UC San Diego UC San Diego Electronic Theses and Dissertations

Title

First-Generation College Students' Stress: A Targeted Intervention

Permalink

https://escholarship.org/uc/item/5mc1t7nt

Author Rockwell, Dean

Publication Date 2022

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA SAN DIEGO

CALIFORNIA STATE UNIVERSITY, SAN MARCOS

First-Generation College Students' Stress: A Targeted Intervention

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Education

in

Educational Leadership

by

Dean Rockwell

Committee in Charge:

University of California San Diego

Christopher Halter, Chair Amy Eguchi

California State University, San Marcos

Sinem Siyahhan

©

Dean Rockwell, 2022

All rights reserved.

The Dissertation of Dean Rockwell is approved, and it is acceptable in quality and form for publication on microfilm and electronically:

University of California San Diego

California State University, San Marcos

DEDICATION

To my parents, thank you for your boundless love.

Dissertation Approval Page	iii
Dedication	iv
List of Figures	
List of Tables	
Abstract of the Dissertation	
Chapter 1: Introduction	
Statement of the Problem	3
Issue to be Investigated	3
Research Questions	3
Significance of the Study	4
Definition of Terms	4
Summary	5
Chapter 2: Literature Review	6
Introduction	6
First-Generation College Students Experience a Cultural Mismatch	6
This Cultural Mismatch Produces Stress	8
Academics	9
Social Relationships	12
Summary	15
A Culturally Tailored Intervention May Benefit First-Generation College Students	16
Social-Belonging Interventions	16
Stress Reappraisal Interventions	17
Difference-Education Interventions	18
The Intervention of This Dissertation	19
Stress as Common and Impermanent	20
Stress as Something to be Ignored	21
Summary of Review of Literature	21
Chapter 3: Methodology	23
Introduction	23
Phase 1	23

TABLE OF CONTENTS

	• •
The Intervention Design	
Participants	
Recruitment	25
Procedures	26
Common and Impermanent Condition Example Quote	27
Ignore Condition Example Quote	27
Essay	28
Measures	29
Hypotheses	29
Quantitative Data Analysis	30
Qualitative Data Analysis	31
Phase 2	32
Design of Phase 2	32
Measures	32
Hypotheses	33
Data Analysis	35
Limitations	35
Conclusion	36
Chapter 4: Findings	37
Introduction	37
Review of Methodology	38
Findings	40
Qualitative Analysis: Why did first-generation college students in the Ignore cond	lition
report less stress?	44
Qualitative Analysis: Comparing first- and continuing- generation student essays in	n the
Ignore condition	49
Trends: Sense of Belonging	52
Conclusion	54
Chapter 5: Discussion	56
Introduction	
Why Ignoring Stress Resonated for First-Generation College Students	56

Hard Independence
Shift and Persist
Deference to Authority: An Alternative Explanation60
Cultural Mismatch Theory: Three Assumptions61
Implications for Higher Education Policy62
Implications for Educational Leadership65
Research Limitations
Conclusions
References
Appendix A. Common and Impermanent Condition Materials
Appendix B. Ignore Condition Materials
Appendix C. Outcome Measures
C-1. Present Moment Stress
C-2. Sense of Belonging
C-3. Perceived Stress Scale (Phase 2 Measure)
C-4. Stress in the Transition to College (Phase 2 Measure)
Appendix D. Other Measures
D-1. Manipulation Check
D-2. Generation Status
Appendix E. Qualitative Data
E-1. First-Generation College Students' Perceptions of the Benefits of Ignoring Stress88

LIST OF FIGURES

Figure 1. First- and Continuing-Generation Student Immediately Following Intervention4	3
Figure 2. First- and Continuing-Generation Student Stress One Month After Intervention5	0
Figure 3. Prevalence of Themes by Generation Status*Condition5	;2
Figure 4. Prevalence of Themes by Generation Status Only5	;3
Figure 5. First- and Continuing-Generation Student Sense of Belonging Immediately Following	,
Intervention	;4
Figure 6. First- and Continuing-Generation Student Sense of Belonging One Month After	
Intervention	55

LIST OF TABLES

Table 1. Elements of the Two Conditions	27
Table 2. Phase 1 Methodology	32
Table 3. Phase 2 Methodology	35
Table 4. Demographic Information for Study Participants	39
Table 5. Codebook for Student Essays	40
Table 6. Example Quote from Essay.	40
Table 7. First-Generation College Student Stress Immediately Following Intervention	43
Table 8. First-Generation College Student Stress One Month Later	45
Table 9. First Generation College Student Stress in the Transition to College	46

VITA

- 2010 Bachelor of Arts, University of Richmond
- 2012 Master of Arts, University of Florida
- 2016 Master of Science, Boston College
- 2018 Master of Arts, Boston College
- 2022 Doctor of Education, University of California San Diego, California State University San Marcos

ABSTRACT OF THE DISSERTATION

First-Generation College Students' Stress: A Targeted Intervention

by

Dean Rockwell

Doctor of Education in Educational Leadership University of California San Diego, 2022 California State University, San Marcos, 2022

Chris Halter, Chair

First-generation college students may experience a mismatch between their cultural backgrounds, which tend to emphasize interdependent cultural norms (i.e., group achievements, connection with others, and taking actions that foster fitting in) and universities, which tend to

emphasize independent cultural norms (i.e. individual achievements, separation from others, and taking actions aimed at standing out). This cultural mismatch can create stress and lower sense of belonging for first-generation college students, which may prevent them from completing their degree. This dissertation investigates whether a targeted intervention that depicts stress as common and impermanent lowers their stress and increases their sense of belonging during the transition to college compared to first-generation college students who were given an intervention that depicts stress as something to ignore and compared to continuing-generation students who received both of these conditions. Surprisingly, it was the condition which encouraged students to ignore stress that reduced first-generation college student stress compared to multiple comparison groups both immediately following the intervention and one month later. Qualitative analysis revealed that the way in which first-generation college students related to stress was consistent with a cultural emphasis on hard independence (i.e. self-reliance and resilience).

Chapter 1: Introduction

Navigating the culture of universities can be daunting for first-generation college students and transitioning into this new culture can be stressful. Cultural Mismatch Theory predicts that stress for first-generation college students can occur when their interdependent cultural backgrounds (i.e., valuing connection with others, group achievements, and fitting in) clash with the independent norms of the university context (i.e., valuing separation from others, individual achievements, and standing out; Markus & Kitayama, 1991; Stephens, Fryberg et al., 2012; Stephens, Townsend et al., 2012). This stress may be interpreted as evidence of not belonging in college, which can create a negative cycle that is detrimental to the academic success and socialemotional health of first-generation college students (Phillips et al., 2020; Walton & Cohen, 2007). While initial research on cultural mismatch and stress confirmed their connection to one another (e.g. Stephens, Townsend et al., 2012), a targeted intervention on first-generation college student stress due to cultural mismatch has not been conducted.

Using insights from Cultural Mismatch Theory, this dissertation tests whether a targeted intervention that encourages first-generation college students to relate to stress as something that is common and impermanent (i.e. from a more interdependent perspective) results in less stress and greater sense of belonging compared to a condition that encourages them to relate to stress as something that is to be ignored. Students in both of these experimental conditions (i.e. Common and Impermanent and Ignore) read anecdotes from fictitious previous students that described overcoming stress related to academics and family in the transition to college and then wrote a short essay. The outcome measures of the study (e.g. stress and sense of belonging) were assessed both immediately following the intervention as well as one month later.

Surprisingly, when first-generation college students were encouraged to relate to stress as something that is common and impermanent (i.e. from a more interdependent perspective), this did not result in less stress and greater sense of belonging compared to either first-generation students in the Ignore condition or continuing-generation students in either condition. Rather, it was the condition that encouraged students to relate to stress as something to be ignored that resulted in less stress for first-generation college students compared to first-generation college students in the Common and Impermanent condition and continuing-generation students in the Ignore condition. Qualitative analysis of the essays revealed that the message of ignoring stress may have resonated with a cultural emphasis on hard independence, or being socialized in a cultural context that emphasizes self-reliance and resilience, which differs from soft independence, prevalent in middle-class contexts, where the emphasis is on acceptance of emotional experiences and comforting yourself (Kusserow, 2004).

By testing a targeted intervention on first-generation college student stress, this dissertation inadvertently provided support for the idea that hard independence is an important part of how first-generation college students relate to stress and that this way of relating to stress differs from the way that continuing-generation college students relate to stress (i.e. with soft independence). These findings contribute to the literature on Cultural Mismatch Theory, which has continued to evolve beyond the dichotomy of "independence" and "interdependence" (see Chang et al., 2020 for an example of this) and towards a more complex understanding of the cultural backgrounds of first-generation college students. This dissertation has important practical implications as it provides educators and therapists with new ways of understanding how first-generation college students relate to stress, and what strategies may be effective towards improving their social-emotional health.

Statement of the Problem

U.S. universities tend to reflect middle-class culture (Stephens, Fryberg et al., 2012). This can be intimidating and stressful for first-generation college students, more likely to have grown up in working-class contexts (Stephens, Townsend et al., 2012). This "cultural mismatch" – and the stress and lack of belonging it engenders – can weaken academic performance and may lead students to leave the university (Phillips et al., 2020; Pratt et al., 2019) If first-generation college students are not graduating from college, they are not accruing the benefits that come from a college degree such as expected earnings that are 95% more than high school graduates (Autor, 2014). The transition to college for first-generation students is a key life moment where persistence (and ultimately graduation) improves their odds of accessing greater resources over the course of their life. If these students do exit the university, the inequality between first- and continuing-generation students further increases, an unfortunate trend that has grown stronger over the past forty years, despite college initiatives to recruit and retain first-generation college students (Mijs & Roe, 2021). In summary, this cultural mismatch can result in stress, a lowered sense of belonging and ultimately, not accruing the benefits of a college degree.

Issue to be Investigated

This dissertation tests whether a targeted intervention, designed from best practices in social-psychological interventions, improves the social-emotional health (e.g. stress levels and sense of belonging) of first-generation college students in the transition to college.

Research Questions

- 1. Does depicting stress as common and impermanent improve *social-emotional health* for first-generation college students?
 - a. Does it result in reduced stress?
 - i. Compared to the Ignore condition of first-generation college students?
 - ii. Compared to continuing-generation students in the Common and Impermanent and Ignore conditions?

- b. Does it result in a greater *sense of belonging*?
 - i. Compared to the Ignore condition of first-generation students?
 - ii. Compared to continuing-generation students in the Common and Impermanent and Ignore conditions?

Significance of the Study

This dissertation contributes to the literature on first-generation college students by examining how they relate to a targeted intervention about stress in the transition to college. Psychologically "wise" interventions have not only resulted in immediate improvements, but have also generated lasting change for disadvantaged groups in college settings (for recent examples, see Brady et al., 2020; Murphy et al., 2020). This dissertation, while using best practices from previously successful interventions, explicitly focuses on how first-generation college students relate to stress. The results of this study are significant, as they reveal that firstgeneration college students tend to relate to stress through the cultural framework of hard independence, where pushing forward and moving past stress quickly may be necessary for managing it. These findings can inform the practice of educators, therapists and advocates working to improve the mental health of college students.

Definition of Terms

First-generation college student - student for whom neither parent has a Bachelor's degree *Continuing-generation college student* - student with a parent who has a Bachelor's degree *Stress* - the subjective feeling that the demands in the external environment exceed the capacity to cope with them (Lazarus & Folkman, 1984)

Independent Cultures - cultural contexts that emphasize uniqueness and separateness from others. More prevalent in middle-class contexts where being unique and distinct is rewarded (Stephens et al., 2019).

Interdependent Cultures - cultural contexts that emphasize relationships, fitting in and familial obligations. More prevalent in low-income contexts as relying on others is often critical for survival (Stephens et al., 2019).

Hard Independence - cultural contexts that emphasize self-reliance and resilience (Kusserow, 2004)

Soft Independence - cultural contexts that emphasize acceptance of emotional experiences and comforting yourself (Kusserow, 2004)

Summary

First-generation college students experience stress in the transition to college, which can be the result of a cultural mismatch between their interdependent cultural backgrounds (i.e., valuing connection with others, group achievements, and fitting in) and the independent cultural norms of the university context (i.e., valuing separation from others, individual achievements, and standing out). This, coupled with lowered sense of belonging may prevent first-generation college students from completing their degree. This dissertation explores whether a targeted intervention resulted in less stress and a greater sense of belonging for first-generation college students. Surprisingly, the condition which encouraged students to ignore stress reduced stress for first-generation college students compared to multiple comparison groups. This finding contributes to knowledge about how first-generation college students relate to stress, which, in turn, has implications for educators attempting to mitigate the harmful effects of stress in the transition to college.

Chapter 2: Literature Review

Introduction

This literature review consists of three main parts, which reflect the three theoretical assumptions of this dissertation: (1) that first-generation college students experience a cultural mismatch between their interdependent cultural backgrounds and the independent cultural norms present in university settings (i.e. Cultural Mismatch Theory; Stephens, Fryberg et al., 2012), (2) that this cultural mismatch produces stress for first-generation college students, and, (3) that a culturally tailored intervention may benefit the social-emotional health of first-generation college students.

First-Generation College Students Experience a Cultural Mismatch

Cultural Mismatch Theory posits that first-generation college students experience a cultural mismatch between their interdependent cultural backgrounds (i.e., valuing connection with others, group achievements, and "fitting in") and the independent cultural norms present in higher education settings (i.e., valuing separation from others, individual achievements, and "standing out"; Stephens, Fryberg et al., 2012). First-generation college students tend to be socialized in working-class contexts, which require more interdependence, such as adjusting to the needs of others and thinking of family and community first. Beyond initial upbringing, K-12 schools in low-income areas tend to affirm interdependent norms, such as fitting into the social hierarchy and respecting the authority of teachers (Kim & Markus, 2005; Lareau, 2011). Encouragement to stand out and express unique individual preferences may not be encouraged. Moving to Higher Education, when first-generation college students were asked about their motives for attending college, they were significantly more likely to select motives such as "help family after college" and "give back to my community" (i.e. interdependent motives) than

continuing-generation college students (Stephens, Fryberg et al., 2012). They were also significantly less likely to select motives such as "learn more about my interests" and "expand my understanding of the world" (i.e. independent motives) than continuing-generation college students (Stephens, Fryberg et al., 2012). The endorsement of more interdependent motives for attending college by first-generation college was replicated in a later study (Phillips et al., 2020). It follows that the transition to college may be a cultural shock as there may be a clash between the interdependent backgrounds of first-generation college students and the independent context of the university. First-generation college students, in fact, have reported feeling caught in between their home culture (i.e. more interdependent) and the university culture (i.e. more independent) (Vasquez-Salgado et al., 2015).

The impacts of cultural mismatch extend beyond entering college, with first-generation college students reporting a lower sense of subjective fit and obtaining a lower GPA throughout their time in college (Phillips et al., 2020). Cultural mismatch is persistent, as many elements of the college experience (e.g. Greek life, study abroad) are more compatible for students from middle-class backgrounds (Armstrong & Hamilton, 2013). First-generation college students may instead rely on their home communities for support, which may further the disconnect to the culture of the university. Academically, first-generation college students don't always feel comfortable attending faculty office hours as this kind of relationship with teachers is often not emphasized in working-class contexts (Calarco, 2011). Each of these opportunities within the university offers valuable social and cultural capital, which, if not utilized, may decrease the value of the college degree for first-generation college students. Thus, making universities more aware of the ways in which they perpetuate social class inequalities has serious implications for social mobility.

This Cultural Mismatch Produces Stress

Stress is one of the top three most commonly reported concerns at College Counseling Centers and 30% of all college students report that stress interferes with their academic performance (Perez-Rojas et al., 2017; ACHA, 2015). While stress is a common reality for college students, how first-generation students experience and relate to stress may be different due to their cultural backgrounds (Stephens, Townsend, et al., 2012). This section of the literature review utilizes Cultural Mismatch Theory as a lens to understanding first-generation college student stress, specifically that stress can arise out of the mismatch between the interdependent cultural backgrounds of first-generation college students and the prioritization of independent cultural values in university settings (Markus & Kitayama, 2010; Stephens, Townsend, et al., 2012). Below, I describe the literature that supports this claim, drawing particular attention to two domains that emerged from the literature: (1) academics and (2) social relationships.

In my review of the literature on first-generation college student stress, two domains emerged as important sources of stress: (1) academics (e.g., tests, classwork or homework) and (2) social relationships (e.g., connections with one's family, friends and romantic partners as well as faculty and staff). While these two domains impact all college students, Cultural Mismatch Theory would predict that they may impact first- and continuing-generation students differently due to how their cultural backgrounds (e.g. relative emphasis on independence or interdependence) interact with these two domains (Stephens, Fryberg et al., 2012). Indeed, research suggests that when first-generation college students experience a cultural mismatch, this can lead to negative emotions (Covarrubias & Fryberg, 2015; Stephens et al., 2012; Vasquez-Salgado et al., 2015). This literature review focuses on stress in particular, and, indeed, found a

similar pattern, namely, that when a cultural mismatch occurs in either academics (e.g., when there is competition) or social relationships (e.g., when there is a lack of social support), this was associated with greater stress for first-generation college students. Conversely, I found that when interdependence is promoted through social relationships (e.g., via social support) this was associated with less stress for first-generation college students. Below, I summarize the quantitative and qualitative research about first-generation college student stress within these two domains (e.g. academics and social relationships).

Academics

According to Cultural Mismatch Theory, activities that emphasize individual achievement and "standing out" may increase stress for first-generation college students' given that they would clash with their interdependent cultural backgrounds. For instance, research suggests that asking students with interdependent backgrounds to speak up in class and voice their opinion may make them uncomfortable because it goes against the interdependent cultural emphasis on knowing one's place in the hierarchy and listening to the teacher (Lareau, 2011). Individual achievements also tend to conflict with interdependence, which is more oriented towards group conformity (Markus, 2017). Seven quantitative papers, reviewed below, looked in particular at stress for first-generation college students in relation to academics.

Two papers measured stress during academic tasks using experimental methods and physiological measures (e.g. salivary cortisol levels and DHEA-S). In one study, first- and continuing-generation students in their first year of university were randomly assigned to a university welcome letter that either emphasized either independent norms (e.g., expressing oneself and conducting independent research during college) or interdependent norms (e.g., being part of a community and conducting collaborative research). After reading the letter, the

students had to deliver a five-minute speech about their college goals (i.e., complete an academic task). When first-generation college students were given the letter that emphasized independent norms, they showed significantly more stress than continuing generation students during this academic task (Stephens, Townsend, et al., 2012). Yet, when they were given the letter that matched their interdependent cultural norms, this difference was eliminated. For continuing-generation students, stress levels did not significantly change depending on the type of welcome letter they received.

In another study that also used physiological measures within an experimental design, first- and continuing-generation students were randomly assigned to one of two speaker panels (Stephens et al., 2015). One emphasized the strengths associated with a diverse social class background (e.g., the strengths of interdependence for first-generation students) while the other did not explicitly address social class backgrounds. Two years later, the impact on students' stress responses (i.e., salivary cortisol levels and DHEA-S) during academic tasks (i.e., giving a speech and doing a word puzzle) was examined. First-generation students who were exposed to the social class intervention two years earlier showed a lower stress response during the difficult academic tasks than both first-generation students who were in the control group and in contrast to continuing-generation students exposed to the intervention.

Two other papers measured stress in relation to academics using quantitative nonexperimental methods and self-report measures. One paper assessed the degree to which firstand continuing-generation students perceived stress to impact their academic performance and found no significant differences (Frazier et al., 2019). A second paper found that first-generation students experienced stress around choosing a major, although there was not a continuinggeneration comparison group, (Glaessgen et al., 2018).

Three quantitative studies looked at whether a mixture of different negative emotions (e.g. anxiety, depression and stress combined into one measure) were perceived to be a barrier to academic success for first-generation college students. Using a large multi-site survey of research universities called the Student Experience in the Research University (i.e., SERU), two quantitative papers analyzed whether feeling "depressed, stressed or upset" was perceived to be an academic obstacle for first- and continuing-generation students (Stebleton & Soria, 2012; Stebleton et al., 2014). Both papers found that first-generation college students were more likely to perceive these negative emotions as an academic obstacle, although the effect sizes were small (d = -0.14 and -0.24). In the second study, they also found that in relation to this same measure, first-generation college students were more likely to report lower levels of belonging than continuing-generation college students (Stebleton et al., 2014). Finally, in a study conducted at a large public research university, college seniors who had decided to withdraw from the university were asked about perceived barriers to their academic success, including "stress/anxiety/depression" and while only 55% of continuing-generation students reported these emotions as a barrier, a significantly greater proportion of first-generation students did (70%; Hunt et al., 2012).

The findings of the three studies provide some evidence that first-generation students were more likely than continuing-generation students to see stress as hampering their academic success. One notable similarity across these three studies is that they used data from large research universities, which may be more likely to promote independence than other types of universities. Yet these three studies should be treated with some caution as each used items that included three different emotion constructs which can result in poor construct validity as people may be responding to any one or more parts of it (Babbie & Benaquisto, 2009). In addition,

because these measures identify whether these students perceive stress as a *barrier* to academic success, they do not capture the intensity of the stress itself.

In summary, across the seven quantitative papers reviewed in this section on firstgeneration college student stress in the academic domain, there is support for the idea that when there is a cultural mismatch related to academics, first-generation college students experience stress.

Social Relationships

Cultural Mismatch Theory would predict that first-generation college students, who tend to be more interdependently-oriented, are more likely to value close ties to their family members and community than their continuing-generation peers (Stephens et al., 2012). These close ties with family can be the result of necessity, as working-class families often rely on each other for economic support. This makes social relationships an area where first-generation college students may experience increased stress relative to their continuing-generation peers when social relationships become strained (i.e. interdependence is threatened). Conversely, supportive social relationships may decrease the intensity of stress for first-generation college students relative to their continuing-generation peers. The seventeen empirical papers reported in this section either statistically tested stress in relation to social relationships (e.g., quantitative research) or explicitly described stress in relation to social relationships (e.g. qualitative research). I first describe papers where social relationships led to greater stress (e.g. due to financial strain, supporting family members, or due to an absence of family support), and then describe papers where social relationships led to less stress (e.g. due to support from family, the campus community and romantic relationships).

Social relationships can lead to greater stress for first-generation college students when they are impacted by financial strain, as demonstrated in two quantitative studies. In one paper, first-generation college students were significantly more likely to experience financial strain than continuing-generation students and that, in general (i.e., not parsing out the effects between firstand continuing-generation students) perceived stress mediated the relationship between this strain and campus integration (i.e. adaptation to campus life; Adams et al., 2016). A second quantitative study without a continuing-generation student comparison group found that sense of belonging mediated the relationship between financial stress and life satisfaction for firstgeneration college students (Duffy et al., 2019). Thus, while we cannot draw conclusions about the differences between first- and continuing-generation status with respect to stress and financial strain, these quantitative studies suggest that financial strain, and its associated impact on social relationships, likely generate stress for first-generation college students.

Seven qualitative studies linked social relationships to greater stress for first-generation college students who were supporting family members (e.g. financially or with daily household needs) or who lacked social support from family. Stress was associated with family financial struggles in two qualitative papers on first-generation college students (Hebert, 2018; O'Neal et al., 2016). In another paper, a qualitative case study of a first-generation Latina student at a predominantly White institution, stress was associated with not being able to go home to help her father out after her mother was deported to Mexico (Pyne & Means, 2013). Other papers described the intense conflict between family responsibilities and academic responsibilities, and the stress that came with balancing these competing demands (Ecklund, 2013; Espino, 2020; Vasquez-Salgado et al., 2015). Finally, in a qualitative study that utilized a daily diary format where students recorded their stressful experiences, those students who lacked family support

experienced more stress and struggled to cope with it more (Phinney & Haas, 2003). These seven qualitative studies provided further evidence that social relationships, when they were strained, could be a source of heightened stress for first-generation college students.

Four quantitative studies focused on how social relationships could lessen stress, especially when interdependence was promoted through harmonious ties to family. The first study, conducted at a large public university, found that receiving support from family significantly reduced stress levels for first-generation students while it did not significantly impact stress levels for continuing-generation students (Wang & Castañeda-Sound, 2008). A second quantitative study, conducted prior to initial college attendance, examined how parents' emotional and informational support related to students' stress and found that parent emotional support predicted less stress for first-generation students but did not have a significant effect for continuing-generation students (Sy et al., 2011). Moreover, a study without a comparison sample of continuing-generation college students and conducted at a Hispanic-serving institution in California, found that family social support was negatively associated with stress and depression for first-generation college students (Suwinyattichaiporn & Johnson, 2020). Unlike the previous three studies, a fourth quantitative study which looked at the impact of social support on stress across first- and continuing-generation students did not find that family/friend support was significant for lowering the stress of first-generation college students, although the authors did find that institutional support (e.g. support from advisors, mentors and professors) resulted in less stress for first-generation college students (Garriott & Nisle, 2018). Taken as a whole, these four quantitative studies lend support to the idea that harmonious social relationships lessen stress for first-generation college students.

An additional four qualitative studies provided additional support that social relationships could lower stress for first-generation students when interdependence was promoted. In a qualitative study of twelve Latino males, ten of whom were first-generation college students, many discussed how relationships with their "campus family" (i.e. peers and romantic partners) lowered their stress levels (Cerezo et al., 2013). In another study where first-generation college students were interviewed, several mentioned that talking to roommates about stress helped to validate what they were experiencing (Glaessgen et al., 2018). In a study of deaf, Latino firstgeneration college students, those who graduated from college were more likely to be socially involved in the campus, which appeared to reduce their stress related to being in a minority group (Torres, 2019). Finally, romantic relationships seemed to reduce stress among white firstgeneration male students, and, for the five students who were dating their high school girlfriend, provided a strong link to their home communities (Wilkins, 2014). These qualitative studies provide further evidence for Cultural Mismatch Theory, namely, that when social relationships promoted interdependence (i.e. relationships were harmonious), this lowered stress for firstgeneration college students.

Summary

In this section, first-generation college students' stress was measured or described in relation to academics and social relationships, two domains that emerged from the literature. When academics and social relationships created a cultural mismatch, first-generation college students experienced greater stress. However, with respect to social relationships, when interdependence was promoted (e.g. family support, social support, institutional support, affinity groups and relationships with roommates, peers and romantic partners), first-generation college students experienced less stress. These results provided support for Cultural Mismatch Theory,

namely, that when first-generation college students' interdependent backgrounds were not affirmed, their stress was greater while when interdependence was promoted within the domain of social relationships, their stress was reduced. This review of the literature suggests that a stress intervention for first-generation college students that promotes interdependence would be beneficial.

A Culturally Tailored Intervention May Benefit First-Generation College Students

Targeted interventions can be an effective way to help reduce the gaps between disadvantaged groups and their more advantaged peers in Higher Education settings (see Harackiewicz & Priniski, 2018 for a review of these studies within colleges). Multiple studies have shown that short, carefully designed psychological interventions can generate lasting effects for students (see Yeager & Walton, 2011 for a review of these studies in educational settings more broadly). These targeted, or "wise" interventions often seek to change the attributions that students make about their the learning environment, such as seeing threats to belonging as shared across racial groups rather than personal (e.g. social belonging interventions; Walton & Cohen, 2011), seeing stress as adaptive rather than threatening (e.g. stress reappraisal interventions; Jamieson et al., 2016) or highlighting the strengths inherent in different cultural backgrounds (e.g. difference-education interventions; Stephens et al., 2014). I review each of these three types of intervention below and then describe the ways in which they shaped the research design of this dissertation.

Social-Belonging Interventions

Social-belonging interventions are designed to assure students that setbacks are not indicative of whether or not they belong in an educational setting (Walton et al., 2017). Too often, groups who are underrepresented in educational settings (e.g. Black students) hold the

pernicious (but understandable, given historic and present inequities) view that "people like me do not belong here," which can have detrimental effects on their academic performance and social-emotional health (Walton & Cohen, 2007, p.83). Initial social-belonging interventions (e.g. Walton & Cohen, 2007), conducted with Black students transitioning to college, emphasized that setbacks are both common across all ethnic groups and lessen over time. The purpose of these interventions were to construe adversity as being unrelated to questions of belonging. These interventions have resulted in both strong and lasting effects on educational outcomes such as higher persistence, grades and sense of belonging (See Walton et al., 2017 for a review). In fact, the original social belonging intervention conducted with first-year college students (e.g. Walton & Cohen, 2007) resulted in benefits that extended into adulthood (7-11 years after the intervention), such as career satisfaction and success, psychological well-being and community involvement and leadership (Brady et al., 2020).

Stress Reappraisal Interventions

Stress reappraisal interventions, similar to social belonging interventions, seek to change how participants relate to a difficult or unpleasant experiences (in this case, stress). Stress reappraisal interventions have depicted stress as adaptive rather than a problem (e.g. Jamieson et al., 2016), as a challenge rather than a threat (e.g. Jamieson et al., 2010) or as enhancing rather than debilitating (e.g. Crum et al., 2013). In a recently published stress reappraisal intervention on underrepresented students (e.g. 67% were Black, Latinx or Native American) transitioning to college, stress was depicted in one condition as enhancing and then compared to two other conditions, one where stress management techniques were emphasized and another condition that received no intervention (Goyer et al., 2021). The outcome measures of positive and negative affect, sleep and exam performance were measured during end of the year exams. The

stress-is-enhancing condition resulted in significantly higher positive affect than the two comparison groups. There were no significant differences for the other outcomes (e.g. negative affect, sleep and exam performance) although the stress-is-enhancing condition weakened the negative correlation between stress and exam performance. Thus, there is some evidence that reappraising stress may benefit underrepresented students in the transition to college.

Difference-Education Interventions

In difference-education interventions, initially designed for first-generation college students, participants learn about how different cultural backgrounds can impact their experiences and outcomes in college (Stephens et al., 2020). This approach differs from both social-belonging and stress reappraisal interventions, which do not accentuate cultural differences in their intervention materials. In one example, students were told how the backgrounds of first-generation college students can both be a source of strength as well as pose particular challenges. By highlighting the unique elements of the backgrounds of first-generation college students, such as a cultural emphasis on interdependence, students who received the intervention were more likely to seek out college resources and it improved their GPAs compared to a condition who were not informed of how social-class differences matter (Stephens et al., 2014). This intervention, conducted in-person using student panels, was also effective when it was administered online to individual students, as it increased first-generation students' psychological empowerment and end of second year grades (Townsend et al., 2019). This intervention approach (i.e. difference-education) was explicitly designed for first-generation college students, which informed the creation of the intervention used in this dissertation.

The Intervention of this Dissertation

The intervention of this dissertation can be understood as a hybrid of the three approaches described above, and here I describe how it is similar and different to these types of interventions. Like social belonging interventions, it shares the emphasis on changing student attributions of setbacks and assures students that what they are feeling is not the result of their cultural background. Similar to stress reappraisal interventions, it centers stress as the phenomenon of interest. Drawing from difference-education interventions, it takes cultural differences into account and is designed for first-generation college students. The intervention of this dissertation differs from social belonging interventions by making stress the central element, whereas social belonging interventions do not explicitly mention stress in their intervention materials (e.g. Walton & Brady, 2020). And unlike stress reappraisal interventions, the intervention of this dissertation does not depict stress as adaptive but instead depicts stress as common and impermanent. This choice was made to resonate with the interdependent backgrounds of first-generation college students, and to promote a sense of belonging in the transition to college. More details of each of the two conditions of this intervention are described briefly below and in more depth in the next chapter.

In this intervention, across both conditions, stressors related to academics and social relationships are acknowledged. Acknowledging the existence of stressors and reflecting on them through writing has been shown to improve mental health outcomes (Pennebaker, 1997). Writing about emotional experiences, as participants will do in this intervention, has positively impacted GPA and lowered distress, negative affect and depression (Pennebaker, 1997). Yet processing negative emotions such as stress may also lead to rumination, which increases negative affect (Kross et al., 2005). One way to prevent rumination is to encourage individuals to process

emotions from a more distanced perspective, which helps them to not relive the experience (Kross et al., 2005). This intervention, which depicts the stressful experiences of *other* students, is designed for more reflective processing.

Stress as Common and Impermanent. Stress resulting from cultural mismatch may be interpreted as a signal of not belonging (Walton & Cohen, 2007). This interpretation could further fuel stress and negative rumination. The first condition in the intervention depicts stress as common, which challenges the interpretation that stress is a signal of not belonging. It seeks to reinforce the idea that students are not alone in feeling stress. This attribution should also resonate in particular with first-generation college students because it affirms interdependent cultural backgrounds. Students from interdependent backgrounds are more likely to define themselves in terms of similarity (rather than difference) and experience themselves in connection to others (rather than as a self-contained entity; Vignoles et al., 2016).

This first condition of the intervention also depicts stress as impermanent. This approach conceptualizes stress as continually changing, rather than being a stable entity, which has been shown to be a healthier way to relate to negative emotions (Kneeland & Dovidio, 2019). This is in the tradition of mindset research, which depicts intelligence as changeable rather than fixed (Paunesku et al., 2015). In the case of stress, it would be detrimental to see stress as something inherent to oneself, stable, unchanging and fixed. While the intervention script does not guarantee that it will get better, as it did in the original social-belonging intervention, it does imply that this is possible. This attribution (i.e. impermanent) may also resonate more with first-generation college students given their interdependent cultural backgrounds. For example, when moving between contexts, those from interdependent cultural backgrounds tend to focus on

variability whereas those from more independent cultural backgrounds tend to focus on consistency (Vignoles et al., 2016).

Stress as Something to be Ignored. The second condition in the intervention depicts stress as something to be ignored. This condition has been used as a placebo control in other interventions (e.g. Jamieson et al., 2016), but it still offers a strategy for regulating stress, one that is more aligned with independence given that it conceptualizes stress as something within your power to control. This condition has the potential to resonate for first-generation college students as they tend to value "hard" independence (e.g. resilience and self-reliance; Kusserow, 2004; Covarrubias et al., 2019). Thus, this condition is not expected to be harmful for first-generation college students. While this condition may benefit first-generation college students, the review of the literature I conducted would predict that the Common and Impermanent condition will benefit them *more* than the Ignore stress condition, given the explicit alignment with interdependent cultural backgrounds.

Summary of Review of Literature

This review of the literature covered three topics that are crucial for understanding the assumptions of the empirical study. First, it described Cultural Mismatch Theory, and explained why first-generation college students likely experience a clash between their interdependent cultural backgrounds and the independent cultural norms present in university settings. Secondly, by reviewing empirical peer-reviewed studies on first-generation college student stress, it demonstrated the link between cultural mismatch and stress for this population. Specifically, it was found that first-generation college students experience stress within the domains of academics and family when a cultural mismatch occurs. Finally, given these findings, and given the promising potential of targeted interventions (e.g. social belonging, stress reappraisal and

difference-education interventions), I describe why a culturally tailored intervention may benefit the social-emotional health of first-generation college students. This literature review directly informed the choices described in the methodology section.

Chapter 3: Methodology

Introduction

This intervention seeks to encourage beneficial interpretations of stress for firstgeneration college students experiencing cultural mismatch in the transition to college, which is detrimental to their social-emotional health (Phillips et al., 2020; Stephens, Townsend et al., 2012). It does this by providing examples of overcoming stress in the transition to college by fictitious students. These stories acknowledge stressors related to academics and family, and then provide two strategies (i.e. via two conditions) for relating to stress: (1) treating it as something that is common and impermanent and (2) treating it as something to be ignored. Students in both conditions read quotes from previous (fictitious) students and reflect on them by writing a short essay. The intervention sought to lower student stress levels and increase sense of belonging. The study also included a follow-up, one month later, in order to learn whether the intervention provided longer term benefits to stress and sense of belonging for first-generation college students. This Methodology section is organized by the two phases of the research project: 1) the intervention; i.e. Phase 1 and 2) the follow-up; i.e. Phase 2.

Phase 1

The Intervention Design

This intervention provided first- and second-year college students with customized stories from fictitious former students on strategies for managing stress during the transition to college. These stories combined actual words from previous students (collected in a pilot study that took place in Spring 2020) with language adapted from the social-belonging intervention (which used fictitious students; Walton et al., 2017). All student stories were presented as real, but students were given fictitious personas to represent diversity of race/ethnicity, social class, gender and

grade level. This also enabled the decoupling of marginalized backgrounds (e.g. race/ethnicity, social class, gender) from particular challenges in the transition to college so that students didn't associate particular challenges as the result of their background (for further reading on this rationale, see Walton & Brady, 2020). These stories were an effort to help first-generation college students to learn about different ways to manage stress. The Common and Impermanent condition encouraged students to see that the stress they experience is both shared amongst peers (i.e. not just within them) and impermanent (i.e. not a stable personality trait). The Ignore condition encouraged students to not dwell on stress but rather to move on. Yet both conditions, by emphasizing common stressors related to academics and familial obligations, communicated to students that the university is an environment where they belong and can be successful.

After reading the stories, students in both conditions were asked to write a short essay to reflect on the stories they read about. Having students write down their own interpretation of the intervention can help induce self-persuasion, or the "saying-is-believing" effect, which results in deeper processing (Aronson, 1999). The essay prompt also encouraged these students to provide advice to future students, giving them the opportunity to help others, another strategy that increases the strength of interventions (Walton et al., 2017). Finally, students completed established measures of stress and sense of belonging. This was followed by demographic items as well as a manipulation check to ensure that they understood the intervention.

Participants

Participants for this study were first-year and second-year students at a public, broadaccess, Hispanic-serving university. In the 2020 Freshman Survey at this particular university, 31% of students identified as first-generation college students. In this same survey of Freshman, 42% identified as Latina/o/x, 21% identified as White and 20% identified as "two or more

races/ethnicities." This university was selected based on its diverse student population, and, more specifically, on the number of students who are first-generation college students. Furthermore, in this same survey of first-year students, 88% of students reported that they felt anxious in the past year, underscoring the need for interventions that reduce stress. Stress may have been particularly high given that this study was conducted during the first full Academic Year after the start of COVID-19 (i.e. Fall 2020 to Spring 2021). Finally, while this university provides access to underrepresented populations, such as first-generation college students, only 49% of the students graduate within six years. This intervention seeks to support the success of first-generation college students and improve their likelihood of graduating from college (Chetty et al., 2017; U.S. Department of Education, 2017).

Recruitment

Students were recruited by emailing the faculty of select courses that tended to be enrolled with first-year students. For example, one of the courses that was targeted was designed to help first-year students transition to college. The other course that was targeted was the Introduction to Writing course, often populated with first-year students. All courses at the university were online due to the conditions of the pandemic. Faculty were asked if the study could be implemented during one of their class periods or as a class assignment. Thus, students were given the intervention as a part of their course, which may have helped to avoid the stigmatization that could come from reaching out to a more specific population. Furthermore, this approach tests the intervention in an educational setting, rather than a laboratory, unlike some previous, similar interventions (Walton & Cohen, 2007; 2011). In recent years, there has been a concerted effort to move educational interventions from the lab to educational settings as a way to test the generalizability of the lab-based findings (see Brady et al., 2018; Murphy et al.,

2020 for recent examples). The majority of students completed the intervention in the Fall semester, a key educational juncture, which can increase the strength (Yeager & Walton, 2011). I also targeted first-year students in particular as they have been shown to be both more open to new information and to experience more anxiety than upper-year students (Misra & Mckean, 2000; Brady et al., 2018).

Approximately 200 students were recruited to participate in the intervention. Within this sample, students were randomly assigned to either the Common and Impermanent condition or the Ignore condition. Approximately 100 students were recruited to each condition and successful interventions were conducted with similar (or fewer) participants. (e.g. Walton & Cohen, 2011 had 92; Stephens et al., 2014 had 168; Jamieson et al., 2016 had 93).

Procedures

The intervention and survey questions were completed online via Qualtrics. After giving informed consent, the college student participants were asked to complete a 30-minute task about the transition to college. Students were told that they would be reviewing the results of a study with former students from their university. After reading the instructions, students were given one of two randomly chosen options, the Common and Impermanent condition and the Ignore condition. Both conditions acknowledge the stressors of academics and family, but the Ignore condition, rather than encouraging students to understand stress as common and impermanent, described stress as something that should be ignored (Jamieson et al., 2016). Table 1 describes how the Common and Impermanent condition and Ignore conditions differ. All study materials can be found in Appendices A and B.

Table 1. Elements of the Two Conditions

Common and Impermanent Condition	Ignore Condition	
The Transition to College	The Transition to College	
Domains of Academics and Family	Domains of Academics and Family	
Descriptions of Stress	Descriptions of Stress	
Way of Relating to Stress: Understand it as Common and Impermanent	Way of Relating to Stress: Understand it as Something to Ignore	

Common and Impermanent Condition Example Quote

"As excited as I was to come to [UNIVERSITY NAME], I must admit that part of me thought it was a mistake that I was admitted, and that I would not be able to measure up to the other students. Early on, I bombed a test. It was the worst grade I'd ever received, and I felt really upset. **But then, I found out I wasn't the only one.** No one did well on that test. It was really hard—the professor was trying to set a high standard. I accepted this stress and continued to study. Soon, college felt more manageable. Though I still have doubts about myself sometimes, I know they're the kinds of things everybody feels on occasion."

- Participant #40, [UNIVERSITY NAME] senior, White male, First-Generation college student

Ignore Condition Example Quote

"As excited as I was to come to [UNIVERSITY NAME], I must admit that part of me thought it was a mistake that I was admitted, and that I would not be able to measure up to the other students. Early on, I bombed a test. It was the worst grade I'd ever received, and I felt really upset. I tried not to let my feelings about the test control my life. After all, the test was really hard—the professor was trying to set a high standard. I tried to not pay attention to the stress and to continue to study. Though I still have doubts about myself sometimes, I know that I can push through them."

- Participant #40, [UNIVERSITY NAME] senior, White male, First-Generation college student

After reading the student stories, participants were asked to write a short essay about how the examples relate to their own experience with stress. While students in the Common and Impermanent condition were asked, "why do you think these students benefited from seeing stress as both common and impermanent?" students in the Ignore condition were asked "why do you think these students benefited from ignoring stress?" They were urged to illustrate their essay with examples of their own experiences of transitioning to college and were invited to look back on the interview excerpts as they worked. In addition, students were told, "your insights will be shared with future students in order to give them a better sense of what the transition will be like. Any advice you can offer to future students would be appreciated." This intervention technique makes students into benefactors rather than beneficiaries of the intervention, possibly reducing stigmatization (Walton et al., 2017; Murphy et al., 2020). There was not a time limit on writing the essay. In a small pilot study conducted in the Spring of 2020, students wrote approximately 300 words. Full essay instructions can be found at the end of Appendix A ("Common and Impermanent" condition) and Appendix B ("Ignore Stress" condition).

Measures

Immediately following the intervention (i.e. reading quotes and writing a reflection), students were given survey items that measure stress in the present moment and sense of belonging (i.e. dependent variables), as well as demographic items. Present Moment Stress was measured using 4 items ("agitated," "upset," "stressed out" and "nervous") following previously published work (Taylor et al., 2007). These items were a part of the positive and negative affect schedule (i.e. PANAS; Watson & Clark, 1984), which uses 20 words to measure positive and negative affect (e.g. "irritable," "alert," "guilty" and "scared"). While "nervous" and "upset" were contained in the original measure, "agitated" and "stressed out" were added to it. Sense of

belonging was measured using three items (e.g. "I feel a sense of belonging to [school name inserted here]"; Museus et al., 2017). Following the measurement of the dependent variables, students completed demographic measures of generation status, race/ethnicity and gender. The generation status measure asked if they self-identified as a first-generation college student.

Hypotheses

Given the findings from Cultural Mismatch Theory on first-generation college students' interdependent cultural backgrounds, I predicted that the Common and Impermanent condition would improve their social-emotional health (i.e. lower stress and increase sense of belonging) immediately following the intervention, relative to the comparison groups. The Common and Impermanent condition aligns with interdependence because it depicts stress as shared (rather than unique) and variable (rather than fixed). While the Ignore condition may benefit firstgeneration college students, I expected it to benefit them less than the Common and Impermanent condition. I did not expect either condition to benefit continuing-generation college students, given that the conditions did not align with their cultural backgrounds.

 H_1 Immediately following the intervention, first-generation college students in the Common and Impermanent condition will show improved social-emotional health relative to the other three relevant groups (i.e. (1) first-generation college students in the Ignore condition, (2) continuinggeneration college students in the Common and Impermanent condition and (3) continuinggeneration college students in the Ignore condition)

 H_{1a} Immediately following the intervention, first-generation college students in the Common and Impermanent condition will report less stress than the other three relevant groups (i.e. (1) first-generation college students in the Ignore condition, (2) continuing-generation college

students in the Common and Impermanent condition and (3) continuing-generation college students in the Ignore condition)

 H_{1b} Immediately following the intervention, first-generation college students in the Common and Impermanent condition will report greater sense of belonging than the other three relevant groups (i.e. (1) first-generation college students in the Ignore condition, (2) continuinggeneration college students in the Common and Impermanent condition and (3) continuinggeneration college students in the Ignore condition)

Quantitative Data Analysis

As the hypotheses above indicate, there are four main groups of interest in this study. First-generation college students who received the Common and Impermanent condition, firstgeneration college students who received the Ignore condition, continuing-generation college students who received the Common and Impermanent condition, and continuing-generation students who received the Ignore condition. Hypotheses 1a and 1b make specific predictions about differences in stress and sense of belonging between first-generation college students in the Common and Impermanent condition and the other three relevant groups. After checking for normality, I will run either 2x2 ANOVAs or a Kruskal-Wallis test to compare the means of the dependent variables (i.e. stress and sense of belonging) across the two independent variables (i.e. generation status and condition).

Qualitative Data Analysis

The student essays will be another source of data. These essays may provide insights into how the four different groups related to stress and may help to further contextualize the quantitative findings. To analyze these essays, I will begin with a round of open coding to get a general sense of the themes present in the essays. Once this open coding is complete, I will go

back to the literature and compare my codes against it. I will check to see if there are more focused, a priori codes that I can apply to the data and to further refine my existing coding. After reviewing the literature, I will go back to the data and code it using both a priori and in vivo codes. This refinement will help to hone in on the themes of the essays that provide further description and insight to the quantitative results.

Research Questions	Hypotheses	Measures	Data Type	Analyses
Does depicting stress as common and impermanent reduce stress for first- generation college students?	H_{1a} Immediately following the intervention, first- generation college students in the Common and Impermanent condition will report less stress than the other three relevant groups.	Present Moment Stress measure ("agitated," "upset," "stressed out" and "nervous"; Taylor et al., 2007)	1-5 scale (Very Slightly or Not at All to Extremely) Student essays	One way ANOVA, Kruskal-Wallis test Qualitative coding
Does depicting stress as common and impermanent result in a greater sense of belonging?	H_{1b} Immediately following the intervention, first- generation college students in the Common and Impermanent condition will report greater sense of belonging than the other three relevant groups.	Sense of Belonging measure (Hurtado & Carter, 1997; Museus et al., 2017)	Likert 1-7 scale (strongly disagree to strongly agree) Student essays	One way ANOVA, Kruskal-Wallis test Qualitative coding

 Table 2. Phase 1 Methodology

Phase 2

Design of Phase 2

After approximately one month, students who received Phase 1 were asked to complete follow-up measures to determine whether the intervention had an impact on first-generation college students one month after implementation. These follow-up measures included the same sense of belonging measure gathered in Phase 1 and added two additional stress measures to track stress over the past month. This within-semester follow-up design is similar to other interventions that include follow-up measures that are given within the constraints of one course (Brady et al., 2018; Jamieson et al., 2016). While many of the most successful interventions track outcomes for multiple years after the initial intervention, this level of follow-up was outside of the scope of this dissertation, given the time limitations of the doctoral program.

Measures

In addition to the measures given in Phase 1 (e.g. Sense of Belonging, demographic items), students were also given two additional measures of stress: the Perceived Stress Scale, which asked the students about their stress over the past month, using a 10-item questionnaire (Cohen et al., 1994) and a Yes/No item asking whether they experienced stress in the transition to college. The Stress in the Transition to College measure asked students "have you found the transition to college stressful?" and gave them the options of Yes and No. If they answered yes, they were taken to an open-ended question that asked them "what did you find stressful about the transition to college?" and if they answered no, they were asked, "Why do you think this is? Why haven't you found the transition to college stressful?" These additional stress measures were utilized in order to get a sense of whether the intervention benefitted students' stress levels over a one month period, not just in the present moment, as was measured in Phase 1.

Hypotheses

Targeted interventions like this dissertation have resulted in lasting effects months and years after the intervention (for examples, see Walton & Cohen, 2011; Stephens et al., 2014). Despite these interventions being short, they have the potential to shift how students relate to difficult experiences that can be applied to other situations, setting off positive cycles of change. For example, applying the intervention strategy to other situations might result in benefits such as improved performance or self-esteem. In the case of this intervention, relating to stress in a way that reduces its harmful effects may empower students to perform better on tests, seek out support or feel comfortable participating in class. These actions may lead to further benefits, such as more motivation to study, forming a regular study group and increased confidence. In this way, the intervention can generate positive recursive cycles that snowball into the future (Walton & Wilson, 2018). This potential underlies the second set of hypotheses, which predict that the effects of Phase 1 will still be seen one month later in Phase 2, namely, that firstgeneration college students in the Common and Impermanent condition will have relatively better social- emotional health (i.e. lower stress and increase sense of belonging) compared to the relevant comparison groups.

 H_2 One month after the intervention, first-generation college students in the Common and Impermanent condition will show improved social-emotional health relative to the other three relevant groups (i.e. (1) first-generation college students in the Ignore condition, (2) continuinggeneration college students in the Common and Impermanent condition and (3) continuinggeneration college students in the Ignore condition)

 H_{2a} One month after the intervention, first-generation college students in the Common and Impermanent condition will report less stress than the other three relevant groups (i.e. (1) first-

generation college students in the Ignore condition, (2) continuing-generation college students in the Common and Impermanent condition and (3) continuing-generation college students in the Ignore condition)

 H_{2b} One month after the intervention, first-generation college students in the Common and Impermanent condition will report greater sense of belonging than the other three relevant groups (i.e. (1) first-generation college students in the Ignore condition, (2) continuinggeneration college students in the Common and Impermanent condition and (3) continuinggeneration college students in the Ignore condition)

Data Analysis

After checking for normality, I will run either 2x2 ANOVAs or a Kruskal-Wallis test to compare the means of the dependent variables (i.e. stress and sense of belonging) across the two independent variables (i.e. generation status and condition). Phase 2 includes two additional measures for stress: perceived stress in the past month and stress in the transition to college. The hypotheses predict that first-generation college students in the Common and Impermanent condition will report decreased stress and increased sense of belonging compared to the other relevant groups. Once again, to further contextualize the quantitative findings, I will analyze the student essays qualitatively in the same manner described for Phase 1.

Research Question	Hypothesis	Measure	Data Type	Analysis
Does depicting stress as common and impermanent result in less stress for first- generation college students?	H_{2a} One month after the intervention, first- generation college students in the Common and Impermanent condition will report less stress than the other three relevant groups.	Perceived Stress Scale (last month; Cohen et al., 1994) Stress in the Transition to College	5 point scale (Never to Very Often) Yes/No	One way ANOVA, Kruskal- Wallis test, Crosstabs
Does depicting stress as common and impermanent result in a greater sense of belonging?	H_{2b} One month after the intervention, first- generation college students in the Common and Impermanent condition will report greater sense of belonging than the other three relevant groups.	Sense of Belonging measure	Likert 1-7 scale (strongly disagree to strongly agree)	One way ANOVA, Kruskal- Wallis test, Crosstabs

 Table 3. Phase 2 Methodology

Limitations

Although this study adheres to best practices in targeted interventions, there are still several limitations to acknowledge. First, there is a relatively short time-frame to measure effects from the intervention and baseline data will not be collected. Second, the measures of stress are perception based, and not physiological. Although perceptions of stress have real consequences for educational outcomes (for a recent example, see Frazier et al., 2019), they only capture a part of the phenomenon of stress. Finally, the unique conditions of COVID-19 are the context of this research project. One limitation of conducting this research during the Academic Year of 2020-2021 is that classes will be online. While the transition to college will look different than it

normally would, this research can uncover how students are feeling during this unique time and whether a targeted intervention can have a positive impact on their college experience. While the unique historical conditions are a potential threat to the generalizability of the study, they may also serve to provide novel insights.

Conclusion

In summary, this dissertation investigates whether a targeted intervention designed for first-generation college students lowers their stress and increases their sense of belonging during the transition to college. This research would contribute to the growing literature on cultural mismatch as it relates to first-generation college student stress and sense of belonging.

Chapter 4: Findings

Introduction

First-generation college students may experience stress due to a cultural mismatch with universities. How did a targeted intervention depicting stress in the transition to college impact their social-emotional health (i.e. stress and sense of belonging)? Stress was depicted in two ways: (1) as something that is common and impermanent, meant to resonate with first-generation college students' interdependent cultural backgrounds, and (2) as something that is to be ignored, meant to contrast with the interdependent condition. The outcomes of the study, stress and sense of belonging, were measured immediately following the intervention and approximately one month later. In this chapter, after reviewing the methodology of the study, I highlight key findings that compare students by generation status (i.e. first- and continuing-) and across the two conditions (i.e. Common and Impermanent and Ignore).

There were two major findings that emerged from the study. Surprisingly, the culturally targeted Common and Impermanent condition did not result in less stress for first-generation college students, rather, it was (1) first-generation college students in the Ignore condition who reported less stress compared to first-generation college students in the "Common and Impermanent" condition, both immediately following the intervention and one month later. Qualitative analysis of the student essays revealed that the Ignore condition particularly resonated with first-generation college students' hard independence (i.e. being socialized in a cultural context that emphasizes self-reliance and resilience; Kusserow, 2004), which may help to explain why their reported stress was lower than first-generation college students in the Common and Impermanent condition. Furthermore, (2) first-generation college students in the Ignore condition also reported less stress one month after the intervention compared to

continuing-generation students in the Ignore condition. Qualitative analysis of the student essays revealed that the Ignore condition did not resonate with continuing-generation students, providing further evidence that the Ignore condition was particularly impactful for first-generation college students. Additional trends from the data, such as those related to sense of belonging are discussed at the end of the chapter.

Review of Methodology

This study was conducted during the Academic Year of 2020-2021. All classes at the participating university were online due to the COVID-19 pandemic. The study was distributed via an online survey link by faculty members teaching first-year courses who agreed to participate. The first part of the study (i.e. Phase 1) asked student participants to read quotes from fictitious former students, write essays and complete outcome measures on stress and sense of belonging. Approximately one month later, students completed a shorter survey (i.e. Phase 2) with follow-up stress and sense of belonging measures.

Data was collected over the Fall and Spring semesters and 274 students completed either one or both phases of the study. Following data collection, the data was methodically cleaned to remove both incomplete responses as well as to remove students who completed Phase 1 and Phase 2 too close together (i.e. under 14 days). Students who were not first- and second-year students were also removed from the data as well as students who failed to correctly answer a basic question about the quotes they had read. This cleaning process narrowed the participant numbers to 118 for Phase 1 and 66 for Phase 2. Following this cleaning process, measures that contained multiple items (e.g. stress, sense of belonging) were combined into their own distinct variables and hypotheses were tested using 2 by 2 ANOVAs/Kruskal-Wallis test and Chi-Square Tests for Independence.

Phase 1	Phase 2
118	66
48%	45%
94%	92%
6%	8%
78%	77%
21%	21%
1%	2%
1%	2%
3%	6%
7%	6%
31%	29%
46%	41%
1%	0%
1%	0%
10%	17%
	118 48% 94% 6% 78% 21% 1% 3% 7% 31% 46% 1%

 Table 4. Demographic Information for Study Participants

In addition to the quantitative analysis, student essays were analyzed qualitatively. First, a round of open coding was completed in order to get a broad sense of how students were relating to the intervention. This open coding revealed the themes of independence and interdependence as they related to stress. A codebook was developed that included both in vivo codes (i.e. generated from participant language) and a priori codes (i.e. derived from the literature on first-generation college student independence vs. interdependence; Covarrubias et al., 2019; Tibbetts et al., 2016). Codes were organized according to three categories: (1) soft independence, (2) hard independence and (3) interdependence. Coding these essays was a way to explore in greater detail why the Ignore condition resulted in less reported stress for first-generation college students.

 Table 5. Codebook for Student Essays

Soft Independence	Soft Independence Hard Independence		Soft Independence Hard Independence I	
Acceptance Being kind to yourself Gaining freedom Comforting yourself Becoming self- expressive Relaxing Finding peace and ease Being interested in emotional experiences	Pushing forward through struggle Being resilient Being self-reliant Don't pay attention to stress Being tough Being responsible Try to reduce stress Control uncertainty	Seeking help Spending time with others Relating to others' experiences Feeling part of a group Connecting with others		

Table 6. Example Quote from Essay

Soft Independence	Hard Independence	Interdependence	
"To truly be healed from those deeper levels of stress, you must deal with the feelings and find out why they aren't to be trusted."	"You can't let stress get in the way of your own success."	"Learning to talk with those you trust about the things that are bothering you, more so now than ever, is extremely important."	

Findings

The quantitative and qualitative findings are presented below. Quantitative findings are presented first, with qualitative findings following each quantitative finding as a way to contextualize them and to provide further insights into possible explanations. First, I report the statistically significant findings that compare first-generation college students in the two conditions, and find that first-generation college students in the Ignore condition reported less stress immediately following the intervention and one month later. Using the qualitative data, I provide evidence that the Ignore condition resonated with first-generation students' hard

independence. Second, I report the significant finding that compares first-generation college students in the Ignore condition with continuing-generation students in the Ignore condition, and find that first-generation college students in the Ignore condition reported less stress one month later. Qualitative essay data is used to provide further evidence that these two groups responded differently to the Ignore prompt.

Finding #1. First-generation college students in the Ignore condition reported less stress than first-generation college students in the Common and Impermanent condition, immediately following the intervention and one month later.

In Phase 1 of the study, all participants were randomly assigned to either the Common and Impermanent condition or to the Ignore condition, which each depicted stress in a different way. Students read quotes from fictitious former students and were asked to write an essay that affirmed the importance of one of these different approaches to stress. Of the 118 students who completed one of the conditions, 57 were first-generation college students (48%). 26 of these first-generation students were randomly assigned to the Common and Impermanent condition, while 31 were randomly assigned to the Ignore condition. The effectiveness of the randomization was checked by comparing the two conditions by race/ethnicity, gender, parent education level and class year in order to make sure that one of the conditions was not significantly different in terms of these demographics. Crosstabs and Chi Square tests were run which revealed no significant differences by condition across each of these demographic categories.

Finding #1a: First-generation college students in the Ignore condition reported significantly less stress than first-generation college students in the Common and Impermanent condition *immediately following the intervention*.

Stress was measured immediately following the intervention using the measure for Present Moment Stress, which asked students to rate, on a 1-5 scale (1=Very slightly or not at all to 5=Extremely) the degree to which they were feeling, at this moment, "agitated," "upset," "stressed out" and "nervous." When looking at the descriptives, histogram and P-P plots of stress, it was determined that the assumption of normality was not met, while the assumption of homogenous variances was met, p = .415. After completing the assumption checks, a Kruskal-Wallis test was conducted that compared the four relevant groups (first-Generation college students in the Common and Impermanent condition, first-generation college students in the Ignore condition, continuing-generation students in the Common and Impermanent condition and continuing-generation students in the Ignore condition). This indicated a statistically significant difference in stress between groups, H(3) = 8.18, p = 0.042. A Dunn's Post Hoc Comparison revealed a statistically significant difference between first-generation college students in the Common and Impermanent condition and first-generation college students in the Ignore condition, p = .003. There was not a statistically significant difference in stress levels for continuing-generation Students in the two conditions.

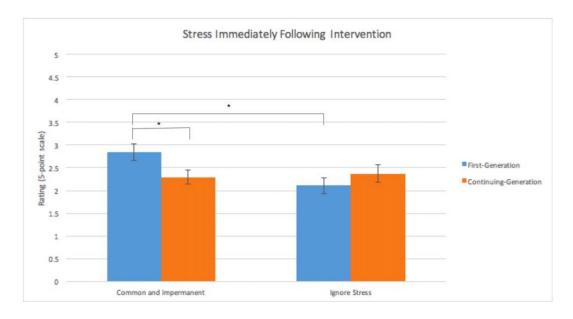


Figure 1. First- and Continuing-Generation Student Stress Immediately Following Intervention

Table 7. First-Generation College Student Stress Immediately Following Intervention

Variable	п	М	SD
Stress - Common and Impermanent condition	26	2.84	0.97
Stress - Ignore condition	31	2.11	0.81

Finding #1b: First-generation college students in the Ignore condition reported significantly less stress than first-generation college students in the Common and Impermanent condition *one month following the intervention*.

Approximately one month after Phase 1, students who completed the intervention were contacted to complete additional measures on stress and sense of belonging (i.e. Phase 2). This resulted in 66 students who completed both Phase 1 and Phase 2. Of these 66 students, 30 were first-generation college students. 13 of these students completed the Common and Impermanent

condition in Phase 1, while 17 completed the Ignore condition in Phase 1. Again, the effectiveness of randomization was checked with these first-generation students by comparing the two conditions across race/ethnicity, gender, parent education level and class year. There were no significant demographic differences by condition.

Stress was measured approximately one month after the intervention using the Perceived Stress Scale (Cohen et al., 1994). Students were asked ten questions about their feelings and thoughts over the last month (e.g. "In the last month, how often have you felt that you were on top of things?") and rated their answers on a 1-5 scale (1=Never and 5=Very Often). When looking at the descriptives, histogram and P-P plots of stress, it was determined that the assumption of normality was met, due to the skewness (-.238) and kurtosis (.047) being close to 0 and a Shapiro-Wilk significance value of p = .068. The assumption of homogenous variances was also met, p = .577. A 2 (Condition: Common and Impermanent vs. Ignore) by 2 (First-Gen Status: First-Gen vs. Continuing-Gen) analysis of variance (ANOVA) was conducted and there was a Condition × First-Gen Status interaction, F(1,66) = 9.05, p = .004, with a large effect size ($\eta_p^2 = .127$). Through post-hoc analysis, it was found that first-generation students in the Ignore condition reported significantly less stress than first-generation students in the Common and Impermanent condition, p = .044.

Variable	п	М	SD
Stress - Common and Impermanent condition	13	3.35	0.46
Stress - Ignore condition	17	2.89	0.71

Table 8. First-Generation College Student Stress One Month Later

Stress was also measured approximately one month after the intervention by asking students "Have you found the transition to college stressful?" This Yes/No question was analyzed using Crosstabs to compare first-generation students who completed the Common and Impermanent condition against first-generation students who completed the Ignore condition. All 13 out of 13 first-generation students in the Common and Impermanent condition answered "yes," they found the transition to college stressful (expected count of 10.4), while 0 out of 13 first-generation students in the Common and Impermanent condition answered "no," (expected count of 2.6). For first-generation students in the Ignore condition, 11 out of 17 answered "yes," they found the transition to college stressful (expected count of 13.6), while 6 out of 17 firstgeneration students in the Ignore condition answered "no," they have not found the transition to college stressful (expected count of 3.4). A Chi-Square Test of Independence revealed a significance of p = .017, with a medium effect size (Cramer's V = 0.437). This indicates that first-generation students in the Ignore condition found the transition to college significantly less stressful than first-generation students in the Common and Impermanent condition. A table with the actual and expected counts is shown below.

		Have you found the transition to college stressful?		
		Yes	No	Total
First-Gen	Count	13	0	13
Common and Impermanent	Expected Count	10.4	2.6	13
First-Gen	Count	11	6	17
Ignore	Expected Count	13.6	3.4	17

Table 9. First Generation College Student Stress in the Transition to College

Qualitative Analysis: Why did first-generation college students in the Ignore condition report less stress?

Qualitative analysis of the student essays revealed that the Ignore condition resonated with first-generation college students. In fact, only one out of the seventeen first-generation student essays in the Ignore condition questioned or critiqued the benefit of ignoring stress. Ten students explicitly affirmed the importance of this way of relating to stress, saying things like "ignoring stress is the best thing you can do" and "ignoring stress could possibly be the best thing anyone could do and is probably so common." Some of the benefits students gave for this approach included: (1) ignoring stress prevents it from "further consuming them," (2) ignoring stress kept them moving forward, (3) ignoring stress causes a clear mind and (4) "stress is the cause of self-doubt and self-damning" and ignoring it keeps them on track for success. One student, Orlando, a first-generation college student, described how ignoring stress was a way to take control over something harmful:

I believe students benefitted from ignoring stress because it's like ignoring someone toxic. Like a toxic person, stress constantly bugs you and tries putting

you down. By ignoring it, you are, in a way, liberating yourself from something that shouldn't be there in the first place. In my personal experience, stress makes me feel like my life isn't really my own to do with as I please. It, instead, feels like it belongs to my responsibilities that can dictate my next actions as it pleases. However, when I make attempts to ignore it, I begin to feel like my life is my own again. I do some of the things that I want to do before dealing with my responsibilities. By the time I get to my responsibilities though, I'm not as stressed as I could've been because I took some time to figure out how I'd balance everything that needs to get done in a timely manner. In conclusion, by ignoring stress, we are freeing ourselves by something that has no right to control us and we may continue with our lives living freely and in peace.

Orlando describes stress as something that is externally imposed on him and can feel suffocating. Ignoring stress, for him, is a way to reclaim agency over something that constrains him. The personal choice to ignore stress gives him a sense of freedom. A table with a full presentation of exemplar quotes is provided in Appendix E.

One possible explanation for why the Ignore condition resulted in less stress for firstgeneration college students relative to first-generation college students in the Common and Impermanent condition was that it resonated with first-generation college students' sense of hard independence. Students from working class backgrounds (i.e. first-generation college students) tend to be socialized with hard independence, which emphasizes resilience, self-reliance and personal responsibility (Covarrubias et al., 2019). This socialization differs from students with middle- and upper-middle class backgrounds (i.e. continuing-generation college students), who tend to be socialized with soft independence, which emphasizes acceptance of emotional experiences and comforting yourself (Kusserow, 2004). These two different ways of relating to difficult psychological experiences (e.g. stress) may explain why the Ignore condition resonated with first-generation college students.

The qualitative coding of the essays revealed that first-generation college student essays in the Ignore condition were replete with references to hard independence, especially compared

with students in the three other conditions (see Figure 3 for a graphical illustration). Many firstgeneration college students interpreted ignoring stress as a way to push forward through struggle and to move on from difficult experiences. As one student described this approach: "I could have been consumed with my bad grade and let it alter my mindset, but instead, I took the initiative to ignore it and move forward." Other students echoed this sentiment of determination and resilience, using phrases such as "do what you need to do," "push on," "keep moving," "focus on your goal," and "you can't let stress get in the way of your own success." Self-reliance was commonly expressed, with one student writing that "it is up to the individual to ignore it [stress] and not let it further consume them." Taking individual responsibility was another theme, as students described how the transition to college required taking the initiative to form new habits such as planning out assignments and key deadlines. For them, taking responsibility was a way to reduce stress.

More unexpectedly, the themes of hard independence were also found for first-generation students in the Common and Impermanent condition, which was surprising, given that this condition was intended to resonate more with their *interdependent* cultural backgrounds. While the Common and Impermanent condition did resonate with interdependence more than the Ignore condition, what was surprising is how many first-generation students in the Common and Impermanent condition continued to share perspectives that emphasized self-reliance, resilience and taking responsibility. Three separate students in the Common and Impermanent condition described the importance of "becoming more independent" in the transition to college. One student described that, "once they [the students in the intervention quotes] realize[d] stress could be a problem, they chose not to pay attention to it and not let it affect them," which sounds similar to the Ignore condition, although this was not primed for in the Common and

Impermanent condition. These findings provide some evidence that independence, and hard independence more specifically, was not something that was simply primed for in the Ignore Stress condition, as it was also emphasized by first-generation college students in the Common and Impermanent condition.

Finding #2. First-generation college students in the Ignore condition reported significantly less stress than continuing-generation college students in the Ignore condition *one month following the intervention*.

Stress was measured approximately one month after the intervention using the Perceived Stress Scale (Cohen et al., 1994). Students were asked ten questions about their feelings and thoughts over the last month (e.g. "In the last month, how often have you felt that you were on top of things?") and rated their answers on a 1-5 scale (1=Never and 5=Very Often). A 2 (First-Gen Status: First-Gen vs. Continuing-Gen) by 2 (Condition: Common and Impermanent vs. Ignore) analysis of variance (ANOVA) was conducted and there was a First-Gen Status × Condition interaction, F(1,66) = 9.05, p = .004, with a large effect size ($\eta_p^2 = .127$) which showed that the Ignore condition generated significant differences between first- and continuing-generation students. Through post-hoc analysis, it was found that first-generation students in the Ignore condition reported significantly lower stress than continuing-generation students in the Ignore condition, p = .010.

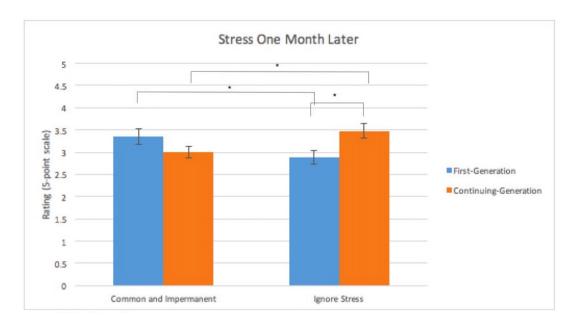


Figure 2. First- and Continuing-Generation Student Stress One Month After Intervention

Qualitative analysis: Comparing first- and continuing- generation student essays in the Ignore condition

Further qualitative analysis was conducted to compare the essays of first- and continuinggeneration college students. There were stark differences in how these two groups related to the Ignore condition. While first-generation students appreciated this approach, some continuinggeneration students voiced concerns over this way of relating to stress. These students pushed back on the quotes they read and the essay instructions, arguing that "ignoring it [the stress] will not make it go away" and "ignoring stress is a form of emotional numbing, a maladaptive coping mechanism in which one suppresses and ignores certain feelings." Another continuinggeneration student, Jessie, elaborated in further detail, writing that:

I don't think anyone here has ultimately benefited from "ignoring stress." That's not a healthy long-term approach to dealing with mounting pressure or workloads, it just shunts the eventual burn-out down the line a little longer, but eventually all that "ignored" stress is going to come back with a roaring vengeance.

This skepticism toward ignoring stress was not shared by all continuing-generation students, but what was notable was the contrast between first-generation students' lack of concern, or, in some cases, strong approval towards ignoring stress and continuing-generation students' hesitancy, or, in some cases, strong reproach towards ignoring stress. These differences were also revealed by comparing the prevalence of "hard independence" codes across these two groups. This revealed that while 76% of first-generation college students in the Ignore condition utilized hard independence themes in their essays, only 53% of continuing-generation student essays in the Ignore condition utilized hard independence themes. Furthermore, 35% of firstgeneration college students in the Ignore condition used *only* hard independence themes, while 15% of continuing-generation students in the Ignore condition used only hard independence themes. This qualitative analysis provides further evidence that the Ignore condition resonated with first-generation college students more than continuing-generation students. Below, Figures 3 and 4 detail the prevalence of themes (i.e. hard independence, soft independence and interdependence) by condition and generation status, while Figure 4 shows these themes by generation status only.

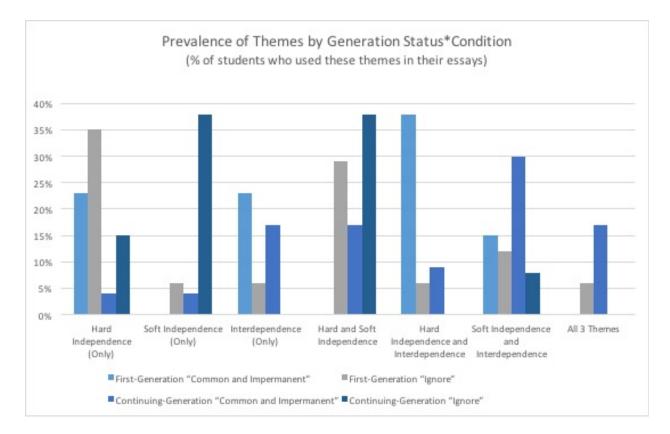


Figure 3. Prevalence of Themes by Generation Status*Condition

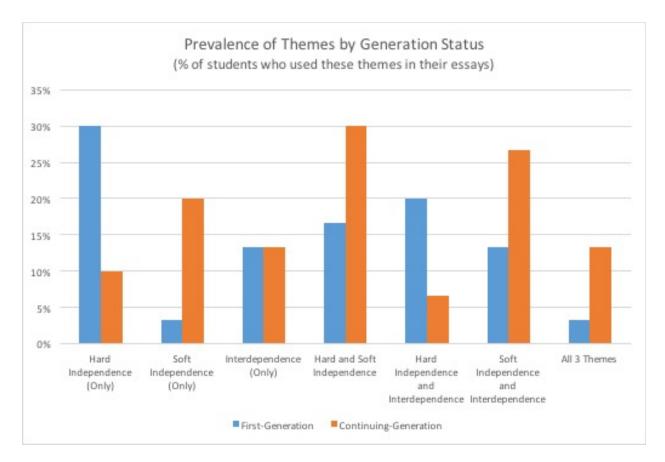


Figure 4. Prevalence of Themes by Generation Status Only

Trends: Sense of Belonging

Sense of belonging, alongside stress, was a key outcome variable of this study. While the Ignore condition benefitted first-generation college students' stress, both immediately and one month later, compared to multiple comparison groups, and using multiple measures of stress, did this condition also benefit first-generation students' sense of belonging? The findings for first-generation students' sense of belonging trended in the same direction as stress, that is, the Ignore condition benefitted first-generation college students' sense of belonging both immediately and one month later, compared to multiple comparison groups. These results, however, were not statistically significant, and thus these differences could have been due to chance. The figures below illustrate this trend, namely, that sense of belonging was, on average, higher for first-generation students in the Ignore condition than it was for first-generation students in the

Common and Impermanent condition as well as higher than continuing-generation students in the Ignore condition and continuing-generation students in the Common and Impermanent condition. This trend indicates that the stress findings may be connected to students' sense of belonging. Yet, the conditions of COVID-19, and, more specifically, online learning, may have contributed to the lack of significant findings on first-generation college students' sense of belonging, as it may have remained relatively stable due to not having to experience the culture of the university in person. The lack of any major differences in sense of belonging (e.g. due to cultural mismatch) may not have been present when college was virtual.

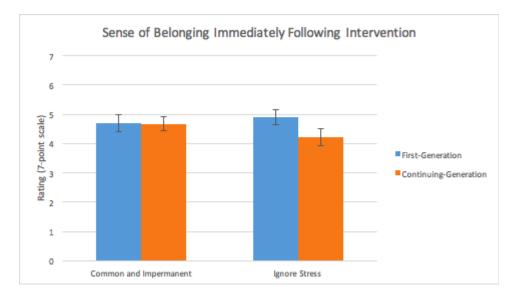
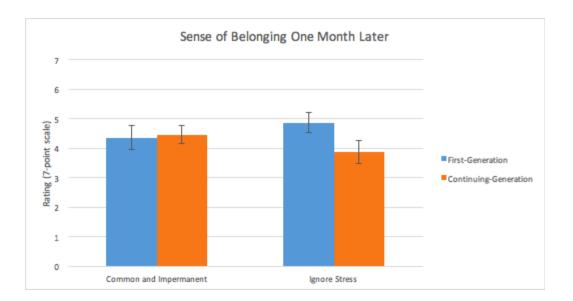
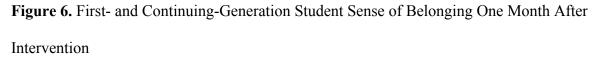


Figure 5. First- and Continuing-Generation Student Sense of Belonging Immediately Following Intervention





Conclusion

This study, conducted during the COVID-19 pandemic, found that encouraging firstgeneration college students to ignore stress led to less reported stress immediately following the intervention and one month later compared to first-generation college students encouraged to understand stress as common and impermanent and compared to continuing-generation college students encouraged to ignore stress. This puzzling finding, further explored by analyzing student essays, revealed that the Ignore condition resonated with first-generation students' sense of hard independence (i.e. being socialized in a cultural context that emphasizes self-reliance and resilience; Kusserow, 2004). The effects of the Ignore condition on sense of belonging were consistent with the stress findings, but were not significant. The findings of this study have important implications for research and policymaking on first-generation college student stress, which is discussed in the subsequent chapter.

Chapter 5: Discussion

Introduction

Surprisingly, encouraging first-generation college students to ignore stress resulted in less stress for them compared to multiple comparison groups both immediately following the intervention and one month later. Qualitative analysis of the student essays revealed that the Ignore condition particularly resonated with first-generation college students' hard independence (i.e. being socialized in a cultural context that emphasizes self-reliance and resilience; Kusserow, 2004), which may help to explain why their reported stress was lower than both first-generation college students in the Common and Impermanent condition and continuing-generation college students in the Ignore condition. In this chapter, I will provide a more comprehensive description of hard independence. I will connect hard independence to stress by using the literature on the "shift and persist" coping strategy (Chen & Miller, 2012). I will also discuss the assumptions underlying this dissertation and how they might be revised in light of the findings. I will also propose an alternative explanation for the findings, namely, that first-generation students' likely deference to authority may have shaped how they reported stress. I will close by discussing research limitations and argue for the importance of considering cultural mismatches in Higher Education beyond that of independence versus interdependence. These cultural mismatches have implications for education leadership and policy.

Why Ignoring Stress Resonated for First-Generation College Students

The Ignore Stress condition was not expected to lower stress for first-generation college students more than the Common and Impermanent condition. In fact, the opposite was hypothesized, that the Common and Impermanent condition would lower stress for firstgeneration college students more than the Ignore condition. This hypothesis was informed by

Cultural Mismatch Theory and an extensive literature review on first-generation college student stress which led to the conclusion that relating to stress in a way that was consistent with interdependence (i.e. seeing it as common and impermanent), would lower stress for first-generation college students. Yet it was the condition that encouraged first-generation college students to ignore stress that lowered their stress both immediately following the intervention and one month later. There is evidence that this condition particularly resonated with "hard independence" as a way to relate to stress. In this section, I provide a more detailed description of hard independence and why the literature on the "shift and persist " coping strategy in low socioeconomic status populations may help to contextualize the findings of the dissertation. I also speculate that first-generation college students' likely deference to authority may have influenced the results of the study. Finally, I discuss three assumptions of the study and how, when operationalized, these assumptions were tested.

Hard Independence

The term "hard independence" as it is used in this dissertation, comes from an ethnography of social class differences in child rearing in New York City entitled *American Individualisms* (Kusserow, 2004). The ethnographer, trained in Anthropology, observed and interviewed parents and teachers in one upper class context and two working class contexts, and paid particular attention to how these adults disseminated ideas to their children about what it means to be an individual. She found that in upper class neighborhoods, parents and teachers promoted what she labeled as soft independence, which emphasized sensitivity around emotions. Children were compared to "flowers," in need of delicate care in order to "blossom" (Kusserow, 2004, p.171). In working class neighborhoods, parents and teachers promoted hard independence, which emphasized toughness, self-reliance and resilience. Children in these

contexts were told to "get over it" and "move on" when they expressed emotions (Kusserow, 2004, p.36). As one working-class parent put it, "you shouldn't pay too much attention to any emotion and you shouldn't baby them too much, give them too much praise. You don't want them to be too soft" (p.37). Kusserow also noticed that working class parents did not always respond to a child's immediate emotional concern, which they saw as a way to build self-reliance and to teach children to move on from difficult emotions.

This anthropological research migrated into scholarship on first-generation college students, where the concept of hard independence has been used to add further nuance to Cultural Mismatch Theory, which applies research on independence and interdependence to firstgeneration college students (Chang et al., 2020). First-generation college students use particular styles and combinations of independence and interdependence as they relate to the college setting, and hard independence is one of the ways they express independent norms (Covarrubias et al., 2019). For example, in a grounded theory study using interviews with low-income, Latinx and Asian-American first-generation students, students expressed five types of hard independence: being resilient, self-reliant, tough, mature and breaking tradition (Covarrubias et al., 2019). The findings of this dissertation revealed similar themes, most commonly: taking responsibility, pushing forward through struggle and being resilient. This emphasis on hard independence as it applies to first-generation college students is a growing area in the literature, especially given the emphasis on strengths-based and asset-based research that focuses on the resilience and persistence of first-generation college students (Azmitia et al., 2018). This dissertation further extends findings on hard independence into coping with stress. This intersection, of hard independence and stress management, is similar to the coping strategy of

"shift and persist," utilized by some low socioeconomic status individuals (Chen & Miller, 2012).

Shift and Persist

While the hypotheses of this dissertation predicted that first-generation college student stress would be comparatively alleviated by framing it as common and impermanent, this was not the case. Rather, stress was comparatively alleviated for first-generation college students by encouraging them to ignore it. This strategy aligns with the coping strategy of "shift-andpersist," which has been found to be utilized by some low socioeconomic status individuals when confronted with stress. The authors of the foundational paper on this topic describe how environmental factors often fall outside of the control of low-SES individuals, and thus quickly adjusting to how they relate to the stressor (i.e. shifting) can be a useful coping strategy (Chen & Miller, 2012). This shifting process is a more internal, self-focused strategy as changing the external situation may be limited. The Ignore condition instructions align with this "shift" strategy because they emphasize taking immediate internal action to reduce the strength of the stressor before it becomes too difficult to handle. The "persist" part of the coping strategy refers to remaining optimistic about the future and staying focused on long-term goals. This kind of determination was evident in the essays of first-generation college students, who wrote things like "I think students benefit from ignoring stress so they could move on with their goals" and "I think they saw something to look forward to and pushed on." Thus, while meant to contrast with the Common and Impermanent condition, the Ignore condition seemed to align with the coping strategy of "shift and persist," and this alignment may explain its effect on stress.

Deference to Authority: An Alternative Explanation

Each of the two conditions (i.e. Common and Impermanent and Ignore) put forward a particular strategy for handling stress. While the Common and Impermanent condition implied that students should see stressors as ubiquitous, shared amongst peers and continually changing, the Ignore condition implied that stress is something that should not be noticed, felt or embraced. An alternative explanation for the finding that the Ignore condition resulted in comparatively lower stress for first-generation college students is that perhaps the Common and Impermanent condition encouraged *reporting* stress as it implied it is something you *should* experience. And, similarly, perhaps the Ignore condition encouraged not reporting stress as it implied that stress is something you *shouldn't* experience. Yet, if this were true, there would be significant differences between conditions for both first- and continuing-generation students. This was not found for continuing-generation students and yet it was found for first-generation students. Is there a way to account for this difference? One explanation is that first-generation students may be more likely to have deferred to the authority of the intervention, while continuing-generation students may have been more likely to question authority, a pattern that has been found in the social class literature (Lareau, 2011; Jack, 2016). These studies have shown that students from working-class backgrounds have been socialized in education settings to keep their head down and not question authority figures while students from middle-class backgrounds have been socialized to speak up and engage authority figures. Similarly, in this dissertation, this pattern was found in the Ignore condition essays, where first-generation students did not repeatedly question or critique this coping strategy while continuing-generation college students were much more likely to assert their own opinion as to why ignoring stress was not a useful coping strategy. This way of relating to the "authority" of the intervention may explain why there were significant differences between conditions for first-generation students but not for continuing-generation students.

Cultural Mismatch Theory: Three Assumptions

This dissertation rested on three key assumptions: (1) that first-generation college students experience a cultural mismatch between their interdependent cultural backgrounds and the independent cultural norms present at universities (Stephens, Fryberg et al., 2012), (2) that this cultural mismatch produces stress for first-generation college students (Stephens, Townsend et al., 2012) and, (3) that if first-generation students' interdependent cultural backgrounds are emphasized in relation to stress, this will result in lower stress and increased sense of belonging relative to relevant comparison groups. These assumptions were tested in the context of this study and yet, given the findings, they should be re-examined. First is the assumption that firstgeneration college students in this study were experiencing a cultural mismatch. Were they? While many of the early studies on cultural mismatch were conducted at prestigious institutions, where the differences between the independent norms of the university and the interdependent norms of the first-generation college students attending those universities may have been stark (e.g. Stephens, Fryberg et al., 2012; Stephens et al., 2014), this dissertation was conducted at a public, comprehensive Hispanic-serving college, which may not possess highly salient independent norms that would threaten first-generation college students to the same degree as more prestigious universities. In fact, recent scholarship has looked at cultural mismatch at community colleges, and found that community colleges do not emphasize independent norms as strongly as 4-year colleges and that first-generation college students may not experience as great of a mismatch (Tibbetts et al., 2018). While this dissertation was not conducted at a community college, the fact that it was conducted at a comprehensive university, rather than an Ivy League

or Research 1 institution may have impacted the degree to which first-generation college students experienced a mismatch. Furthermore, the pandemic, and more specifically, online learning may have weakened the experience of cultural mismatch, as students were not getting a complete experience of the culture of the university. If first-generation students were not experiencing a strong cultural mismatch, then the effect on stress and sense of belonging was likely weaker.

The third assumption of this dissertation, namely, that if first-generation students' interdependent cultural backgrounds were affirmed, this would reduce stress and increase sense of belonging, underestimated the potential of affirming hard independence. Affirming independence, rather than interdependence, has, in fact, produced some benefits for first-generation college students. For example, when first-generation college students reflected on their own independent values, they obtained higher grades and felt less concerned about their background (Tibbetts et al., 2016). When writing about independence was manipulated by researchers by specifically asking first-generation students to write about their independent values, it improved their performance on a math test (Tibbetts et al., 2016). These authors argue that it can be worthwhile to find alignment between aspects of the student backgrounds that align with the dominant context. This dissertation adds to the growing evidence that hard independence is a salient feature of first-generation college students' cultural backgrounds that support their social-emotional health in college. This idea is explored further below.

Implications for Higher Education Policy

Stress management and mental health services have become ubiquitous features of university life. In my fifteen years of working and studying on college campuses, I have

witnessed firsthand the massive investment (both financially and symbolically) in therapists, counseling centers, and self-care resources (e.g. mindfulness, exercise, healthy food). The causes for this growing trend would fill another dissertation, yet what is most relevant for this dissertation is a discussion of the following questions: (1) do universities emphasize soft independence in the framing of their mental health offerings? (2) does this emphasis on soft independence create a mismatch with first-generation college student hard independence? And (3) does this mismatch impact the social-emotional health of first-generation college students? If the answer is "yes" to these three questions, then institutions of Higher Education may need to reconsider how mental health services are framed to an increasingly diverse student body.

Stress and the treatment of stress are deeply cultural (Furedi, 2013; Hutmacher, 2021). Yet stress is often framed as a universal experience, for example, when it is described as an ancient, evolutionary response to threat (Sapolsky, 2004). Presuming stress to *only* be universal lacks important cultural nuance, which risks perpetuating dominant cultural understandings of stress. For example, many of the continuing-generation students who participated in the study found it unsettling to be advised to ignore stress. If stress is, culturally, something that should be understood, accepted and treated with kindness, then ignoring it seems (to these students) inappropriate and potentially harmful. Yet, if stress is, culturally, something that should be quickly dismissed and overcome, then ignoring it seems both appropriate and helpful. To say that stress is simply universal and that one of these groups is managing stress "correctly" obscures how different understandings of stress develop *that benefit particular cultural conditions*. Unfortunately, psychological research on stress can perpetuate these cultural ideas, and there is highly cited work (e.g. Eisenberg et al., 1996) that describes "supportive" emotion socialization practices as those consistent with soft independence and "non supportive" emotion socialization

practices as those consistent with hard independence, such as ignoring children's negative emotions (Doan et al., 2022). The problem is that this research was conducted with White middle-class families, and applying the findings to other cultural groups (e.g. low-income, Black, Latinx families) would imply that they are engaging in "non supportive" emotion socialization.

College campuses, as institutions embedded with certain cultural assumptions about the world, tend to promote the ideas that are prevalent among highly educated, middle-class people (Stephens et al., 2014). Thus, it follows that how "social-emotional health" is framed to students will reflect the cultural norms of soft independence and that this will create a mismatch with the cultural norms of hard independence. This mismatch may produce negative outcomes for first-generation college students such as underutilization of counseling, and, when it is utilized, suboptimal outcomes due to the recommended strategies not aligning with their cultural backgrounds.

Ideally, higher education institutions would represent a plurality of ideas and beliefs about what is "right," "worthwhile," and "legitimate" when it comes to managing stress. This kind of diversity and nuance could give students a variety of ways to deal with the complexities of stressful situations. Having an arsenal of tools, including both treating stress as common and impermanent as well as treating stress as something to ignore, seems useful. For example, if a stressful pattern of thinking arises (e.g. how am I going to pass this test?), there are times where it may be useful for students to remember that they are not alone and that however stressful it feels now, this feeling won't last forever. Other times, it may be best for them to ignore this thought pattern before it gains too much momentum and becomes very intense. Any strategy for navigating stress needs to be experimented with in different contexts under different conditions and what works today may not work tomorrow. The danger of exclusively promoting certain

ideas about stress (e.g. soft independence) and downplaying others (e.g. hard independence) may lead those with cultural backgrounds that emphasize hard independence to assume something is wrong with them if the strategies that are strongly promoted don't work.

Implications for Educational Leadership

In this section I discuss three implications for Educational Leadership: (1) awareness of class-based cultural norms, (2) taking an asset-based approach towards first-generation college students and (3) explicitly centering first-generation college student leaders and mentors.

Educational leaders would benefit from strengthening their awareness of class-based ideas and perceptions. For example, people from lower-income backgrounds tend to give more contextual explanations (e.g. outside of the control of individuals) for poverty and wealth than those from higher-income backgrounds, who are more likely to use dispositions (e.g. talent) to explain inequality (Kraus et al., 2011). There is also evidence that people from lower-income backgrounds are more charitable than those from higher-income backgrounds (Piff et al., 2010). Whether educational leaders come from lower- or higher-class backgrounds, understanding how these contexts shape thought and action may be an important part of understanding students and colleagues. Furthermore, without awareness of these default beliefs, educational leaders may unintentionally perpetuate dominant cultural values which make places like universities less inclusive and comfortable for first-generation students.

Another positive implication for educational leaders would be to affirm the values of first-generation college students, such as those associated with hard independence. First-generation college students are often viewed from a deficit perspective, that is, that they lack certain qualities that negatively impact their educational experience (for a review of studies that perpetuate a deficit perspective, see Ives & Castillo-Montoya, 2020). Yet one key finding from

this dissertation is that, on average, first-generation college students are more likely to value persistence, resilience, and taking responsibility than their continuing-generation student peers. These assets should be acknowledged and celebrated as beneficial contributions to university life.

Finally, hearing the voices and stories of what it is like to navigate the university setting as a first-generation college student can add to the richness of diverse university communities. To take one example, Michele Obama's organization "Reach Higher" created a video series where first-generation college students share the highs and lows of their first year in college (Cole, 2020; Lopez, 2020). Individual campuses could draw inspiration from this series and implement similar initiatives on their own campuses. Centering and uplifting first-generation college students, faculty and staff can help campuses to become more welcoming and inclusive spaces.

Research Limitations

This dissertation took a particular approach to this topic that is not without limitations. First, the focus was on first-generation college students and I looked at how lacking access to a parent with a college degree was relevant to navigating stress in the transition to college. While demographic information such as gender and race/ethnicity was collected, it was outside of the scope of this dissertation to analyze this data. Future research can consider how gender and race intersect (and diverge) from these findings on social class. Second, while the decision to focus on stress helped to hone in on a common concern reported at college counseling centers (Perez-Rojas et al., 2017), this focus also limited the ability to understand a broader range of negative emotional experiences (e.g. anxiety, sadness, guilt, anger).

The outcome measures and research design of the study had their own limitations. For example, using self-reported perceptions of stress, while common in extant research, could be improved by adding a physiological measure (e.g. measuring cortisol from a saliva sample). In terms of the research design, baseline measures of stress and sense of belonging were not taken. It was a concern, due to the short time frame of the project, that including baseline measures may have primed students as to the nature of the study, which would have introduced demand characteristics. Using random assignment, in theory, should average out pre-existing differences in terms of the stress and sense of belonging of participants. The effectiveness of the randomization was also checked and no significant differences were found for relevant demographic items. Finally, additional limitations include conducting the study at one university, during a pandemic, which limits the generalizability, although this context may not be particularly unique as universities more broadly adapt and change to accommodate the conditions of the 21st century.

Conclusions

Stress is rising for college students and first-generation college students face particular obstacles as they navigate universities compared to their continuing-generation peers. Yet, before this dissertation, it was unclear whether promoting an interdependent way of relating to stress would benefit the social-emotional health of first-generation college students. It did not. Rather, encouraging first-generation college students to ignore stress resulted in less stress compared to multiple comparison groups both immediately following the intervention and one month later. Qualitative analysis of the essays revealed that the message of ignoring stress may have resonated with the "hard independence" (i.e. being socialized in a cultural context that emphasizes self-reliance and resilience; Kusserow, 2004) part of the cultural backgrounds of

first-generation college students. Hard independence can be further explored in research and practice as one of the unique assets that these students bring into the university.

References

- Adams, D. R., Meyers, S. A., & Beidas, R. S. (2016). The relationship between financial strain, perceived stress, psychological symptoms, and academic and social integration in undergraduate students. *Journal of American college health*, 64(5), 362–370. <u>https://doi.org/10.1080/07448481.2016.1154559</u>
- American College of Health Association. (2015). National college health assessment spring 2015 reference group data report.
- Aronson, E. (1999). Dissonance, hypocrisy, and the self-concept. *Cognitive Dissonance: Progress on a Pivotal Theory in Social Psychology.*, 103–126. <u>https://doi.org/10.1037/10318-005</u>
- Armstrong, E. A., & Hamilton, L. T. (2013). *Paying for the party*. Cambridge, MA: Harvard University Press. <u>https://doi.org/10.4159/harvard.9780674073517</u>
- Autor, D. H. (2014). Skills, education, and the rise of earnings inequality among the "other 99 percent". *Science*, *344*(6186), 843-851. <u>https://doi.org/10.1126/science.1251868</u>
- Azmitia, M., Sumabat-Estrada, G., Cheong, Y., & Covarrubias, R. (2018). "Dropping Out is Not an Option": How Educationally Resilient First-Generation Students See the Future. New directions for child and adolescent development, 2018(160), 89-100. <u>https://doi.org/10.1002/cad.20240</u>
- Babbie, E. R., & Benaquisto, L. (2009). Fundamentals of Social Research. Cengage Learning.
- Brady, S. T., Hard, B. M., & Gross, J. J. (2018). Reappraising test anxiety increases academic performance of first-year college students. *Journal of Educational Psychology*, 110(3), 395. <u>https://doi.org/10.1037/edu0000219</u>
- Brady, S. T., Cohen, G. L., Jarvis, S. N., & Walton, G. M. (2020). A brief social-belonging intervention in college improves adult outcomes for black Americans. *Science Advances*, 6(18). <u>https://doi.org/10.1126/sciadv.aay3689</u>
- Calarco, J. M. (2011). "I need help!" Social class and children's help-seeking in elementary school. *American Sociological Review*, 76(6), 862-882. https://doi.org/10.1177/0003122411427177
- Cerezo, A., Lyda, J., Beristianos, M., Enriquez, A., & Connor, M. (2013). Latino men in college: Giving voice to their struggles and triumphs. *Psychology of Men & Masculinity*, 14(4), 352. <u>https://doi.org/10.1037/a0029646</u>
- Chen, E., & Miller, G. E. (2012). "Shift-and-persist" strategies: Why low socioeconomic status isn't always bad for health. *Perspectives on Psychological Science*, 7(2), 135-158. <u>https://doi.org/10.1177/1745691612436694</u>

- Chang, J., Wang, S. W., Mancini, C., McGrath-Mahrer, B., & Orama de Jesus, S. (2020). The complexity of cultural mismatch in higher education: Norms affecting first-generation college students' coping and help-seeking behaviors. *Cultural Diversity and Ethnic Minority Psychology*, 26(3), 280. <u>https://doi.org/10.1037/cdp0000311</u>
- Chetty, R., Friedman, J. N., Saez, E., Turner, N., & Yagan, D. (2017). *Mobility Report Cards: The Role of Colleges in Intergenerational Mobility*. <u>https://doi.org/10.3386/w23618</u>
- Cohen, S., Kamarck, T., & Mermelstein, R. (1994). Perceived stress scale. *Measuring Stress: A Guide for Health and Social Scientists*, 10, 1-2.
- Cole, D. (2020, January). *Michelle Obama to highlight college students' first year in new Instagram TV series*. Retrieved from <u>https://www.cnn.com/2020/01/07/politics/michelle-obama-attn-igtv-series-college-students/index.html</u>
- Covarrubias, R., & Fryberg, S. A. (2015). Movin'on up (to college): First-generation college students' experiences with family achievement guilt. *Cultural Diversity and Ethnic Minority Psychology*, 21(3), 420. <u>https://doi.org/10.1037/a0037844</u>
- Covarrubias, R., Valle, I., Laiduc, G., & Azmitia, M. (2019). "You never become fully independent": Family roles and independence in first-generation college students. *Journal of Adolescent Research*, *34*(4), 381-410. <u>https://doi.org/10.1177/0743558418788402</u>
- Crum, A. J., Salovey, P., & Achor, S. (2013). Rethinking stress: the role of mindsets in determining the stress response. *Journal of Personality and Social Psychology*, 104(4), 716.<u>https://doi.org/10.1037/a0031201</u>
- Doan, S. N., Yu, S. H., Wright, B., Fung, J., Saleem, F., & Lau, A. S. (2022). Resilience and family socialization processes in ethnic minority youth: Illuminating the achievementhealth paradox. *Clinical Child and Family Psychology Review*, 1-18. <u>https://doi.org/10.1007/s10567-022-00389-1</u>
- Duffy, R. D., Kim, H. J., Gensmer, N. P., Pendleton, L. H., Boren, S., & Garriott, P. O. (2019). Testing a critical cultural wealth model of well-being among first-generation students. *Journal of Counseling Psychology*, 67(2), 171–183. <u>https://doi.org/10.1037/cou0000388</u>
- Ecklund, K. (2013). First-generation social and ethnic minority students in Christian universities: Student recommendations for successful support of diverse students. *Christian Higher Education*, 12(3), 159–180. <u>https://doi.org/10.1080/15363759.2011.598377</u>
- Espino, M. M. (2020). "I'm the one who pieces back together what was broken": Uncovering mestiza consciousness in Latina-identified first-generation college student narratives of stress and coping in Higher Education. *Journal of Women and Gender in Higher Education*, 13(2), 138–156. <u>https://doi.org/10.1080/26379112.2020.1784752</u>

- Eisenberg, N., Fabes, R. A., Murphy, B., Karbon, M., Smith, M., & Maszk, P. (1996). The relations of children's dispositional empathy-related responding to their emotionality, regulation, and social functioning. *Developmental Psychology*, 32(2), 195. <u>https://doi.org/10.1037/0012-1649.32.2.195</u>
- Frazier, P., Gabriel, A., Merians, A., & Lust, K. (2019). Understanding stress as an impediment to academic performance. *Journal of American College Health*, 67(6), 562-570. https://doi.org/10.1080/07448481.2018.1499649
- Furedi, F. (2013). Therapy Culture: Cultivating vulnerability in an uncertain age. Routledge.
- Garriott, P. O., & Nisle, S. (2018). Stress, coping, and perceived academic goal progress in firstgeneration college students: The role of institutional supports. *Journal of Diversity in Higher Education*, 11(4), 436. <u>https://doi.org/10.1037/dhe0000068</u>
- Glaessgen, T. A., MacGregor, C. J., Cornelius-White, J. H., Hornberger, R. S., & Baumann, D. M. (2018). First-generation students with undecided majors: A qualitative study of university reacculturation. *The Journal of the National Academic Advising Association*, 38(1), 22–35. <u>https://doi.org/10.12930/nacada-16-030</u>
- Goyer, J. P., Akinola, M., Grunberg, R., & Crum, A. J. (2021). Thriving under pressure: The effects of stress-related wise interventions on affect, sleep, and exam performance for college students from disadvantaged backgrounds. *Emotion*. <u>https://doi.org/10.1037/emo0001026</u>
- Hébert, T. P. (2018). An examination of high-achieving first-generation college students from low-income backgrounds. *Gifted Child Quarterly*, 62(1), 96–110. <u>https://doi.org/10.1177/0016986217738051</u>
- Harackiewicz, J. M., & Priniski, S. J. (2018). Improving student outcomes in higher education: The science of targeted intervention. *Annual Review of Psychology*, 69, 409-435. <u>https://doi.org/10.1146/annurev-psych-122216-011725</u>
- Hunt, P. F., Boyd, V. S., Gast, L. K., Mitchell, A., & Wilson, W. (2012). Why some students leave college during their senior year. *Journal of College Student Development*, 53(5), 737–742. <u>https://doi.org/10.1353/csd.2012.0068</u>
- Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociology of Education*, 70(4), 324-345. <u>https://doi.org/10.2307/2673270</u>
- Hutmacher, F. (2021). Putting stress in historical context: Why it is important that being stressed out was not a way to be a person 2.000 years ago. *Frontiers in Psychology*, *12*, 1333. https://doi.org/10.3389/fpsyg.2021.539799

- Ives, J., & Castillo-Montoya, M. (2020). First-generation college students as academic learners: A systematic review. *Review of Educational Research*, 90(2), 139–178. <u>https://doi.org/10.3102/0034654319899707</u>
- Jack, A. A. (2016). (No) harm in asking: Class, acquired cultural capital, and academic engagement at an elite university. *Sociology of Education*, 89(1), 1-19. https://doi.org/10.1177/0038040715614913
- Kraus, M. W., Piff, P. K., & Keltner, D. (2011). Social class as culture. *Current Directions in Psychological Science*, 20(4), 246–250. <u>https://doi.org/10.1177/0963721411414654</u>
- Kross, E., Ayduk, O., & Mischel, W. (2005). When asking "why" does not hurt distinguishing rumination from reflective processing of negative emotions. *Psychological Science*, *16*(9), 709-715. <u>https://doi.org/10.1111/j.1467-9280.2005.01600.x</u>
- Kusserow, A. (2004). *American Individualisms*. Palgrave Macmillan, a division of Nature America Incorporated.
- Jamieson, J. P., Mendes, W. B., Blackstock, E., & Schmader, T. (2010). Turning the knots in your stomach into bows: Reappraising arousal improves performance on the GRE. Journal of Experimental Social Psychology, 46(1), 208-212. <u>https://doi.org/10.1016/j.jesp.2009.08.015</u>
- Jamieson, J. P., Peters, B. J., Greenwood, E. J., & Altose, A. J. (2016). Reappraising stress arousal improves performance and reduces evaluation anxiety in classroom exam situations. Social Psychological and Personality Science, 7(6), 579-587. <u>https://doi.org/10.1177/1948550616644656</u>
- Kim, H., & Markus, H. (2005). Speech and silence. *Beyond silenced voices: Class, race, and gender in United States schools*, 181–196.
- Kneeland, E. T., & Dovidio, J. F. (2020). Emotion malleability beliefs and coping with the college transition. *Emotion*, 20(3), 452–461. <u>https://doi.org/10.1037/emo0000559</u>
- Lareau, A. (2011). Unequal Childhoods. University of California Press.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer publishing company.
- Lopez, J. (2020, January). *Michelle Obama Is Launching a New Series That Follows First-Gen College Students*. Retrieved from <u>https://www.glamour.com/story/michelle-obama-</u> <u>launching-instagram-series-first-gen-college-students</u>
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*(2), 224. <u>https://doi.org/10.1037/0033-295x.98.2.224</u>

- Markus, H. R., & Kitayama, S. (2010). Cultures and selves: A cycle of mutual constitution. *Perspectives on Psychological Science*, 5(4), 420-430. <u>https://doi.org/10.1177/1745691610375557</u>
- Markus, H. R. (2017). American= independent?. *Perspectives on Psychological Science*, 12(5), 855–866. <u>https://doi.org/10.1177/1745691617718799</u>
- Mijs, J. J., & Roe, E. L. (2021). Is America coming apart? Socioeconomic segregation in neighborhoods, schools, workplaces, and social networks, 1970–2020. Sociology Compass, 15(6). <u>https://doi.org/10.1111/soc4.12884</u>
- Misra, R., & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies*, *16*(1), 41.
- Murphy, M. C., Gopalan, M., Carter, E. R., Emerson, K. T., Bottoms, B. L., & Walton, G. M. (2020). A customized belonging intervention improves retention of socially disadvantaged students at a broad-access university. *Science Advances*, 6(29). <u>https://doi.org/10.1126/sciadv.aba4677</u>
- Museus, S. D., Yi, V., & Saelua, N. (2017). The impact of culturally engaging campus environments on sense of belonging. *The Review of Higher Education*, 40(2), 187-215. <u>https://doi.org/10.1353/rhe.2017.0001</u>
- O'Neal, C. R., Espino, M. M., Goldthrite, A., Morin, M. F., Weston, L., Hernandez, P., & Fuhrmann, A. (2016). Grit under duress: Stress, strengths, and academic success among non-citizen and citizen Latina/o first-generation college students. *Hispanic Journal of Behavioral Sciences*, 38(4), 446–466. <u>https://doi.org/10.1177/0739986316660775</u>
- Paunesku, D., Walton, G. M., Romero, C., Smith, E. N., Yeager, D. S., & Dweck, C. S. (2015). Mind-set interventions are a scalable treatment for academic underachievement. *Psychological Science*, 26(6), 784-793. <u>https://doi.org/10.1177/0956797615571017</u>
- Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science*, 8(3), 162-166. <u>https://doi.org/10.1111/j.1467-9280.1997.tb00403.x</u>
- Pérez-Rojas, A. E., Lockard, A. J., Bartholomew, T. T., Janis, R. A., Carney, D. M., Xiao, H., ... & Hayes, J. A. (2017). Presenting concerns in counseling centers: The view from clinicians on the ground. *Psychological Services*, 14(4), 416. <u>https://doi.org/10.1037/ser0000122</u>
- Phillips, L. T., Stephens, N. M., Townsend, S. S., & Goudeau, S. (2020). Access is not enough: Cultural mismatch persists to limit first-generation students' opportunities for

achievement throughout college. *Journal of Personality and Social Psychology*. <u>https://doi.org/10.1037/pspi0000234</u>

- Phinney, J. S., & Haas, K. (2003). The process of coping among ethnic minority first-generation college freshmen: A narrative approach. *The Journal of Social Psychology*, 143(6), 707– 726. <u>https://doi.org/10.1080/00224540309600426</u>
- Piff, P. K., Kraus, M. W., Côté, S., Cheng, B. H., & Keltner, D. (2010). Having less, giving more: the influence of social class on prosocial behavior. *Journal of Personality and Social Psychology*, 99(5), 771. <u>https://doi.org/10.1037/a0020092</u>
- Pratt, I. S., Harwood, H. B., Cavazos, J. T., & Ditzfeld, C. P. (2019). Should I stay or should I go? Retention in first-generation college students. *Journal of College Student Retention: Research, Theory & Practice*, 21(1), 105-118. https://doi.org/10.1177/1521025117690868
- Pyne, K. B., & Means, D. R. (2013). Underrepresented and in/visible: A Hispanic firstgeneration student's narratives of college. *Journal of Diversity in Higher Education*, 6(3), 186. <u>https://doi.org/10.1037/a0034115</u>
- Sapolsky, R. M. (2004). Why Zebras don't get Ulcers: The acclaimed guide to stress, stressrelated diseases, and coping. Holt paperbacks.
- Stebleton, M. J., & Soria, K. M. (2012). Breaking down barriers: Academic obstacles of firstgeneration students at research universities. *The Learning Assistance Review*, 17 (2).
- Stebleton, M. J., Soria, K. M., & Huesman Jr, R. L. (2014). First-generation students' sense of belonging, mental health, and use of counseling services at public research universities. *Journal of College Counseling*, 17(1), 6–20. <u>https://doi.org/10.1002/j.2161-</u> 1882.2014.00044.x
- Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C. S., & Covarrubias, R. (2012). Unseen disadvantage: how American universities' focus on independence undermines the academic performance of first-generation college students. *Journal of personality and social psychology*, *102*(6), 1178. <u>https://doi.org/10.1037/a0027143</u>
- Stephens, N. M., Townsend, S. S., Markus, H. R., & Phillips, L. T. (2012). A cultural mismatch: Independent cultural norms produce greater increases in cortisol and more negative emotions among first-generation college students. *Journal of Experimental Social Psychology*, 48(6), 1389–1393. <u>https://doi.org/10.1016/j.jesp.2012.07.008</u>
- Stephens, N. M., Hamedani, M. G., & Destin, M. (2014). Closing the social-class achievement gap: A difference-education intervention improves first-generation students' academic performance and all students' college transition. *Psychological Science*, 25(4), 943-953. <u>https://doi.org/10.1177/0956797613518349</u>

- Stephens, N. M., Townsend, S. S., Hamedani, M. G., Destin, M., & Manzo, V. (2015). A difference-education intervention equips first-generation college students to thrive in the face of stressful college situations. *Psychological Science*, 26(10), 1556–1566. <u>https://doi.org/10.1177/0956797615593501</u>
- Stephens, N. M., Townsend, S. S., & Dittmann, A. G. (2019). Social-class disparities in higher education and professional workplaces: The role of cultural mismatch. *Current Directions in Psychological Science*, 28(1), 67-73. https://doi.org/10.1177/0963721418806506
- Stephens, N. M., Hamedani, M., & Townsend, S. S. (2020). Difference-education: Improving disadvantaged students' academic outcomes by changing their theory of differences. *Handbook of Wise Interventions: How Social-Psychological Insights Can Help Solve Problems*. Guilford Press.
- Suwinyattichaiporn, T., & Johnson, Z. D. (2020). The Impact of Family and Friends Social Support on Latino/a First-Generation College Students' Perceived Stress, Depression, and Social Isolation. *Journal of Hispanic Higher Education*. https://doi.org/10.1177/1538192720964922
- Sy, S. R., Fong, K., Carter, R., Boehme, J., & Alpert, A. (2011). Parent support and stress among first-generation and continuing-generation female students during the transition to college. *Journal of College Student Retention: Research, Theory & Practice*, 13(3), 383– 398. <u>https://doi.org/10.2190/cs.13.3.g</u>
- Taylor, S. E., Welch, W. T., Kim, H. S., & Sherman, D. K. (2007). Cultural differences in the impact of social support on psychological and biological stress responses. *Psychological Science*, 18(9), 831-837. <u>https://doi.org/10.1111/j.1467-9280.2007.01987.x</u>
- Tibbetts, Y., Harackiewicz, J. M., Canning, E. A., Boston, J. S., Priniski, S. J., & Hyde, J. S. (2016). Affirming independence: Exploring mechanisms underlying a values affirmation intervention for first-generation students. *Journal of Personality and Social Psychology*, *110*(5), 635. <u>https://doi.org/10.1037/pspa0000049</u>
- Tibbetts, Y., Priniski, S. J., Hecht, C. A., Borman, G. D., & Harackiewicz, J. M. (2018). Different institutions and different values: Exploring first-generation student fit at 2-year colleges. *Frontiers in Psychology*, 9, 502. <u>https://doi.org/10.3389/fpsyg.2018.00502</u>
- Townsend, S. S., Stephens, N. M., Smallets, S., & Hamedani, M. G. (2019). Empowerment through difference: An online difference-education intervention closes the social class achievement gap. *Personality and Social Psychology Bulletin*, 45(7), 1068-1083. https://doi.org/10.1177/0146167218804548
- Torres, F. C. (2019). Facing and overcoming academic challenges: Perspectives from deaf Latino/a first-generation college students. *American Annals of the Deaf*, *164*(1), 10–36. <u>https://doi.org/10.1353/aad.2019.0008</u>

- U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), [2017], Retrieved from <u>https://nces.ed.gov/ipeds/</u> on February 26, 2018.
- Vasquez-Salgado, Y., Greenfield, P. M., & Burgos-Cienfuegos, R. (2015). Exploring homeschool value conflicts: Implications for academic achievement and well-being among Latino first-generation college students. *Journal of Adolescent Research*, 30(3), 271–305. <u>https://doi.org/10.1177/0743558414561297</u>
- Vignoles, V. L., Owe, E., Becker, M., Smith, P. B., Easterbrook, M. J., Brown, R., ... & Bond, M. H. (2016). Beyond the 'east-west'dichotomy: Global variation in cultural models of selfhood. *Journal of Experimental Psychology: General*, 145(8), 966. <u>https://doi.org/10.1037/xge0000175</u>
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: race, social fit, and achievement. *Journal of Personality and Social Psychology*, 92(1), 82. <u>https://doi.org/10.1037/0022-3514.92.1.82</u>
- Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, 331(6023), 1447-1451. <u>https://doi.org/10.1126/science.1198364</u>
- Walton, G. M., Murphy, M. C., Logel, C., Yeager, D. S., & The College Transition Collaborative (2017). The Social-Belonging Intervention: A Guide For Use and Customization.
- Walton, G. M., & Wilson, T. D. (2018). Wise interventions: Psychological remedies for social and personal problems. *Psychological Review*, 125(5), 617. <u>https://doi.org/10.1037/rev0000115</u>
- Walton, G. M., & Brady, S. T. (2020). The social-belonging intervention. *Handbook of wise interventions: How social psychology can help people change*, 36-62.
- Wang, C. C. D., & Castañeda-Sound, C. (2008). The role of generational status, self-esteem, academic self-efficacy, and perceived social support in college students' psychological well-being. *Journal of College Counseling*, 11(2), 101–118. <u>https://doi.org/10.1002/j.2161-1882.2008.tb00028.x</u>
- Watson, D., & Clark, L. A. (1984). Negative affectivity: the disposition to experience aversive emotional states. *Psychological Bulletin*, 96(3), 465. <u>https://doi.org/10.1037/0033-2909.96.3.465</u>
- Wilkins, A. C. (2014). Race, age, and identity transformations in the transition from high school to college for Black and first-generation White men. *Sociology of Education*, 87(3), 171– 187. <u>https://doi.org/10.1177/0038040714537901</u>

Yeager, D. S., & Walton, G. M. (2011). Social-psychological interventions in education: They're not magic. *Review of Educational Research*, 81(2), 267-301. <u>https://doi.org/10.3102/0034654311405999</u>

Appendix A

Common and Impermanent Condition Materials

Former Students Survey: Introduction

We have surveyed 54 former [UNIVERSITY NAME] students. Almost all students we have surveyed reported a positive experience at [UNIVERSITY NAME], including in meeting other students, taking classes, and pursuing interesting opportunities.

But here we share six quotes from this larger survey that emphasize stress students faced in the transition to college, and how students were able to overcome this <u>stress</u> by seeing it as <u>common and impermanent</u>. Please read the quotes from former [UNIVERSITY NAME] students carefully. You will then be asked to reflect on and write about how these quotes relate to your own experiences.

Former Students Survey: "Common and Impermanent" Quote #1

"As excited as I was to come to [UNIVERSITY NAME], I must admit that part of me thought it was a mistake that I was admitted, and that I would not be able to measure up to the other students. Early on, I bombed a test. It was the worst grade I'd ever received, and I felt really upset. But then, I found out I wasn't the only one. No one did well on that test. It was really hard—the professor was trying to set a high standard. I accepted this stress and continued to study. Soon, college felt more manageable. Though I still have doubts about myself sometimes, I know they're the kinds of things everybody feels on occasion."

- Participant #40, [UNIVERSITY NAME] senior, White male, First-Generation college student

Former Students Survey: "Common and Impermanent" Quote #2

"I love cal state and I wouldn't trade my experiences here for anything. As a commuter student, feeling lonely and going through the motions of school is very easy to do, but at cal state I have never really felt more safe, free to discover, and connect with others than I have at any other school. Still, the transition to college was difficult for me. For the first few weeks I felt like I could not cope. I think it was because I didn't know what to expect, like in terms of how to do well in classes. It got a lot better once I chose a major I was excited about. I began to make close friends through classes, and I started to get involved in research with one of my professors. It was funny because once I made these friends, they shared with me that they too had felt frustrated at the beginning of the year. This made

me feel less alone. Now I am happier than I have ever been at college and am so grateful for this experience."

- Participant #19, [UNIVERSITY NAME] senior, Black female

Former Students Survey: "Common and Impermanent" Quote #3

"Yes, good grades matter, but so does mental health and well-being. At first, I actually believed that I shouldn't be feeling stress about college. But now I know that it is totally natural. I also know that whatever I'm feeling will eventually change. Sometimes I just need some sleep or to take a walk. Like all things in life, college has its ups and downs. Most people in college are nervous about getting good grades, not just me."

- Participant # 21, [UNIVERSITY NAME] senior, White female

Former Students Survey: "Common and Impermanent" Quote #4

"It's stressful leaving your family because you've been living with them your whole life and all of a sudden you're transitioning to not being around them or seeing them as much. I'm really close with my family and I was sad to leave home. I wondered if they would be ok without me. While I felt lonely, I soon realized that a lot of people were really homesick and missed their families. They often just don't admit it. Eventually, once I made some friends, I didn't feel as homesick and lonely. I still missed them but it didn't weigh me down as much." - Participant #11, [UNIVERSITY NAME] 6th year, White female, First-Generation college student

Former Students Survey: "Common and Impermanent" Quote #5

"Family is everything to me! Once I got to college, I was really torn about how often I should go home and visit my family. It was difficult to realize how lonely I was and how much I missed being back home, which was only 45 minutes from my new home. However, regardless of the distance I still missed my parents and childhood home, my safe haven. This really stressed me out. Once I talked to other students about it, I realized that this internal conflict was really common. Now, when I feel the stress, I tell myself that this is ok to feel rather than try to push it away. I still visit my family a lot and I love to see them, but now I'm not as stressed out about it."

- Participant #9, [UNIVERSITY NAME] junior, Latina female

Former Students Survey: "Common and Impermanent" Quote #6

"I was able to live at home during my time at [UNIVERSITY NAME]. However, because my parents nor my little sister did not attend college, I found it difficult to balance family events with studying time. It was hard for them to understand that I had to study on a daily basis and not attend huge family parties. I had to explain to my family that there would be a lot of moments where I would have to pass on family gatherings so that I could focus on my education. It frustrated me to have to do this but this is just a natural part of transitioning to college. Eventually, I found a balance for my family and my education which didn't deprive me of one another."

- Participant #33, [UNIVERSITY NAME] senior, Latino male, First-Generation college student

Former Students Survey: Brief Writing Activity

Review: The results of the Student Transition to College Study suggest that students experienced <u>stress</u> when transitioning to college. However, the study results also suggest that when students were able to see this stress as <u>common and impermanent (i.e. changing over time)</u>, they would eventually become comfortable at [UNIVERSITY NAME].

Writing Activity: Please take a moment to write about why you think this would be so -- that is, why students benefitted from seeing stress as both common and impermanent. Please be sure to illustrate your description with examples from your own experience. Your insights will be shared with future students in order to give them a better sense of what the transition will be like. Any advice you can offer to future students would be appreciated.

Please take as much time as you would like.

Appendix B

Ignore Condition Materials

Former Students Survey: Introduction

We have surveyed 54 former [UNIVERSITY NAME] students. Almost all students we have surveyed reported a positive experience at [UNIVERSITY NAME], including in meeting other students, taking classes, and pursuing interesting opportunities.

But here we share six quotes from this larger survey that emphasize <u>stress</u> students faced in the transition to college, and how students were able to overcome this stress by <u>ignoring it</u>.

Please read the quotes from former [UNIVERSITY NAME] students carefully. You will then be asked to reflect on and write about how these quotes relate to your own experiences.

Former Students Survey: "Ignore Stress" Quote #1

"As excited as I was to come to [UNIVERSITY NAME], I must admit that part of me thought it was a mistake that I was admitted, and that I would not be able to measure up to the other students. Early on, I bombed a test. It was the worst grade I'd ever received, and I felt really upset. I tried not to let my feelings about the test control my life. After all, the test was really hard—the professor was trying to set a high standard. I tried to not pay attention to the stress and to continue to study. Though I still have doubts about myself sometimes, I know that I can push through them."

- Participant #40, [UNIVERSITY NAME] senior, White male, First-Generation college student

Former Students Survey: "Ignore Stress" Quote #2

"I love cal state and I wouldn't trade my experiences here for anything. As a commuter student, feeling lonely and going through the motions of school is very easy to do, but at cal state I have never really felt more safe, free to discover, and connect with others than I have at any other school. Still, the transition to college was difficult for me. For the first few weeks I felt like I could not cope. I think it was because I didn't know what to expect, like in terms of how to do well in classes. It got a lot better once I chose a major I was excited about. I began to make close friends through classes, and I started to get involved in research with one of my professors.I decided to just keep going and even though I chose a major

and made some close friends, the stress was still there. I just ignored it. Now I am happier than I have ever been at college and am so grateful for this experience."

- Participant #19, [UNIVERSITY NAME] senior, Black female

Former Students Survey: "Ignore Stress" Quote #3

"Yes, good grades matter, but so does mental health and well-being. At first, I actually believed that I shouldn't be feeling stress about college. But now I know I don't need to pay attention to it. Sometimes I just need some sleep or or to take a walk. College is a high standard to live up to. In order to stay calm, I just try not to think about the stress."

- Participant # 21, [UNIVERSITY NAME] senior, White female

Former Students Survey: "Ignore Stress" Quote #4

"It's stressful leaving your family because you've been living with them your whole life and all of a sudden you're transitioning to not being around them or seeing them as much. I'm really close with my family and I was sad to leave home. I wondered if they would be ok without me. While I felt lonely, I tried not to notice it and then I didn't feel as homesick. I still missed them but it didn't weigh me down as much."

- Participant #11, [UNIVERSITY NAME] 6th year, White female, First-Generation college student

Former Students Survey: "Ignore Stress" Quote #5

"Family is everything to me! Once I got to college, I was really torn about how often I should go home and visit my family. It was difficult to realize how lonely I was and how much I missed being back home, which was only 45 minutes from my new home. However, regardless of the distance I still missed my parents and childhood home, my safe haven. This really stressed me out. Once I talked to other students about it, I realized that I should ignore these feelings and just keep going with school. Now, when I feel the stress, I tell myself that this is ok to push it away. I still visit my family a lot and I love to see them, but now I'm not as stressed out about it."

- Participant #9, [UNIVERSITY NAME] junior, Latina female

Former Students Survey: "Ignore Stress" Quote #6

"I was able to live at home during my time at [UNIVERSITY NAME]. However, because my parents nor my little sister did not attend college, I found it difficult to balance family events with studying time. It was hard for them to understand that

I had to study on a daily basis and not attend huge family parties. I had to explain to my family that there would be a lot of moments where I would have to pass on family gatherings so that I could focus on my education. It frustrated me to have to do this but once I explained it to them, I found a balance for my family and my education which didn't deprive me of one another."

- Participant # 33, [UNIVERSITY NAME] senior, Latino male, First-Generation college student

Former Students Survey: Brief Writing Activity

Review: The results of the Student Transition to College Study suggest that students experienced <u>stress</u> when transitioning to college. However, the study results also suggest that when students were able to <u>ignore</u> this stress, they would eventually become comfortable at [UNIVERSITY NAME].

Writing Activity: Please take a moment to write about why you think this would be so -- that is, why students benefitted from ignoring stress. Please be sure to illustrate your description with examples from your own experience. Your insights will be shared with future students in order to give them a better sense of what the transition will be like. Any advice you can offer to future students would be appreciated.

Please take as much time as you would like.

Appendix C

Outcome Measures

C-1. Present Moment Stress (Watson & Clark, 1984)

Please rate the degree to which you are feeling the following <u>at</u> <u>this moment</u>:

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Upset	0	0	0	0	0
Nervous	0	\bigcirc	0	\bigcirc	0
Agitated	0	0	0	0	0
Stressed Out	0	0	\bigcirc	0	0

C-2. Sense of Belonging (Museus et al., 2017)

statement:							
	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongl Agree
l see myself as part of (school name inserted here).	0	0	0	0	0	0	0
I feel that I am a member of (school name inserted here).	0	0	0	0	0	0	0
I feel a sense of belonging to (school name inserted here).	0	0	0	0	0	0	0

Please rate the degree to which you agree with the following

C-3. Perceived Stress Scale (Phase 2 Measure; Cohen at al., 1994)

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate *how often* you felt or thought a certain way.

	0 = Never	1 = Almost Never	2 = Sometimes	3 = Fairly Often	4 = Very Often
In the last month, how often have you been upset because of something that happened unexpectedly?	0	0	0	0	0
In the last month, how often have you felt that you were unable to control the important things in your life?	0	0	0	0	0
In the last month, how often have you felt nervous and "stressed"?	0	0	0	0	0
In the last month,					
how often have you felt confident about your ability to handle your personal problems?	0	0	0	0	0
In the last month, how often have you felt that things were going your way?	0	0	0	0	0
In the last month, how often have you found that you could not cope with all the things that you had to do?	0	0	0	0	0
In the last month, how often have you been able to control irritations in your life?	0	0	0	0	0

In the last month, how often have you felt that you were on top of things? In the last month	0	0	0	0	0
In the last month, how often have you been angered because of things that were outside of your control?	0	0	0	0	0
In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0	0	0	0	0

C-4. Stress in the Transition to College (Phase 2 Measure)

Have you found the transition to college stressful?

- \circ Yes
- \circ No

What did you find stressful about the transition to college?

Appendix D

Other Measures

D-1. Manipulation Check (Common and Impermanent Condition)

In the quotes you read, what central strategy did students use to manage stress?

- Ignore Stress
- Seek Support from Friends
- See Stress as Common and Impermanent
- Distraction

D-2. Generation Status

Q133

Do you identify as a first-generation college student?

 \circ Yes

 \circ No

Appendix E

Qualitative Data

E-1. First-Generation College Students' Perceptions of the Benefits of Ignoring Stress

It is important to acknowledge the stress that you are undergoing, but after the stress is identified, it is up to the individual to ignore it and not let it further consume them.

- Eloise, First-generation college student

I think students benefitted from [ignoring] stress because it kept them on their toes and moving. I think they saw something to look forward to and pushed on. - Maria, First-generation college student

I believe students benefitted from ignoring stress because it's like ignoring someone toxic. Like a toxic person, stress constantly bugs you and tries putting you down. By ignoring it, you are, in a way, liberating yourself from something that shouldn't be there in the first place. In my personal experience, stress makes me feel like my life isn't really my own to do with as I please. It, instead, feels like it belongs to my responsibilities that can dictate my next actions as it pleases. However, when I make attempts to ignore it, I begin to feel like my life is my own again. I do some of the things that I want to do before dealing with my responsibilities. By the time I get to my responsibilities though, I'm not as stressed as I could've been because I took some time to figure out how I'd balance everything that needs to get done in a timely manner. In conclusion, by ignoring stress, we are freeing ourselves by something that has no right to control us and we may continue with our lives living freely and in peace.

- Orlando, First-generation college student

I think students benefited from ignoring stress because it then caused their mind to feel clear, less anxious, and focused on their vision of their goal. - Michele, First-generation college student

The reason students have benefitted from ignoring stress is because stress is the cause of self doubt and self damning. Stressing out about assignments, and exams, and school is inevitable we've been doing it since we were able to comprehend what stress was maybe even before then. School will always bring stress but the important thing is to know how to manage it. You can't let stress get in the way of your own success.

- Nina, First-generation college student