student Julie discovered the value of seeking support when she met with a college counselor about stress she was experiencing in the *partners* context as her relationship fell apart:

I decided to go because I was like, “This is not me. This is not normal.” I was crying all the time. I would get upset and I was like, “Okay, my schoolwork comes first and it’s coming last right now.” So all I do is worry about things and freak out and cry and it’s 2:00 in the morning and I was like, “I really, really need to talk to somebody.” I’m not going to go crazy or anything. I really feel if I just tell someone, I’ll feel better about it and because I had known [name of college counselor] from before. We had talked before and I was like, “She seems pretty nice.” So I went in there and I just bawled for straight 30 minutes. She was like, “It’s okay. It’s okay.” And I was like, “No, it’s not. I don’t ever cry.” And after that I just felt this is why I think you need somebody to talk to that doesn’t really know me, that’s not in my life all the time, that can just give me honest advice about it.

Julie contrasted how helpful the unbiased support from her counselor was with how unhelpful the support from her father was, given his dislike of her boyfriend and his desire for her to end the relationship immediately. This example illustrates the nuances that existed both in terms of the type of emotional support students sought and from whom they sought support.

Students seeking stress relief also *reduced tension* in many different ways as a form of coping. Tension reduction strategies included taking medication, using humor, spending time with others, and venting emotions. As with seeking emotional support, the primary goal of these strategies was to help students feel better. In this example, third-year student Rae described how she reduced tension to deal with stress in the *partners* context related to arguments with her boyfriend:

I don't know. I get over it. I get really stressed out, but I sort of have to be like, "Screw this" or "Whatever." I am my own person. I am just going to go study. I have friends here that are fairly knowledgeable about our relationship and so sometimes I could be like, "Isn't he being a jerk?" and they're like, "Yes, of course, always," you know. I might even just sleep I think. That's definitely what my mother does, too, is sort of turn it off. Maybe I just turn it off for a little bit or do something like knitting or something just mindless, but it's just going to carry you through the next couple of minutes when you feel really bad and then you'll get over it.

In this section of text, Rae mentioned several tension reduction strategies, including distracting herself with academic work, venting to her friends, sleeping, and knitting to ease her mind. Each of these strategies played an important role in alleviating her distress.

A third type of emotion-focused coping strategy was evident when students *distanced themselves* from the stressful experience. This strategy involved students coping by separating from the problem itself or from their emotions about the problem. For example, second-year student Justine distanced herself from her feelings related to her abusive father to cope with stress in the *family* context:

It doesn't mean there isn't scar tissue, you know? Because every time I see a parent get really angry at their child in a store – oh, there have been some times where I've had to bit my tongue, because you know that if they're comfortable displaying that kind of thing in public, what goes on behind closed doors is going to be absolutely 10 or 20 times worse. And that just infuriates me. There are times when I think about some of the rest of the world and what other girls have to go through, that really just breaks my heart. So I wouldn't say there's not scar tissue. But I think being able to leave home, and not be thinking every day about revenge – to not be wrapped up in that because it kills your spirit. I think to be able to get healing and get help is a big part of walking away from that as a complete person.

Justine and other students dealing with stressful events occurring off campus seemed to find solace in intentionally distancing themselves from those events, both geographically and psychologically.

**Examples of meaning-focused strategies.** These types of strategies focused on making sense of the stressful experience as a means of coping. Students exhibited several different approaches to making meaning of stressors, the most common of which was when they *reinterpreted the problem*. This strategy referred to students viewing the problem from a different perspective or finding the positive in a stressful situation. Second-year student Emma exhibited this strategy to manage stress in the *family* context. She reinterpreted her strained relationship with her parents as having had a positive influence on her:

I just feel like not having a normal parent/child relationship with my parents made me grow up a little bit faster, and I really value my time at college and the classes, and getting somewhere with that. Because I eventually want to end up helping in third-world countries and refugee camps, and I think part of that comes from the fact that I wasn't necessarily helped as much by my parents. So I think that's where a lot of it comes from.

Even though her difficulties with her parents caused her stress, she realized that dealing with her relationship with them also contributed to her maturity, motivation in college, and career goals.

For some students, learning to live with a stressful situation or accepting responsibility for how one contributed to it facilitated their ability to cope. Third-year student Laura illustrated the *accepted the problem* coping strategy related to stress in the *academics* context when she came to terms with the fact that she was not succeeding in her biology classes and needed to change her major:

I really didn't know if I was doing the right thing or if I should change my major or if I should stay with Biology and try to finish it out because at first I felt like if I did change my major that would be an upset to me. I'd be saying, "Oh I failed and I could have stuck with it and maybe if I stuck with it I could have achieved my goal and got my grades up in my Biology classes," but I had to come to the realization that it wasn't going to happen. It just wasn't going to happen. There was no way I could pass those classes no matter how hard I studied or if I studied

every day. It just wasn't going to happen. So when I finally made the decision to go ahead and change my major, I was very nervous when I did it. I wasn't sure what I was going into when I changed my major but I decided, "This is going to be a new chapter in my life. I'll just take it as it is. I'm just going to go with the flow and if I don't do well in the class, then I'm going to go to something else."

Laura noted that once she finally accepted that the biology major was a not a good fit for her, she felt liberated to explore other options and eventually found a more fulfilling career path.

The third type of coping strategy in this category, *learned from others' experiences*, reflects the reality that meaning making can have an interpersonal component. Students who used this strategy made meaning of stressful events by learning from others' experiences or helping others coping with similar events. Second-year student Lawrence, who felt overwhelmed by the competition for admission to the film major, made meaning of his stress in the *academics* context through his older peers' experiences:

I feel so sad because it's not what I was expecting when I came to college. I wanted to have an education for me. I didn't want to have to care necessarily what my grades were because if I was satisfied with what I was doing, I figured that would be good enough. But now I feel like it's completely opposite where I constantly have to worry about what I'm doing and making sure that other people are happy with my work, just so that I can get into this department. And I mean everybody that I've spoken to who's a junior or senior said the same thing – that once you [are admitted to the major], it all changes because there's nothing else you really have to worry about in regard to proving yourself because you're in the department. And so now, it's all what you want to do once you're there. So, you really just kind of have to stress and freak out until you get into it, but past that I guess it's all about you.

Learning that his peers were able to focus more on exploring their own interests and less on proving themselves once they were admitted to the film major helped Lawrence cope with his current situation and trust that it would improve in the future.



The fourth and final type of meaning-focused coping strategy observed in this sample, *relied on faith*, was defined broadly to include both spirituality and faith in oneself. For some students, relying on faith meant observing a specific spiritual or religious practice, but for others, it meant believing that things happen for a reason or trusting in themselves to persevere. Third-year student Lisa relied on her faith to cope with stress in the *friends* context after the death of her friend:

It's just that everything could be so much worse. You don't understand how much God has blessed you until you realize that. You could be sitting on a street corner with barely enough clothes to keep you warm, searching through the garbage for your next meal. That's something that God has left me with so much that I don't have to do that. I have never experienced things that people have – like, I just have personally have never experienced leukemia. I personally have never experienced that illness or any of those extremely severe illnesses...

And, my life had changed because [friend's name] died. I was very sad, but in any case, I think that's something that God needed him then. There was something that [friend's name] had to do that God wanted him for, so he was taken. And maybe [friend's name] had served his purpose. Maybe he'd touched so many people with his generosity, his kindness and his ability to have fun and enjoy life.

Not only did her faith help her recognize the blessings in her own life, but it also brought her comfort believing that it must have been God's plan to take her friend at a young age.

**Examples of maladaptive strategies.** While maladaptive coping strategies only comprised 6% of the total number of coping strategy references in the sample, they are an important reminder that not all attempts at coping are productive. Occasionally, students used only maladaptive strategies but more often, they used them in combination with adaptive strategies. For example, when they realized that avoiding a stressful situation was not productive, they chose to seek help, take action, or make meaning of the situation instead. This was the case for second-year student Micah, who experienced stress in the *partners* context as his relationship with his girlfriend unraveled. Initially, he *avoided the*

*problem* by denying that the relationship was over until he realized that he needed to accept reality:

The whole summer I was just thinking, this is just a movie. And now I keep thinking I'm gonna wake up and it's gonna be mid-summer and none of this happened.

Interviewer: How have you been processing what happened?

I went through the stages of grief. I'm at anger right now. I went through the sad, now I'm at the angry. I like to think of myself as having a good faith nature or strong headed. And so I kept asking God for a solution to the problem or what I should do. Well, everybody – my close friends, my family, a professor that I had a really good relationship with, my [priest] – everybody told me that these people are crazy. Life's short. Run for the hills. And I didn't listen to them. I finally realized he sends me everybody in my life to tell me to run and so I decided well, maybe, it's a good idea just to forget about it and move on. So, I'm in the process of trying to forget.

In this excerpt, it is evident that influential people in Micah's life helped him progress from a state of denial to a state of acceptance.

At times, students in the analytic sample did more than avoid a stressful situation; they disengaged from it entirely. The *disengaged* coping strategy referred to students who allowed the problem to defeat them or gave up trying to achieve their goals. Second-year student Seamus reported stress in the *activities/employment* context when he was injured and could no longer compete on the cross-country team. He disengaged from the team once he was injured even though it had been an important social network for him and he was offered an opportunity to stay on as team manager:

Well, the fact that I'm not running doesn't make me feel too guilty about not hanging out with the team very often in place of work, because honestly when you are a runner that doesn't run, you aren't really that much of a runner. You kind of miss the whole share the pain experience. It's not so much of running that you are doing at that point. I mean my coach offered to let me be manager this year, but I'm not too keen on that. [I: Okay why not?] Because quite frankly I'd be out there just carrying bags around, filling up water bottles, with no benefit to me.

Although serving as team manager would have allowed him to stay connected to his teammates and support the team, he allowed the injury to defeat him and disassociated from the team entirely.

Overall, findings from my analysis of students' coping strategies revealed that students reported an average of 4.5 coping strategies per stressful experience (728 coping strategies for 164 stressful experiences). These strategies represented a range of *problem-focused*, *emotion-focused*, *meaning-focused*, and *maladaptive* types. Students were most likely to cope with stress using *meaning-focused* strategy types, followed by *problem-focused*, *emotion-focused*, and finally *maladaptive* types. As the coding process progressed, patterns began to emerge between the contexts of students' stressful experiences and the coping strategies they chose to use. These patterns are explored in the next section.

### **Coping Strategies by Stressful Experience Context**

In this phase of data analysis related to my second research question, I explored whether and how students' strategies for coping with stressful experience differed across contexts. I noticed patterns in the frequency data that prompted me to further explore the relationship between coping strategies and context. I did so by analyzing excerpts from four students whose coping changed across contexts. This analysis yielded new insights that were not found during the frequency analysis; these are reported below.

**Frequency of coping strategy usage by context.** Patterns emerged between the major categories of stressful experience contexts reported (i.e., *intrapersonal*, *interpersonal*, *institutional*) and the major categories of coping strategy types employed in response to these experiences (i.e., *problem-focused*, *emotion-focused*, *meaning-focused*,

*maladaptive*), as illustrated in Figure 4.3. Students were most likely to cope with *intrapersonal* stressful experiences using *problem-focused* strategies. In contrast, when students encountered *interpersonal* and *institutional* stressors, they relied on *meaning-focused* strategies more frequently. Students' use of *emotion-focused* strategies was less frequent when dealing with *institutional* stressors, although it is unclear why this may be. *Maladaptive* strategies remained fairly stable across all three categories of stressful experiences.

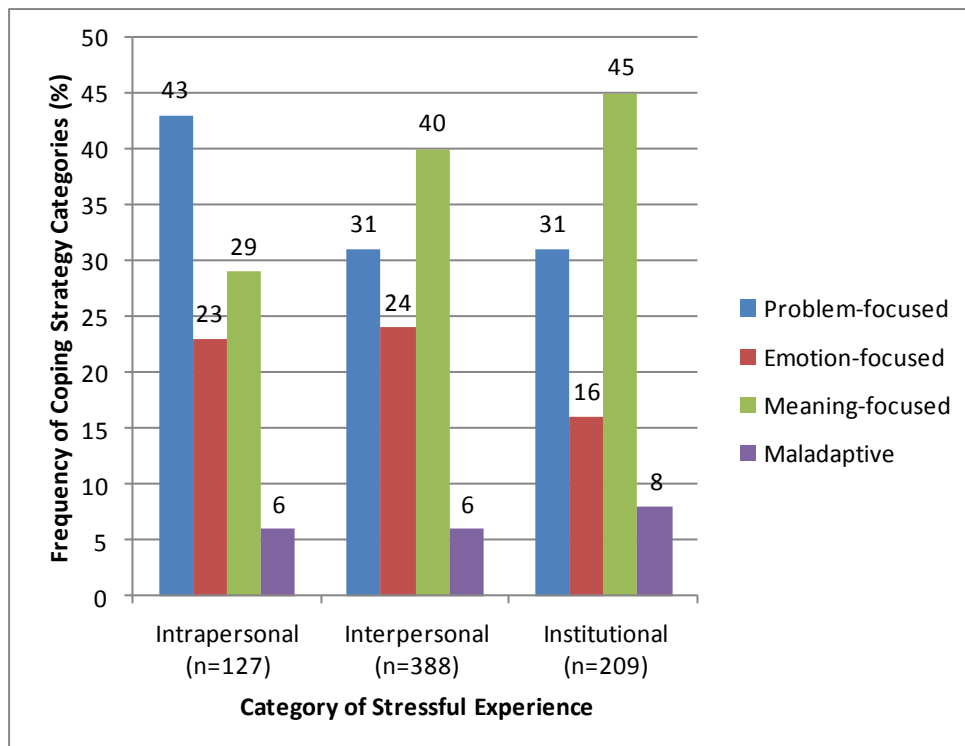


Figure 4.3. Frequency of Use of Coping Strategy Categories by Stressful Experience Category

I also noticed patterns between specific stressful experience contexts and specific coping strategy types; the frequency data underlying these patterns are reported in Table 4.3. In the table, for each stressful experience context (columns), the table shows the frequency of references to each coping strategy type (rows).

Table 4.3. Frequency of Use of Coping Strategy Types by Stressful Experience Context

	Health		Goals		Identities		Family		Friends		Partners		Roommates/ Neighbors		Academics		Activities		Campus Climate		Administration/ Authorities	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>COPING STRATEGIES</b>	<b>54</b>		<b>44</b>		<b>29</b>		<b>133</b>		<b>89</b>		<b>79</b>		<b>87</b>		<b>93</b>		<b>65</b>		<b>45</b>		<b>6</b>	
<b>Problem-focused types</b>	<b>19</b>	<b>35</b>	<b>27</b>	<b>61</b>	<b>8</b>	<b>28</b>	<b>44</b>	<b>33</b>	<b>24</b>	<b>27</b>	<b>14</b>	<b>18</b>	<b>38</b>	<b>44</b>	<b>36</b>	<b>39</b>	<b>20</b>	<b>31</b>	<b>8</b>	<b>18</b>	<b>0</b>	<b>0</b>
Sought informational or instrumental support	11	20	12	27	1	3	18	14	6	7	6	8	8	9	11	12	4	6	1	2	0	0
Prepared for action	2	4	7	16	3	10	8	6	2	2	2	3	5	6	7	8	3	5	2	4	0	0
Took action	6	11	8	18	4	14	18	14	16	18	6	8	25	29	18	19	13	20	5	11	0	0
<b>Emotion-focused types</b>	<b>14</b>	<b>26</b>	<b>5</b>	<b>11</b>	<b>10</b>	<b>34</b>	<b>35</b>	<b>26</b>	<b>18</b>	<b>20</b>	<b>22</b>	<b>28</b>	<b>17</b>	<b>20</b>	<b>11</b>	<b>12</b>	<b>9</b>	<b>14</b>	<b>12</b>	<b>27</b>	<b>1</b>	<b>17</b>
Sought emotional support	9	17	3	7	6	21	15	11	9	10	13	16	6	7	5	5	4	6	4	9	1	17
Reduced tension	4	7	1	2	1	3	8	6	2	2	5	6	2	2	3	3	2	3	0	0	0	0
Distanced self	1	2	1	2	3	10	12	9	7	8	4	5	9	10	3	3	3	5	8	18	0	0
<b>Meaning-focused types</b>	<b>16</b>	<b>30</b>	<b>11</b>	<b>25</b>	<b>10</b>	<b>34</b>	<b>49</b>	<b>37</b>	<b>42</b>	<b>47</b>	<b>38</b>	<b>48</b>	<b>25</b>	<b>29</b>	<b>39</b>	<b>42</b>	<b>29</b>	<b>45</b>	<b>23</b>	<b>51</b>	<b>4</b>	<b>67</b>
Reinterpreted problem	11	20	4	9	2	7	21	16	24	27	16	20	15	17	14	15	15	23	9	20	2	33
Accepted problem	3	6	2	5	2	7	15	11	13	15	12	15	6	7	21	23	11	17	10	22	2	33
Learned from others' experiences	1	2	4	9	5	17	8	6	2	2	4	5	3	3	3	3	3	5	2	4	0	0
Relied on faith	1	2	1	2	1	3	5	4	3	3	6	8	1	1	1	1	0	0	2	4	0	0
<b>Maladaptive types</b>	<b>5</b>	<b>9</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>11</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>17</b>
Avoided problem	3	6	1	2	1	3	5	4	5	6	4	5	6	7	7	8	4	6	0	0	1	17
Disengaged	2	4	0	0	0	0	0	0	0	0	1	1	1	1	0	0	3	5	2	4	0	0

In order to examine these patterns more fully, I attempted to conduct a chi-squared analysis of the distribution of coping strategies across contexts reported in Table 4.3. However, I was unable to do so because the *n* values reflect the number of coping strategy references, and students typically referenced multiple coping strategies per interview, resulting in a lack of independence between cells<sup>4</sup>. Nevertheless, other patterns are visible in Table 4.3, and these are worth noting. Beginning with the *problem-focused* coping strategy types, students tended to *seek informational or instrumental support* when coping with *health* and *goals* related stress and *prepare for action* when coping with *goals* and *identities* related stress. They also *took action* at a consistently high level across nearly all stressful experience contexts. Turning to the *emotion-focused* coping strategy types, students *sought emotional support* more often when coping with stressors in the *identities*, *health*, and *partners* contexts, which makes sense given that problems in these contexts tend to be emotionally-charged. Students *distanced themselves* more often from *campus climate* related stressors. Regarding *meaning-focused* coping strategy types, students *reinterpreted the problem* at a consistently high level across all *interpersonal* and *institutional* contexts, and *accepted the problem* more often in the *institutional* contexts (*academics*, *activities/employment*, *campus climate*). Finally, both *maladaptive* coping strategy types were used infrequently across all stressful experience contexts, which was also true for the *reduced tension* and *relied on faith* strategies.

**Examples of coping strategy usage by context.** To illustrate the patterns that emerged between the contexts of students' stressful experiences and their coping

---

<sup>4</sup> This is also the case for the data in Tables 5.1 and 5.2.

strategies and to examine the mechanisms underlying these patterns, this section will present a series of examples from four students. These students were among 10 of the 55 students in the analytic sample who reported stressful experiences in three or more contexts within a single interview and changed their coping strategies depending on the context of each experience. In these examples, both the year and self-authorship level remained the same, enabling a comparison of how coping changed across contexts that was not attributable to the other two factors. While it is possible that the factors of context, time, and self-authorship level interact, this was one approach to separately consider how context relates to coping.

*Example 1: Andrea.* Third-year student Andrea described stressful experiences related to *family, roommates/neighbors, and activities/employment*. In the *family* context, Andrea felt stressed by what she perceived as her mother's selfishness once she retired. To cope, she *reinterpreted the problem* by finding the positive in the situation, that she developed a new appreciation for her older sister who kept the family together when her mother was focusing on herself.

For a while I held a grudge against her (older sister). "Oh you were so mean to me for all those years," and I think that on the New York trip I realized what an amazing person she really is in that we're like, "How – our older sister's grown up." We're like, "Look at her. Look at how she's handling this situation." I think we gained a lot of respect for her and I think that was probably the biggest thing. And she made these bad awkward days so much fun because she was really good at maintaining a positive attitude in the worst of times. And I hadn't really realized that until the trip.

While Andrea may not have felt empowered to address the source of her stress (her mother's behavior), she was able to find a silver lining in the situation, a closer relationship with her older sister.

In the *roommates/neighbors* context, Andrea was upset about how her roommate's boyfriend mistreated her roommate and *took action* by bringing these concerns to the attention of her roommate to express her concern. This is how she described the interaction:

It got really bad. He was abusive. She started cutting herself. It was really a sad story and he was so unsupportive when he found out. He would take a knife and say, "What do you want me to do? Cut myself," and it was so bad. We would really try to tell her and unfortunately she would take it the wrong way and think that we're being rude to him or to her and she just took it in this really negative way. And it's, "Really we're trying to look out for you," and that is really a relationship I was sad about and we had even tried afterwards to hang out – when she kind of called it quits and left but she never did. And then it just kind of fell apart.

Andrea felt compelled to take action in this case because she feared her roommate's safety was at risk and thought that her roommate would heed her advice. She was disappointed when this did not happen.

In the *activities/employment* context, Andrea encountered a stressful situation when she earned an orientation leader position, but was pressured by her friend to decline the position out of protest over a recent policy change. Andrea went against her friend's wishes and accepted the position, which ended their friendship. Although this was hurtful, she *accepted the problem* and chose to move on:

I think our friendship was already starting to go downhill to begin with. We thought that this job would have been able to boost our friendship up again but because we're both really busy and she's doing her own thing, I'm doing my own thing and our paths don't cross anymore. So it was kind of already on that route. I sometimes see her but not often and it wasn't one of those friendships that I really, really miss like my first roommate.

In this situation, Andrea realized that she could not change the way her friend felt about her and also admitted to herself that she no longer cared that much about the relationship; she accepted the problem and moved on.



*Example 2: Rebecca.* Second-year student Rebecca faced stressors related to *campus climate, health, and friends*. In terms of *campus climate*, she felt frustrated by the environment in her residence hall, which she described as not conducive to studying and sleeping. To cope, she *distanced herself* from the residence hall and stayed elsewhere as often as possible:

So when I was in the dorms, the brief period of time I got to do homework was totally just taken aback with cursing and swearing and smoking and drinking and bottles and heads in your window all hours of the night and my roommate was already asleep. It wasn't the most conducive living environment so I changed that obviously.

I finished out my year ...and as soon as it was done, I ran. During summer and Christmas break, they don't have housing for students obviously so I would stay with a cheer family that I've become really good friends with the daughter and the parents have an extra bedroom so I'd always stay there.

It appears that Rebecca felt powerless to change the residence hall environment, and instead distanced herself from it to alleviate her stress.

When dealing with a stressor related to her *health*, Rebecca coped by using several different strategies, including one which was maladaptive. After injuring her back at a cheerleading camp over the summer, she *sought instrumental support* moving back to college and getting around campus. Although at first she *avoided the problem* by hiding her injury for fear of being cut from the cheer team, eventually her pain forced her to *accept the problem*:

My mom and my brother were packing me up for college while I'm sleeping in the bed, and when I moved up here, I could not operate on my own. I had cheer people bringing me stuff, and I went to my first couple of classes just so I wouldn't be dropped and that was about it. Then I took some time off; I was supposed to take eight weeks off.

Well, I didn't go to class but I would sleep all day and then go to practice because they didn't know how serious it was and I wanted to be on the team so bad. I was new and I didn't really know how the feel of it was going to go. I didn't know,

well, are they just going to cut you or what, so I got through it and probably you could not tell I was injured...

I would tumble and do my normal stuff and stunts and do everything that I normally do on this reeking back and then I'd have to go home, take medication and just fall down and then I finally couldn't get out of bed anymore in April.

This is an example of how a student changed her approach to coping as the reality of her injury set in.

Finally, in the *friends* context, Rebecca noted how stressful it had been to avoid partying with her usual group of friends because she and her boyfriend were undergoing a background check for his career as a police officer and thus she could not engage in illegal behavior such as underage drinking. In order to cope, she *sought emotional support* from another couple who were in the same predicament:

I put together my best friend on the cheer team and Gregory's best friend who's training to become a police officer, so now we have another group. I have another couple who's going through what I went through.

Interviewer: Right, right and it sounds like you had another –

We are able to do stuff...because Donnie's going to be going through backgrounds and so is Becca so we just clutched each other as close as we could because it was all we could do to be together but be with somebody else as well.

Given that the background check was not within Rebecca's power to change, spending time with others in the same situation was comforting to her. The variety of strategies Rebecca employed across these stressful experiences suggests that she was able to adapt her coping based on her perceptions of the situation's context.

*Example 3: Dave.* Similar to Rebecca, third-year student Dave reported stressful experiences in the *intrapersonal*, *interpersonal*, and *institutional* categories. The specific contexts of stressors confronting Dave were related to his *health*, *partner*, and *academics*. In the *health* context, Dave faced challenges related to depression. In this excerpt, Dave

described how he coped with these challenges by taking medication (*reduced tension*), talking with his female friends (*sought emotional support*), and appreciating how the college environment had been a positive influence on him overall (*reinterpreted the problem*):

I started fighting depression before I came to college and just last summer was the first time I'd ever seen a doctor and started to become medicated for it. Fighting that battle on your own is pretty rough especially at an all guy's school. There's no one to talk to. You can't talk to your buddy about it. That's the only time you really have to talk to a girl about it. I mean that's just how we're wired. I suppose we can talk about gender roles in those situations, but ultimately that's really the only thing that helps so I mean that's one of the things that [name of college] lacks, but I think [name of college] helped a lot in just how the structure helped me to grow in the right ways at a time in my life when I'm growing so fast and could have lacked direction. It's made me push towards the intellectual direction where I could have been in the factory and just seen the people my age that drop out of school and live there or live there and work in a factory. They just their lives are so much different than mine and their values are so much different. The things that they think are important in life are a lot different than mine. I suppose that's alright, but I like the way that I'm going so I'm glad that I was here.

Dave was one of the only students in the sample who talked openly about coping with the stress associated with mental health problems. In Dave's case, the stress stemmed from needing support, preferably from women, and having difficulty finding it at a single-sex institution.

In the *partners* context, Dave felt considerable stress about whether he should reunite with his ex-girlfriend. To cope with this stress, he *relied on faith* by meditating and praying about his decision. After he made the decision, he *reinterpreted the problem*, admitting that he may have made an unwise choice:

Probably the hardest decision I had to make was right around finals at the time I was talking about. The girl that I had broken up with, I could not decide whether or not I wanted to be back with her or not and it was a decision that absolutely plagued me for quite some time. I just did my best to really meditate on it and think about it and pray about it which I'm not so sure helped, but I ended up

making a decision. It was probably the wrong one in retrospect so. That decision has made me change the way I make decisions.

Interviewer: And how is that?

I think that people that say listen to your heart all the time are probably wrong. A little bit of logic goes a long ways sometimes and making a decision on passion or pure emotion probably isn't the best idea. I mean passion and emotion should be considered and shouldn't be pushed aside at all, but when it comes down to it, you have to be logical and you have to think things through and I knew what would happen in my mind and it ended up happening.

This is another example of a student using different coping strategies at different points throughout the stressful experience. While trying to make the decision, Dave relied on faith to give him clarity. After he made the decision, Dave reinterpreted the problem in an attempt to understand why he made the choice he did and how he might approach future decisions balancing logic and emotion.

Finally, in the *academics* context, Dave described one of the most stressful moments of his college career; it involved cramming to finish final papers. To cope with the situation, he *took action* by working long hours to meet his deadlines. He also *accepted the problem* including the role that his procrastination played in creating the problem:

Actually the first semester of my sophomore year, I had a real big load around finals time and I did not sleep much during finals week at all. Just stressed out about all my tests and absolutely going crazy. I had just broken up with my girlfriend like a week beforehand. We were about to get back together and we didn't, then it about happened again and it didn't. Just going back and forth like that and then having to stay up night after night after night to study for tests and get papers done. Just being really, really afraid that I was gonna screw something up or maybe not cite a source right. Just absolutely crumble my grade in one of my classes, and it ended up all working out. I got my report card back and had a 3.7 so at [name of college] at least that's not bad at all. I was pretty satisfied with that and I just ended up getting through that alright. After that it's like I knew that I could make it through any finals week because that was my hardest semester without a doubt that I'd ever have.

Interviewer: So how do you make sense of that experience now that you've gone through that and you're on the upswing now or you're on the other side of that bad experience? How do you make sense of that? What does that mean to you?

Learning how to work ahead was a big lesson to take from that. Just getting as much out of the way as you can as early as possible so that you're not in the lab six nights out of seven because that's not fun.

As mentioned earlier, *accepting the problem* was a common coping strategy employed by students dealing with *institutional* stressors, either because the stressor was not malleable to change or because they accepted their role in creating the stressor.

*Example 4: Tyler.* Third-year student Tyler reported stressful experiences related to his involvement in a fraternity and his status as a racial minority on campus in the *friends, activities/employment, and campus climate* contexts. In the *friends* context, Tyler felt frustrated when his friendships with his fraternity pledge brothers began to weaken. Once he reflected on the situation and *reinterpreted the problem*, however, he realized that there was a positive side to having more time to himself:

I guess before I was really concerned with spending all my time with my pledge brothers and I have this new group of guys in my life and I really just want to make this work and spend lots of time with them, but I realized that that can't be the case all the time. I kind of have to start living for myself to some extent, making sure that I'm happy and there are people in my life who support me and care for me and stuff. It took time for me to kind of wake up and realize that I would have devoted so much of myself to other people that I was not paying a little attention to myself. So now I'm at the point where I pay lots more attention to myself, but I've learned how to balance it and still be a good friend.

Rather than dwelling on his disappointment about friendships ending, which felt beyond his control to change, he reframed it as an opportunity to focus on his own needs, desires, and goals.

Also in the fraternity setting, Tyler dealt with a stressor related to his role as one of several Rush Chairs, which I coded in the *activities/employment* context. He struggled

to balance his desire to make progress by doing the work himself with his awareness that he should be a team player. In this excerpt, Tyler *accepted the problem* by admitting that he tends to take charge of situations which can create stress for himself and those around him:

I was going so head strong. I was like, okay I can do this or I can do that and I was just independent about it and just having to do it instead of always working in a team, but I feel like when I stopped working as a team with the other two guys, it was frustrating because I could never get them all to meet me at the same time or I could never meet them on their time or they never really had any opinions about what we ought to do. I just felt like it was just my idea so it was really hard to negotiate between what to do as a Rush Chair and kind of having to be all the Rush Chairs at the same time. So it was a challenge for me.

Interviewer: So how did it turn out?

Well it turned out just fine. I mean my pledge brother, I thought he was mad at me for a while, but I guess he really wasn't. It's actually going to work out okay I think because I'll be abroad in the fall so I'll still be a Rush Chair, but obviously I won't be as active as I would have been if I was on campus in the fall. So the other two will have a chance to step up and do what I couldn't do or what I wasn't doing or continue to do what I was doing.

Tyler, similar to other students in the sample, felt frustrated that he could not control the actions of his peers and as a result, collaboration with the other Rush Chairs was more challenging than he had hoped. Eventually, he accepted the reality of the situation and admitted that he was at least partly to blame for the stress that he experienced.

In the *campus climate* context, Tyler spoke about the stress he felt as one of only two African-Americans in his largely white fraternity, particularly when his brothers told racist jokes. To cope with the hurtful comments, he learned to *distance himself* to protect his emotions and also *sought emotional support* when needed:

It was the first time in my life where I really had to deal with any sort of issue like this and so it took me a while to learn how to adjust and how to not internalize all of this, seeing as this part of [name of state where college is located] culture. I'm not going to say Midwestern culture, but there's another issue. How all

Midwesterners act, that's the [name of state] culture because they're so predominantly white. It's just a common thing. I'm just hoping you hear it so much and then you just learn how to deal with it in such a way that it doesn't hurt me psychologically or emotionally. So it's definitely a process. I can't really necessarily articulate that process, but I know it's going on. There are a lot of small things. It's probably the fact that even when somebody says something to me I always have somebody else that I can go talk to that will support me or if somebody says something to me I could go approach that person and say, "Hey I don't like what you said. It kind of hurt my feelings." It's knowing that I can always do that. That's a really comforting thing.

For student Tyler, just the knowledge that he had people from whom he could seek support was comforting. This speaks to the idea mentioned earlier that the perception of coping resources may be as important as actual resources.

Qualitative analysis of how these four students coped in different contexts detected differences that were not found during the frequency analysis. For these four students, the types of strategies they elected changed across contexts, depending on their perceived control of each stressful experience. The mechanisms underlying students' change in coping strategies across contexts will be considered in the next section.

### **Discussion of Findings**

My findings related to the first and second research questions yielded several insights about sources of stress, coping strategies, and the relationship between context and coping strategies in undergraduate students. Even though they were not prompted to discuss stressful experiences by the WNS interview protocol, the students in the analytic sample reported between 1 and 4 stressful experiences per transcript with an average of 1.5. The experiences themselves varied widely by type, duration, and intensity, including examples of all four of Aldwin's (2011) categories of stressors presented earlier (hassles, chronic role strains, serious life events, personal traumas). The major categories of stressful experiences that students reported – *intrapersonal, interpersonal, and*

*institutional*— mirrored the first three levels of Hochman and Kernan’s (2010) social ecological model of college student stress. Students’ relationships, particularly those with their peers, were the most frequently reported source of stress followed by institutional sources of stress, most notably academics. This aligns with previous research identifying relationships and academics as two of the most frequently cited domains of stressors for undergraduate students (Howard et al., 2006). Furthermore, more than one of the underrepresented students in the sample, including Tyler who was the target of racist jokes in his fraternity, reported minority-status stresses, similar to those described by Smedley, Myers, and Harrell (1993).

In terms of coping strategies, students implemented a diverse array of strategies and exhibited flexibility when applying those strategies. They reported between 1 and 23 coping strategies per stressful experience with an average of 4.5. They also adapted their strategies as their perception of the situation changed; this will be discussed further in Chapter VI. Overall, students were more likely to cope by making meaning of a problem or trying to address it as opposed to alleviating distress or avoiding it, but examples of all four major types of coping emerged from the data. There was some evidence that students matched their coping strategies to the specific situation; for instance, the *sought emotional support* strategy was used more frequently in emotionally-charged contexts such as *health, identities, and partners*. The fact that *maladaptive* strategies were reported infrequently could be an indication that students did not consider these to be valid coping options or simply did not feel comfortable disclosing them in an interview setting.

When a stressful event occurred, students in the analytic sample appeared to appraise the context of the situation to determine how malleable it was to change. The



outcomes of these appraisals shaped students' perceived control over the situation. You may recall from Chapter II that students who exhibit higher perceived control have been shown to experience less stress because they are confident in their ability to manage stressful situations (Skinner & Zimmer-Gembeck, 2011). In addition, degree of controllability was included in Park's (2010) model illustrated in Figure 2.4 as one of the factors that can influence one's appraised meaning of a stressful event.

When students perceived greater control over the context of a stressful experience, they were more likely to cope by using *problem-focused* strategies to address the problem directly in an attempt to change it. As the frequency data suggested, this was often the case with *intrapersonal* stressors (e.g., Rebecca *sought instrumental support* to cope with her *health-related* cheerleading injury), but there were exceptions to this pattern. For example, to cope with his *health-related* depression, Dave utilized the strategies of *seeking emotional support*, *reducing tension*, and *reinterpreting the problem*, suggesting that he may not have felt empowered to address his depression directly so instead he did what he could to alleviate his distress and make sense of the situation. This suggests that even within a single context, in this case *health*, the degree of agency students felt related to addressing stressful experiences varied.

When students perceived less control over the context of a situation, they tended to cope by using *meaning-focused* strategies to make sense of the problem. As the frequency data suggested, this was often the case with *interpersonal* and *institutional* stressors (e.g., Andrea and Tyler *reinterpreted* stressors related to *family* and *friends*, respectively, and both *accepted* stressors related to *activities/employment*). Here, too, there were exceptions to this pattern. For example, to cope with a situation related to her

*roommate's* abusive partner, Andrea *took action* by approaching her roommate with her concerns because she felt a sense of urgency about the situation and a sense of agency to change it. Similarly, student Dave *took action* to cope with final exams stress in the *academics* context, again because he perceived that there was much at stake and that he had the potential to change his situation. Thus, the way students perceived their potential to effect change in a stressful situation seemed to be an important determinant of the type of coping strategies they chose to use.

### **Summary**

As mentioned in Chapter II, Lazarus and his colleagues (Lazarus, 1966; Lazarus & Folkman, 1984) described coping as a complex, multidimensional, dynamic construct influenced by characteristics of the individual, the environment, and transactions between the two (see Figure 2.1). In this study, undergraduate students reported coping with stressful experiences in a wide range of contexts, and those contexts were one of the environmental characteristics that shaped students' choice of coping strategies. Those students who perceived greater control over the context of the stressful experience tended to opt for *problem-focused* strategies, while those who perceived less control generally opted for *meaning-focused* strategies. However, not all students who confronted stressors in the same context coped the same way. This suggests that there were also individual characteristics at play that affected students' perceptions of stressful experiences as well as their coping strategies. Two of these individual characteristics (previous coping experience and self-authorship level) will be explored in the next chapter.

## **CHAPTER V: ANALYSIS OF COPING BY YEAR AND SELF-AUTHORSHIP LEVEL**

The goal of determining whether and how undergraduate students' stress-related coping changes over time and with self-authorship development was central to this study, and this chapter will present my findings related to the third and fourth research questions: 3) Do students' coping strategies change over time, and if so, how? and 4) What is the relationship between students' self-authorship levels and their coping strategies? Similar to Chapter IV, I will present frequency data, excerpts from interviews, and discussions to illustrate the patterns that emerged related to students' coping strategies.

### **Coping Strategies by Year**

In this phase of data analysis related to my third research question, I explored whether and how students' coping strategies differed between the Year 2 and Year 3 interviews. To accomplish this, I compared the types of strategies that emerged from the Year 2 and 3 cohorts to detect patterns. I noticed patterns in the frequency data that prompted me to further explore changes in coping strategies over time using qualitative analysis on excerpts from four students. This further analysis yielded new insights that were not found during the frequency analysis.

**Frequency of coping strategy usage by year.** The frequency of use of coping strategy categories remained stable between Years 2 and 3, each varying by only 2%. A

bar chart illustrating the frequency of references to each coping strategy category per year may be found in Figure 5.1.

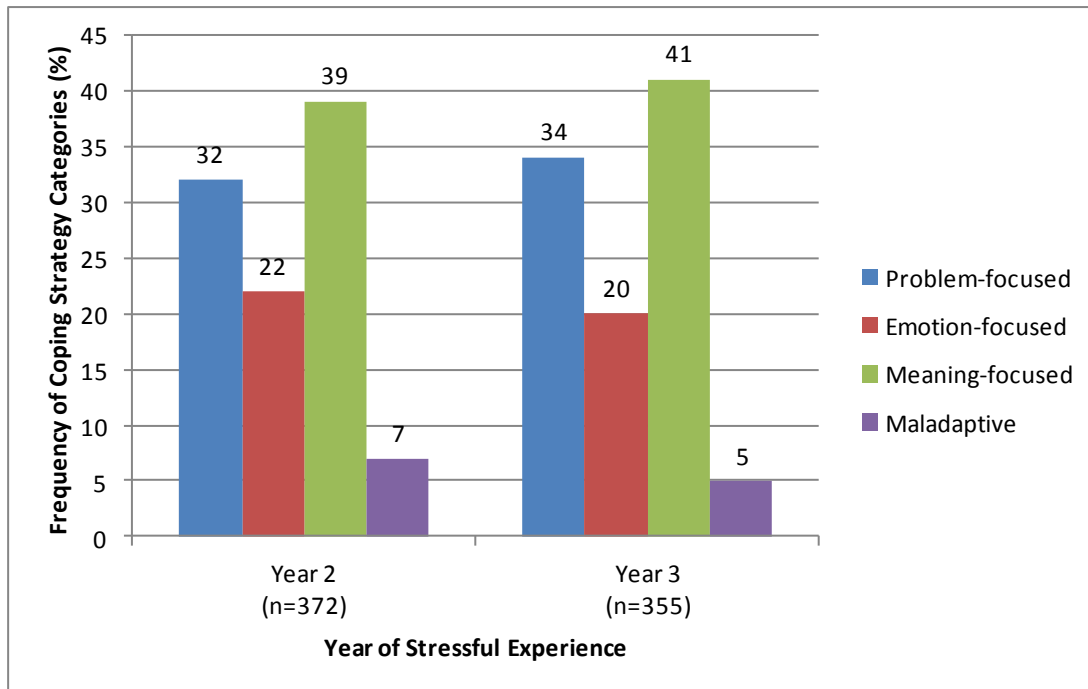


Figure 5.1. Frequency of Use of Coping Strategy Categories by Year

The frequency of use of specific coping strategy types with the total sample also remained relatively stable between Year 2 and Year 3, each varying by no more than 5% as illustrated in Table 5.1. For both years, the table shows the total number of coping strategies used by students that year, followed by the number of references to each coping strategy type and what percent of the total references that type represented each year. Although I was unable to determine whether the frequency differences in coping strategy usage between years were statistically significant for reasons explained in Chapter IV, I identified the coping strategy types that changed the most (3-5%); these are italicized in Table 5.1. Students were slightly more likely to *seek informational or instrumental support* and *distance themselves* in Year 2, and to *take action* and *learn from others*'

*experiences* in Year 3. This suggests that in Year 2, students were more apt to seek advice or help and distance themselves from a stressful situation to cope, while in Year 3, students preferred to cope by taking action and learning from others with similar experiences.

Table 5.1. Frequency of Use of Coping Strategy Types by Year

	Year 2		Year 3	
	<i>n</i>	%	<i>n</i>	%
<b>COPING STRATEGIES</b>	<b>372</b>		<b>355</b>	
<b>Problem-focused types</b>	<b>118</b>	<b>32</b>	<b>119</b>	<b>34</b>
Sought informational or instrumental support	46	12	32	9
Prepared for action	20	5	21	6
Took action	52	14	66	19
<b>Emotion-focused types</b>	<b>83</b>	<b>22</b>	<b>72</b>	<b>20</b>
Sought emotional support	34	9	40	11
Reduced tension	14	4	14	4
Distanced self	34	9	18	5
<b>Meaning-focused types</b>	<b>144</b>	<b>39</b>	<b>145</b>	<b>41</b>
Reinterpreted the problem	71	19	62	17
Accepted the problem	49	13	50	14
Learned from others' experiences	13	3	23	6
Relied on faith	11	3	10	3
<b>Maladaptive types</b>	<b>27</b>	<b>7</b>	<b>19</b>	<b>5</b>
Avoided the problem	20	5	17	5
Disengaged	7	2	2	1

The frequency differences by year were small, suggesting that not much had changed in the year between interviews to influence the number or type of coping strategies students utilized. I did, however, detect several examples of students who exhibited a shift in the type of coping strategies they used from one year to the next, and these examples will be shared in the next section. I have included their stories in hopes that they will shed light on what prompted these students' coping to change over time even though other students' coping did not.

**Examples of coping strategy usage by year.** Although the aggregate data indicated that students' use of coping strategies remained fairly stable from Year 2 to Year 3, several students displayed a noticeable change in the type of coping strategies they used each year. To examine the mechanisms underlying these changes, this section will present a series of examples from four students. These students were among seven of the 55 students in the analytic sample who reported a stressful experience within the same context both years, whose self-authorship level remained the same between years, and who exhibited a shift in their coping strategies from one year to the next. Although the stressful experiences were not always precipitated by the same set of situational factors, the fact that they were within the same context enabled an analysis of how coping changed over time that was not attributable to context or self-authorship level.

*Example 1: Alina.* Alina reported stressful experiences in the *academics* context in her Year 2 and 3 interviews. In Year 2, she was afraid of approaching professors because she perceived them to be “much smarter” than she was. Even though she needed to find a new advisor, she hesitated to contact them for fear of being judged, so she *avoided the problem:*

I have a lot of trouble understanding how to talk to teachers outside of the classroom setting. Because I feel like here, they try to make it like the teachers are really open to have conversations with you and they want to be more than just your teacher. They want to be your friend or whatever, you know? Which is fine but I don't know how to interact with people like that. I'm very awkward about it. Some of these students have really great relationships with professors. Specifically one writer that I know, he has this great relationship with the head of the fiction department where they talk a lot and he gives her his writing and all this stuff. She helps him out with that and that's really cool. I don't know. I just don't know how to do that, like talking to an adult who's much smarter than me in a setting where he or she is supposed to be teaching outside of the class. I don't know. It's something I need to learn, I guess. I need to work on that one.

It is clear from this excerpt that in Year 2, Alina lacked confidence in her ability to interact with professors outside the classroom even though she was interested in forming closer relationships with them. She opted for the *maladaptive* coping strategy type of *avoiding the problem*.

By Year 3, Alina had come to value her own intelligence and was less intimidated by professors' judgment of her, which was helpful when she encountered a stressful situation defending her qualifications to enter the political studies major in front of a contentious admissions committee. As she looked back on the fear she previously felt, she *accepted the problem* that it had been rooted in her own insecurity:

I spent a lot of time thinking about it and thinking that it was going to be somehow like a measure of my worth, which in hindsight was very silly. [I: How is that silly?] Well, I think it was silly because, what can I say? How can I explain that? Given what I know about myself and how I think about my own thoughts, I have autonomy I guess in my understanding of my intelligence that is not dependent upon professors – like I think that's fine to have, right? And—and so ultimately if they want to argue about things themselves, while I'm just sitting there, that's fine. It's not actually related to me. I mean it is related to me, but it's not because of me, you know what I mean? It's not like my fault or anything that they couldn't figure out what they wanted to talk about. They let me in and they were like, "You're obviously a good student, so no problem. You're obviously in the department," so I was just really nervous going into it because I was convinced that they would think that I wasn't qualified to get in, but I obviously was, so it was just really a lot of insecurity I guess regarding the situation, which was kind of silly.

In this excerpt, it is evident that by Year 3, Alina perceived a greater ability to cope with faculty members. She had come to realize that their opinions of her did not define her intelligence, and she opted for the adaptive strategy type of *accepting the problem*, admitting that her own insecurity had been holding her back.

*Example 2: Sabrina.* Another student, Sabrina, dealt with stressful events in the *roommates/neighbors* context during her second and third years. In Year 2, a conflict

with her roommates emerged once she got a boyfriend and began to spend less time with them, triggering feelings of jealousy. To cope with the situation, she *avoided the problem* at first by ignoring text messages and staying elsewhere until she eventually *sought informational or instrumental support* from her Resident Assistant (RA):

Well, the other day the roommate No. 1 text messaged me and asked me if I wanted to go to the mall. I said no because I didn't want to spend any money, and I knew if I went I would buy stuff, and I would buy food, and I don't really want to spend any money. And she got mad at me because I didn't want to go to the mall. So I think she thinks it's an excuse to hang out with him (her boyfriend) instead, and I think she thinks that everything I do is directed towards her when I just don't want to spend any money. A lot of it happens over text message so I really don't like looking in my phone.

And one time there was a floor meeting, but I just completely forgot about it. I went over to my boyfriend's, and I was just watching TV or something. The second roommate texted me, and she asked me where I was. And I was, like, "Oh my gosh, I forgot." Then the other roommate – she was babysitting because that's her job – she text messaged me and got mad at me for not going to the floor meeting. And I was, like, this isn't any of your business. She just likes to know what's going on all the time, and then gets mad at me for things that are ridiculous. So it's pretty difficult to stay there. Basically I emailed my RA, and I asked him what I could do, but he hasn't emailed me back.

The fact that Sabrina *avoided the problem* by refusing to check her phone and avoiding her room in Year 2 rather than confront her roommates shows that she lacked confidence in her ability to cope with the situation. Although she did *seek informational and instrumental support* from her RA, she was expecting her RA to fix the problem for her because she did not feel capable of resolving it herself.

The same issue with her roommates persisted into Year 3, although she figured out how to manage it better. As in Year 2, she *sought informational or instrumental support* from her RA as well as a college counselor. In Year 3, however, she also *accepted the problem*, acknowledging that the situation was not going to resolve itself, and *took action* by finally confronting her roommates about the conflict.



...about my roommates, I had to confront them because it was like a month or two of them just not talking to me, so I confronted them and—

Interviewer: Can you—can you tell me a little bit more about that, how you did it?

It was so ridiculous. Well I went to a counselor on campus — in the counseling offices, not like an advisor. And she told me to just talk to them about it. And then I saw the person on the floor that's in charge-

Interviewer: Like your resident, your resident assistant?

Yes. Yes. My RA. [Interviewer: Okay, RA.] I went to my RA too, and they just told me I have to talk to them about it. So I did, and they just told me that they want me to spend more time with them, that they feel like they're losing me. And I understand where they're coming from, but I just couldn't be everywhere for everyone...I guess we needed to have that conversation to move on, so that she would stop glaring, that I would start trying more to hang out with them. It was all just like a cycle of just bad.

The type of coping strategies used by Sabrina changed in Year 3. In contrast to the *maladaptive* strategy of *avoiding the problem* exhibited in Year 2, Sabrina coped by *accepting the problem* and *taking action* to address it in Year 3. The nature of how she *sought informational and instrumental support* also changed. Rather than expecting her RA to fix the problem, Sabrina sought strategies from both her RA and a counselor about how to cope with the situation herself.

*Example 3: Diana.* Diana reported stress related to the *identities* context during her Year 2 and Year 3 interviews. She was at a different phase of the coming out process in each interview and used different types of coping strategies to manage her stress each year. In Year 2, Diana reflected on how liberating it felt to be open about her sexuality in the college environment and how incongruent it felt to continue to hide it from her family. She *reinterpreted the problem*, realizing that she needed to reveal her true self to her family in order to be authentic in all facets of her life:

I think coming out has helped me grow in that I don't hide anything. I don't feel the need to hide anymore. Especially on campus, it's like, "This is who I am. You accept me for me or you don't." Whereas before I was like always, "Oh, well, this is only one part of me" or I would put on a façade about this and pretend to be someone I wasn't.

Where now it's like I'm comfortable being myself and I think I've become so comfortable on campus being myself that now when I go home it's like I can't go back to the person I used to be and feeling the need to hide, so that's why I've come to terms with having to come out to my family, so that I can be the same person I am on campus at home.

In this excerpt, we can hear that Diana has *reinterpreted* her situation and recognized the need to be open about her sexuality with her family so that she could be authentic in all areas of her life. Still, she has not yet taken action to come out to them because her perceived ability to cope with their reactions is lacking.

By Year 3, not only had she *taken action* by coming out to her mother, but she also reported *learning from others' experiences* by sharing her coming out story with other students to educate them:

I know that if anything happens, if anything goes bad I always have my mom to go back to and I can tell her everything and I can be open with her and so now that she knows and she's supportive it's even bigger because when I go out into the world I might be kicked down or pushed down or beaten and have negativity brought towards me and I can go back to a loving home. So, that's something that pushes me to even do more. I do so much advocacy work and I love to do panels for different classes. I'm doing a human sexuality class next week where I just go and speak about my coming out process and how I figured it out, stuff like that. She doesn't understand why I like to do things like that or why I put myself out there because she says, "Isn't that your private life?" I try to explain to her it's something that I'd rather people to be educated about than ignorant, and so, I'd rather use myself because who else is better than me? If someone's educated about the negative stereotypes, they will go away. She doesn't necessarily understand that, but she's still supportive of me.

One year later, the type of coping strategies Diana employed suggests that she felt more confident in her ability to cope with the consequences of being openly gay. She *took*

*action* to come out to her family, and she became an activist for LGBTQ rights on her campus, *learning from others' experiences* and sharing her own.

*Example 4: Hannah.* Last, Hannah reported stressful events in the *partners* context in her Year 2 and 3 interviews. In Year 2, Hannah was recovering from a traumatic breakup with her boyfriend. To cope, she *distanced herself* from her emotions so that she could move on with her life. She also *disengaged* from the dating scene entirely, assuming that it was impossible to find a quality partner on her campus:

That's kind of like with my relationship with Jonathan. It was very hurtful and it was very hard, but I have to get through it and that's it, you know? Yes I'm going to cry once in a while because I cry, and yes I'm going to be sad sometimes because it's okay to be sad. You have to let your emotions out, but I can't let it take over me. I can't. I have to keep moving forward...

Interviewer: Reflecting on those relationships, has it changed the way that you're going to approach things this year?

Definitely. I used to be a very crushy girl. I still love having crushes but I completely shut it off in my life. I don't even think about it that much anymore. I'm definitely focusing on my school academics and my newspaper and having this fun social life, and that's it. That's the main difference, that I'm not really putting thought into having a boy relationship, especially just because what I want is definitely more than anyone here would want, you know? And I don't think I can find something I would want here at [name of college], such as a relationship.

Although it was not explicit in this excerpt, Hannah seemed to lack confidence in her ability to cope with another painful breakup. She chose the *maladaptive* coping strategy type of *disengaging* from dating altogether on her campus based on the assumption that she would not find a suitable partner there, so it was not worth looking.

In Year 3, Hannah was still recovering from the breakup and *sought emotional support* from a college counselor and her sister to help her heal and bring her back to her true self:

So that's how amazing [name of college] is, that you could get to know people like this. Then I got to go to counseling, and that was really helpful throughout like my time at [name of college] this year. I kind of got sidetracked and I didn't want to. I went to probably one party when I was a freshman, and then when I was sophomore I went to a lot more. I still didn't drink, so that was a big thing. Then slowly and progressively I'd do little things, but nothing too crazy.

Then I talked to my sister one of the times, and I was like, "I don't know, I've been like this," and I told her everything. And she's like, "Well, you know what, I think you're trying to find out who you are, and you are a goody-two shoes. You just are that person. You probably feel weird right now because you're acting like a person that you're not." And I was like, "Yeah, that's true." Now I'm back on track and I feel happier than ever and I'm okay being whatever. If I'm known as that girl I'm totally fine, like I've been that all my life and I'd rather be known as that than something else.

In her Year 3 interview, it was evident that Hannah felt more capable of coping with her lingering emotions from the breakup. Her decision to *seek emotional support* from a counselor reflected her willingness to engage with her problems rather than run away from them.

Qualitative analysis of how these four students coped with stressful experiences both years detected differences that were not found during the frequency analysis. For these four students, the types of strategies they elected changed between years and were related to their perceived ability to cope with stress in a specific context. The mechanisms underlying students' change in coping strategies between years are considered in the Discussion of Findings section later in this chapter.

Next, I considered whether and how students' self-authorship levels might be related to their perceived ability to cope with stressful experiences. Did students exhibiting different levels of self-authorship cognitively construct stressful situations in different ways, choose different types of coping strategies, and/or apply those strategies

differently? In the following section, I address these questions and explore the relationship between the constructs of coping and self-authorship.

### **Coping Strategies by Self-Authorship Level**

In this phase of data analysis related to my fourth research question, I explored the relationship between students' self-authorship levels and their coping strategies. To accomplish this, I merged the Year 2 and Year 3 transcripts, divided them into three groups by self-authorship level (*external [Ea, Eb, Ec]*, *early crossroads [E(I), E-I]*, and *late crossroads/internal [I-E, I(E), Ia]*), and compared them to identify patterns in students' coping strategy types across levels. As a reminder, descriptions of the ten positions that comprise the self-authorship levels are presented in Figure 2.3; the *late crossroads (i.e., predominantly internal)* and *internal* positions were combined due to the small number of students within the *internal* level ( $n = 2$ ), as described in Chapter III.

In order to explore the relationship between coping strategies and self-authorship level using qualitative analysis, I selected excerpts from four students who exhibited a change in their coping when their self-authorship level changed. In addition, I analyzed the entire sample to determine whether there were qualitative differences between self-authorship levels regarding how each coping strategy type was applied. These further analyses yielded new insights that were not found during quantitative analysis.

**Frequency of coping strategy usage by self-authorship level.** A bar chart illustrating the frequency with which students reported using each coping strategy category for each self-authorship level may be found in Figure 5.2. *Meaning-focused* strategies, those aimed at making meaning of the problem, were used at a consistently high level by students across self-authorship levels. *Problem-focused* strategies, those

aimed at addressing the problem, were reported more often by *external* and *late crossroads/internal* students (35-37% of the strategies used by students within these levels) than by *early crossroads* students (29% of the strategies used by students within this level). The use of the *maladaptive* category of coping strategies, those aimed at providing relief but often exacerbated the problem, was low but decreased slightly as self-authorship increased. The *emotion-focused* category of strategies, those aimed at alleviating distress, remained stable across all three self-authorship levels.

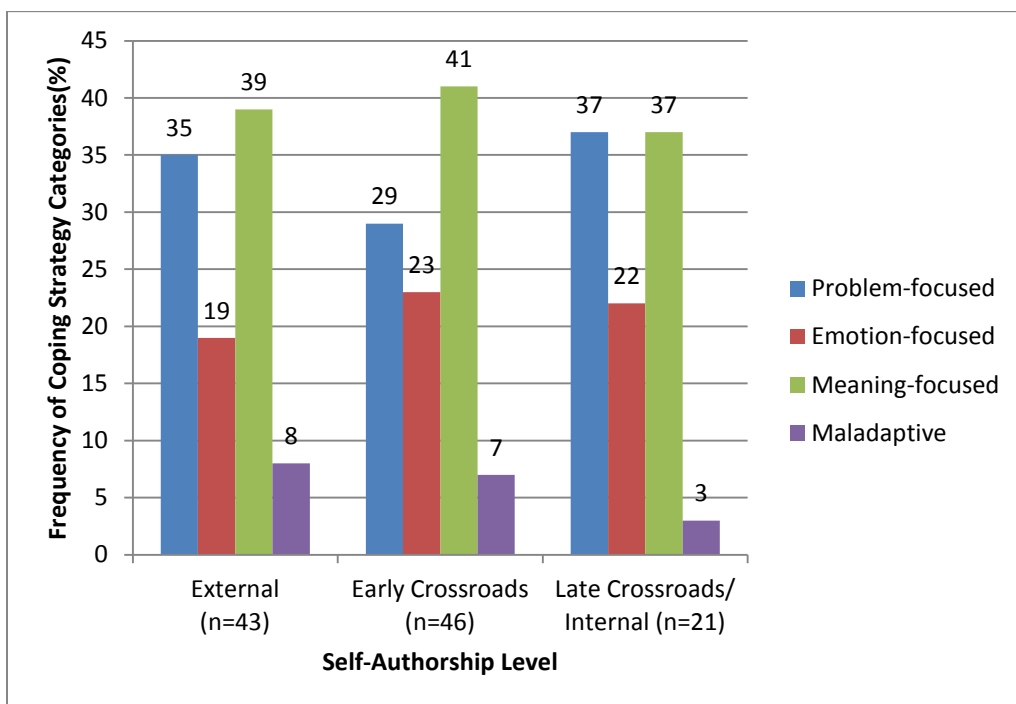


Figure 5.2. Frequency of Use of Coping Strategy Categories by Self-Authorship Level

I also detected patterns between specific types of coping strategies and students' self-authorship levels, as illustrated in Table 5.2. For each self-authorship level, the table shows the total number of coping strategies used by students in that level, followed by the number of references to each coping strategy type and what percent of the total references that type represented per level. Although I was unable to determine whether

the frequency differences in coping strategy usage between self-authorship levels were statistically significant for reasons explained in Chapter IV, it is worth noting those coping strategy types that changed the most (3-5%); these are italicized in Table 5.2. Students in the *early crossroads* level were less likely to *seek informational or instrumental support* (8% compared to 12-13%) and slightly more likely to *distance themselves* (9% compared to 6%) than those in the other levels. Students in the *late crossroads/internal* level were less likely to *accept the problem* (9% compared to 13-16%) and twice as likely to *learn from others' experiences* (9% compared to 4%) than students in the other levels.

Table 5.2. Frequency of Use of Coping Strategy Types by Self-Authorship Level

	External		Early crossroads		Late crossroads/ internal	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>COPING STRATEGIES</b>	<b>252</b>		<b>327</b>		<b>148</b>	
<b>Problem-focused types</b>	<b>87</b>	<b>35</b>	<b>95</b>	<b>29</b>	<b>55</b>	<b>37</b>
Sought informational or instrumental support	<i>34</i>	<i>13</i>	<i>26</i>	<i>8</i>	<i>18</i>	<i>12</i>
Prepared for action	14	6	17	5	10	7
Took action	39	15	52	16	27	18
<b>Emotion-focused types</b>	<b>47</b>	<b>19</b>	<b>75</b>	<b>23</b>	<b>33</b>	<b>22</b>
Sought emotional support	25	10	33	10	16	11
Reduced tension	7	3	13	4	8	5
Distanced self	<i>15</i>	<i>6</i>	<i>28</i>	<i>9</i>	<i>9</i>	<i>6</i>
<b>Meaning-focused types</b>	<b>99</b>	<b>39</b>	<b>135</b>	<b>41</b>	<b>55</b>	<b>37</b>
Reinterpreted the problem	49	19	60	18	24	16
Accepted the problem	<i>33</i>	<i>13</i>	<i>53</i>	<i>16</i>	<i>13</i>	<i>9</i>
Learned from others' experiences	<i>9</i>	<i>4</i>	<i>14</i>	<i>4</i>	<i>13</i>	<i>9</i>
Relied on faith	8	3	8	2	5	3
<b>Maladaptive types</b>	<b>19</b>	<b>8</b>	<b>22</b>	<b>7</b>	<b>5</b>	<b>3</b>
Avoided the problem	15	6	17	5	5	3
Disengaged	4	2	5	2	0	0

The frequency differences I detected between self-authorship levels relative to the types of coping strategies students used were small yet intriguing. They led me to wonder about the reasons for these differences and whether self-authorship level impacts how students select and apply coping strategies. In the following section, I will consider these topics in depth by focusing on individual students whose coping strategies changed as their self-authorship developed.

**Examples of coping strategy usage by self-authorship level.** To explore the patterns that emerged between students' self-authorship levels and their coping strategies and to examine the mechanisms underlying these patterns, this section will present a series of examples from four students. These students were among five of the 55 students in the analytic sample whose self-authorship level increased between Years 2 and 3 (e.g., *early crossroads* to *late crossroads/internal*) and who also exhibited a change in coping strategies between interviews. (As a reminder, you can find the distribution of self-authorship level scores over time in Table 3.1.) Given that the contexts of their stressful experiences remained the same, this enabled an analysis of how coping changed by self-authorship level that was not attributable to a change in the context of the experience. The only way to capture a change in self-authorship level was to compare Year 2 transcripts with Year 3 transcripts; thus, the examples below differ both by year and by self-authorship level.

*Example 1: Nicole.* The first student, Nicole, dealt with stress in the *family* context during her second and third years of college related to the fact that she became pregnant as a freshman and as a result, her religious family pressured her to have an abortion and cut her off financially when she chose to keep the baby. They were also



upset that their daughter had had premarital sex and that the baby's father was African-American. In Year 2, when Nicole exhibited meaning making in the *early crossroads (E-I)* level, she was struggling with how to cope with her family's reaction. She chose to *distance herself* from their criticism, *reinterpret the problem* as a wake-up call to learn to take care of herself, and *accept the problem* that she could not control her family's reaction to her pregnancy:

This is going to sound terrible, and I don't mean this in a terrible way, but I almost want to just cut off ties with them. I almost feel like I wouldn't get stressed because I wouldn't talk to them. You know what I mean? I don't want to give them my cell phone number, which they have, but just because I'm like, "You took it from me. Why should I give you mine that I'm paying for?"...

I've never had to take care of myself. It's always been, "Do you need anything? Do you need some laundry detergent? Do you need to bring them home to mama?" Now it's like go get quarters. Wash your own laundry. I think in the long run, it'll teach me responsibility and I think it'll teach me that life isn't just handed to you. Everything's not on a silver platter and you've taken a lot for granted because you've been so spoiled...

I sometimes wonder what happened to the happy me. You know what I mean? Like I'm happy, but with my family life, I'm not happy, but I can't control what's happened. I mean back then, I could have controlled it. But I didn't and it's here and there's really nothing I can do about it.

In Year 2, Nicole's choice of coping strategies reflected her *E-I* self-authorship position in that she was actively working on constructing an internal voice and was trying to determine who she was now that she could no longer rely on her family to provide direction for her life. She *distanced herself* from authority figures, *accepted* that she needed to take responsibility for her own life, and *reinterpreted* the situation as an opportunity to develop her own inner compass.

In Year 3, Nicole was still processing the anger she felt toward her family for abandoning her and figuring out how to survive as a single mother and full-time student.

Now exhibiting meaning making in the *late crossroads (I(E))* level, she opted for different coping strategies than in Year 2. She *sought informational or instrumental support* from a college counselor for advice about how to manage her anger, *reduced tension* by listening to music and crying, *relied on faith* by praying, and *sought emotional support* by talking to her friends:

Because of what I've been through, that's the person that I've become, and that's what I was talking to [name], our guidance counselor, about. Just anger management. [I: Interviewer: Did it help?] Yeah, a little bit. One of the things that did help, she told me when I'm mad about something to write down on a piece of paper what I'm mad about, crumple it up and throw it away, and it helps. I thought, "[Counselor's name], come on. That's not going to work. That's so elementary," but it really does work... a lot of the way I cope with things is to write music or either play the piano or sing or play the guitar, very musical. That's a lot of it is I either do that little write down thing or I just listen to music, either just a laidback, chill out song or a sad song that will make me cry. That might sound weird, but for me, crying helps. I don't go around sobbing, no, but if I have a moment, crying makes me feel better. It does. You know, so I use music, and that's another thing the guidance counselor was saying is try and find a song that relates, like a different song for each emotion. If you're angry or if you want revenge, try and find a song that will make the situation seem less intense than it really is, and it helps. And I pray. I pray a lot. That's really it: music and prayer and time with my friends. I vent a lot. Obviously I'm venting now, but I talk to my friends a lot about it, almost every day, and it's always something new.

By Year 3, Nicole had advanced to the *I(E)* self-authorship position, and thus was actively working on cultivating her internal voice. This was evident in her increased introspection about her goals and needs as a single parent as well as her increased confidence in her ability to cope. She coped by proactively *seeking informational and emotional support*, asking for help without expecting others to fix the problem for her. She also *relied on faith* and *reduced tension* in several ways, suggesting that she was more adept at self-care than she had been in Year 2.

*Example 2: Audrey.* The second student, Audrey, also dealt with stressful experiences in the *family* context during Years 2 and 3. Both involved the aftermath of

her father's unexpected death from a heart attack in the summer before her second year of college. In Year 2, when she displayed meaning making in the *early crossroads (E-I)* self-authorship level, she exhibited some confidence in her ability to cope. She dealt with the loss by *distancing herself* from her emotions so that she could stay strong, *reducing tension* by watching television with her mother in the week after this death, and *reinterpreting the problem* by realizing that she was better equipped than her mother or sister to hold the family together even though she did not enjoy the role:

Interviewer: How do you think your dad's death has affected the way you see yourself?

I'm not quite sure yet, because I've internalized it so much. I sort of think that I can handle more now. I always knew I could handle a lot. My dad – and most of his brothers had died before him. And my mom's two brothers, one of whom is younger than her – her two brothers died in a year. In a calendar year, they were both gone. One of her brothers was my dad's best friend. So I didn't have to be as strong then, but I sort of had to hold it together for them because they were both completely lost in separate ways...

Interviewer: How did you get through that week?

Pretty much just kept going. I slept in my mom's bed every night. Just pretty much got three hours of sleep a night, I think – both of us did. And we watched a lot of late night TV that week...

Interviewer: And what have been your thoughts about you being that someone?

I mean certainly I would rather someone else could have done it. He had a heart attack. My sister was the one there, went with him to the hospital, and called my mom and me. I was really the most removed. I never saw my dad in the hospital. I saw him when he said bye to me that morning, and that was it. My sister saw him through the whole heart attack. My mom was there. She got to the emergency room about the same time the ambulance did. So they both sort of experienced it more than I did, and I think that helped me.

In Year 2, Audrey exhibited the *E-I* self-authorship position so she was also working on constructing an inner voice even though it was not necessarily by choice. Similar to Nicole, Audrey lost a parental figure in her life (her father) and as a result, needed to step

up and take more responsibility for herself and her family. To do so, she *distanced herself* from her pain and *reinterpreted* her new role as caretaker of her family as fitting as opposed to obligatory.

In the Year 3 interview, when Audrey displayed meaning making in the *late crossroads (I-E)* self-authorship level, she described the progression from bottling up her own emotions for the sake of her family to allowing herself to grieve the loss of her father. This time, she coped by *seeking emotional support* from her roommate and close friend:

Then mid-April last year my mom and I got into a really huge fight because she was like, “You don’t miss your dad enough. You’re not grieving for him well.” I sort of went to pieces on my roommate, but she had a really important meeting so I was like holding myself together a bit. I was like, “No, I’m fine. Really, I’m fine,” and the minute she was out the door I was on the phone with my oldest friend. I answered it and she was like, “Hey, [student’s name],” and I was like, “*Sob!*” and I just started sobbing again. She was out at a party and we maybe talked for a good hour-and-a-half, until she was sure that I calmed down. So my friends have really helped a lot in that—the friend, she let me cry on her, she was actually the first person I told that my dad had died.

By Year 3, Audrey had advanced to the *I-E* self-authorship level, which is characterized by active external and internal voices with the internal voice being more prominent. Her growing inclination to listen to her internal voice enhanced her perceived ability to cope, which was reflected in her decision to prioritize her own needs by *seeking emotional support* once she realized that she could no longer shoulder the weight of her father’s death on her own. She also exercised her internal voice by standing up to her mother who had accused her of not grieving properly, rather than burying her emotions as she had in Year 2.

*Example 3: Arianna.* The third student, Arianna, reported stressful experiences in the *health* context during her Year 2 and Year 3 interviews, both relating to being stalked

by a peer. In Year 2, when she displayed meaning making in the *external (Ea)* self-authorship level, she coped by *reinterpreting the problem* and *seeking informational or instrumental support*. Although she was upset by the stalker's behavior, she used reinterpretation to justify his actions, claiming that he could not help himself due to an assumed mental disorder. She also sought help from her resident director (RD) to fix the situation for her, without giving any indication that she felt confident she could solve the problem herself:

Well, I don't really necessarily blame him for his actions. I mean I'm sure he does have some Asperger's, a mental disorder and I think it was sort of beyond his control and he doesn't understand his limitations or where to stop or when to stop. I just don't blame him. I don't, although I just didn't like being a part of it and personally I didn't feel safe. It was just an unhealthy situation for me to be in even if it isn't his fault. Eventually I asked him to stop and he didn't. Then I supposed it was harassment, so that's when I contacted the RD. She said that like I should have contacted her long before, and his stack of emails and letters that I had like was probably half an inch thick.

Interviewer: Wow. Wow. What was that kind of decision-making process for you like, whether to go to the RD or how to handle it?

Well, I talked to my roommate about it and she didn't think it was normal. And I talked to one of my friends at home and she told me I should go straight to the RD.

In Year 2, Arianna exhibited self-authorship at the *Ea* position, which is defined by consistently relying on external authorities without recognizing the shortcomings of doing so. The absence of an internal voice is evident in both coping strategies mentioned above. She used *reinterpretation* to justify the stalker's behavior, discounting her own feelings in the process, and she *sought informational or instrumental support* from her RD, expecting that the RD would step in and fix the problem for her. The lack of empowerment reflected in both of these coping strategies is indicative of her *external* orientation.

In Year 3, Arianna had an entirely different perspective on the situation given that the stalker had been allowed to return to campus because she had elected not to press charges with local police. Now exhibiting meaning making in the *early crossroads (E-I)* level, she felt frustrated with herself for prioritizing the stalker's feelings over her own. This prompted her to *accept the problem* that she should have acted sooner to protect her safety:

So, last year he came back to campus, and I couldn't take any legal action against him. I just didn't want him to get in trouble freshmen year, but the fact that he returned really didn't go well with me, and there's nothing that the school could do. There was nothing that I could do, so it was like a lesson learned that I should have taken action the first time around. The statute of limitations ran out.

By Year 3, Arianna's self-authorship had advanced four positions to *E-I*. Now that she was constructing an internal voice, she felt more capable of coping with the situation and *accepted* that she should have listened to her instincts one year ago and taken stronger action against her stalker to protect herself.

*Example 4: Irene.* The fourth student, Irene, described stressful events related to the *roommates/neighbors* context in her Year 2 and Year 3 interviews. In both years, she experienced tension with roommates whom she felt were inconsiderate. In Year 2, when Irene demonstrated meaning making in the *early crossroads (E-I)* self-authorship level, she coped with her roommates' noisiness by *accepting the problem* because as the only female in a house with four males, she felt powerless to change the situation:

It was really hard to even study in my own house because they were very inconsiderate, living with boys. It was just so much drama with them and I think it really affected school because they would stay up so late and how can a person sleep when so much noise is going on? I didn't really have much of a say because I'm the only girl against four guys and so I was like, "Oh my gosh. I just have to suck it up."

In Year 2, when Irene exhibited meaning making in the *E-I* self-authorship level, she was just beginning to construct her inner voice and she did not yet feel confident to confront her roommates and ask for what she needed. Feeling incapable of addressing her situation, she *accepted the problem* as it was.

By Year 3, Irene's meaning making had progressed to the *late crossroads I(E)* level and instead of accepting the problem, she *took action* by confronting her roommates. No longer concerned about whether her behavior would be perceived as nagging, she stood up for her needs and insisted that her new roommates (her boyfriend and her sister) take turns cleaning the house with her:

At first when I was living with them, I just didn't want to be the nagging person even though I was nagging inside. I just didn't want to nag because they're all grown people. You're at college. Look out for yourself, and take responsibility. You don't have your mom to clean after you and I didn't want to be that mom to clean up after them. Now it's different because me and my sister take turns or my boyfriend will take turns and so it's more of an equal amount of responsibility within the house.

Interviewer: Do people talk about it or does it just kind of happen?

We talk about it, but I tell them, "If you see dishes there, wash them, or take the garbage out" or something like that. For me and Nicky, my sister, it just comes naturally to be able to do it, but I always tell him (boyfriend), "It doesn't hurt to do it either, John."

By Year 3, Irene's self-authorship had advanced to the *I(E)* level and her inner voice was more prominent. She felt more capable of *taking action* to confront her roommates about their lack of cleanliness and no longer allowed her roommates' opinions to override her own.

Qualitative analysis of the relationship between coping and self-authorship level in these four students detected differences that were not found during the frequency analysis. For these four students, as their self-authorship increased, so did their perceived

ability to cope with stressful experiences leading them to select different types of coping strategies. The mechanisms underlying students' change in coping strategies with self-authorship development are considered in the Discussion of Findings section later in this chapter.

**Patterns in coping strategies by self-authorship level.** After detecting differences in the types of coping strategies used by students in different self-authorship levels, I grew curious about whether students at different self-authorship levels applied each of the strategies differently. In other words, did the quality of *took action* and each of the other eleven coping strategy types listed in Table 4.2 differ depending on whether students exhibited *external*, *early crossroads*, or *late crossroads/internal* meaning making? To determine this, I ran queries using NVivo to locate all examples of a specific coping strategy type (e.g., *took action*) that were reported by students within the *external*, *early crossroads*, and *late crossroads/internal* levels. I then analyzed these examples, looking for patterns related to how and why students within each level used each coping strategy type.

I attempted to summarize the patterns I observed in my analysis of coping strategies and how these differed by self-authorship level; these are listed in Table 5.3. In the table, I have included a brief description of the nature of how each strategy was used by students within each of the three self-authorship levels. I have also included the number of occurrences of each type of coping strategy per self-authorship level in parentheses following each description.



Table 5.3. Patterns in Coping Strategies by Self-Authorship Level

Coping Strategy Type	External Level	Early Crossroads Level	Late Crossroads/Internal Level
<b>PROBLEM-FOCUSED CATEGORY</b>			
<b>Sought informational or instrumental support</b>	Expected authorities to fix the problem or tell them how to cope. (n=34)	Felt conflicted about following others' advice versus their own instincts. (n=26)	Filtered others' advice through their own perspective on the problem. (n=18)
<b>Prepared for action</b>	Made a plan based on what others thought they should do. (n=14)	Experienced tension between others' opinions and their own when planning. (n=17)	Devised plan based on own needs, informed by others' input. (n=10)
<b>Took action</b>	Exhibited passive aggressive or timid action. (n=39)	Felt torn between own needs and others' when taking action. (n=52)	Seized opportunities, challenged comfort zone, and shared authentic self with others. (n=27)
<b>EMOTION-FOCUSED CATEGORY</b>			
<b>Sought emotional support</b>	Relied heavily on authorities for support and validation. (n=25)	Turned to peers for empathy b/c they were less judgmental than authorities. (n=33)	Sought strategies to manage own emotions. (n=16)
<b>Reduced tension</b>	Escaped via medication, venting, or distraction. (n=7)	Explored new hobbies and relationships which led to self-discovery. (n=13)	Engaged in sophisticated self-care to regain balance and reduce stress. (n=8)
<b>Distanced self</b>	Distanced from problem due to fear or doubt that it can change. (n=15)	Separated from problem out of indecision or self-preservation. (n=28)	Distanced to get better perspective or avoid negative influences. (n=9)
<b>MEANING-FOCUSED CATEGORY</b>			
<b>Reinterpreted the problem</b>	Used reinterpretation as the default when failed to see other options. (n=49)	Considered multiple perspectives and weighed those against their own. (n=60)	Reflected deeply, learning from and finding value in the experience. (n=24)
<b>Accepted the problem</b>	Felt powerless to change problem so resigned self to accept it. (n=33)	Tried to learn from the problem and keep it from repeating. (n=53)	Accepted the problem and oneself, including own limitations. (n=13)
<b>Learned from others' experiences</b>	Relied heavily on others' experiences to inform their own. (n=9)	Exercised some discretion regarding whom they learned from and how they applied learning. (n=14)	Others' experiences triggered deep self-reflection; more likely to help others cope. (n=13)
<b>Relied on faith</b>	Felt powerless to cope without help from God, prayer, etc. (n=8)	Questioned their faith and its relationship to free will. Viewed God as an advisor. (n=8)	Exhibited balance between faith in God and faith in self. God worked through them. (n=5)
<b>MALADAPTIVE CATEGORY</b>			
<b>Avoided the problem</b>	Refused to face reality or engage with problem. (n=15)	Avoided problem out of fear, but realized they should deal with it. (n=17)	Reflected on reason for avoidance. Tended not to avoid problems to be authentic. (n=5)
<b>Disengaged</b>	Gave up, assuming that a successful outcome was not possible. (n=4)	Admitted that they could have kept trying to cope but decided it was not worth it. (n=5)	(n=0)

Overall, I found that students who functioned at more advanced levels of self-authorship used more complex coping strategies. By complex, I am mirroring the language used in self-authorship theory by referring to the degree to which the strategies were guided by students' internal voice as opposed to external sources. In contrast to earlier self-authorship levels where students' strategies were characterized by deferring to authorities' opinions and avoiding responsibility for coping, students who operated at advanced levels used strategies characterized by forming one's own perspective, accepting responsibility for the coping process, and learning from the stressful experience. To illustrate this pattern, I will focus on two of the more commonly reported coping strategy types (*sought informational or instrumental support* and *reinterpreted the problem*) and describe the distinct patterns that emerged in students' use of each strategy depending on their self-authorship level.

As described in Chapter IV, the *problem-focused* strategy of *seeking informational or instrumental support* refers to seeking advice or tangible aid in an attempt to address the problem. For students displaying *external* self-authorship, this coping strategy type took the form of expecting authority figures (e.g., parents, teachers, counselors) to fix the stressful situation for them or at least tell them how to fix it for themselves. Externally-defined students seemed to assume that they were incapable of handling the problem on their own. The tendency to consistently rely on external sources without questioning the drawbacks of doing so is characteristic of external meaning making. In contrast, for students displaying *early crossroads* self-authorship, *seeking informational or instrumental support* was generally associated with feeling conflicted about whether to follow others' advice or their own instincts. These students saw the

value in seeking advice from others but were more likely to question that advice, particularly if it was inconsistent with their own ideas about how to cope. This tension between external sources and an emerging internal voice is characteristic of early crossroads meaning making. Finally, for students displaying *late crossroads/internal* self-authorship, *seeking informational or instrumental support* typically involved filtering others' advice through their internally-defined ideas about the situation. In other words, late crossroads/internal students formed their own perspectives about how to cope with stressful events and evaluated others' opinions against their own. The ability to mediate external influences using one's internal voice is characteristic of late crossroads/internal meaning making.

Turning now to the coping strategy of *reinterpreting the problem*, the nature of this *meaning-focused* strategy type revealed different patterns across self-authorship levels. As defined in Chapter IV, *reinterpreting the problem* refers to viewing a problem from another perspective or finding the positive in a stressful experience. For students displaying *external* self-authorship, this coping strategy type seemed to be used as a default when they did not feel empowered to address the problem. In other words, instead of trying to change the situation, they reinterpreted it to try to make sense of it and come to terms with it. The lack of empowerment to affect change in one's environment due to an absent internal voice is characteristic of external meaning making. For students exhibiting *early crossroads* self-authorship, the nature of their reinterpretation involved considering multiple perspectives, including their own, and weighing those to construct a new perspective. This process caused students to feel conflicted about what to think at times because they prioritized external perspectives and

their internal voice equally. Again, the tension between following external formulas and trusting one's own interpretation of a situation is characteristic of early crossroads meaning making. Finally, for students displaying *late crossroads/internal* self-authorship, *reinterpreting the problem* took the form of deep reflection through which students learned from, found value in, and were motivated by the stressful experience. The depth of students' reinterpretations and their ability to convert negative events into positive life lessons reflected their tendency to be introspective, know themselves, and trust their internal voice, which are defining qualities of students with advanced levels of self-authorship.

A similar pattern also emerged for the other ten coping strategy types listed in Table 5.3. When comparing how the nature of each strategy changed across the three self-authorship levels from *external* to *late crossroads/internal*, I noticed a shift away from externally-defined strategies toward internally-defined strategies. This shift will be discussed in more detail in the next section along with the general characteristics that described how students coped within each of the three levels.

### **Discussion of Findings**

My findings related to the third and fourth research questions yielded insights about the relationships between coping strategies, previous coping experience, and self-authorship level in undergraduate students. When a stressful event occurred, students in the analytic sample appraised themselves and their ability to manage the situation. The outcomes of these appraisals shaped students' perceived ability to cope with the situation. As defined in Chapter II, this ability stems from an assessment of one's internal and external coping resources (Lazarus & Folkman, 1984).

With respect to coping differences over time, I was surprised to not detect notable differences in the frequency of coping strategy usage between the Year 2 and Year 3 interviews given Aldwin's (2011) assertion that coping ability develops with age. I interpreted this to mean that one additional year of coping experience, college life, and maturity was not enough to trigger a change in perceived ability to cope for most students. Perhaps coping develops gradually over the lifespan similar to self-authorship, or perhaps the majority of students in the sample did not experience events that triggered coping growth over the course of that year. For the four students whose experiences I analyzed more closely, however, there was a shift away from *maladaptive* strategies toward *adaptive* strategies from Year 2 to Year 3 as their perceived ability to cope with stress in a specific context increased. As mentioned, the students' self-authorship levels remained the same between years.

In Year 2, when these students exhibited less confidence in their coping abilities, they were more likely to choose *maladaptive* strategy types. For example, Alina and Sabrina *avoided problems* related to the *academics* and *roommates* contexts respectively, and Hannah *disengaged* from stress related to finding a *partner*. By Year 3, their confidence in their ability to cope had increased, and all three students chose adaptive strategy types instead. Alina and Sabrina both *accepted the problem* (Sabrina also *took action* to address her roommate conflict directly), and Hannah *sought emotional support* to cope with residual pain from a past breakup. The increase in their perceived ability to cope may have been due to the additional year of experience coping with stress in that particular context. There was one exception to this pattern, exhibited by Diana's coping. She chose adaptive strategies in both Years 2 and 3 to cope with stress in the *identities*

context related to revealing her sexuality. However, her Year 3 strategies (*took action* and *learned from others' experiences*) demonstrated greater agency than her Year 2 strategy (*reinterpreted the problem*). Thus, the way students perceived their ability to cope with a stressful situation, based on relevant previous coping experience, seemed to be an important determinant of their sense of agency and the type of coping strategies they elected.

With respect to coping differences by self-authorship level, I found that both the type and complexity of students' coping strategies changed depending on their level of self-authorship. According to the frequency data, students' use of *maladaptive* strategy types decreased slightly at more advanced levels of self-authorship, suggesting that their perceived ability to cope had increased. Self-authorship may foster students' capacity to select more adaptive strategies, or at least eliminate *maladaptive* options, by shaping the way students cognitively construct and respond to stressful situations. In addition, students exhibiting *early crossroads* meaning making were less likely to opt for *problem-focused* strategy types than students within the other two levels. This may be because they felt conflicted about whether to cope by relying on external authorities, as their *external* peers did, or by listening to their internal voice, as their *late crossroads/internal* peers did; as a result, they were less likely to take action to address the stressful situation. Across all coping strategy types, the nature of how students used each type was more complex among those who functioned at higher levels of self-authorship. More self-authored students exhibited strategies that were more internally defined, were more likely to accept responsibility for coping, and were more committed to learning from their experiences than their less self-authored peers.

For the four students whose experiences I analyzed more closely, I observed that those students who exhibited *early crossroads* meaning making were less likely to report *problem-focused* strategies than students who exhibited *external* or *late crossroads/internal* meaning making. For example, Nicole and Irene both shifted from *meaning-focused* strategies (e.g., *accepted the problem, reinterpreted the problem*) to *problem-focused* strategies (e.g., *sought informational or instrumental support, took action*) when their self-authorship level advanced from *early crossroads (E(I))* to *late crossroads (I(E))*, suggesting greater perceived ability to cope; this may reflect the increased presence of an internal voice guiding their coping decisions. I also observed a change in the complexity of how certain strategies were used depending on self-authorship level in these four students. For instance, when Arianna *sought informational or instrumental support* to deal with a stalker in Year 2, she expected authority figures to fix the situation for her or tell her how to cope, a reflection of her *external* self-authorship level. In contrast, when Nicole used the same strategy to cope with family conflict and life as a single mom in Year 3, she accepted more responsibility for coping and exhibited more internally-defined coping decisions. Although the contexts of these two stressful experiences were not identical, there were clear differences in how the students interpreted and responded to their situations related to their meaning-making capacities.

Overall, when students exhibited a less advanced level of self-authorship, they were more reliant on authority figures to help them cope and less likely to take responsibility for their situation. When students exhibited a more advanced level of self-authorship, they were more likely to prioritize their own needs and were more confident in their ability to cope, which was reflected by a shift in the type and nature of their

coping strategies. A conceptualization of this evolution based on the findings of this study is depicted in Figure 5.3.

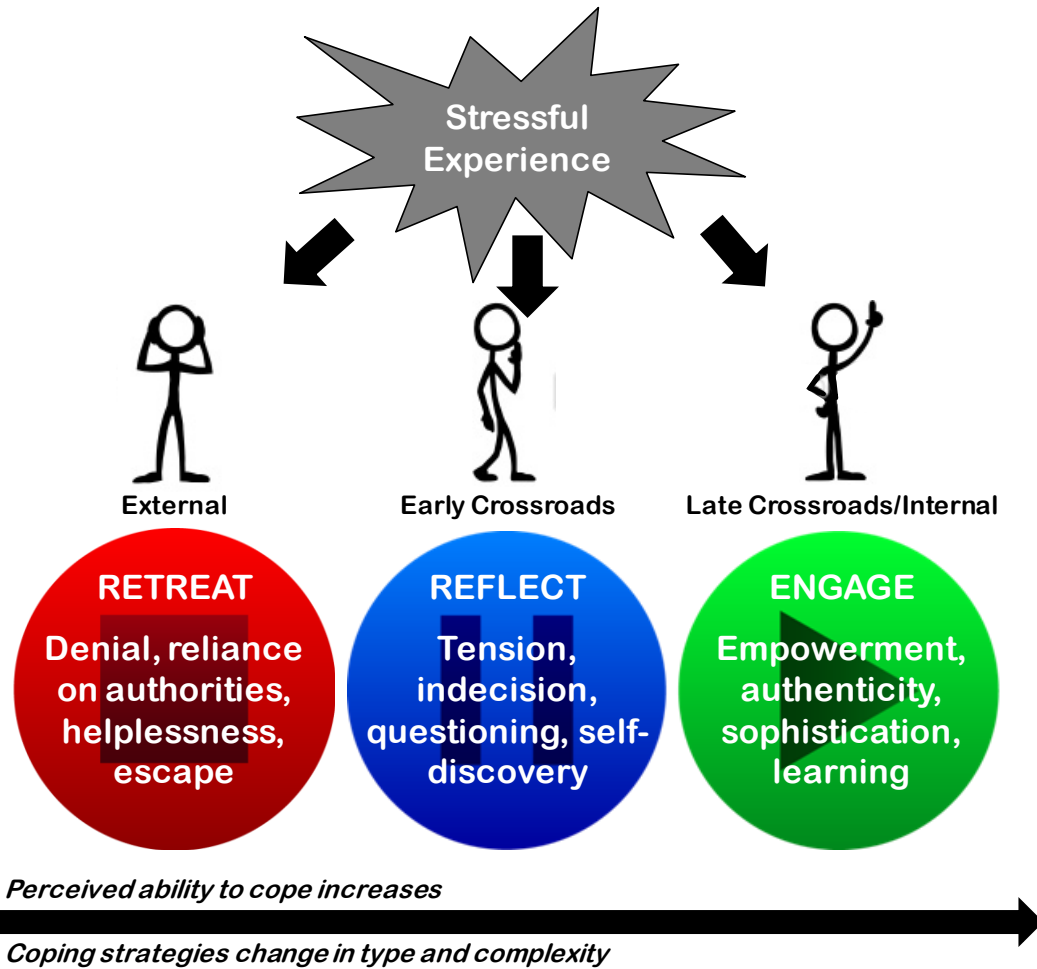


Figure 5.3. Evolution of Coping Strategies with Self-Authorship Development

In the figure, the words *retreat*, *reflect*, and *engage* within the three circles represent the general approaches that students in the *external*, *early crossroads*, and *late crossroads/internal* self-authorship levels took toward coping, respectively. These approaches are also represented by the stop, pause, and play symbols commonly used in music and video applications, which are visible in the background of the three circles. The descriptive terms within each circle represent characteristics of the coping



demonstrated by students at that self-authorship level; these terms were derived from the results of the qualitative analysis presented in Table 5.3. The arrow at the bottom of the figure illustrates how students' perceived ability to cope increased and the type and nature of students' coping strategies changed with increasing self-authorship, as demonstrated by the four longitudinal examples presented earlier.

Beginning with the *external* level, students within this level were generally overwhelmed by their stressful experiences and coped by retreating from taking responsibility for the problem. This retreat took the form of denial that a problem existed, reliance on authorities to fix the problem, a sense of helplessness, and a desire to escape from the situation. Overall, this group exhibited the least confidence in their ability to cope as well as the least complex coping strategies. Students within the *early crossroads* level tended to be perplexed by how to deal with their stressful experiences and coped by reflecting on the problem. This reflection was characterized by tension between others' ideas for coping and their own, indecision over how to proceed, questioning their existing assumptions, and self-discovery motivated by the demands of the stressful experience. Overall, this group exhibited more confidence in their ability to cope and more complex coping strategies, and yet they were the least likely to try to address their situation through the use of *problem-focused* strategies. Finally, students in the *late crossroads/internal* level generally felt confident in their ability to handle stressful experiences, and they coped by engaging with the problem. This engagement was characterized by a sense of empowerment over the stressor, authenticity in their approach to coping, sophistication in the depth and nuance of their strategies, and a desire to

convert stressful events into learning opportunities. Overall, this group exhibited the most confidence in their ability to cope as well as the most complex coping strategies.

Figure 5.3 is reminiscent of Taylor's (2008) conceptualization of meaning-making development shown in Figure 2.2. In both figures, individuals learn how to mediate environmental influences, such as stressful experiences, as their internal voices strengthen. That is, they evolve from making decisions based on what others think they should do, to questioning whether to prioritize others' interests or their own, to making decisions based on their own needs, values, and goals, taking others' views and contextual factors into account, but not letting them dictate the decision.

### **Summary**

When I compared students' coping strategies over time and across self-authorship levels, I observed more pronounced differences in coping between self-authorship levels than between interview years. Over time, the only students whose coping strategies changed notably were those who experienced stressful events within the same context both years. These students were more likely to opt for *adaptive* strategies over *maladaptive* strategies in Year 3, suggesting that their perceived ability to cope had increased due to relevant coping experience in this context. These students had learned from their relevant Year 2 stressful experiences and demonstrated greater agency in their coping the following year. Between self-authorship levels, I observed differences in both the type and complexity of coping strategies that students used. Students who were more self-authored exhibited strategies that were more internally defined and took greater responsibility for their coping, suggesting increased perceived ability to cope due to the presence of an internal voice. In the final chapter of this paper, I will explore the

cognitive processes underlying coping, present a revised version of the conceptual model introduced in Figure 2.5, and discuss the implications of my findings for higher education practitioners and researchers.

## **CHAPTER VI: DISCUSSION AND IMPLICATIONS**

The purpose of this study was to explore the construct of stress-related coping in undergraduate students, including whether and how coping changed across contexts, over time, and with self-authorship development. Given the prevalence of stress-related problems in this population and their influence on academic success and well-being, it is critical that faculty and staff understand what students are experiencing so that they can support students' coping efforts. In this final chapter, I will present a revised conceptual model of the cognitive processes underlying coping in undergraduate students based on my findings and demonstrate possible pathways through the model with students at varying self-authorship levels. (As a reminder, you can find descriptions of the coping strategy categories and types identified in this study in Table 4.2.) After presenting this new model, I will share my observations about the relationship between self-authorship and coping based on my findings. Finally, I will conclude with recommendations for higher education practice and research.

### **Revised Conceptual Model**

The model shown in Figure 6.1, a revised version of the model in Figure 2.5, conceptualizes the cognitive processes underlying coping in undergraduate students based on findings from this study. This section will describe the constructs and relationships depicted in the model in detail.

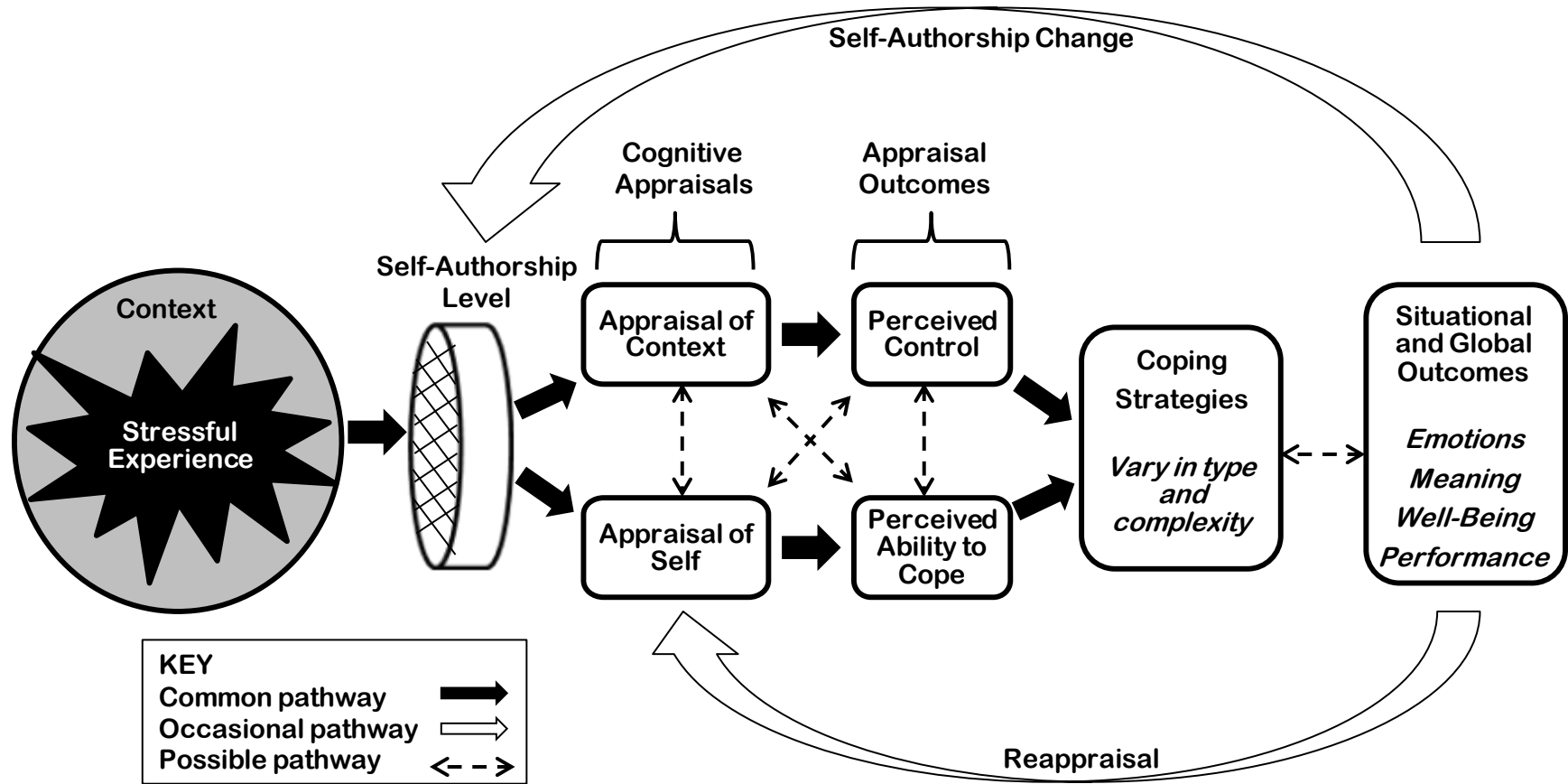


Figure 6.1. Model of the Cognitive Processes Underlying Coping in Undergraduate Students

The findings from my analysis of the coping experiences of 55 undergraduate students in the sample support Folkman and Lazarus's (1985) assertion that coping is not a single act but rather a process that unfolds over time. This process, which is informed by both individual and environmental characteristics, involves a series of cognitive appraisals that shape students' perceptions of the experiences themselves and their ability to cope. These perceptions are related to the type and complexity of coping strategies students choose to use. The outcomes of coping may then prompt students to reappraise their situation or even develop more advanced levels of self-authorship.

Beginning at the far left of Figure 6.1, when students in the analytic sample perceived a stressful event, they made meaning of the event by filtering it through assumptions associated with their self-authorship levels. Students performed a series of cognitive appraisals, much like those proposed by Lazarus and Folkman (1984) in Figure 2.1. The first of these appraisals focused on the stressor itself; here, students appraised the context of the stressor to determine how malleable it was to change. In essence, they attempted to understand whether they could do something to address the situation (i.e., use *problem-focused* strategies) or whether they would need to find a way to deal with the stress (i.e., use *emotion- or meaning-focused* strategies). The outcome of this appraisal shaped students' perceived control of the situation. The second appraisal students performed focused on themselves. Students appraised their ability to cope with the stressor by evaluating their internal and external coping resources. Internal resources included self-confidence, coping skills, and previous coping experience; external resources included support networks, university administrators, and therapists. The outcome of this appraisal shaped students' perceived ability to cope with the situation.

Students' perceived control and perceived ability to cope had an impact on the type and complexity of their coping strategies. When students perceived more control over a stressor, as was the case for many *intrapersonal* stressors, they were more likely to choose *problem-focused* strategy types. On the other hand, when students perceived that they had little control over the stressor, as was the case for many *interpersonal* and *institutional stressors*, they were more likely to choose *meaning-focused* strategy types. When students perceived greater ability to cope with a stressor (as was the case with increased self-authorship and for some students, previous coping experience in the same context), they were more likely to choose adaptive over maladaptive strategy types. Those students who were more self-authored also exhibited greater complexity in their coping strategies than their less self-authored peers.

For some students, the coping process appeared to be iterative in that the outcomes of coping triggered a reappraisal of the situation *and* a shift in coping strategies. In Figure 6.1, the reappraisal process is indicated by a feedback loop at the bottom of the figure, connecting outcomes back to the cognitive appraisal phase. A hollow arrow was used as opposed to a solid arrow because the reappraisal process was only exhibited by a few students in this sample. After applying one or more coping strategies, these students reappraised the situation by performing another round of cognitive appraisals to determine whether the situation had improved or they needed to change their approach to coping. At times, the reappraisal was necessary due to the situation evolving and at other times, it was necessary because the initial round of coping strategies had been unsuccessful. I noticed the use of reappraisal in students who had initially implemented maladaptive strategies such as *avoiding the problem*, but upon

reappraising the situation, realized that they had not been effective and then implemented adaptive strategies (e.g., Rebecca *avoided* admitting her back injury at first but eventually *accepted* it). I also noticed reappraisal in students who, after implementing one or more coping strategies, engaged in *meaning-focused* coping as a means of reflecting on the coping process and achieving a sense of closure on the entire experience (e.g., Dave *relied on faith* as his relationship came to an end and *reinterpreted the problem* as a way to reflect on and learn from the breakup experience).

Another process that I observed occasionally was that a change in self-authorship level was triggered by coping with a stressful experience. In Figure 6.1, the self-authorship change process is indicated by the feedback loop at the top of the figure, connecting outcomes back to self-authorship level. Here, too, the arrow is hollow as opposed to solid because I noticed this in only a few students. Particularly among students who lost parental figures in their lives (e.g., Nicole, who was abandoned by her parents after becoming pregnant, and Audrey, whose father died), I detected a more prominent internal voice as a result of having to take more responsibility over their coping decisions and their life in general. This is consistent with research presented in Chapter II showing that adverse experiences can trigger self-authorship growth because they require students to take responsibility for their decisions (Abes & Jones, 2004; Pizzolato, 2003; Torres & Hernandez, 2007).

The dotted arrows in Figure 6.1 indicate expected relationships based on the literature, although they did not surface in this study's findings. It is likely that students' cognitive appraisals (i.e., appraisals of context and self) and appraisal outcomes (i.e., perceptions of control and ability to cope) influence one another and that students engage



in other types of appraisals that were not detected in this study. I would also expect that students' coping strategies have the potential to influence both situational outcomes (e.g., emotions, meaning) and global outcomes (e.g., well-being, academic performance), based on the research findings shared in Chapter II. I was not able to assess these relationships given the secondary data source, but future research should examine the many nuances of the coping process including the relationships between context, self-authorship level, cognitive appraisals, coping strategies, and outcome measures.

There are many parallels between the model in Figure 6.1, which I developed based on my interpretation of the data, and the conceptualization in Figure 2.5, which I developed based on my interpretation of the coping and self-authorship literature. The findings from this study enabled me to refine the section of model focused on cognitive appraisals and the outcomes of those appraisals. I discovered that for the students in this sample, there were two distinct cognitive appraisal processes taking place: an appraisal of the context and an appraisal of oneself. The outcomes of those two appraisals shaped one's perceived control over the situation and perceived ability to cope, respectively. Furthermore, these perceptions had an important impact on the type and complexity of coping strategies one used. The revised model contributes to the existing literature in that it elucidates some of the cognitive processes underlying coping, specifically the relationships between self-authorship level, cognitive appraisals, and coping strategies.

The primary differences between Figures 2.5 and 6.1 relate to constructs that were not relevant to this study or that I was not able to assess given the secondary data source. I lacked information about the individual and environmental factors that may have influenced how students coped with specific stressful experiences, so these constructs

were excluded from the revised model. Also, given that I selected students for my analytic sample based on their reports of stressful experiences, I omitted the arrow labeled *No Distress* and removed the word “potentially” in front of *Stressful Experience* in the revised model.

### **Potential Pathways through the Model**

The model in Figure 6.1 offers a visual map of the constructs and relationships described in the previous section. To demonstrate how the model works, I will use examples from three of the students whose stories I shared in Chapter V, each of whom exhibited meaning making at a different self-authorship level.

Arianna, the student who reported being stalked by a peer, exhibited the *external (Ea)* self-authorship level during her Year 2 interview. When she performed an appraisal of the context of the situation and of herself, she perceived that she had little control over the stalker’s behavior and little ability to cope. This type of situation was new to her, and she was at a loss for how to deal with it. Lacking confidence in her ability to address the problem, she chose to *reinterpret* it instead, convincing herself that the stalker could not help his behavior due to an assumed mental illness. Although she did implement the *problem-focused* strategy of *seeking informational or instrumental support* from her resident director, she expected that the RD would fix the situation for her. This lack of empowerment was common among students exhibiting meaning making at the *external* self-authorship level. Thus, although Arianna used adaptive coping strategy types, the nature of how she used both strategies lacked complexity.

Audrey, the student who dealt with the unexpected death of her father prior to her sophomore year, exhibited the *early crossroads (E-I)* self-authorship level during her

Year 2 interview. When she performed an appraisal of the context of the situation and of herself, she perceived that she had no control over the fact that her father died, but had some ability to cope with it. She opted for *meaning-focused* and *emotion-focused* strategies, acknowledging that she could not change the stressor itself (i.e., her father's death). Rather than resent her mother and sister for leaning on her for support, she chose to *reinterpret the problem* by concluding that she was the furthest removed from his death, and thus the most natural choice to serve as caretaker for her mother and sister. Audrey also *distanced herself* from her emotions so that she could stay strong for her family. While both of these strategy types are adaptive, the nature of how Audrey used them demonstrated that she was still prioritizing her family's needs over her own, even though she was aware that she needed to take care of herself, too. This tension between external demands and an emerging internal voice is characteristic of *early crossroads* meaning making.

Nicole, who was disowned by her family when she got pregnant during her freshman year, exhibited the *late crossroads (I(E))* self-authorship level in her Year 3 interview. When she performed an appraisal of the context of the situation and of herself, she perceived that she had some control over the situation and significant ability to cope. Although she knew that she could not control the actions of her family members, she decided to try to address those elements of her situation that were within her power to manage. She implemented the *problem-focused* coping strategy of *seeking informational or instrumental support* from a counselor to learn how to manage her emotions and adjust to life as a single parent. She also applied *emotion-focused* and *meaning-focused* strategies, including *reducing tension* through music, *relying on faith* through prayer, and

*seeking emotional support* by talking with friends. In contrast to her Year 2 interview when she was at a loss for how to handle her situation, by Year 3, Nicole had additional coping experience and a more prominent internal voice that allowed her to choose more adaptive, complex strategies.

The three students described above dealt with some of the most stressful experiences reported by the sample. Although each of these students struggled with knowing how to cope at first, each eventually implemented one or more adaptive coping strategies in an attempt to improve her situation. The type and complexity of those coping strategies varied, depending on each student's cognitive appraisals and the outcomes of those appraisals. The appraisals themselves were shaped by the assumptions associated with each student's self-authorship level. The next section will consider possible mechanisms underlying the apparent relationship between self-authorship and coping.

### **Observations about the Relationship between Self-Authorship and Coping**

As described in Chapter V, self-authorship level appeared to be related to which coping strategies students chose and how they applied those strategies, and I suggested that the mechanism underlying this may have to do with students' perceived ability to cope. In this section, I explore the relationship between self-authorship and coping further, contemplating the reasons for the apparent link between them as well as potential implications for students' resilience and ability to flourish in the college environment.

One possible reason for the relationship between self-authorship and coping is that it may influence the degree of distress students experience in stressful situations. As noted in Chapter II, Folkman and Lazarus (1985) defined stress as a "troubled person-

environment fit” (p. 152). Perhaps students who are more self-authored perceive a less troubled fit than their peers. In other words, students with more internally-defined meaning making may experience less disequilibrium when stressful events occur. In addition, given that the cognitive appraisal process involves assessing the relevance of a stressful event to one’s well-being, more self-authored students may be better able to discern when an event is relevant to their well-being and thus be able to assess their own needs in the context of a stressful experience. Self-authorship has also been associated with a higher tolerance for ambiguity (Baxter Magolda, 2001), which could also help explain why students at higher self-authorship levels seem less thrown off balance by stressful experiences.

Another possible explanation for the relationship between self-authorship and coping is that self-authorship level may influence not only the type and complexity of students’ coping strategies, but also their ability to adapt their coping based on the situation. Qualitative analysis of the nature of how each coping strategy was used by students across self-authorship levels revealed that the meaning of each strategy changed across levels, depending on how students cognitively constructed the situation. (As noted above, more self-authored students exhibited strategies that were more internally-motivated, involved accepting greater responsibility for coping, and were more focused on learning from the stressful experience.) It is possible that students may develop larger and more complex repertoires of coping strategies as well as greater flexibility in applying those strategies as they grow more self-authored. Self-authorship has been associated with the ability to consider multiple perspectives and make informed judgments mediated by an internal voice (Baxter Magolda, 2001). In the realm of

coping, this may mean that more self-authored students may be able to see more possibilities for coping strategies and be better equipped to evaluate the potential effectiveness of those strategies according to the situation.

Furthermore, perceived ability to cope is determined by an assessment of internal and external resources (Lazarus & Folkman, 1984), and students with higher levels of self-authorship are more likely to possess both types of resources. Internally, they tend to have a greater sense of agency and be more attuned to acknowledging their own needs in the context of others' needs, which might explain the empowerment and authenticity that characterized coping at the *late crossroads/internal* level in Table 5.3. Externally, they tend to develop mutually beneficial relationships, which might explain the desire to learn from others' experiences and apply that learning to their own situations, characteristics that also characterized *late crossroads/internal* students.

Stepping back from coping strategies to the concepts of resilience and flourishing, it is valuable to consider how self-authorship may be related to undergraduate students' propensity for each. Resilience, as defined in Chapter II, can refer to either resistance to or recovery from stressful events (Rutter, 2007). Students with higher levels of self-authorship may be more resistant to stressful experiences, allowing them to maintain stability because they are better able to filter contextual influences when determining how to respond to a given experience (Abes et al., 2007). They may also recover more quickly from stressful events because they are better equipped to adapt to change and navigate complex situations (Kegan, 1994).

Self-authorship may also increase students' likelihood of flourishing in the college environment. Flourishing, a state characterized by high levels of psychological,

social, and emotional well-being (Keyes, 2005), confers a heightened sense of awareness, allowing one to consider new possibilities, develop more skills, exercise more self-control, and choose more adaptive goals (Howell, 2009). Students with higher levels of self-authorship may be more likely to flourish in college because their resilience allows them to maintain optimal levels of well-being despite stressful circumstances. They may also be more attuned to their thoughts and feelings, due to their capacity for balanced introspection, and thus be more cognizant of the connection between coping effectively with stress and maintaining well-being.

There are a number of possible reasons self-authorship may promote adaptive coping and lead to resilience and flourishing over time. Although more research on the relationship between self-authorship and coping is needed, the findings from this study suggest that studies seeking to understand the phenomenon of coping would be strengthened by taking self-authorship into account. The findings also suggest that educators should consider how to incorporate self-authorship and coping education into their work with college students. These and other implications for practice will serve as the focus for the next section.

### **Implications for Practice**

The findings from this study have important implications for higher education practitioners, including those who serve students directly and those who develop policies that influence students. These implications focus on teaching coping skills, promoting self-authorship development, reducing environmental stressors, and creating a culture of caring.

**Teach coping skills.** Teaching undergraduate students how to cope with the stressors of college and life should be the responsibility of both faculty and staff. Many college and university mission statements espouse promoting the holistic development of students, and an important part of holistic development involves preparing students to proactively cope with life's challenges, including the mental and emotional demands of college (Schreiner, 2010). The ability to be resilient in times of adversity is a key life skill, and the college environment is a rich training ground for students to learn and practice new coping skills.

The first step in teaching students how to cope with stressful situations is to normalize stress as a natural part of adult life and the college experience and help them distinguish between healthy and harmful levels of stress. For instance, students should understand that some degree of stress can be beneficial to achieving optimal performance, but too much can be detrimental, both academically and emotionally. As mentioned in Chapter I, sometimes students assume that severe stress levels are a normal part of the college experience and as a result, they fail to seek help (Alipuria, 2007). This is concerning because it means that students' stress levels can go unchecked and reach dangerously high levels. When stressful events occur, educators should teach students how to evaluate their situations including how distressed they feel and how manageable their situations seem. This would enable students to recognize the difference between healthy and harmful levels of stress so that they can adapt their coping response to match the situation.

The second step is to help students increase their perceived options for coping and develop the flexibility to know how and when to apply various strategies. Young adults



may be tempted to cope using maladaptive strategies when they are not aware of adaptive alternatives. Ideally, students should have a rich tool box of adaptive strategies from which to draw and should know how to assess a situation themselves to determine the most effective way of coping. For example, when students in my analytic sample sought support to deal with stressors, they exhibited flexibility in terms of the type of support they sought (e.g., emotional, informational, instrumental) and the source of that support (e.g., parents, friends, counselors) depending on the situation. Students also need to be encouraged to reflect on the effectiveness of their coping, reappraise situations as needed, and make adjustments.

Third, educators should help students reframe stressful events as opportunities to learn and build resilience rather than as something to be avoided. Student Emma's story about how her strained relationship with her parents motivated her to excel in college and clarified her career goals (described in Chapter IV) is a good example of how one can convert a negative situation into positive motivation. Stressful experiences can also serve as teachable moments to show students how they may be contributing to their own stress so that they begin to make better choices. Rather than viewing setbacks as failures, students can learn to reinterpret them as opportunities to find someone or something that suits them better.

**Promote self-authorship development.** This study's finding that students who were more self-authored used more adaptive, complex strategies suggests that promoting students' self-authorship development may also improve their coping abilities and vice versa. If educators can nudge students toward self-authorship, students may develop the sense of agency needed to manage stressful situations, evaluate multiple coping options,

and select the most adaptive option(s). Mezirow (2000) referred to this type of change as transformative learning, which he defined as “learn[ing] to negotiate and act on our own purposes, values, feelings, and meanings rather than those we have uncritically assimilated from others - to gain greater control over our lives as socially responsible, clear-thinking decision makers” (p. 8). One way to promote transformative learning is by challenging students’ existing ways of making meaning and supporting their development toward more complex thinking.

For example, as part of a resilience education curriculum such as those mentioned in Chapter II, an instructor could challenge students by introducing them to potential stressors they may confront in college and asking them to imagine effective coping strategies for each scenario. The instructor could encourage the students to generate coping ideas together, but challenge each student to evaluate those ideas for himself or herself to reinforce the idea that they are responsible for assessing the fit. To support the students in this exercise, the instructor could validate their ability to figure out how to cope effectively by reminding them of previous instances when they successfully coped with stressors. This aligns with the principle of validating learners’ capacity to know from the Learning Partnerships Model (Baxter Magolda, 2004a), introduced in Chapter II. Ideally, the instructor will also create a supportive classroom environment where students gain practice appraising stressful situations and choosing adaptive coping strategies. That way, when stressors do occur, the students are more likely to possess the internal resources necessary to navigate complex situations effectively.

Based on my personal experience engaging students in reflective conversations both as a Wabash National Study for Liberal Arts Education (WNS) interviewer and as a

professional academic advisor, I see tremendous potential for these conversations to promote both self-authorship and coping development. Baxter Magolda and King (2008) created a conversation guide for educators looking to engage students in guided reflection. They suggest that educators initiate conversation, listen, affirm, and help students learn from their experiences. The goal is to meet students at their current self-authorship level and provide the challenge and support needed to promote self-authorship development. This same strategy could be applied to promote students' coping abilities. When stressful events occur, educators could help students reflect on their assumptions about the events and empower them to find solutions rather than solve problems for them. The key is to allow students to make sense of situations for themselves and take responsibility for their coping decisions. Over time, reflective conversations have the potential to help students reframe their reactions to stressful events and build their internal and external coping resources, making them more resilient and better able to adapt and respond to future stressors.

**Reduce environmental stressors.** The college years can be a very stressful period for young adults given that the academic and social demands of the college environment often exceed what students expect and are developmentally prepared to handle. Some of these environmental stressors are healthy and motivating, while others are oppressive and hinder students' potential for success. Left unchecked, stress can spiral into a host of psychological problems (Kadison & DiGeronimo, 2004). Although it is important for educators to normalize stress for students, it is equally important for them to make every effort to eliminate unnecessary or excessive sources of stress for students. Many of the *institutional* stressors reported in this study are factors that are within

educators' power to change. (Descriptions of the stressful experience categories and contexts identified in this study are listed in Table 4.1.) For example, in the *academics* context, students reported feeling stressed by faculty members whom they perceived as unsupportive or academic policies that they perceived as unfair. In the *campus climate* context, students experienced stress related to racism, social isolation, party culture, and pressure to conform to a certain image. Creating a campus culture where faculty provide a balance of challenge and support, students have a voice in policymaking, and there is no tolerance for racist, exclusionary, and disruptive behaviors could go a long way toward addressing institutional sources of stress.

An important component of reducing environmental stressors involves anticipating what situations may induce stress for students and proactively providing support to help students navigate these situations. In this study, more than half of students' references to stressful experiences occurred in the interpersonal context, with conflicts involving roommates or neighbors as one of the most frequently reported. Educators can reduce stress in living situations by helping students develop community standards for shared living space, learn to compromise, and confront problems in a constructive way. Empowering students to believe that they have numerous options for coping and are capable of managing stressful situations, even those beyond their power to change, can minimize stressors in residence halls and other potentially stressful contexts.

**Create a culture of caring.** Sometimes just knowing that there are people to turn to in times of stress is enough to help one cope with a difficult situation. This was the case for student Tyler, introduced in Chapter IV, who felt comforted knowing that he had friends who would support him if his fraternity brothers' racist remarks became too much

to handle. It is vital that educators create a culture of caring on campus so that students know that their well-being matters, not only to faculty and staff members, but also to peers. Educators can accomplish this by showing interest in students' lives outside of the classroom and expressing concern when students seem overwhelmed. If a student suddenly begins to miss class, for instance, the instructor or classmates should reach out to the student to make sure he or she is okay and offer support if needed.

Bystander education, which teaches students to intervene as opposed to being bystanders when they see peers in trouble, is becoming more popular on college campuses. Programs such as the University of Arizona's Step UP! program (University of Arizona C.A.T.S. Life Skills Program and the National Collegiate Athletic Association, 2012) espouse prosocial behavior to help peers at risk due to alcohol and other drugs, eating disorders, hazing, and interpersonal violence, among other reasons. These programs suggest that educators are realizing the powerful influence that peers have on one another and the potential that peers have to reach students in a way that educators cannot. The same concept could be applied to identify and support students having difficulty coping with stressful situations. For example, if a student notices that a peer has *disengaged* and no longer spends time with friends, he or she could check in with the peer, offer support, and refer him or her to relevant campus resources. Peers' opinions carry significant weight, particularly for young adults, so students may be more likely to heed advice from a peer than a faculty or staff member.

All of the aforementioned implications for practitioners are feasible with the proper training and resources. If implemented, they have the potential to reduce not only students' stress levels but also the negative consequences of stress on academic

performance and personal well-being. As student Franny noted when asked how her personal life impacted her academic life:

Everything that goes on outside of school really does have a big effect on how you act and interact at school. I think a lot of people fail to realize that if you're going through a lot of personal issues outside of school, that will have an effect on your grades and how you interact with people on campus and how you interact with people just in general.

Hopefully, as college student mental health becomes a higher priority on college campuses, initiatives such as stress management workshops and resilience education initiatives will become more common.

### **Future Research**

The findings from this study also suggest a number of potential directions for future research on the topic of stress-related coping in undergraduate students, and for that matter, graduate students as well. These directions include replicating this study with a different sample, timing, interview protocol, and method; exploring intrapersonal, interpersonal, and institutional influences on coping; and assessing the effect of coping on situational and global outcomes. Each of these ideas for future research is described below.

**Vary the sample, timing, protocol, and method.** The analytic sample for this study was comprised entirely of full-time traditional age students at four-year institutions. As such, most of the participants lived on campus, so many of the stressors reported focused on residential and academic life. Future studies should explore stress-related coping in other populations, including nontraditional age students, part-time students, community college students, and graduate students, to determine what specific types of stressors they confront and to increase the likeliness of sampling students with advanced

levels of self-authorship. As mentioned in Chapter IV, a few students in this study reported stressful experiences related to their status as minorities on their campuses. This finding, along with evidence that students of color experience a higher prevalence of mental health problems (Eisenberg, Hunt, & Speer, 2013) and lower persistence rates (Horn & Berger, 2004), suggests the need to delve deeper into coping in traditionally underrepresented student populations.

With respect to timing, it would be valuable to study coping at multiple points throughout a single stressful experience, as recommended by Folkman and Lazarus (1985), to understand more about how the coping process unfolds over time. This study touched on this topic by analyzing how students coped with the same stressor in Years 2 and 3. A finer-grained approach would be to interview students more frequently as opposed to annually to detect how students' appraisals of situations shifted over smaller increments of time. Furthermore, future studies should ideally include students in every year of college given that there are stressors unique to each year of college. For example, first-year students experience stress as they integrate academically and socially into an institution, while students in their last year confront stress related to preparing for life after college. Also, the inclusion of data from first-year students would provide baseline data so that researchers could explore how attending college affects coping development.

In Chapter III, I explained that the WNS interview protocol was designed to elicit information about students' progress on collegiate learning outcomes as well as their self-authorship development. While this protocol yielded numerous accounts of students coping with stress, it did not contain questions specifically about students' stressful experiences and coping strategies. Future qualitative research on the topic should include

protocol questions designed to elicit students' perceptions about their stressful experiences, their ability to cope with them, and options for coping. These protocols should also contain questions probing students' self-authorship related to assessing stressful situations, deciding on coping strategies, and appraising the effectiveness of coping. These types of direct questions may reveal important insights about how and why students' coping strategies vary by type and complexity.

Finally, the research questions posed in this study should also be examined using quantitative methods once a reliable self-authorship survey is developed. Surveys tend to be less expensive and more flexible to implement than interviews, and they would enable researchers to utilize bigger samples and further explore the relative frequency data. The anonymity of surveys may also elicit more candid responses from participants than interviews, which may be important with a sensitive topic such as coping with stressful events. At this time, however, self-authorship researchers are still attempting to design a survey instrument that reliably captures the complexities of the self-authorship construct, even though several have tried (Creamer et al., 2010; Pizzolato, 2007, 2010). For example, distinguishing between self-authored reasoning and behavior or determining which of the ten positions on the meaning-making continuum best represents one's current self-authorship level can be difficult to do using a survey. More progress on this front will need to be made to facilitate quantitative research on the relationship between coping and self-authorship.

**Explore other influences on coping.** The findings from this study support Hochman and Kernan's (2010) model that there are multiple levels of factors influencing college students' stress and how they cope with it; among those are intrapersonal,



interpersonal, and institutional factors. While this study explored many of those factors, there is more to be learned.

At the intrapersonal level, this study revealed that students' self-authorship levels were related to their perceived ability to cope with stress. The students in the sample mentioned several other intrapersonal factors that deserve further exploration, such as having an optimistic attitude and how this helped them weather difficult times. For example, student Chloe commented that maintaining an attitude of optimism and gratitude helped her find a silver lining after breaking both ankles at the start of her second year. She noted that she was grateful that it happened during cold weather as opposed to warm so that she did not overheat walking around campus in a cast and a boot. Other students noted that reminding themselves that their situation was temporary and believing that things would improve made coping easier. In addition to attitude, intrapersonal factors such as motivation, self-efficacy, and expectations all have the potential to influence how students cope with stress. More than one student reported that having unrealistic expectations that their roommate would become their best friend set them up for disappointment when that did not happen.

Interpersonal factors also warrant further consideration in future research on coping. Given that coping does not occur in a vacuum, it would be valuable to know more about how students' relationships on and off campus help or hinder their coping efforts. Students in this study reported receiving advice about how to cope with stressful situations from family members, friends, partners, and professors, and while students generally found the advice helpful, at times others' opinions were perceived as intrusive and actually increased students' stress levels. In particular, when parents inserted

themselves into the students' conflicts with intimate partners, it often did not end well. We witnessed this with student Julie, introduced in Chapter IV, whose father pressured her to end her relationship with her boyfriend because he disapproved of him. Julie rejected her father's advice and sought advice from a college counselor instead.

At a broader level, many kinds of institutional factors have the potential to impact undergraduate students' coping, but we do not fully understand why or how. In this study, students reported stressors related to residence halls, student organizations, and academic departments, but it is possible that these contexts could actually facilitate coping in stressful situations as well. For example, living in a residence hall can expose students to valuable learning opportunities through residential education and give students access to a community of people who presumably care about their well-being and notice when something is amiss. Participating in a student organization can serve as an outlet from academic stress and give students a sense of purpose because they are part of something larger than themselves (Shim, 2013). Academic departments can provide students with access to resources including academic advising and financial aid, both potential sources of support for students in crisis. It is also important to keep in mind that institutional sociocultural barriers, such as perceived lack of support for women and students of color in STEM departments, can make coping difficult for even the most resilient students, as Ryland, Riordan, and Brack (1994) cautioned. Future research on this topic should examine in detail the positive and negative influences of institutional contexts on students' coping.

**Measure the effect of coping on outcomes.** A third area of potential research for higher education scholars interested in this topic involves measuring the effect of coping

on situational and global outcomes. In Chapter III, I explained how I selected the sample using the criterion of whether the stressful experience appeared to have affected a student's well-being. Unfortunately, I could not directly determine from the interview data whether and how students' coping strategies influenced their well-being and other outcomes. The literature reviewed in Chapter II suggests that coping may act as a mediator between stress and both situational outcomes (e.g., emotions) and global outcomes (e.g., health, academic success), but more research is needed to explore these relationships. Given that retention and graduation rates are commonly used as indicators of success for both students and institutions, illustrating a link between coping and student retention may bolster efforts to insert coping skills and resilience training into formal and informal curricula.

Future research on coping in undergraduate students should also focus on the concept of stress-related or posttraumatic growth. You will recall from Chapter I that this concept, originated by Joseph and Linley (2005), refers to instances when individuals' meaning making evolves after a traumatic experience. Because they are unable to assimilate the experience into their current meaning-making structures, they must accommodate those structures so that the experience will fit. Many of the students in the analytic sample reported that they had learned lessons from their stressful experiences, and some even perceived that their worldview had changed. More research is needed to illuminate the conditions that foster stress-related growth so that educators can help students convert negative events into opportunities for development. For example, inviting students to reflect on how their assumptions about themselves and their

relationships have changed as a result of coping with a stressful experience could help promote development toward self-authorship.

The potential research topics described above span the domains of many fields of research, including higher education, psychology, sociology, and public health. As such, they represent opportunities for scholars to collaborate on interdisciplinary initiatives to learn more about the construct of stress-related coping using multiple disciplinary lenses. One challenge for future coping studies, particularly if they are interdisciplinary, will be to develop a common nomenclature for coping strategies, one of the limitations I mentioned in my critique of the existing research in Chapter II. Revised nomenclature should take into account this study's finding that coping strategies can have different meanings for individuals at different self-authorship levels. This suggests that there may be a need to identify names for each coping strategy that capture differences in complexity about its meanings discovered here.

## **Conclusion**

I initiated this study with the intention of learning more about what the stress-related coping process looks like for undergraduate students, including the types of stressful experiences and coping strategies students report and how coping changes across contexts, over time, and with self-authorship development. The students in this study reported *intrapersonal*, *interpersonal*, and *institutional* types of stressors, and they coped with them by applying *problem-focused*, *emotion-focused*, *meaning-focused*, and *maladaptive* types of strategies. Frequency analyses revealed patterns between students' coping strategies and context, year of the interview, and self-authorship level, and

qualitative analyses of individual students' coping produced additional insights about the cognitive processes underlying coping.

Across contexts, those students who perceived greater control over the context of the stressful experience tended to opt for *problem-focused* strategies, while those who perceived less control generally opted for *meaning-focused* strategies. Over time, those students who perceived greater ability to cope, at least in part due to previous experience coping within the same context, were more likely to opt for *adaptive* strategies over *maladaptive* strategies. Between self-authorship levels, students who perceived greater ability to cope associated with more advanced self-authorship often opted for different types and more complex versions of coping strategies than their less self-authored peers. As self-authorship increased, students' strategies were characterized by forming their own perspectives, accepting responsibility for the coping process, and learning from stressful experiences, suggesting the importance of taking self-authorship into account when studying coping.

The topic of stress-related coping in undergraduate students deserves more attention in higher education research and practice because of its implications for both students and the institutions as a whole. The literature presented in Chapter II contains compelling evidence of a link between students' stress and their college success, health, and other key outcomes. For students, learning how to cope with stressful events is critical to their ability to handle the demands of college and life after college. For institutions, maintaining a healthy student body is vital to reduce the risk of crisis situations and create a vibrant, thriving campus community. Fortunately, the college environment is an ideal laboratory for teaching coping skills, allowing students to

practice those skills, and encouraging them to reflect on and learn from that practice. If our goal as educators is to nurture the development of the next generation of good citizens, then we need to teach students the benefits of being grateful when life is going well and being resilient when life gets difficult. In the words of student Chloe, “You can’t have the rainbow without the rain.”

## **APPENDICES**

APPENDIX A: Description Of WNS Interview Sample For Years 1-3 (Shim, 2009)

College	Size in 2006	Type	Control	Other Information	Location
Institution G	1,400	Liberal Arts (Bac A&S)	Private		Northeast
Institution E	900	Liberal Arts (Master L)	Private	All female college; about half African-Am, half White	South
Institution I	900	Liberal Arts (Bac A&S)	Private	All male college	Midwest
Institution J	1,427	Liberal Arts (Bac A&S)	Private	Hispanic Serving Institution	West
Institution F	8,300	Research (RU VH)	Private	Catholic affiliation	Midwest
Institution H	17,189	Regional (Master L)	Public	Hispanic Serving Institution	West

	2006	2007		2008				Return Rate <sup>1</sup> (%)	Return Rate <sup>2</sup> (%)
	N	N	Return Rate <sup>1</sup> (%)	N					
				Total	Summer phone	Fall campus	Phone		
Institution G	59	45	76.3	39	4	32	3	86.7	66.1
Institution E	49	29	59.2	23	0	20	3	79.3	46.9
Institution I	61	52	85.3	45	10	35	0	86.5	73.8
Institution J	46	26	56.5	27	2	25	0	96.4	57.4
Institution F	53	48	90.6	46	17	26	3	95.8	86.8
Institution H	47	28	59.6	24	1	22	1	92.3	52.2
Total	315	228	72.4	204	34	160	10	89.5	64.8

<sup>1</sup>Return rate = N in the present year / N in the previous year \* 100

<sup>2</sup>Return rate = N in the present year / N in 2006 \* 100

Race/Ethnicity	Year 1 (2006)			Year 2 (2007)			Year 3 (2008)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Black, non-Hispanic	9	25	34	5	18	23	6	14	20
Hispanic	12	17	29	11	11	22	9	11	20
Asian/Pacific Islander	13	14	27	7	9	16	6	6	12
White, non-Hispanic	107	106	213	86	70	156	77	63	140
White and Hispanic	0	4	4	0	4	4	0	4	4
Hispanic and Middle Eastern	0	1	1	0	0	0	0	1	1
Asian/Pacific and Hispanic	2	0	2	2	0	2	2	0	2
Asian/Pacific and International	2	3	5	2	3	5	2	3	5
Total	145	170	315	113	115	228	102	102	204



APPENDIX B: WNS Year 3 Interview Protocol

**Introduction to the Interview**

Greet student as he/she arrives, ask his/her name, thank him/her for coming, put at ease and begin completion of consent form	
<p>Provide student a written description of the study and provide a copy of a consent form that you sign; collect the one that student signed.</p> <p>“I will reintroduce the study to you but before we begin there is a consent form that I would like to review with you and, if you are willing to participate, I need you to sign.”</p> <p>“I have reviewed the summary of last year’s interview, so the ideas you shared last year are fresh in my mind.”</p>	<p>Review the consent form and ensure he/she consents to both the participation and audio recording.</p> <p>Highlight:</p> <ul style="list-style-type: none"> <li>✓ your role as the interviewer</li> <li>✓ voluntary participation, they can refuse to answer or end interview at any time</li> <li>✓ confidentiality</li> <li>✓ 90 minute time commitment (confirm interview end time)</li> <li>✓ opportunity for questions at the end</li> <li>✓ how interview will be used and by whom</li> <li>✓ confirm the process of payment</li> </ul>
<p>Reintroduce the study verbally and welcome them back to the project for a third year.</p>	<p>e.g., “We are delighted that you’ve returned for a third interview and I’m eager to hear about your year.”</p> <p>e.g., “Our purpose in meeting today is to learn about you, your experiences in college and how they affected you. This will help us better understand how students approach and benefit from their educational experiences. Because every student is different and brings a unique perspective and set of experiences, we believe it is important to hear about your experiences from your point of view.”</p>

<p>Provide an overview of the organization of the questions</p>	<p>e.g., “As you’ll recall from last year, I’ll ask you to talk about your experiences. I’d like to hear about your specific experiences during the past year of college. I’ll ask you to be the judge of what is most important as we move through the conversation. Overall, I would like to hear how you make sense of all you are experiencing and learning. Just like last year, this is an informal interview. I’ll ask you to introduce what is important to you and we’ll use that to guide our conversation. We are interested in hearing about the past year, but if there are ideas from the previous year you want to revisit, that is okay too. We are also interested in all areas of life – not just college or the classroom.</p>
<p>Turn on recorder: State “This is [interviewer name], today’s date, interviewing at [institution].” Do NOT state the students’ name.</p>	

**Section One: Building Rapport, Sharing Background Information, and Discussing Highlights of Past Year**

<b>Basic Foundation:</b> To access meaning-making during and as a result of the second year of college and build rapport	
<b>Means to Access Foundation:</b> Reflection on the 2nd year, what they anticipate for the 3rd year	
<b>Multiple Ways to Approach:</b>	
Provide a brief recap of the main points from last year's interview to convey interviewer is familiar with it and to set the tone.	e.g., "Last year, I remember we discussed X, Y, and Z." or "Reading the summary I see that you discussed X, Y, and Z."
Let's start with an update on how college has been for you since the last interview. What has stood out for you over the past year? What's new or different?	<p>Possible Probes:</p> <ul style="list-style-type: none"> <li>• Tell me about your classes – what were they like?</li> <li>• Tell me about your friends.</li> <li>• Tell me about life outside of class – what is important to you? What experiences have you participated in?</li> <li>• Tell me about any goals you have for this year [try to draw out both academic and personal goals].</li> </ul>
I'm interested in how you experienced the transition from second year to third year. What did you gain in your second year that helped you as you began this year? What surprised you most about last year?	<p>Possible Probes:</p> <p>How have your prior experiences influenced how you are approaching your third year?</p>
Let's talk about <i>your expectations</i> coming into this year. What do you expect it to be like to be a third year student?	<p>Possible Probes:</p> <ul style="list-style-type: none"> <li>• What did you expect [or hope] the learning environment to be like?</li> <li>• What did you expect would go well for you and what would be challenging in your courses?</li> <li>• What kind of relationships did you expect [or hope] to build with other students? With faculty?</li> </ul>

	<ul style="list-style-type: none"> <li>• How did you expect [or hope] you would grow or change this year?</li> <li>• In what ways did you expect [or hope] to get involved in campus activities?</li> </ul>
<p>I'm interested in your perspective on how your experience of this year <i>compares with your expectations!</i> Let's talk about areas in which your experience matches your expectations and areas in which it does not. [Note: it may be artificial to separate expectations and reality – you won't need this if the interviewee already addressed it]</p>	<p>Possible Probes:</p> <ul style="list-style-type: none"> <li>• Using what the interviewee offered re expectations, return to each one asking to what degree experience matches [i.e., you said you expected classes to be pretty hard – what is your sense of that so far?] Draw out why the person sees it this way and what it means to her/him.</li> <li>• What has been your experience as a student at this institution? What has been your experience as a [race, ethnicity, gender] student at this institution [<i>only if person raised these dynamics</i>]?</li> <li>• What has surprised you most? Draw out the description, why it was surprising, how the person is making sense of it.</li> </ul>
<p>NOTE: It may be helpful when appropriate to use our basic Framework for drawing out meaning:</p>	<p><b>Framework</b> for drawing out meaning:</p> <ul style="list-style-type: none"> <li>• Describe the experience</li> <li>• Why was it important?</li> <li>• How did you make sense of it?</li> <li>• How did it affect/influence you?</li> </ul>

## Section Two: Describing and Making Meaning of Educational Experiences that Promoted Growth

<b>Basic Foundation:</b> 3 dimensions by 7 outcomes chart	
<b>Means to Access:</b> meaningful experiences and how students made meaning of them	
<b>Multiple Ways to Approach:</b>	
Our conversation so far has given me some context to understand you and how you experienced the first two years of college. Let's talk more about important experiences. How would you describe your college life since the last interview?	Probes: How are you balancing the various parts of college life? What are some of the ups and downs you've encountered so far?
Let's focus in specifically on the experiences you've had that you think have affected you most. What has been your <i>most significant experience</i> since the last interview? By significant, I simply mean something that stands out in your mind, something that is important to you.	<b>Framework</b> for drawing out the dimensions and outcomes: <ul style="list-style-type: none"> <li>• Describe the experience</li> <li>• Why was it important?</li> <li>• How did you make sense of it?</li> <li>• How did it affect/influence you?</li> </ul>
Tell me about your <i>best experience</i> , <i>worst experience</i>	<b>Framework</b>
Tell me about some of the <i>challenges</i> you've encountered	<b>Framework;</b> also inquire about challenges in other dimensions if response is uni-dimensional
Who/what are your <i>support</i> systems? Tell me about them.	Probes: When you need support, where do you find it? Who do you go to for help? Who do you trust to help when something important is on your mind? What does the support look like? How does it play out? What did you do with it?
Usually college is a place where you <i>encounter people who differ from you</i> because of different backgrounds, beliefs, preferences, values, personalities, etc. Have you had interactions with people	What have these interactions been like? How have you made sense of them? What ideas have you gathered from these interactions?

who you perceive as different from you? If so, tell me about them.	
Have you had to face any <i>difficult decisions</i> ? If so, tell me about how you work through or process such decisions. Are there people you look to for guidance in these situations?	<b>Framework:</b> also inquire about decisions in other dimensions (i.e., cognitive, intrapersonal, interpersonal) if response is uni-dimensional
Often college students report feeling <i>pressure</i> from multiple directions – pressure to study and succeed academically, pressure to belong socially, pressure re: family or work obligations, pressure to participate in campus activities, pressure to figure out career directions. Have you encountered any of these pressures?	If so, describe; how did you handle it, why, how did it affect you.
Has there been any time that what you wanted and what others wanted from you <i>conflicted</i> ?	If so, what was that like? How did you handle it?
Have you been in a situation where you struggled with doing the right thing?	If so, describe, how did you handle it, why, how did it affect you? How did you decide what to believe? Was there anyone to guide you through this?
How do you think being a student at [institution] has <i>affected you</i> ?	What do you think prompted this? How do you feel about it? Draw out possible challenges to beliefs, sense of self, relationships.

**Section Three: Integrating Learning across Experiences and Reflecting on Implications of Learning for Meaning Making**

<b>Basic Foundation:</b> access Integration of Learning outcome and synthesize the student's experience as shared in the interview	
<b>Means to Access:</b> how your collective experiences are influencing your thinking about what to believe, yourself, and relations with others	
<b>Multiple Ways to Approach</b>	
<b>Synthesis</b>	
You've talked about some of your important experiences [such as x, y, z] and what they've meant to you. How did the experiences you've shared influence the person you are today?	Draw out meaning.
As you have reflected on your experiences, has anything come up that you expect you'll want to <i>explore further</i> ?	Describe, why is this important, how do you anticipate you will explore this.
How has this past year helped you think about how you want to approach <i>this upcoming year</i> ?	Possible Probes: <ul style="list-style-type: none"> <li>• How has it shaped your goals?</li> <li>• How has it shaped your view of yourself?</li> <li>• How has it shaped how you learn?</li> </ul>
<b>Integration of Learning/Summary</b>	
We have about [x] minutes left and I'd like to be sure I have the key points you think are important. Thinking about your overall experience, what is the most important idea you <i>gained</i> from this past year?	Possible Probes: <ul style="list-style-type: none"> <li>• Where did this come from?</li> <li>• What prompted this?</li> </ul>
How has this <i>past year influenced</i> your everyday decisions and actions?	Possible Probes: <ul style="list-style-type: none"> <li>• How do these experiences influence your thinking about college? Your goals here?</li> <li>• How do these experiences influence your relationships?</li> <li>• How do these experiences influence how you see yourself?</li> <li>• How do these experiences influence how you make</li> </ul>

	decisions? How do they influence how you determine your beliefs and opinions?
How are you evaluating new ideas you've encountered thus far?  Do any of the ideas you've encountered thus far conflict? If so, how are you thinking about that?	
Tell me about any connections or themes you see among your experiences.	Draw out description and meaning. Draw out the nature of these connections.
Are there any <i>other observations</i> you would like to share?	Draw out description and meaning.
Are there any observations you'd like to share about participating in this study?	



## APPENDIX C: WNS Year 3 Informed Consent Form

### WNSLAE Interview Study Informed Consent

#### Project Description

This research project is designed to examine the practices and conditions that help students gain the knowledge and skills they and their colleges believe reflect the purposes of a college education. This study will be examining collegiate outcomes such as leadership, well-being, problem solving, multiculturalism, integrated learning, and moral character. This study is being jointly administered by the Center of Inquiry in the Liberal Arts at Wabash College, the University of Michigan, the University of Iowa, and Miami University of Ohio.

This study is designed to benefit educators in many kinds of institutions who teach college students by increasing our understanding of the practices, programs, and pedagogies that help students succeed. Study participants may find that the interviews are enjoyable and provide a unique opportunity to reflect upon the college experience. There is no risk associated with this project where the probability of harm or discomfort is greater than that encountered in daily life.

#### Participant Informed Consent

You are volunteering to participate in this interview for the Wabash National Study of Liberal Arts Education. As a reminder, participation involves being interviewed each fall for four years (2006-2009), to the extent that this is possible for both you and researchers. If desired, you are invited to continue involvement in the study for a fifth interview in 2010. As in the past, your interview will last approximately 60-90 minutes and notes will be taken during the interview.

Your participation in this project is voluntary and you may withdraw or discontinue participation at any time without penalty. You will be compensated with \$30 for this interview.

During the interview, you will be asked reflective and thought-provoking questions. However, you have the right to decline to answer any question or to end the interview at any time.

Due to the nature of this research, all interviews will be audio recorded. The audio recordings will be securely stored on a computer in the research office at the University of Michigan or the office of a researcher from the project team. By signing this document, you are agreeing to be audio recorded. Should you choose not to be audio recorded, you will not be able to participate in this interview but will still be compensated \$30 and excluded from future interviews.

Your confidentiality as a participant in this study will remain secure through the assignment of a pseudonym. A separate list matching participants' names with their pseudonym will be filed and secured in a locked file cabinet in a restricted access office at the University of Michigan. All information collected will remain confidential except as may be required by law. Any personally identifiable information will not be used for study purposes. Following the conclusion of the study, data will be maintained on a secure server at the University of Michigan to allow researchers to continue their research. We do not anticipate sharing the data with investigators who are not affiliated with this project.

The Institutional Review Board at the University of Michigan has reviewed this study. Should you have questions about this research project, you may contact Dr. Patricia M. King, the project's Principal Investigator, at 610 East University, 2117 SEB, Ann Arbor, MI 48109-1259, (734) 615-6740, email: patking@umich.edu. Should you have questions regarding your rights as a participant in research, you may contact the Institutional Review Board: 540 East Liberty, Suite 202, Ann Arbor, MI 48104-2210, (734) 936-0933, email: irbhsbs@umich.edu.

By signing this document, you are acknowledging that you have read and understand the explanation provided to you. Furthermore, you agree that you have had all of your questions answered to your satisfaction, and voluntarily agree to participate in this study. You will be given a copy of this consent form, which includes a description of the research project, and one copy will be kept for study records.

Please sign below if you are willing to participate today and be re-contacted for later participation in this study:

*I agree to participate in this study and be audio recorded.*

\_\_\_\_\_  
Participant's Name

\_\_\_\_\_  
Participant's Signature

\_\_\_\_\_  
Date

*For further information, please contact: Wabash National Study of Liberal Arts Education, University of Michigan, 2232 School of Education Building, 610 E. University Ave., Ann Arbor, MI 48109-1259, 734-647-8753*

\_\_\_\_\_  
Interviewer's Name

\_\_\_\_\_  
Interviewer's Signature

\_\_\_\_\_  
Date

## REFERENCES

- Abes, E. S., & Jones, S. R. (2004). Meaning-making capacity and the dynamics of lesbian college students' multiple dimensions of identity. *Journal of College Student Development, 45*(6), 612-632.
- Abes, E. S., Jones, S. R., & McEwen, M. K. (2007). Reconceptualizing the model of multiple dimensions of identity: The role of meaning-making capacity in the construction of multiple identities. *Journal of College Student Development, 48*(1), 1-22.
- Aldwin, C. M. (2007). *Stress, coping, and development: An integrative perspective* (2nd ed.). New York: The Guilford Press.
- Aldwin, C. M. (2011). Stress and coping across the lifespan. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 15-34). New York: Oxford University Press.
- Alipuria, A. K. (2007). *First-year college student decision making: How freshmen respond to the stress of the college transition*. (Ed.D. dissertation), University of California Los Angeles.
- American College Health Association. (2011a). *American College Health Association-National College Health Assessment II: Reference group executive summary Spring 2011*. Hanover, MD: American College Health Association.
- American College Health Association. (2011b). Standards of practice for health promotion in higher education Retrieved August 4, 2011, from [http://www.acha.org/info\\_resources/SPHPHE.cfm](http://www.acha.org/info_resources/SPHPHE.cfm)
- Aspinwall, L. G., & Taylor, S. E. (1992). Modeling cognitive adaptation: A longitudinal investigation of the impact of individual differences and coping on college adjustment and performance. *Journal of Personality and Social Psychology, 63*(6), 989-1003.
- Ayduk, Ö., & Kross, E. (2010). Analyzing negative experiences without ruminating: The role of self-distancing in enabling adaptive self-reflection. *Social and Personality Psychology Compass, 4*(10), 841-854.

- Baker, M. A., & Sgoutas-Emch, S. (2011). *How students from historically underrepresented groups experience & cope with stress*. Paper presented at the annual meeting of the American College Health Association, Phoenix, AZ.
- Barber, J. P., King, P. M., & Baxter Magolda, M. B. (2012). Long strides on the journey toward self-authorship: Substantial developmental shifts in college students' meaning making. *Manuscript submitted for publication*.
- Barber, J. P., & Walczak, K. K. (2009). *Conscience and critic: Peer debriefing strategies in grounded theory research*. Paper presented at the annual meeting of the American Educational Research Association, San Diego.
- Barr, V., Rando, R., Krylowitz, B., & Reetz, D. (2010). The Association for University and College Counseling Center Directors annual survey. Retrieved November 26, 2011, from [http://www.aucccd.org/img/pdfs/aucccd\\_directors\\_survey\\_monograph\\_2010.pdf](http://www.aucccd.org/img/pdfs/aucccd_directors_survey_monograph_2010.pdf)
- Baxter Magolda, M. B. (1992). *Knowing and reasoning in college: Gender-related patterns in students' intellectual development* (1st ed.). San Francisco: Jossey-Bass.
- Baxter Magolda, M. B. (2001). *Making their own way: Narratives for transforming higher education to promote self-development* (1st ed.). Sterling, VA: Stylus Publishing.
- Baxter Magolda, M. B. (2004a). Learning partnerships model: A framework for promoting self-authorship. In M. B. Baxter Magolda & P. M. King (Eds.), *Learning partnerships: Theories and models of practice to educate for self-authorship* (pp. 37-62). Sterling, VA: Stylus.
- Baxter Magolda, M. B. (2004b). Self-authorship as the common goal of 21st-century education. In M. B. Baxter Magolda & P. M. King (Eds.), *Learning partnerships: Theory and models of practice to educate for self-authorship* (1st ed., pp. 1-35). Sterling, VA: Stylus Publishing.
- Baxter Magolda, M. B. (2005). Complex lives. In M. E. Wilson & L. E. Wolf-Wendel (Eds.), *ASHE reader on college student development theory* (pp. 81-100). Boston: Pearson.
- Baxter Magolda, M. B. (2009a). The activity of meaning making: A holistic perspective on college student development. *Journal of College Student Development*, 50(6), 621-639.
- Baxter Magolda, M. B. (2009b). *Authoring your life: Developing an internal voice to navigate life's challenges*. Sterling, VA: Stylus Publishing.
- Baxter Magolda, M. B. (2010). Future directions: Pursuing theoretical and methodological issues in the evolution of self-authorship. In M. B. Baxter

- Magolda, E. G. Creamer & P. S. Meszaros (Eds.), *Development and assessment of self-authorship: Exploring the concept across cultures* (pp. 267-284). Sterling, VA: Stylus.
- Baxter Magolda, M. B., & Crosby, P. C. (2011). Preparing students and graduates to navigate life's challenges: A dialogue on self-authorship and the quest for balance of agency and communion. *Journal of College & Character, 12*(3), 1-11.
- Baxter Magolda, M. B., & King, P. M. (2004). *Learning partnerships: Theories and models of practice to educate for self-authorship*. Sterling, VA: Stylus.
- Baxter Magolda, M. B., & King, P. M. (2007). Interview strategies for assessing self-authorship: Constructing conversations to assess meaning making. *Journal of College Student Development, 48*(5), 491.
- Baxter Magolda, M. B., & King, P. M. (2008). Toward reflective conversations: An advising approach that promotes self-authorship. *Peer Review, 10*(1), 8-11.
- Baxter Magolda, M. B., & King, P. M. (2012). Assessing meaning making and self-authorship: Theory, research, and application. *ASHE Higher Education Report, 38*(3). San Francisco, CA: Jossey-Bass.
- Baxter Magolda, M. B., King, P. M., Taylor, K., & Perez, R. J. (2008). *Developmental steps within external meaning making*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Jacksonville, FL.
- Baxter Magolda, M. B., King, P. M., Taylor, K. B., & Wakefield, K. M. (2012). Decreasing authority dependence during the first year of college. *Journal of College Student Development, 53*(3), 418-435.
- Belenky, M. F., Clinchy, B. M., Goldberger, N., & Tarule, J. (1986). *Women's ways of knowing: The development of self, voice, and mind*. New York, NY: Basic Books.
- Blumer, H. (1969). *Symbolic interactionism: Perspective and method*. Englewood Cliffs, NJ: Prentice-Hall.
- Bray, N. J., Braxton, J. M., & Sullivan, A. S. (1999). The influence of stress-related coping strategies on college student departure decisions. *Journal of College Student Development, 40*(6), 645-657.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, Mass.: Harvard University Press.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*(2), 267-283.

- Center of Inquiry at Wabash College. (2011). Wabash National Study 2006-2009: Study design. Retrieved November 26, 2011, from <http://www.liberalarts.wabash.edu/study-design/>
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Sage Publications.
- Coifman, K. G., Bonanno, G. A., Ray, R. D., & Gross, J. J. (2007). Does repressive coping promote resilience? Affective-autonomic response discrepancy during bereavement. *Journal of Personality and Social Psychology, 92*(4), 745-758.
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: the Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety, 18*(2), 76.
- Corbin, J. M., & Strauss, A. L. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Los Angeles: SAGE Publications.
- Creamer, E. G., Baxter Magolda, M. B., & Yue, J. (2010). Preliminary evidence of the reliability and validity of a quantitative measure of self-authorship. *Journal of College Student Development, 51*(5), 550-562.
- Creamer, E. G., & Wakefield, K. M. (2010). Self-authorship and women in SET. In B. Bogue & E. T. Cady (Eds.), *Olio: Research on women in science and engineering* (pp. 35-43): Published using lulu.com.
- Darling, C. A., McWey, L. M., Howard, S. N., & Olmstead, S. B. (2007). College student stress: The influence of interpersonal relationships on sense of coherence. *Stress and Health, 23*(4), 215-229.
- DeBerard, M. S., Spielmans, G. I., & Julka, D. L. (2004). Predictors of academic achievement and retention among college freshmen: A longitudinal study. *College Student Journal, 38*(1), 66-80.
- Dusselier, L., Dunn, B., Wang, Y., Shelley, M., & Whalen, D. (2005). Personal, health, academic, and environmental predictors of stress for residence hall students. *Journal of American College Health, 54*(1), 15-24.
- Egart, K., & Healy, M. (2004). An urban leadership internship program: Implementing Learning Partnerships “unplugged” from campus structures. In M. B. Baxter Magolda & P. M. King (Eds.), *Learning partnerships: Theory and models of practice to educate for self-authorship* (pp. 125-149). Sterling, VA: Stylus.
- Eisenberg, D., Hunt, J., & Speer, N. (2013). Mental health in American colleges and universities: Variation across student subgroups and across campuses. *The Journal of Nervous and Mental Disease, 201*(1), 60-67.

- Fenzel, L. M. (2005). Multivariate analyses of predictors of heavy episodic drinking and drinking-related problems among college students. *Journal of College Student Development, 46*(2), 126-140. doi: 10.1353/csd.2005.0013
- 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*(1), 399-419.
- Folkman, S. (2011a). Stress, health, and coping: An overview. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 3-11). New York: Oxford University Press.
- Folkman, S. (2011b). Stress, health, and coping: Synthesis, commentary, and future directions. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 453-462). New York: Oxford University Press.
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*(3), 219-239.
- Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology, 48*(1), 150-170.
- Folkman, S., & Lazarus, R. S. (1988). *Manual for the Ways of Coping questionnaire*. Palo Alto, CA: Consulting Psychologists Press.
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. (1986). The dynamics of a stressful encounter: Cognitive appraisal, coping and encounter outcomes. *Journal of Personality and Social Psychology, 50*, 992-1003.
- Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology, 55*(1), 745-774.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218-226.
- Gall, T. L., Evans, D. R., & Bellerose, S. (2000). Transition to first-year university: Patterns of change in adjustment across life domains and time. *Journal of Social and Clinical Psychology, 19*(4), 544-567.
- Giacobbi, P., Lynn, T. K., Wetherington, J. M., Jenkins, J., Bodendorf, M., & Langley, B. (2004). Stress and coping during the transition to university for first-year female athletes. *The Sports Psychologist, 18*(1), 1-20.
- Giancola, J. K., Borchert, D., & Grawitch, M. J. (2009). Dealing with the stress of college: A model for adult students. *Adult Education Quarterly, 59*(3), 246-263.

- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine Pub. Co.
- Golden, S. (2010). When college is not the best time. *Inside Higher Ed*. Retrieved from <http://www.insidehighered.com/news/2010/09/15/leibow>
- Haynes, C. (2004). Promoting self-authorship through an interdisciplinary writing curriculum. In M. B. Baxter Magolda & P. M. King (Eds.), *Learning partnerships: Theory and models of practice to educate for self-authorship* (pp. 63-90). Sterling, VA: Stylus.
- Hochman, S. R., & Kernan, W. D. (2010). *A social-ecological model for addressing stress on the college campus*. Paper presented at the annual meeting of the American College Health Association, Philadelphia, PA.
- Horn, L., & Berger, R. (2004). *College Persistence on the Rise? Changes in 5-Year Degree Completion and Postsecondary Persistence Rates Between 1994 and 2000 (NCES 2005-156)*. U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Howard, D. E., Schiraldi, G., Pineda, A., & Campanella, R. (2006). Stress and mental health among college students: Overview and promising prevention interventions. In M. V. Landow (Ed.), *Stress and mental health of college students* (pp. 91-123). New York: Nova Science Publishers, Inc.
- Howell, A. (2009). Flourishing: Achievement-related correlates of students' well-being. *Journal of Positive Psychology, 4*(1), 1-13.
- Hurl, L., & Burdick, S. (2010). Mental health-mental illness continuum figure. Retrieved August 4, 2011, from [http://hr.umich.edu/mhealthy/programs/mental\\_emotional/understandingu/learn/mental\\_health.html](http://hr.umich.edu/mhealthy/programs/mental_emotional/understandingu/learn/mental_health.html)
- Joo, S.-H., Durband, D. B., & Grable, J. (2008-2009). The academic impact of financial stress on college students. *Journal of College Student Retention, 10*(3), 287-305.
- Joseph, S., & Linley, P. A. (2005). Positive adjustment to threatening events: An organismic valuing theory of growth through adversity. *Review of General Psychology, 9*(3), 262-280.
- Kadison, R., & DiGeronimo, T. F. (2004). *College of the overwhelmed: The campus mental health crisis and what to do about it* (1st ed.). San Francisco: Jossey-Bass.
- Keeling, R. P. (Ed.). (2004). *Learning reconsidered: A campus-wide focus on the student experience*. Washington, DC: ACPA, NASPA.

- Keeling, R. P. (Ed.). (2006). *Learning reconsidered 2: A practical guide to implementing a campus-wide focus on the student experiences*. Washington, D.C.: ACPA, ACUHO-I, ACUI, NACA, NACADA, NASPA, and NIRSA.
- Kegan, R. (1982). *The evolving self: Problem and process in human development*. Cambridge, Mass.: Harvard University Press.
- Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge, Mass.: Harvard University Press.
- Kegan, R. (2000). What “form” transforms? A constructive-developmental approach to transformative learning. In J. M. a. Associates (Ed.), *Learning as transformation: Critical perspectives on a theory in progress* (pp. 35-69). San Francisco: Jossey-Bass.
- Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustun, T. B. (2007). Age of onset of mental disorders: a review of recent literature. *Current Opinion in Psychiatry*, 20(4), 359.
- Keyes, C. L. M. (2005). Mental illness and/or mental health? Investigating the axioms of the complete state model of health. *Journal of Consulting and Clinical Psychology*, 73, 539-548.
- King, P. M. (2009). Principles of development and developmental change underlying theories of cognitive and moral development. *Journal of College Student Development*, 50(6), 597-620.
- King, P. M. (2010). The role of the cognitive dimension of self-authorship: An equal partner or the strong partner? In M. B. Baxter Magolda, E. G. Creamer & P. S. Meszaros (Eds.), *Development and assessment of self-authorship: Exploring the concept across cultures* (pp. 167-185). Sterling, VA: Stylus.
- King, P. M., & Baxter Magolda, M. B. (2004). Creating learning partnerships in higher education: Modeling the shape, shaping the model. In M. B. Magolda & P. M. King (Eds.), *Learning partnerships: Theory and models of practice to educate for self-authorship* (pp. 303-332). Sterling, VA: Stylus.
- King, P. M., & Baxter Magolda, M. B. (2005). A developmental model of intercultural maturity. *Journal of College Student Development*, 46(6), 571-592.
- King, P. M., Baxter Magolda, M. B., Barber, J. P., Kendall Brown, M., & Lindsay, N. K. (2009). Developmentally effective experiences for promoting self-authorship. *Mind, Brain and Education*, 3(2), 108-118.
- King, P. M., Baxter Magolda, M. B., Perez, R. J., & Taylor, K. B. (2009). *Refining the journey toward self-authorship: Developmental steps within the crossroads*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Vancouver, BC.



- King, P. M., Kendall Brown, M., Lindsay, N. K., & VanHecke, J. R. (2007). Liberal arts student learning outcomes: An integrated approach. *About Campus: Enriching the Student Learning Experience*, 12(4), 2-9.
- King, P. M., & Kitchener, K. S. (1994). *Developing Reflective Judgment: Understanding and promoting intellectual growth and critical thinking in adolescents and adults*. San Francisco, CA: Jossey-Bass.
- King, P. M., & Mayhew, M. J. (2002). Moral judgement development in higher education: Insights from the Defining Issues Test. *Journal of Moral Education*, 31(3), 247-270.
- Lahey, L. L., Souvaine, E., Kegan, R., Goodman, R., & Felix, S. (1988). *A guide to the Subject-Object Interview: Its administration and interpretation*. Cambridge, MA: Harvard University Graduate School of Education subject-object research group.
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York: McGraw-Hill.
- Lazarus, R. S. (2000). Toward better research on stress and coping. *The American Psychologist*, 55(6), 665-673.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Pub. Co.
- LEAD Pittsburgh and 3-C Institute for Social Development. (2012). SCoRE: Student Curriculum on Resilience Education. Retrieved December 25, 2012, from <http://www.scoreforcollege.org/programoverview>
- Leong, F., Bonz, M., & Zachar, P. (1997). Coping styles as predictors of college adjustment among freshmen. *Counselling Psychology Quarterly*, 10(2), 211.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications, Inc.
- Litt, M. D., Tennen, H., & Affleck, G. (2011). The dynamics of stress, coping, and health: Assessing stress and coping processes in real time. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 387-403). New York: Oxford University Press.
- Lo, R. (2002). A longitudinal study of perceived level of stress, coping and self-esteem of undergraduate nursing students: An Australian case study. *Journal of Advanced Nursing*, 39(2), 119-126.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227-238.

- McEwen, B. S. (2000). The neurobiology of stress: From serendipity to clinical relevance. *Brain Research, 886*(1-2), 172-189.
- McGregor, I., & Little, B. R. (1998). Personal projects, happiness, and meaning: On doing well and being yourself. *Journal of Personality and Social Psychology, 74*(2), 494-512.
- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education & Behavior, 15*(4), 351-377.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education* (2nd ed.). San Francisco: Jossey-Bass Publishers.
- Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Teaching and Learning, 74*, 5-12.
- Mezirow, J. (2000). Learning to think like an adult: Core concepts of transformation theory. In J. Mezirow (Ed.), *Learning as Transformation: Critical Perspectives on a Theory in Progress* (pp. 3-33). San Francisco: Jossey-Bass.
- Michael, S. T., & Snyder, C. R. (2005). Getting unstuck: The roles of hope, finding meaning, and rumination in the adjustment to bereavement among college students. *Death Studies, 29*(5), 435-458.
- NASPA Health Education and Leadership Program. (2004). Leadership for a healthy campus: An ecological approach for student success. Retrieved from <http://www.naspa.org/membership/mem/pubs/ebooks/HealthyCampus.pdf>
- O'Connor, C. (1997). Dispositions toward (collective) struggle and educational resilience in the inner city: A case analysis of six African-American high school students. *American Educational Research Journal, 34*(4), 593-629.
- Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin, 136*(2), 257-301.
- Park, C. L. (2011). Meaning, coping, and health and well-being. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 227-241). New York: Oxford University Press.
- Park, C. L., & Folkman, S. (1997). Meaning in the context of stress and coping. *Review of General Psychology, 1*(2), 115-144.
- Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science, 8*(3), 162-166.
- Piaget, J. (1950). *The psychology of intelligence*. London: Routledge & Paul.

- Piaget, J. (1964). *The psychology of intelligence*. London: Routledge & Paul.
- Pierceall, E., & Keim, M. (2007). Stress and coping strategies among community college students. *Community College Journal of Research and Practice*, 31(9), 703-712.
- Piper, T. D., & Buckley, J. A. (2004). Community standards model: Developing learning partnerships in campus housing. In M. B. Magolda & P. M. King (Eds.), *Learning partnerships: Theories and models of practice for self-authorship* (pp. 185-212). Sterling, VA: Stylus.
- Pizzolato, J. E. (2003). Developing self-authorship: Exploring the experiences of high-risk college students. *Journal of College Student Development*, 44(6), 797-812.
- Pizzolato, J. E. (2004). Coping with conflict: Self-authorship, coping, and adaptation to college in first-year, high-risk students. *Journal of College Student Development*, 45(4), 425-442.
- Pizzolato, J. E. (2006). Complex partnerships: Self-authorship and provocative academic advising experiences. *NACADA Journal*, 26(1), 32-45.
- Pizzolato, J. E. (2007). Assessing self-authorship. *New Directions for Teaching and Learning*, 2007(109), 31-42.
- Pizzolato, J. E. (2010). What is self-authorship? A theoretical exploration of the construct. In M. B. B. Magolda, E. G. Creamer & P. S. Meszaros (Eds.), *Development and assessment of self-authorship: Exploring the concept across cultures* (pp. 187-206). Sterling, VA: Stylus.
- Pizzolato, J. E., Nguyen, T.-L. K., & Chaudhari, P. (2008). *Cultural self-ways and self-authorship: The case of Asian American students*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Jacksonville, FL.
- Pritchard, M. E., Wilson, G. S., & Yamnitz, B. (2007). What predicts adjustment among college students? A longitudinal panel study. *Journal of American College Health*, 56(1), 15-21.
- Pryor, J. H., Hurtado, S., DeAngelo, L., Palucki Blake, L., & Tran, S. (2010). *The American freshman: National norms fall 2010*. Los Angeles: Higher Education Research Institute, UCLA.
- Renn, K. A., & Arnold, K. D. (2003). Reconceptualizing research on college student peer culture. *The Journal of Higher Education*, 74(3), 261-291.
- Reynolds, A. L., & Weigand, M. J. (2010). The relationships among academic attitudes, psychological attitudes, and the first-semester academic achievement of first-year college students. *Journal of Student Affairs Research and Practice*, 47(2), 175-195.

- Rice, K. G., Vergara, D. T., & Aldea, M. A. (2006). Cognitive-affective mediators of perfectionism and college student adjustment. *Personality and Individual Differences, 40*(3), 463-473.
- Ross, S. E., Niebling, B. C., & Heckert, T. M. (1999). Sources of stress among college students. *College Student Journal, 33*(2), 312.
- Rutter, M. (2007). Resilience, competence, and coping. *Child Abuse & Neglect, 31*(3), 205-209.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology, 52*(1), 141-166.
- 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.
- Ryland, E. B., Riordan, R. J., & Brack, G. (1994). Selected characteristics of high-risk students and their enrollment persistence. *Journal of College Student Development, 35*(1), 54-58.
- Schreiner, L. A. (2010). The "thriving quotient": A new vision for student success. *About Campus: Enriching the Student Learning Experience, 15*(2), 2-10.
- Seligman, M. E. P., Schulman, P., DeRubeis, R. J., & Hollon, S. D. (1999). The prevention of depression and anxiety. *Prevention & Treatment, 2*(8).
- Shields, N. (2001). Stress, active coping, and academic performance among persisting and nonpersisting college students. *Journal of Applied Biobehavioral Research, 6*(2), 65-81.
- Shim, W. (2009). Description of research methods and sample, years 1, 2, and 3: Interview portion, Wabash National Study, from [http://sitemaker.umich.edu/liberalartstudy/qualitative\\_methods](http://sitemaker.umich.edu/liberalartstudy/qualitative_methods)
- Shim, W. (2013). *Understanding college students' leadership engagement*. (Ph.D. dissertation), University of Michigan Ann Arbor.
- Skinner, E. A., & Zimmer-Gembeck, M. J. (2011). Perceived control and the development of coping. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 35-59). New York: Oxford University Press.
- Smedley, B. D., Myers, H. F., & Harrell, S. P. (1993). Minority-status stresses and the college adjustment of ethnic minority freshmen. *The Journal of Higher Education, 64*(4), 434-452.

- Somerfield, M. R., & McCrae, R. R. (2000). Stress and coping research: Methodological challenges, theoretical advances, and clinical applications. *The American Psychologist, 55*(6), 620-625.
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist, 52*(6), 613-629.
- Stein, C. H., Abraham, K. M., Bonar, E. E., McAuliffe, C. E., Fogo, W. R., Faigin, D. A. (2009). Making meaning from personal loss: Religious, benefit finding, and goal-oriented attributions. *Journal of Loss & Trauma, 14*(2), 83-100.
- Steinhardt, M., & Dolbier, C. (2008). Evaluation of a resilience intervention to enhance coping strategies and protective factors and decrease symptomatology. *Journal of American College Health, 56*(4), 445-453.
- Stoeber, S. A. (2002). Multiple predictors of college success: Investigation of an empirical model. *Dissertation abstracts international. B, The sciences and engineering, 62*(7-B).
- Struthers, C. W., Perry, R. P., & Menec, V. H. (2000). An examination of the relationship among academic stress, coping, motivation, and performance in college. *Research in Higher Education, 41*(5), 581-592.
- Taylor, K. B. (2008). Mapping the intricacies of young adults' developmental journey from socially prescribed to internally defined identities, relationships, and beliefs. *Journal of College Student Development, 49*(3), 215-234.
- Taylor, S. E. (2011). Affiliation and stress. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 86-100). New York: Oxford University Press.
- Torres, V. (2009). The developmental dimensions of recognizing racist thoughts. *Journal of College Student Development, 50*(5), 504-520.
- Torres, V., & Baxter Magolda, M. B. (2004). Reconstructing Latino identity: The influence of cognitive development on the ethnic identity process of Latino students. *Journal of College Student Development, 45*(3), 333-347.
- Torres, V., & Hernandez, E. (2007). The influence of ethnic identity on self-authorship: A longitudinal study of Latino/a college students. *Journal of College Student Development, 48*(5), 558-573.
- U.S. Department of Health and Human Services. (1999). *Mental health: A report to the Surgeon General*. Retrieved from <http://www.surgeongeneral.gov/library/mentalhealth/chapter1/sec1.html>.
- U.S. House Subcommittee on Higher Education and Workforce Training. (2011). Mental Health on Campus Improvement Act of 2011 (H. R. 1833). Text from: Bills,

Resolutions. Available from: Thomas (Library of Congress). Retrieved August 3, 2011, from <http://thomas.loc.gov>

University of Arizona C.A.T.S. Life Skills Program and the National Collegiate Athletic Association. (2012). Step UP! Be a Leader, Make a Difference Program. Retrieved February 2, 2013, from <http://www.stepupprogram.org/about/>

Wilson, T. D., & Gilbert, D. T. (2008). Explaining Away: A Model of Affective Adaptation. *Perspectives on Psychological Science*, 3(5), 370-386.

Wong, P. T. P., Wong, L. C. J., & Scott, C. (2006). Beyond stress and coping: The positive psychology of transformation. In P. T. P. Wong & L. C. J. Wong (Eds.), *Handbook of multicultural perspectives on stress and coping* (pp. 1-26). New York: Springer.