The Poor/Working-Class College Students' Challenges and Resiliency Factors Scale:

Developing the P/W-CRF

Rebecca Reed

Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy under the Executive Committee of the Graduate School of Arts and Sciences

COLUMBIA UNIVERSITY

2017

© 2017 Rebecca Reed All rights reserved

#### **ABSTRACT**

The Poor/Working-Class College Students' Challenges and Resiliency Factors Scale:

### Developing the P/W-CRF

#### Rebecca Reed

Social class encompasses the preferences, lifestyles, and behaviors of people in various social class groups in conjunction with the structural privileges that accompany certain social locations (Smith, 2010). Class-privileged college students typically come to campus with greater amounts of *cultural capital* (Bourdieu, 1980) that afford them the luxury of understanding how to navigate the middle-class environment of college (Tett, 2000). Students from poor/working-class backgrounds are, on the other hand, often without the benefit of knowing the behavioral codes and expectations of college, which can lead to negative psychological outcomes in the form of lowered self-esteem, depression, and stress. As a construct, *resiliency* provides a framework for understanding how some poor/working-class students are able to succeed despite these potential negative outcomes and persist through college. The study aimed to measure the class-related challenges and resiliency factors that correspond to different levels of psychological outcomes using a scale called the Poor/Working-Class Challenge and Resiliency Factor Scale (P/W-CRF).

Data was collected using a sample of 253 four-year college students who identified as coming from a poor/working-class background. Participants filled out an online survey consisting of a demographic survey, original challenge and resiliency factor items, psychology outcome measures (self –esteem, depression, and stress), a social desirability scale, and previously validated classism and resiliency scales. Through factor analysis, two scales were generated. The first scale represented the challenges faced on campus, which was a 20-item,

four factor scale with a good fit. The second, resilience scale, was a 24-item, eight factor scale with a poor fit. The overall challenge scale was found to show convergent validity with the depression, stress, and classism scales, and divergent validity with the self esteem and social desirability scales. The resilience scale demonstrated convergent validity with the self esteem and resilience scales and divergent validity with the depression and stress scales. In an effort to explore a stronger model fit for the two models, post hoc analysis offered a possible 18-item, six-factor resilience model, with a slightly improved model fit. The document will explore potential strengths and weaknesses of using these models. Finally, implications and suggestions for future research are provided in the following areas; a) Research; b) Theory; c) Clinical Practice; d) Student Affairs or Services; e) Policy; and f) High School College Counseling.

## TABLE OF CONTENTS

| List of Tables  | viii |
|---|------|
| List of Figures   | ix   |
| Chapter 1: Introduction                                 | 1    |
| Chapter 2: Literature Review                            | 4    |
| Social class  | 4    |
| Social class structure                                  | 5    |
| Poverty   | 6    |
| Working class   | 7    |
| Middle class  | 8    |
| Owning class  | 9    |
| Classism  | 11   |
| Microaggressions  | 12   |
| Social class membership and psychological stressors     | 13   |
| Social Class and Higher Education                       | 15   |
| Who enrolls in higher education?                        | 15   |
| Poor/Working-class students and the college environment | 16   |
| Class-related barriers in higher education              | 18   |
| Finances as a source of challenge                       | 19   |
| Communication   | 21   |
| Academic cultural navigation                            | 23   |
| Interpersonal relationships                             | 27   |
| Dual-class identity issues                              | 30   |

| Belongingness and challenges   | 33 |
|--|----|
| Social media   | 36 |
| Class-related challenges and psychological outcomes                        | 37 |
| Summary: Perspectives on the Success of Poor and Working Class Students    | 39 |
| Resilience   | 40 |
| Trends in resilience research  | 42 |
| Risk Factors and their impact  | 44 |
| Outcomes   | 45 |
| Protective factors   | 45 |
| Resilience and psychological outcomes                                      | 47 |
| Resilience and culture   | 49 |
| Resilience and social class  | 50 |
| Social Class and Resiliency Factors on College Campuses                    | 54 |
| Finances   | 55 |
| Communication  | 55 |
| Academic cultural navigation   | 56 |
| Interpersonal relationships  | 57 |
| Dual-class identity  | 59 |
| Social media   | 60 |
| Counseling Psychology and the Resiliency of Working-Class College Students | 65 |
| Purpose of the Proposed Study  | 62 |
| Chapter 3: Method  | 64 |
| The MCRS   | 64 |

|       | P/W-CRF Item Development                 | 66 |
|-------|--|----|
|       | Creation of initial item pool            | 66 |
|       | Reduction of initial item pool           | 67 |
|       | Procedures                               | 67 |
|       | Measures                                 | 68 |
|       | Demographic Questionnaire                | 68 |
|       | Self-esteem                              | 68 |
|       | Depression                               | 68 |
|       | Stress                                   | 70 |
|       | Resiliency                               | 70 |
|       | Classism                                 | 70 |
|       | Social desirability                      | 71 |
|       | Participants                             | 71 |
|       | Attrition                                | 73 |
| Chapt | ter 4: Results                           | 74 |
|       | The Current Study: Analyzing the P/W-CRF | 74 |
|       | Section I: Factor Analysis               | 75 |
|       | Preliminary analysis                     | 75 |
|       | Challenges                               | 75 |
|       | Resilience                               | 75 |
|       | Exploratory factor analysis              | 75 |
|       | Extracting challenges factors            | 75 |
|       | Extracting resilience factors            | 76 |

| Confirmatory factor analysis                        | 78 |
|---|----|
| CFA: Challenges model                               | 79 |
| CFA: Resilience model                               | 79 |
| Post hoc analysis: Principal axis factoring         | 80 |
| Post hoc analysis: Parallel analysis                | 81 |
| Six-factor resilience scale                         | 81 |
| Section II: Validity                                | 83 |
| Preliminary analysis                                | 83 |
| Validity  | 84 |
| Post hoc analysis                                   | 85 |
| Section III: Distress Scales                        | 86 |
| Post hoc: Regression analysis                       | 86 |
| Summary of Findings                                 | 87 |
| Chapter 5: Discussion                               | 89 |
| Summary of Research Findings                        | 89 |
| Challenge scale                                     | 89 |
| Resilience scale                                    | 89 |
| Modifications of the resilience scale               | 89 |
| Exploring the six-factor versus eight-factor models | 90 |
| Distress scales                                     | 91 |
| Hypotheses  | 91 |
| Discussion of Research Findings                     | 92 |
| Challenge factors                                   | 92 |

| Peers and reported                 | challenges95  |
|------------------------------------|---|
| Demographics and                   | reported challenges96                                 |
| Psychological outco                | omes and reported challenges98                        |
| Definition of social               | class and reported challenges98                       |
| Resilience Factors                 | 98  |
| Demographics and                   | resilience factors                                    |
| Psychological outco                | omes and resilience factors                           |
| Distress                           | 104   |
| Challenges and dist                | ress: Financial strain and comparison to peers104     |
|                                    | stress: Communication, finances, ources and belonging |
| Belonging and year                 | in college106   |
| Implications and Future Directions | 3106  |
| Research                           | 106   |
| Theory                             | 107   |
| Using the PW/CRF scale in          | clinical practice                                     |
| Interventions                      | 110   |
| Expanding the defin                | nition of counseling110                               |
| Family counseling                  | 111   |
| Group experiences                  | 112   |
| Online presence                    | 112   |
|                                    | : First generation or poor/working class              |
| Accessible financia                | l planning support114                                 |

| Information and professional development for professors   |
|---|
| Policy114   |
| High school college counselors                            |
| Limitations   |
| Concluding Comments                                       |
| References  |
| Appendix A: Challenges and Resiliency Factor Items        |
| Appendix B: Email Announcement                            |
| Appendix C: Rosenberg Self-Esteem Scale                   |
| Appendix D: Center for Epidemiological Studies-Depression |
| Appendix E: Perceived Stress Scale                        |
| Appendix F: Connor-Davidson Resilience Scale              |
| Appendix G: Classism Experiences Questionnaire- Academe   |
| Appendix H: Marlow-Crowne Social Desirability Scale       |

# List of Tables

| Table 1: Categories of Resources, Challenges, and Protective Factors Affecting Poor/Working | ng  |
|---|-----|
| Class College Students  | 147 |
| Table 2: Frequencies and Percentages of Demographic Variables for Total Sample              | 148 |
| Table 3: Individual Eigenvalues and Variances for Initial PCA                               | 152 |
| Table 4: Component Factor Analysis Loadings for Retained Challenges Items                   | 153 |
| Table 5: Means, Standard Deviations, and Reliability Coefficients for the P/W-CRF           | 155 |
| Table 6: Challenge Scale and Demographic Associations                                       | 156 |
| Table 7: Component Factor Analysis Loadings for Retained Resilience Items                   | 157 |
| Table 8: Resilience Scale (8-factor) and Demographic Associations                           | 160 |
| Table 9: CFA: Standardized Factor Loadings, Residual Variances, and R-Square for            |     |
| Four-Factor Challenge Model   | 161 |
| Table 10: CFA: Standardized Factor Loadings, Residual Variances, and R-Square for           |     |
| Eight-Factor Resilience Model   | 163 |
| Table 11: Comparison of Eigenvalues and Criterion Values from PA                            | 165 |
| Table 12: Component Factor Analysis Loadings for Retained Six Factor Resilience Items       | 166 |
| Table 13. Means, Standard Deviations, and Reliability Coefficients for Post Hoc             |     |
| Six Factor Resilience Scale   | 168 |
| Table 14: CFA: Standardized Factor Loadings, Residual Variance, and R-Square for            |     |
| Six-Factor Resilience Model   | 169 |
| Table 15: Six-Factor Resilience Scale and Demographic Associations                          | 171 |
| Table 16: Validity for Four-Factor Challenges Scale   | 172 |
| Table 17: Validity for Fight Factor Paciliance Scale  | 173 |

| Table 18: Validity for Six-Factor Resilience Scale                    | 174 |
|---|-----|
| Table 19: Corresponding Distress Factors and Demographic Associations | 175 |
| Table 20: Variables Predictive of Distress                            | 176 |

# List of Figures

| Figure 1. Challenge Scree Plot         | 177 |
|--|-----|
| Figure 2. Resilience Scree Plot        | 178 |
| Figure 3. Challenges Measurement Model | 179 |
| Figure 4. Resilience Measurement Model | 180 |

### Acknowledgements

To my mentor, advisor, teacher, and friend, Laura Smith: words cannot express how grateful I am for the tremendous support you have given me over the years. You have been a guiding force in my life since the moment I met you as a master's student and inspired me to learn not only about society, but also myself. Your words travel with me as I navigate the world and encourage me to be courageous. I share this accomplishment with you and recognize that without you it would not have been possible. Thank you so much for everything you do and for you just being you.

To my family- Mom, Dad, Michael, Lizzy, Mazie, and Judie: Thank you for your encouragement throughout my PhD travels. It has been a long road and you all gave me the space I needed to work and the support I needed to fly. Special thanks to Judie, who waited a few hours after my Advanced Seminar to come into this world- thank you for allowing me to make it to everything.

To my husband Jared, a constant presence in my life, you have watched me delve into my work and allowed me to ramble about my ideas. You have given me understanding, encouragement, and even editing help- all of which forged my path to complete this project.

Thank you for being my partner, friend, and teammate.

To my friends and cohort, Aasha Foster, Amelia Walker, Joanna Rooney, and Peggy Loo: It has been a long, hard road. We have held each other up, challenged each other to be better, and offered room for tears. You have each given me strength to keep going and never give up. Thank you for allowing me to be part of a meaningful group of intelligent women who I've learned so much from.

To all my professors and supervisors: Thank you for taking the time to teach. It is a gift that I never take for granted. This project was a culmination of the ideas that inspired me, inquiries that challenged me, and words that guided me.

## Dedication

Mom and Dad: Even though I never thought I'd make it this far, you both always did. I dedicate this dissertation to you as my unwavering team of support. Thank you for encouraging me and reminding me there is nothing I cannot do.

### **Chapter 1: Introduction**

In defining social class, sociologist and writer Betsy Leondar-Wright (n.d) wrote: "Class is relative status according to income, wealth, power and/or position" (para. 2). Social class largely includes the preferences, lifestyles, and behaviors of people in various social class groups in conjunction with the structural privileges that come alongside certain lifestyles (Lott, 2012; Lott & Bullock, 2007). Relatively greater amounts of social privilege tend to accrue among people in the middle to owning classes relative to social class groups with less class privilege (e.g. working-class individuals or people living in poverty), which contributes to feelings of powerlessness and marginalization among these groups (Zweig, 2012).

In particular, poor and working-class college students may face specific challenges that can be defined as classism. Classism was described by Bullock (1995) as the oppression of relatively less privileged classes through discriminatory, "practices, attitudes, assumptions, behaviors, and institutional rule" (p. 119) that can occur on the *interpersonal* and *institutional* levels (Lott & p, 2007). Research studies have shown significant psychological affects (e.g. lowered self worth) of those who internalize their experiences with classism (e.g. Russell, 1996).

Bourdieu (1984) described how social privileges are reproduced in education. He used the term *cultural capital* to signify the social class set of non-monetary assets (e.g. privileges, norms, and standards) that structure peoples' ideals of status and knowledge. Specifically, more privileged students typically come to college with greater amounts of cultural capital (Tett, 2000) that afford them the luxury of understanding how to navigate the middle-class college environment. Students from poor or working class backgrounds are left without the privilege of knowing the expectations of how people in middle-class environments dress, behave,

(Casey, 2005; Stephens, Markus, & Phillips, 2014), and communicate (Kosut, 2006; Kraus & Keltner, 2009; Stephens, Markus, & Phillips, 2014).

Although there is a low number of poor or working-class college students enrolling in and graduating from college (The Pell Institute for the Study of Opportunity in Higher Education, 2014), some students do persist through the challenges. Resiliency factors can be used as a framework in understanding how some of these students are able to adjust to the middle-class environment of college. Even though poor and working-class students may experience risks or threats from experiences of social class adversity, not all students develop negative psychological outcomes as a result. Resiliency research addresses the reasons that some individuals who face risks experience positive outcomes, while others who encounter the same risk factors experience negatives ones (Masten & Reed, 2002). Individual and environmental protective factors are considered to be major contributors in acting as buffers between risks and outcomes (Masten, Monn, & Supkoff, 2011; Perez, Espinoza, Ramos, Coronado, Coretes, 2009; Schoon, Parsons, & Sacker, 2004). Poor and working-class college students appear to benefit from protective factors that help to guard against negative psychological outcomes (e.g. Haddadi & Besharat, 2010; Hjemdal, Vogal, Solem, Hagen, & Stiles, 2011; Petros, Opacka-Juffry, & Huber, 2013).

This study aimed to measure the class-related challenges and resiliency factors that correspond to different levels of psychological outcomes. These challenges and resiliency factors were understood as falling into five themes: finances, communication, academic cultural navigation, interpersonal relationships, and dual-class identity issues. These dimensions were proposed to be associated with three psychological outcomes (self-esteem, depression, and stress).

Nazish M. Salahuddin and Karen M. O'Brien's (2011) Multiracial Challenges and Resilience Scale (MCRS) inspired the development of the present study. Salahuddin and O'Brien sought to develop a scale that would specifically examine the challenges and resiliency factors of multiracial people. Their work resulted in the MCRS, which is a psychometrically sound scale that measures challenges multiracial people face, and protective factors used to be resilient when confronted with these challenges. As no comparable instruments exist to measure such variables among poor and working-class people, this study is a first attempt to construct a psychometrically sound scale.

### **Chapter 2: Literature Review**

How does membership in a relatively disadvantaged social class affect the well-being of college students? What do we know about the challenges and protective factors that apply to their experiences? This chapter will begin with an overview of social class and its connection to power, privilege, and psychological outcomes. The association between social class and college campuses will be discussed next, followed by the types of challenges experienced by poor and working-class college students. Then, an overview of resiliency literature will be presented as well as how resiliency can be examined within a cultural framework. Preceding that discussion, resiliency factors of poor and working-class college students will be specifically explored. Finally, an explanation of how this study fits within the specialty of counseling psychology will be presented. The chapter will conclude by summarizing the purpose of the current study.

### **Social Class**

Social class is not an easy concept to define, digest, or even speak openly about in the United States. It is a term that is often absent from polite conversation and academic literature (Liu, Ali, Soleck, Hopps, Dunston, & Pickett, 2004; Smith, 2005; Smith, 2008; Zweig, 2012). However, social class is a powerful influence on people's experiences, histories, and futures (Smith, 2005). For instance, material resources (e.g. money or clothing) and social conditions (e.g. neighborhoods or employment working conditions) can expose people to vastly different experiences depending on their social class locations, and in doing so, contribute to specific cognitive, emotional, and behavioral patterns and preferences (Kraus, Piff, & Keltner, 2011). These experiences correspond to the norms and lifestyles of people within the same class, and influence how people perceive themselves and relate to others (Kraus & Stephens, 2012). Class membership affects people's participation in financial or political systems (Lott, 2012; Smith

2010), and relates to social, cultural, and educational experiences (e.g. degree attainment, career goals, fashion choices, and language usage) (Liu, 2001; Lott, 2012). Therefore, class membership influences how people learn, think, and aspire (Bourdieu, 1984; Kraus, Piff, Mendoza-Denton, Rheinschmidt, & Keltner, 2012; Lott, 2012; Piff, Kraus, Cote, Cheng, & Keltner, 2010).

Given its pervasive and multifaceted nature, it is not surprising that definitions of social class vary widely. Most social class models originate from the field of sociology. To present them fully exceeds the scope of this discussion, but they comprise attempts to address and model such variables as physical health (Sarsour, Sheridan, Jutte, Nuru-Jeter, Hinshaw, & Boyce, 2011), weight (Godley & McLaren, 2010), lifespan development (Haas, Krueger, & Rohlfsen, 2011), and neighborhoods (Hwang & Sampson, 2014). Psychologists have been far less comprehensive in their attempts to understand and describe social class. In fact, social class is typically addressed in psychological research via stand-in variables such as income or socioeconomic status (SES), the latter usually representing a calculation based on income, education, and other characteristics (e.g. Johnson, Richeson, & Finkel, 2011; Matthews & Gallo, 2011; Santiago, Wadsworth, Stump, 2011).

For the purposes of the present discussion, social class will be understood according to economic activist, sociologist, and writer Betsy Leondar-Wright's (n.d) definition: "Class is relative status according to income, wealth, power and/or position" (para. 2). This specific definition expands more specifically into social psychologist Bernice Lott's extensive contributions to the study of class and classism. Throughout her work (Lott, 2012; Lott & Bullock, 2007), she expands the traditional view of social class as a product of finances, and

includes the role of power. In Lott's (2012) *American Psychologist* paper entitled "The Social Psychology of Class and Classism", she explained how social class operates:

Membership in a given social class (a) reliably predicts the degree to which one can obtain and benefit from a society's economic and political resources, (b) is correlated with a wide array of life experiences, and (c) mediates and influences what a person is likely to learn, believe, anticipate, and seek after (p. 650).

These theoretical understandings of social class are important because they broadly encompass the preferences, lifestyles, and behaviors of people in various social class groups. They also acknowledge the significance of the structural power that cannot be broken from defining social class.

Social class structure. Different social class models propose different categories into which individuals are understood to fall; at other times, social class is understood to be a continuous variable (Russell, 1996) used to differentiate the experiences of people. For the purpose of this paper, the social class groupings *poor*, *working class*, *middle class*, and *owning class* will be used (although other terminology will also appear in keeping with its use in cited sources). Basic typologies such as these cannot fully capture the differing lifestyles that they imply; moreover, social class experiences can vary as they intersect with other identities such as race, ethnicity, gender, and sexual orientation. Nevertheless, these general descriptions provide a basic starting point for describing the circumstances of life at different points in the social class hierarchy.

**Poverty.** Michael Zweig's (2012) book *The Working Class Majority: America's Best Kept Secret* expanded upon the lived experiences of people in various social groups and focused on re-examining the stereotypes that class-privileged individuals often hold for the poor. Zweig

explained that many Americans equate poverty with chronically poor people who do not wish to work, although in fact, most of the non-working poor are unemployed as a result of illness, disability, difficulty finding employment, or living in challenging conditions. Similarly, Smith (2010) highlighted the overlap between people living in poverty and the working class, in that poor people are often working-class individuals who, because of life circumstances relating to unemployment, health issues, or low-paying jobs, are without enough income to support their personal and family's basic needs. This overlap is important to demythologizing people living in poverty as comprising primarily the so-called "chronic poor;" in fact, most people receiving welfare benefits do so for a relatively short period of time (Ellwood & Bane, 1994).

Lott (2012) described people in poverty as being unseen by the majority of society. They tend to work in jobs (e.g. food or laundry services) that are low-paid and not covered by unions or other work-protection laws. Often these individuals are in jobs that Lott described as "substitutable," meaning employers feel that their employees can be easily replaced. In addition, people living in poverty face negative stereotypes from society (e.g. Cozzarelli, Wilkinson, & Tagler, 2001; Fiske, 2007; Smith, Allen, & Bowen, 2010), have limited educational resources (e.g. Kozol, 2005; hooks, 1994), inadequate health care (e.g. Weil, 2007), and tend to live in harmful environments (e.g. Dwyer, 2010; Evans & English, 2002).

Working Class. Smith (2010) described the working class as: "People who have little power or authority in the workplace, little control over the availability or content of jobs, and have little say in the decisions that affect their access to health care, education, and housing" (p. 19). Working-class individuals are more likely than people in more privileged classes to hold jobs in dirty or hazardous places, putting their mental and physical health at risk. They typically

hold relatively little political power, have less formal education, and tend to have lower levels of income (Smith, 2010).

Working-class people may not have adequate health care, forcing them to rely on family and friends to tend to the sick instead of hospitals, doctors, and other healthcare facilities (Kraus & Stephens, 2012). When people with limited power at work require time off for health reasons or to tend to a sick child, they often do not have the luxury, financial means, or job security to take a few hours off from their jobs (Boushey, 2007). In addition, even though the establishment of unions tended to afford working-class people more influence at work, they still often lack the power to achieve upward mobility in the workplace. This is largely due to the fact that the power comes from the unions to negotiate their contracts, and the owners of the company to grant those contracts (Zweig, 2012).

Unlike many people living in poverty, working-class individuals hold positions within workplaces; however, as previously mentioned, they hold little sociopolitical power relative to other classes. Therefore, like people living in poverty, they are more likely to be relative outsiders to some of the social systems and resources that are routine parts of life for people in more privileged social classes, such as higher education (Zweig, 2012). Additionally, much of the stigmatized social stereotyping that characterized attitudes toward poverty applies to working-class people as well (e.g. Lott & Saxon, 2002). Throughout the subsequent discussion of access to higher education, students from these two social groups will be discussed together when appropriate through use of the term *poor/working-class*.

*Middle Class.* In general, middle-class people often hold careers that allow some time and resources for leisure activities, have debt from home or college loans, and believe they will receive fair public support when needed (Lott, 2012). People in this class must work to support

themselves in order to sustain their lifestyles. Many are college-educated, have salaried employment, and have more freedom to control their daily work lives than do the working class (Smith, 2010). Zweig (2012) described the middle class as comprising three subsections: small business owners, supervisors/managers, and professionals. He presented the middle class's degree of social power and privilege as lying between that of the working class and what he referred to as the capitalist class. For instance, many middle-class employees share some of the working class's vulnerabilities in a market owned and dominated by the capitalist class, yet they simultaneously experience some of their superiors' motivation to keep working-class workers' power at a minimum. Managers/supervisors receive pressure to perform from those who hold the most power (higher management) in a place of business, yet also have the power to push the workforce below them to perform. In the professional sector, upper-middle-class individuals (e.g. doctors, lawyers, college professors) tend to have higher levels of income, enjoy an especially high degree of autonomy and/or flexibility at work, and have a voice in setting the rules and regulations of their own (and sometimes others') professions.

Owning Class. In referring to what is frequently called the upper class as the owning class, Leonard-Wright (n.d) described people in this grouping as possessing enough financial resources that they do not need to hold jobs in order to sustain their lifestyles. Owning-class people have the greatest amount of access to social resources and power, and may also hold political privilege (Lott, 2012). In referring to the owning class as the capitalist class, Zweig (2012) described them as holding the power to control the professional and cultural lives of people in other classes -- the majority of the country. These individuals own the businesses, so they set the regulations for production and can dictate rules. Their financial situation and status in companies also affords them the opportunities to influence governmental policies and the

cultural climate. Relatively speaking, the owning class is the segment of society with the most power to define and limit opportunities for others.

From these descriptions, it is clear that social class operates not only at an individual level, but has an additional level of operation that is relevant for a social justice perspective: social class involves "structural power, privilege, and disadvantage" (Smith, 2010, p. 5) that goes beyond the amount of money that an individual has. Rather, social class involves "the power some people have over the lives of others, and the powerlessness most people experience as a result" (Zweig, 2012, p. 8). McIntosh (1988) defined privilege as advantages and powers held by a dominant social group relative to other less privileged groups. In the case of social class, middle-class and wealthy people have relatively more social class privilege than poor/working-class people.

French sociologist Pierre Bourdieu wrote extensively about the concept of social class privilege from economic and cultural perspectives (e.g. Bourdieu, 1984). His analysis included an examination of the ways that cultural and relational aspects of class contribute to the hierarchical structure of social class (Crossley, 2008). Children's sociocultural upbringing predisposes them to what Bourdieu (1984) called *taste*. Tastes are formulated via exposure to culture (e.g. visits to museums) and preferences (e.g. parental education level influences the types of books that parents prefer to read to their children). Bourdieu's (1984) research found that tastes are differentiated across cultures, and it is the tastes of the middle and upper classes that tend to hold dominance in society and to structure social ideals of normalcy. Those who do not abide by these "normal" behaviors, traditions, and customs often find that their access to social benefits (e.g. educational experiences) is impeded.

Classism. The systematic social operations by which characteristic disadvantages accrue to particular groups of people can be described by the general term *oppression*. Psychologist Isaac Prilleltensky has written extensively about oppression, privilege, and liberation. In 2008, he published an article in the *Journal of Community Psychology* titled, "The Role of Power in Wellness, Oppression, and Liberation: The Promise of Psychopolitical Validity," in which he described power as both political and psychological. Specifically, he defined oppression as "a series of asymmetric power relations between individuals, genders, classes, communities, and nations. Such asymmetric power relations lead to conditions of misery, inequality, exploitation, marginalization, and social justices" (p. 127). In general, Prilleltensky emphasized that the foundation of oppression is power, which can be manifested in the lives of oppressed groups via limitations on life circumstances and financial sanctions, all of which contribute to negative psychological outcomes (e.g. powerlessness).

The terminology for forms of oppression associated with social hierarchies such as race and gender include the relatively familiar terms *racism* and *sexism*. The analogous term for class-based oppression is *classism*. Classism has been defined as the oppression of relatively less privileged classes through discriminatory, "practices, attitudes, assumptions, behaviors, and institutional rule" (Bullock, 1995, p. 119) and "denotes negative attitudes, beliefs, and behaviors directed toward those with less power, who are socially devalued" (Lott, 2012, p. 654). Lott and Bullock (2007) expanded upon the idea of classism by differentiating classism into *interpersonal classism* (discriminatory biases between people) and *institutional classism* (systematically imposed neglect and limitations regarding poor/working-class people). These two types of classism emphasize how classism can be enacted not only a on personal level, but also on a broader organizational level (Jones, 2003). Psychological research has documented the existence

of classist attitudes via such studies as Cozzarelli, Wilkinson, and Tagler's (2001) research measuring 209 college students' self-reported beliefs about people living in poverty, stereotypes of the poor, and overall attitudes towards poor people. The authors found that participants tended to rate the poor as uneducated, unmotivated, lazy, and substance abusers. Even though the poor were rated as having some positive attributes, such as being loving, nice, and/or friendly when compared with middle-class people, the poor were significantly more likely to be rated as having more negative traits.

Bourdieu (1984) defined *symbolic violence* as a form of violence that operates to maintain social hierarchy dominance. Symbolic violence reflects the harm that the poor/working class experience as they receive sociocultural messages that legitimize the power and superiority of privileged classes and conversely, the inadequacy and deviance of classes whose lifestyles are different. Schubert (2008) wrote that symbolic domination "results when we misrecognize as natural those systems of classification that are actually culturally arbitrary and historical" (p. 184). The operations of symbolic violence are such that members of privileged classes need not exert conscious effort to maintain the subordination of less powerful classes – they merely need to continue to maintain the lifestyles, exclusivity, and habits of privilege (Schubert, 2008). Throughout his work (e.g. Bourdieu, 1984; Bourdieu & Passeron, 1990), Bourdieu specifically discussed the impact of *symbolic violence* on education and the related ramifications for disadvantaged individuals, which will be discussed later in this paper.

*Microaggressions*. Negative attitudes towards poor/working-class people can be detected within daily experiences, language, and systems. Sue, Capodilupo, Torino, Bucceri, Holder, Nasal, and Esquilin (2007) defined microaggressions as commonplace derogatory messages received by people in specific minority groups. They occur within three dimensions:

microassaults (deliberately wounding messages); microinsults (implicitly painful messages); and microinvalidations (messages that ignore a person's feelings, lifestyle, and reality). The expression of such biases can evoke feelings of pain and psychological distress for many people who feel the brunt of jokes, environmental messages, direct and indirect words, and general feelings that imply that they do not belong.

Microaggressions are most frequently discussed with regard to race, ethnicity, or sexual orientation. Smith and Redington (2010) offered a particular extension of the microaggressions framework by addressing microaggressions in relation to social class groupings. They outlined the way that Sue's et al. (2007) three levels of microaggressions can be specifically classist. First, the widespread use of the term *white trash* is an example of a classist microaggression that is used in everyday dialogue, and in the media. Next, they cited the example of a student giving a poor friend tips on suitable manners and clothing (i.e., according to middle-class norms) as a microinsult. Finally, microinvalidations include the media's focus on middle-and upper-class lifestyles (Smith & Redington, 2010). Although individual incidences such as these may seem minor, collectively these messages can elicit feelings of worthlessness, pain, and alienation for poor/working-class people.

Social class membership and psychological stressors. The stressors that stem from classism -- such as the impact of microaggressions or a lack of access to social and material resources -- may undermine psychological well-being (Ali & Lees, 2013; Belle & Doucet, 2003; Evans & English, 2002; Smith, Chambers, & Bratini, 2009). Research has specifically supported the connection between social class and psychological distress (e.g. Cutrona, Wallace, & Wesner, 2006; Evans & English, 2002).

Along these lines, classism can become internalized, as exposure to a negative social environment may encourage a person to turn the situation inward and/or develop internalized oppression. Internalized oppression is understood to be a process of adopting stereotypical aspects of the self that are associated with the experience of being part of a marginalized group (Russell, 1996). Russell (1996) wrote a theoretical paper on internalized classism and noted that oppressive experiences might cause poor/working-class people to wonder if there is something wrong with them or question whether they deserve to have these experiences. She observed that the poor/working class might struggle to understand the reason they do not feel a sense of belonging alongside people of privilege. Such questions and concerns suggest the existence of negative feelings about the self as the result of internalized classist oppression, which may lower self-worth and create feelings of shame.

Chen and Paterson (2006) studied the effect of neighborhoods, family, and socioeconomic status as predictors for adolescent physical health and psychological outcomes. They measured blood pressure, heart rate, basal cortisol levels, and body mass indexes in addition to assessing psychological self-report measures (cognitive appraisal and understanding of social events, discrimination, hostility, optimism, self-esteem, and perceived control) of 315 adolescents. Results found negative correlations between SES and BMI, and positive correlations between SES and basal cortisol levels. Other characteristics of SES such as family education, occupation status, and income were also correlated with higher levels of hostility, perceived discrimination, and perceived threat. In addition, participants who perceived their families to be of high status had higher correlations of optimism, self-esteem, and perceived self control. The researchers interpreted this finding as suggesting that neighborhoods, families, and SES influence health of adolescents (BMI and stress levels). It is possible, therefore, that the

participants who exhibited a positive psychological response (e.g. self-esteem, optimism, and perceived self-control) had not internalized classism to the same degree, and this may have contributed to a difference in the way they perceived themselves and others. Beyond this finding, there is limited information on internalized classism or the factors that may minimize its impact; it is difficult to know whether such protections may derive from personality traits, coping skills, or some combination of these. Later in this chapter, a discussion of resiliency will outline how resilience factors may possibly defend against the psychological ramifications of the experience of social class challenges.

### **Social Class and Higher Education**

Often students attend college in hope of gaining more personal, professional, and economic opportunities in the future. The pursuit of higher education may lead students to leave their socially homogeneous communities and become exposed to different social classes (Langhout, Rosselli, & Feinstein, 2007), because college allows students to meet people from diverse communities (Jones, 2003). In fact, college may be the first time that students begin to recognize the existence of social class attitudes and barriers (Ostrove & Cole, 2003). Generally, college is a time of physical, psychological, and emotional transition (Langhout, Rosselli, & Feinstein, 2007), and that transition may look and feel different depending on the type of college a student chooses to attend (e.g. historically Black college, historically Hispanic college, predominately White college, a public institution, or a private institution).

Who enrolls in higher education? In 2013, the *National Center for Education Statistics* found that 50.9% of low-income secondary school graduates enrolled in college, a rate that is approximately 14% less than the rate for middle-income graduates and approximately 30% less than the rate for higher-income graduates. Even more class based disparity can be seen in the

admissions rates for the most selective colleges: only a attending highly selective college came from low-income families in 2003 (Hill & Winston, 2006).

Espenshade and Radford (2009) analyzed data from the *National Survey of College Experiences*, which was administered to over 9,000 students who applied to selective colleges between the early 1980s and the late 1990s. They found that there were far fewer working-class students (or students living in poverty) who applied (10%), were admitted (26%), and who matriculated (11%) into selective colleges in comparison to middle-, upper-middle, and upper-SES students. With that said, 53% of students who lived in poverty and 64% of working-class students graduated in four years, while for students from more affluent families, the percentages ranged in the 70s. Although they acknowledged that it is difficult to make statistical comparisons among student social class groups due to the greater number of students from the middle SES and high SES, Espenshade and Radford suggested that lower-income students who enroll in college demonstrate lower graduation rates.

### Poor/Working-class students and the college environment.

No matter what distance they have physically traveled to their campus, college requires a cultural journey to a very different land than the one they knew as youngsters. For first-generation, poor, and working-class college students, surviving the social challenges of higher learning can be at least as demanding as achieving a high grade point average (Oldfield, 2007, p. 3).

The challenges posed to poor/working-class students who attempt the transition to college campuses are described in the personal writings of social critic bell hooks (1994). When hooks left her working-class home for Stanford University, she learned that "class was more than just a question of money, that it shaped values, attitudes, socials relations, and the biases that

informed the way knowledge would be given and received" (p. 178). hooks experienced what she described as middle-class values of obedience and silence in the classroom as the college norm, while characteristics that hooks interpreted as working-class customs -- such as unrestrained laughter or loudness -- were deemed inappropriate. She recalled that the college classroom was assumed to be an environment of freedom, yet observed that students who did not conform to middle-class norms did not contribute to classroom discussions for fear of public shaming as a result of being different from the privileged group.

Along these lines, Bourdieu (1984) theorized that the role of education in the reproduction of social privilege provides conceptual grounding for the educational experiences described by those of less privileged groups. He explained that many of the students who enter higher education already hold economic and social advantages. He contended that, in this way, the French educational system (which can be compared to the American system) has functioned more to maintain the social class privileges of the wealthy rather than to create social and economic advantages for those in the lower ends of the class hierarchy (Bourdieu & Passerson, 1979). Education, therefore, often perpetuates intergenerational social inequalities (Swartz, 1997).

Bourdieu (1984) used the terms *cultural capital* and *social capital*, to signify the class-based sets of non-financial social assets (privileges, norms, and standards) that shape people's societal status and knowledge (e.g. Martin, 2012). Middle-class students tend to enroll in college with greater amounts of cultural capital -- or the "knowledge, dispositions, linguistic codes, problem solving, attitudes and tastes" (Tett, 2000, p. 190) that support college success.

Poor/working-class students, on the other hand, lack the "right" background, clothing, manners, or credentials. In fact, many working-class students' cultural practices defy the norms of the

university itself (Casey, 2005; Stephens, Markus, & Phillips, 2014), and without the appropriate cultural capital, many students struggle with how to be a college student (Collier & Morgan, 2008; Martin, 2012).

Smith, Mao, and Deshpande (in press) examined classist microaggressions in higher education. They interviewed 15 graduate students who self-identified as poor or working class and used consensual qualitative research (CQR) methodology to analyze the data. Many participants reported that peers and professors alike assumed all students to be middle class and members of the school community often voiced negative attributions regarding poor/working-class people (e.g. they are lazy, do not read books, are fully to blame for their own life circumstances). The authors noted that participants described wanting to hide their social class backgrounds based on these microaggressions. These findings implied that poor/working-class students in higher education experience classist microaggressions.

As poor/working-class students encounter implicit and explicit exclusionary messages from their peers and professors, they may begin to feel like outsiders on their own campuses.

Occurrences of microaggressions and institutional and/or interpersonal classism represent some of the ways that Bourdieu's (1984) concept of symbolic violence is enacted in higher education. Moreover, the feelings that are associated with these experiences may leave imprints that affect students' mental health.

Class-related barriers in higher education. The characteristic challenges faced by many poor/working-class students on college campuses can be organized according to a framework that addressed varied forms of capital. Cultural sociologist Mary Kosut (2006) attempted such a categorization based upon Bourdieu's cultural capital terminology. Kosut's aim was to convey the important biographical moments in her own journey from a working-class background to a

life in the academy. To spotlight these moments, she proposed themes corresponding to discursive capital (knowledge of forms of discourse used in elite institutional settings), aesthetic-cultural capital (knowledge related to the humanities and arts), cognitive capital (self-assurance in actively participating in the classroom dialect expected in college environments), and temporal capital (amount of time available to devote to academic work).

The present discussion will utilize Kosut's approach while proposing a different organizational structure that reflects a current review of existing research, autobiographical accounts, and qualitative interviews with poor/working-class college students and graduates. In the following section, challenges and barriers associated with five overlapping themes will be explored: a) *finances*; b) *communication*; c) *academic cultural navigation*; d) *interpersonal relationships*; and e) *dual-class identity issues*. As displayed in Table 1, these themes reflect areas in which poor/working-class students typically possess relatively lower levels of capital and consequently experience relatively higher levels of challenge, conflict, and stress. Table 1 is configured so that students may have vulnerabilities in some but not all themes; moreover, campus-based (or other) sources of support and mentoring can help compensate for challenges in one or more areas. The implications of these protective factors will be explored in a later section of the chapter.

Finances as a source of challenge. The financial implications of college constitute a significant external factor that can impact poor/working-class students' feelings of belonging, overall functioning, and understanding of college (Aries & Seider, 2005; Armstrong & Hamilton, 2013; Collier & Morgan, 2008; Greenwald 2012; Lubrano, 2004; Martin, 2012; Schwartz, Donovan, & Guido-DiBrito, 2009; Walpole, 2003). Financial capital refers straightforwardly to the financial resources that students can access to support their academic and living expenses

while at college. Students without sufficient financial capital – or more precisely, students whose families are without such capital – may be discouraged from going to college (Schwarz, Donovan, & Guido-DiBrito, 2009), or left juggling part-time jobs that often do not account for college expenses (Armstrong & Hamilton, 2013; Martin 2012), leaving them to feel isolated among the general student population (Armstrong & Hamilton, 2013; Schwartz, Donovan, & Guido-DiBrito, 2009).

One of the implications of their relative lack of external financial resources is that many poor/working-class students must work long hours to support their basic needs in college (Bergerson, 2007; Schwarz, Donovan, & Guido-DiBrito, 2009), as well as contribute to their family's expenses (Heiselt & Bergerson, 2007; Schwarz, Donovan, & Guido-DiBrito, 2009).

Armstrong and Hamilton's (2013) book *Paying for the Party* used an ethnographic perspective to record the experiences of women on a college campus. The authors originally set out to explore the role of gender at college, but as their study continued, they could not deny the strong affect of social class on collegiate experiences. They observed that students with unlimited, or expansive, funds had opportunities to spend time engaging socially with peers or studying, while working-class students' activities were constrained by their financial situations. Similarly, other authors have found that throughout college, poor/working-class students spend about two or three hours more a week working at a job than their middle-class counterparts (Martin, 2012).

Throughout Armstrong and Hamilton's (2013) narratives, working-class students were constantly attempting to discover ways to pay for basic needs, such as rent and food. For instance, Armstrong and Hamilton quoted one student as saying, "If I didn't have a job I wouldn't have a cell phone. I wouldn't have gas. I wouldn't have food" (p. 153). Even though many poor/working-class students took out loans, the resulting funds were usually not enough to

cover the expenses of college (Armstrong & Hamilton, 2013; Beagan, 2005), and often these students ended up in physically and emotionally arduous jobs. These jobs not only took students away from their academic responsibilities, but also caused stress in managing time (Armstrong & Hamilton, 2013).

Similarly, Bergerson (2007) used a case study of a working-class student named Anna to explore how social class affected her participation in campus life and engagement in her classes. Anna's academic and social experiences at college were delimited by the necessity to maintain a job at a fast food restaurant, where she worked from 5:00 pm until 2:00 am. She desired an oncampus work-study job to minimize traveling time, however, the outside work paid more (Heiselt & Bergerson, 2007).

Communication. Challenges within the communication theme correspond to the effects of low levels of discursive capital as defined by Kosut (2006). This theme describes the ways in which grammar, accents, and sentence formation often differ between social classes (Aries & Seider, 2005; Bernstein, 1960; Gos, 1995). Through Aries and Seider's (2005) interviews with 30 lower-income students (half from state institutions and half from private colleges), they found that speech often deterred these students from speaking aloud at college in front of middle-class peers, due to the fear of being seen as outsiders. Based on their ways of speaking, the lower-income students reported feeling less intelligent than their wealthier counterparts.

Bernstein (1960; 1974) researched the differences between speech patterns and means of communication among what he called the lower-working-class and middle-class people. In his 1960 work, Bernstein divided 106 participants into a working-class group and a public school group (middle-class). First, he created the working-class group by matching 61 subjects (messenger boys who did not attend grammar school) between the ages of 15 and 18 based on

education, sex, social background, and neighborhoods. The public school group consisted of 45 subjects that were matched for age and sex with the working-class group. Next, both groups were given non-verbal intelligence and vocabulary assessments, and then further divided into four-subgroups (5 subjects each) based on intelligence scores. Last, the subjects were recorded having a discussion on "The Abolition of the Death Penalty" and tapes were analyzed. His results indicated that working-class people's mode of speech frequently used concrete grammatical language and few conditional statements, which were the opposite for middle-class children, who are taught to speak abstractly, formulate independent opinions, and use complex grammatical construction and conditional statements.

Bernstein's (1960; 1974) work suggested the existence of a range of language facility that creates different modes of speech between the social class groupings. Moreover, other authors (Kosut, 2006; Kraus & Keltner, 2009; Stephens, Markus, & Phillips, 2014) have observed that working-class people tended to express themselves in relation to their context, and more often used double negatives, causal words, and expressive body movements to enhance their points, while middle-class communication has been observed to be more independent, formal, confident, disengaged, and limited in bodily gestures.

Peckham (1995) self-identified as a working-class academic and wrote about his experiences in academia in the edited book *This Fine Place So Far from Home: Voices of Academics from the Working Class.* Peckham described the differences in communication styles that were initiated by students' early experiences in different neighborhoods – and poor/working-class people may not have many experiences outside of their direct neighborhood.

Poor/working-class people often live with or close by family members, which may encourage family members to form strong bonds and understand one another's communication styles.

Peckham further described how this familiarity enabled people to understand metacommunication elements, such as tone and gestures, which can be difficult for people outside of the community to grasp.

Similarly, Gos (1995) wrote a theoretical paper describing the relationship between communication styles and social class within the university setting. He explained how language is a reflection of a community's worldview, and he described working-class people's use of underlying authoritative demands in their speech, in such terms as, "Do it because I said so." In general, verbal challenges are perceived in this community as questioning a relationship and not a person's statement (Gos, 1995), an interpretation that differs from the middle-class value of debating points of view.

Along these lines, college may be the first time that some students view a debate that occurs without contention or fighting (Greenwald, 2012; Lubrano, 2004). Coming from a working-class background, Oldfield (2007) described his home community as solving disagreements through speaking loudly and eventually pursing a physical altercation. He wrote that after a disagreement, large amounts of time would elapse before either party would choose to interact with the other again. He wrote about one instance where he observed two students debating a professor in the student union. Based on the personal experiences, Oldfield expected a brawl to ensue, and he was surprised to see their debate turn into a completely different friendly conversation an hour later. Through this experience, he learned that loud disagreements are not the step before a fistfight in a middle-class environment, and represented an essential element of college discourse.

Academic cultural navigation. As described above, discursive capital corresponds to a form of capital that is relevant to social class culture both inside and outside the university

context. Discursive and cognitive capitals overlap, therefore, with other forms of cultural knowledge that are specific to academic culture itself and that are necessary for its successful navigation. The theme *academic cultural navigation* is proposed to capture the college-specific preparation, knowledge, and expectations that are common in middle-class culture and that college-educated families are able to transfer to their children. Correspondingly, the resulting fund of knowledge will be referred to as *academic cultural capital*.

Dr. Richard Greenwald (2012) self-identified as a first generation college student who went on to gain a PhD, and wrote about feeling alienated from his peers and community at college. He explained that his family's limited background knowledge on college drove him to feel confused about expectations and college related topics. For instance, he and his first-generation peers did not understand the idea of majors, and believed that majors were specific career choices. Some of Greenwald's peers did not take on a given major because they had never heard of a job directly attached to a discipline. These students' academic experiences were restricted and defined by their limited college background knowledge.

Aries and Seider's (2005) previously discussed study illustrated the parental resources that enabled more affluent students to flourish in college. For example, one low-income participant described hearing wealthier students mention that their parents edited their papers. The participant felt "awful" because she never had parents whose education level afforded her the same academic support, which emphasized her feelings of difference and her perception that she needed to fend for herself. In addition, Beagan (2005) interviewed students from a Canadian medical school who identified as working-class or impoverished. Her work also illustrated how poor/working-class students often lacked the cultural capital to navigate a middle-class academic environment. She presented a number of examples to describe how students felt about lacking

the resources and knowledge that their more affluent peers took for granted. Beagan highlighted a quote from one of the working-class participants in her study:

You know, who is at the dinner table, the kind of advice you are getting, the support you are getting and what kind of letters of reference you are getting. Because if your parents are buddies with [the] program cardiologist and he is over for dinner, then it is much more easy to make those kind of connections that result in better letters (p. 780).

This quote illustrates how certain students may be at a disadvantage on college campuses as the result of their family's social class experiences. Such experiences signify how poor/working-class students are often left feeling that their previous lives relegated them to a lower status in higher education – a place that they hoped would level the playing field.

Collier and Morgan (2008) used focus groups to study differences on academic cultural expectations between professors and first generation working-class students. Two faculty focus groups were created with business and liberal art and sciences department staff (15 faculty in each) and two student focus groups were generated -- one for first generation college students and one for students whose parents attended college. They found that first generation students, in comparison to the other group of students, required more details from professors as they lacked the foundation of understanding the classroom structure. They were interested in knowing more about what would be on a test, how to take notes, how much material to include in an assignment, and desired a syllabus that outlined more details about class expectations as well as expressed a need for more material on how to exactly meet class expectations. They also reported struggling to determine pertinent information regarding the class. For instance, one student stated:

I didn't understand what office hours were all about... I mean, the office hours are there on the syllabus. Ok, what's that got to do with anything? What am I supposed to do with "office hours?" I didn't know that a teacher was available at a certain time for me to come and talk to if I had a problem. I didn't know that as a freshman or a sophomore, even though it is right there on the damn syllabus, I didn't know it (p. 439).

Another participant reported being confused by the feedback that they received from professors. For instance, one participant was told by a professor her writing was not scientific, which she found confusing as her topic had been about science. A different participant mentioned a professor instructing the class to write an assignment, and when the participant handed it in she was penalized for not having it typed. The student was confused because she had assumed that writing an assignment meant by hand. However, despite their desire for information and their confusion about tasks, many poor/working-class students reported not having sought help. Their professors had appeared to them to be intimidating authority figures in suits (Collier & Morgan, 2008), and it had not felt culturally appropriate for them to request assistance from such figures. Casey (2005) described:

The student whose cultural background teaches a sink-or-swim philosophy, emphasizing emotional toughness (if not a well-honed capacity for accepting punishing circumstances), is unlikely to reach out to a faculty member when he or she is failing-especially if the student harbors doubts about the worth of college, or about whether he or she belongs there (p. 36).

With regard to assignments, to question a professor or debate in writing may be seen as disrespecting an authority figure and challenging a cultural norm. As class-privileged environments, universities encourage such exchanges of ideas and it would be typical for a

professor to assign an argumentative paper. Working-class students who are not accustomed to these ways of exchanging ideas may feel confused and uncomfortable encountering these expectations and might ultimately be penalized for not having previously mastered these skills (Gos, 1995). Accordingly, when Oldfield (2007) entered the college classroom, he was shocked at the questioning and debate that took place among students and faculty. He was surprised to learn that this was not just the norm, but students were strongly encouraged to challenge one another. In Smith, Mao, and Deshpande's (in press) qualitative study on classist microaggressions in higher education, one participant described confusion with the proper etiquette of interacting with professors. The participant acknowledged that making eye contact and expressing opinions differed from the norms of the social class that she had been raised in.

Tsui (2003) conducted a literature review of how universities engage in social reproduction through their management of students based on socioeconomic status. She reported that colleges consider critical thinking and the discussion of those ideas in the classroom to be paramount for college students' development. She found that on average, the ability to think critically was rated as more important among people with higher-status professions than people with lower-status professions. Class-privileged families also tended to participate more frequently in activities that encouraged intellectual thought and critical thinking, such as theater or museum outings, leaving less privileged students at a disadvantage to critically engage with material.

Interpersonal relationships. Interpersonal socialization within a network of campus peers and supportive professors or mentors comprises another potential source of challenge for poor/working-class students. In particular, as a result of factors like the foregoing, poor/working-class college students may find themselves with low levels of this resource, which can diminish

feelings of belongingness for these students, and increase feelings of isolation and self-worth, as described in Alfred Lubrano's (2004) book *Limbo*. Lubrano takes readers through a journey of interviews and personal narratives of those whom he calls Straddlers, working-class children who live middle-class lifestyles as adults. The main purpose of the book was to deconstruct the experience of crossing the social class divide and illustrate the interpersonal isolation that can accompany this process. He wrote:

They gave me the impression that they were older somehow. Smarter, too -- worldly in a way that I have never seen. I'd thought that by being born a New Yorker I'd automatically be seen as sophisticated. But I fell terribly short in holding my own...It was as though the granite and marble were a birthright. Success was preordained; they didn't have doubts (pp. 93-94).

As poor/working students observe that their typical ways of interacting, eating, and dressing (Beagan, 2005; Lubrano, 2005) do not correspond to the accepted social customs of middle-class environments, feelings of outsider status can begin to develop. Lubrano also described an acquaintance who won a Fulbright Scholarship and attended an event to celebrate her achievement. In so doing, she also entered a setting that required to her to have the knowledge on how to manage appetizers, use multiple forks, handle materials, and order drinks. She reported, "I didn't know how to behave and I didn't want to make a fool of myself over just the simple stuff" (p. 106). Another narrative contributed by Lubrano described a working-class student who, at a party, disclosed that his grandfathers worked on farms and railroads. As an awkward silence immediately spread through the room, the student felt embarrassed about his family history. In addition, some participants in Smith, Mao, and Deshpande's (in press) study reported their social class affected their social and interpersonal interactions. Specifically,

narratives were described indicating friendships were lost due to class differences. One participant acknowledged apprehension about forming strong friendships, due to fear of not fitting into the community.

Soria and Stebleton (2013) used data from the Student Experience in Research University (SERU) national survey, which was completed in 2010 by 9,601 enrolled University of California-Berkley undergraduate students. Thirty percent of those students were randomly assigned to complete the social capital survey items used for the study. The social capital items focused on students' ability to interact with faculty, staff, and peers on campus, all of whom the authors described as helpful to supporting working-class students. Researchers found that students who self-identified as working-class had greater struggles formulating personal connections with peers, staff, and faculty members, which may have hindered their adjustment to school and persistence through college. These students reported more difficulty than middle-class students in forming study groups, speaking with faculty and staff members, talking to faculty during office hours, and spending time with friends.

Fashion and clothing choices can be a challenge for poor/working-class students who have a different way of dressing for professional (Schwartz, Donovan, & Guido-DiBrito, 2009) and social events (Armstrong & Hamilton, 2013; Beagan 2005) than middle-class people. Schwarz, Donovan, & Guido-DiBrito (2009) interviewed working-class Mexican college students about their class-based experiences. One participant acknowledged the significance of dressing around more class-privileged people: "Jeans are not dress clothing, and a lot of people don't know that, you know what I mean?" (p. 58). Another participant spoke about the experience of needing to wear a tie, but not knowing how to tie it because his father had never worn one. In addition, working-class students were found to dress for parties in a manner that

was negatively perceived by middle-class peers (Armstrong & Hamilton, 2013). Armstrong and Hamilton wrote about two women who "broke the rules of dress -- wearing garish makeup, bright clothing, and tube tops with miniskirts. This immediately marked them as non-girlfriend material and therefore as less deserving of male respect" (p. 92). These working-class women were not perceived as fitting in with what was "appropriate" or "acceptable," leaving them targeted as unworthy and undesirable (Armstrong & Hamilton, 2013).

Dual-class identity issues. Dual-class identity refers to the pressure placed upon poor/working-class students to conform to the middle-class college environment (Casey, 2005) while still retaining the cultural identity of their home community. Specifically, Barrett (2011) noted that when poor/working-class students enter college, they face a "middle classing or conversation experience" (p. 13), which fosters a devaluation of the students' identity. The pressure to change was described by Lubrano (2004):

People from the working class must change themselves – to fit. A problem arises: at the same time they are feeling like imposters -- ants at the picnic -- who don't belong in the Valhalla of the cashmere-ians. Straddlers [working-class students] can become resentful that they are the ones who must change. In this multicultural, I-accept-who-you-are, I-acknowledge-your-right-to-exist world, class is the one of the few things people will try to make you alter and try to teach you how not to be (pp. 103-104).

Through adapting a new culture, students often experience a significant separation from their family's values, behaviors, and traditions. Poor/working class students may feel pressured to uphold a specific identity while on campus and then change that identity when interacting with family members. Switching between cultures can therefore be a source of stress, confusion, and frustration for poor/working class students, as well as contribute to students' sense that they do

not belong in either environment.

Jake Ryan and Charles Sackrey's (1996) book *Strangers in Paradise: Academics From the Working Class* examined various aspects of education from the perspective of the working class. Ryan and Sackrey invited professors to reflect on their working-class upbringings and how their childhood social class membership influenced their current experiences in the world of education. Sam Butler, the author of a chapter that addressed his own feelings of exclusion in academia, wrote:

I clearly see how a middle-class background is conducive to academic success. Barriers of class can be overcome, but it is more of a struggle because one does not have the "proper" values, attitudes, social training, and respect. The necessity to adopt a middle-class role is not only a question of the dominating values of the institution, which have to be at least partly accepted in order to survive, but extends to fundamentals of life, such as dress, appearance, lifestyles and interests (p. 280).

A narrative in the same volume by John Koonings examined his social mobility from childhood to adulthood. He wrote about his experience upon graduating from college and feeling physically and monetarily removed from his past social class, yet at the same time never feeling completely at home in his new middle-class lifestyle in academia. These two examples, along with many others illustrated throughout the book, gave rise to what Ryan and Sackrey (1996) described as the experiences of stress and internal conflicts by working-class students who assimilate into a middle class lifestyle of academia.

Similarly, Lubrano (2004) described feeling like a new person as he entered the middleclass through academia. He acknowledged feeling separated from his family and his heritage as well as from the middle-class environment, writing, "Something is always a little off about us, like an engine with imprecise timing" (p. 12). He stressed that even though he learned middleclass language and behavioral rituals, he felt like he belonged to neither in his new life nor in his old.

Winkle-Wagner (2009) interviewed 30 African American college students (24 were first-generation) about their experiences at a predominately White college. She found that the first-generation students struggled to fit in on campus, and also struggled when they returned to their home communities. Participants described no longer connecting with their old neighborhoods because their families and communities did not understand the patterns, behaviors, and lifestyles to which they had been expected to conform on campus. Students like this found themselves living between two worlds, but lacked a sense of belonging in both.

Nelson, Englar-Carlson, Tierney, and Hau (2006) interviewed 11 counseling psychology or counseling education academics about their experiences coming from lower- to lower-middle class backgrounds to college campuses. The authors found that the majority of their working-class participants described feeling that they had grown apart from their families. Most of the participants did not have parents who encouraged them to pursue college and few had parents who expressed career aspirations for their children. The participants feared that their success would disconnect them from their parents, siblings, and extended family. Often participants described having been the only child in the family to venture outside the neighborhood, leaving them without peers or family members to discuss the bicultural experience of living in two different worlds – working class and middle class. Many of these college students reported feeling rejected by their communities for deciding to leave, and these feelings remained as they continued to adopt a middle-class lifestyle.

In another study, Nisonoff, Tracy, and Warner (1992) interviewed working-class

participants at Hampshire College, a small liberal arts school in Massachusetts. One participant reported being appalled by the complaints of his peers about food and living in the dorms, as he stated, "Since I've been here I've had more food, heat, hot water, electricity, and space than I ever had in my whole life. I feel guilty being here knowing how my family suffers" (p.16). Overall, these participants expressed a sense of guilt for leaving their communities and joining a group that could not appreciate some of the advantages their social class afforded them.

Belongingness and challenges. Belonging, connection, relatedness, community, and cohesion are terms used interchangeably in academic literature to describe people's need and desire to feel part of a larger group. Despite differences in the terminology used, research has repeatedly shown that human beings are motivated to feel a sense of attachment towards others (e.g. Bollen & Hoyle, 1990, Cohen & Garcia, 2008; Lee & Robins, 2000, Osterman, 2000; Strayhorn, 2012) and that lacking that bond can be detrimental to one's psychological well-being (Langhout, Drake, Rosselli, 2009; Ryan 1995; Walton & Cohen, 2011). Overall, people seem to function better in environments where they feel a sense of belonging (Strayhorn, 2012).

As the preceding section indicates, students from poor/working-class backgrounds can experience challenges from many sources that, together, contribute to the feeling that they do not fit well into campus culture. This dimension of their experiences -- belongingness -- merits emphasis as it permeates these themes and corresponds to a significant body of research within the higher education literature.

In College Students' Sense of Belonging: A Key to Educational Success for All Students, Strayhorn (2012) explored human belongingness in a variety of settings with an emphasis on the college level. He wrote that belongingness is a fundamental relational human motivation and emphasized that a sense of belonging is, "a basic human need and motivation, sufficient to

influence behavior" (p.3). Strayhorn described society's implicit agreement that water and shelter are basic human drives, that human beings are motivated to ensure that those drives are fulfilled, and that detrimental health affects will result if human beings are left unsatisfied. Strayhorn further argued that belongingness is a similar basic human need, and if it is left unfulfilled, people's well-being will be compromised. Therefore, when people are deprived of a sense of belonging, they are left with, "the absence of belonging [which] is marginalization, isolation, or alienation…" (Strayhorn, 2012, p. 17).

School belonging has been defined as a person's feeling of connection to the educational institution and/or perception of social or community membership (Pittman & Richmond, 2008). Most researchers have addressed school belongingness at the adolescent level as students' perceived sense of acceptance, importance, and value within the classroom setting (e.g. Goodenow, 1993). Strayhorn (2012) related school belongingness to the college level as well:

In terms of college, sense of belonging refers to students' perceived social support on campus, a feeling of sensation of connectedness, the experience of mattering or feeling cared about, accepted, respective, valued by, and important to a group (e.g. campus community) or others on campus (e.g., faculty, peers). It's a cognitive evaluation that typically leads to an affective response or behavior (p. 3).

Research has shown that college students' feelings of belongingness on campus affect their academic and social experiences (e.g. Cohen & Garcia, 2008; Freeman, Anderson & Jenson, 2007; Ostrove & Long, 2007; Pittman & Richmond, 2008), as well as their commitment to remaining in college and actually graduating (Hausmann, Ye, & Schofield, 2009). Much of the research on cultural groups and school belongingness focuses on the experiences of marginalized racial or ethnic groups, and these results may lend insight into the experience of belongingness

with regard to social class. For instance, Hurtado and Carter (1997) sought to understand Latino students' sense of belonging during their first two years of college. The researchers used data from the National Survey of Hispanic Students (NSHS; a national longitudinal study of Latino college students who received top PSAT scores), and the Student Descriptive Questionnaire (SDQ; a precollege survey of demographics, high school information, and college preferences). The NSHS was followed up with two additional surveys three years later. Overall, the researchers found a significant effect of belongingness in the lives of Latino students. Specifically, the results suggested that activities (e.g. discussing classes and joining student organizations) and interactions with faculty and peers strengthened group cohesion by helping students identify with the university. However, GPA was not found to be correlated with a sense of belongingness. The researchers were surprised to find that belongingness was not affected by independent study projects with faculty, working directly on a professor's research project, or being a guest at a professor's home. It was suggested that even though the participants had these experiences, belongingness might be more connected to the quality of the experiences. In addition, students who participated in sororities, fraternities, religious organizations, and clubs felt a stronger sense of belonging. Interestingly, of the students who reported racial tensions on campus, those who were involved in racial-ethnic organizations reported feeling an overall sense of community on campus.

In one of the few studies that specifically addressed social class and belongingness,

Ostrove (2003) used a retrospective approach to interview seven working-class, middle-class,
and upper-class women who attended Radcliff, a private New England women's college, in the
1960's. It was found that participants' recalled comfort levels at college reflected their
upbringing, types of attended secondary schools, and the professions of their parents. Working-

and middle-class students recalled a sense of social segregation and unpreparedness for academic challenges, while for the upper-class students themes of continuation of family tradition (education) were reported. Women from all three social class groupings noticed which students appeared to belong and which did not. Ostrove concluded with the suggestion that social class influenced belongingness on college campuses.

These studies (Hurtado & Carter, 1997; Ostrove, 2003) imply the strong correlation between feeling a sense of belonging on a college campus with overall school success. Particularly in regard to social class, this suggests poor/working-class students often lack a sense of belongingness, because they are not accustomed to the typical middle-class college environment. The evidence suggests that poor/working-class students who struggle to find that sense of belongingness are left with a feeling of alienation that can have a negative affect on their academic and social experiences.

Social media. Social media has provided a forum in which college students have voiced the challenges surrounding social class on campus. Starting in March and April 2015, students and student organizations at Columbia University (Columbia First Generation Low-Income Partnership, 2015), Stanford University (Stanford Class Confessions, 2015), Williams College (Williams College Class Confessions, 2015), and Brown University (Brown University Class Confessions, 2015) have created Facebook pages called "Class Confessions." This online discussion depicts experiences of social class on campus. Students are invited to post about their families, interpersonal conflicts, observations, and financial concerns. These posts, which are numbered sequentially, echo much of the previously-reviewed literature, touching upon such topics as the difficulty of affording basic needs (e.g. #478, 2015; #450, 2015), strained interpersonal relationships with friends from home (e.g. #64a, 2015), and struggles to meet the

expectations of the classroom (e.g. #422, 2015). On April 7, 2015 Blogger #111 from *Stanford University Class Confessions* wrote about the expectations his/her professor had about students' backgrounds:

Today a professor, in going through the background lab material for the class, kept referring to how much "we'd all seen in high school already". I felt so uncomfortable because I never really saw anything he discussed in my high school because the school couldn't afford to do any of the labs.

Other students have specifically shared that they have engaged in sex work (#110, 2015), lived in a homeless shelter while being a student (#182, 2015), could not afford the campus dating scene (#489, 2015), and had to send their academic scholarship money home to support families (#463, 2015). For instance, on March 23, 2015, Blogger #64b from *Columbia University Class Confessions* wrote:

Growing up homeless, I knew how bad my family's economic situation was. I wanted to help and the only way I could was to not be a financial burden. I knew my parents could never afford to send me to college, so I took on that responsibility. Things have gotten worse, so now I have to work two jobs to help my parents pay bills and send my sibling to college. I look around and feel as if I am the only one that has to deal with this.

Throughout these detailed posts, students have been able to express the depth of the challenges poor/working-class students have faced while attending college.

Class-related challenges and psychological outcomes. The mental health literature documents the fact that the challenges faced by poor/working-class students on college campuses can result in negative psychological and health-related outcomes. In Eisenberg, Gollust,

Golberstein, and Hefner's (2007) online survey completed by 2,843 graduates and undergraduate students at a large Midwestern university asked participants about their mental health using the Patient Health Questionnaire (Spitzer, Kroenke, Williams, & the Patient Health Questionnaire Primary Care Study Group, 1999). The researchers found significant mental health differences between participants who reported having a financial struggle versus those who endorsed finances as no concern. Students who reported growing up in a poor family were more likely to endorse symptoms for depression and anxiety. They also reported more suicidal thoughts than students who reported being from a comfortable financial situation. Overall, students who reported financial struggle were more likely to endorse depression, anxiety, and suicidal thoughts.

Roberts, Golding, Towell, and Weinreb (1999) surveyed 360 British university undergraduate students and measured financial circumstances, smoking/drug/alcohol use as well as physical and psychological well-being. Approximately half of the sample reported being in debt, 73% reported some difficulty with paying bills, and 16% reported great or very great difficulty in paying bills. The researchers found that students who worked longer hours outside of the university and reported having difficulty paying bills experienced poorer mental health outcomes and had lower levels of social functioning. Overall, the researchers interpreted their findings as demonstrating how the stress of debt (and the resulting possibility of leaving the university) impacted mental health functioning.

Weitzman (2004) used data collected from the 1997-1999 paper surveys of the Harvard College Alcohol Study, which reported a nationally representative sample of accredited American colleges. In 1997, Harvard College Alcohol Study asked 130 universities to randomly select 230 students to participate, and then again in 1999, 128 universities from the original set

were randomly asked to select 225 students to participate. Students were measured on mental health and depression, alcohol consumption, drinking-related harm, and alcohol abuse.

Weitzman discovered that students with patterns of poor mental health/depression (PMHD) were more likely to be found among first-generation college students. Students with PHMD also consumed a greater amount of alcohol on campus.

Grant-Vallone, Reid, Umanli, and Pohlert (2004) used paper surveys to gather information from juniors and seniors in three college support programs (Educational Opportunity Program, Academic Support Program for Intellectual Rewards and Enhancement, and Faculty Mentor Program) that worked with students who were financially disadvantaged or first-generation college students. One hundred and eighteen participants filled out an original survey asking about demographics, college experiences, and the college environment, and 73 of the participants filled out a follow-up survey focusing on students' experiences with student support programs. They found that those with higher levels of self-esteem and greater social support were better adjusted to college life and had stronger academic performances; and students who utilized university support programs with greater frequency endorsed higher levels of social adjustment. Students who experienced greater social involvement on campus and were better able to adjust to the academic environment also experienced an enhanced commitment to the university.

Taken as a whole, these findings suggest that students from poor/working-class families are more likely to endorse symptoms of anxiety, depression, and stress as well as to display lower levels of social functioning than their more class-privileged peers. Moreover, poor/working-class students who were adjusted to college life had higher self-esteem and stronger social support than those who appeared less well-acclimated (e.g. Grant-Vallone, Reid,

Umanli, & Pohlert, 2004). These findings indicate the probable mental health correlates of social class barriers on college campuses.

## Summary: Perspectives on the Success of Poor/Working-Class Students

Poor/working-class students may experience obstacles in a number of themes, including finance, communication, academic cultural navigation, interpersonal relationships, and dual-class identity challenges. An additional theme that runs through them is the undermining of the students' sense of belongingness on campus. Moreover, the stress of trying to manage the financial, behavioral, and social aspects of college attendance has the potential to affect not only their academic success, but also their mental health.

Nevertheless, a relatively small percentage of poor/working-class students do succeed in spite of the obstacles. In 2014, The Pell Institute for the Study of Opportunity in Higher Education found that 21% of students who began college from the bottom family income quartile attained their bachelor's degree. Despite this low figure, it is evident that some students are able to persist through the college challenges and graduate. Understanding their ability to persist could help psychologists better support all poor/working-class students on college campuses. A construct that offers a helpful framework for student success in the face of obstacles is *resilience*, which is explicated in the following section.

## Resilience

Throughout the history of psychology, researchers have typically focused on pathology and neglected the exploration of positive adaptation in the face of stressful events (Campbell-Sills, Cohan, & Stein, 2006). Resilience research addresses the issue of positive adaptation: why do some people have positive outcomes when exposed to adversity while others do not (Masten & Reed, 2002)? It emerged within the field of positive psychology, which examines the

development of positive qualities at an individual level (e.g. love, courage, interpersonal skills, and forgiveness) and at the group level (e.g. citizenship, responsibility, altruism, and tolerance) (Seligman & Csikszentmihalyi, 2000). In addition (and similar to counseling psychology), positive psychology aims to support adequately functioning people in leading fulfilling lives (Seligman & Csikszentmihalyi, 2000), making resiliency a relevant topic for exploration in the counseling psychology domain.

Resiliency has been studied as people's ability to adjust from adversity (Luthar, Ciccetti, Becker, 2000) in a given time and place (Schoon & Parsons, 2002; Waller, 2001). People manage adverse incidents in various ways: some recover quickly, while others face disruptions in their daily lives and relationships. Despite many people having negative outcomes (e.g. psychological or behavioral) after experiencing adversity, studies have found that the majority of people who are confronted with adversity have more positive outcomes than would be assumed (Barnard 1994;Kim-Cohen, Moffitt, Caspi, & Taylor, 2004; Vailant, 1993; Wolin & Wolin, 1995).

Psychologists have examined the outcomes of resilience on human development, behavior, and emotion (Luthar, Ciccetti, & Becker, 2000). Luthar, Ciccetti, and Becker (2000) referred to resilience as the "dynamic process encompassing positive adaptation within the context of significant adversity" (p. 858), while Waller (2001) classified resiliency as a "positive adaption in response to adversity" (p. 292). Similarly, Masten (2001) defined resilience as "a class of phenomena characterized by *good outcomes in spite of serious threats to adaptation or development*" (p.228). For the purpose of this paper, the common theme between these definitions will be considered to define resiliency: resiliency occurs in the context of adversity, risk, or threat, with the result that positive adaptation takes place despite the threat to well-being

or development. Without both elements, resiliency is not present (Luthar, Ciccetti, & Becker, 2000).

Trends in resilience research. Richardson (2002) reviewed the resiliency literature to describe the trajectory of resiliency research. According to Richardson, the first wave, Resilient Qualities, focused on environmental factors and biological or learned personality characteristics (Anthony, 1987; Block & Block, 1980, Waller, 2001) such as self-esteem, tolerance, and possessing social support (Richardson, 2002; Werner & Smith, 1992). For instance, Benson (1997) surveyed over 350,000 middle- and high-school students between 1990 and 1995, and found that youth who were functioning optimally had the following qualities: support, empowerment, boundaries, constructive use of time, commitment to learning, positive values, social competencies, and positive identity. Other authors have identified additional qualities supporting resilience, such as happiness (Buss, 2000), optimism (Peterson, 2000), and selfdetermination (Ryan & Deci, 2000). Luthar, Ciccetti, and Becker (2000) challenged the Resilient Qualities wave, stating that it disregarded the dynamic process of resiliency. They and others (Masten, Monn & Supkoff, 2011) argued that to be resilient, a person must experience an adverse event and adapt to that circumstance, and the trait or qualities definition restricts the concept of resiliency by denying its dimensionality. Additionally, Luthar, Ciccetti, and Becker (2000) and Walsh (1998) argued that the idea of pure intrinsic resiliency could be used as an excuse to blame or label people as weak.

The second wave, Resiliency Process, emphasized ways to procure resilient qualities (Richardson, 2002). Richardson, Neiger, Jensen, & Kumpfer's (1990) proposed a comprehensive model detailing the progression of retrieving resiliency through conscious and unconscious decisions. According to this framework, as people journey through life they are bombarded with

adverse events. The model begins with biopsychospiritual homeostasis (a person's physical, mental, and spiritual life circumstances), which is flooded by internal and external situations (e.g. stressors, adversities, opportunities). Some of these stimuli are adverse situations (stress) and people can choose to use coping mechanisms to overcome the event. A simple example is that, if people feel hungry (adversity/stressor), they eat food (coping mechanism). However, when life situations (thoughts, feelings, or experiences) do not have clear protective factors or coping mechanisms, people may struggle. People ultimately choose how to engage with a stressful event by using resiliency mechanisms (coping), attempting to avoid the situation, feeling a sense of loss through giving up motivation/hope, or experiencing dysfunction such as the use of substances or destructive behaviors.

The third wave, Resilience Theory, integrated varied academic disciplines to explain that all humans have resilient qualities (Richardson, 2002). Masten's (2001) research proposed that resiliency is a normal human function arising from "ordinary human adaptive processes" (p. 234) for children and adolescents after being exposed to disadvantage, trauma, and adversity. She emphasized the following normative processes that contribute to the foundation of adaptation: brain development/cognitive, attachment with caregivers, emotional/behavior, motivation for learning, and desire to engage with the environment. Masten did not deny that the existence of additional factors (e.g. good parents, luck, or talents) may influence resiliency, but she stressed that these processes are the underlying force of resilience. The perspective on resilience represented in the creation of the current project reflects both the Resiliency Theory and the Resilience Process frameworks, recognizing that people's resiliency is generated from both innate and learned protective factors. At the same time, the significance of external resources (e.g. support networks) in forging resilient outcomes is acknowledged.

Van Vliet (2008) explored how adults self-report their experiences of adapting after feeling shamed. Interviews were conducted with 13 adults who recalled an event that created strong feelings of shame (e.g. assault on the self), and grounded theory was used to analyze the data and formulate a theoretical framework to describe how adults recover from such adverse events. In using five main elements, Van Vliet depicted how forces can work together to forge a sense of resiliency: 1) connecting (formulating bonds with others that provide acceptance and a sense of normalcy); 2) refocusing (shifting attention to interests or behaviors that create a positive sense of the self and a sense of control); 3) accepting (drive to address situation and face feelings of shame); 4) understanding (learning to make sense of adversity and separate the self from the situation through comprehension and insight); and 5) resisting (using internal and external protective factors to ward against stress). For some participants, adversity referred to addressing the cultural stereotypes that caused people to experience feelings of shame or marginalization, and when they were able to rebuild and overcome adversity, distress was reduced. People who were able to adapt gained a greater sense of control and confidence in their resiliency.

Risk factors and their impact. The terms *threat*, *risk*, and *adversity* have been used in the literature interchangeably to classify a noteworthy biological or psychological disruption of normal development (Masten, 2001; Masten, Monn, & Supkoff, 2011; Werner & Smith, 1992), such as low socioeconomic status (Brody, Yu, Chen, Miller, Kogan, & Beach, 2013), community trauma (Bonanno, Brewin, Kaniasty, & Greca, 2010), divorce (Kelly & Emery, 2003), and attachment style (Li, 2008). Generally, risk factors are situations or conditions that enhance the likelihood of a negative outcome (Carbonell, Reinherz, Giaconia, Stashwick, Parasdis, &

Breadslee, 2002) and can occur at the individual (e.g. biology, cognition), community (e.g. neighborhoods), or societal/environmental levels (e.g. poverty, legislation) (Krumpfer, 1999).

The number of threats and degree of exposure dictates the effect of a risk factor on a person (Waxman, Gray, Padron, 2003). Those who encounter adversity in one setting may also have other adversities in their lives (Waller, 2001), which are referred to as cumulative risk (Masten, Monn, & Supkoff, 2011). For instance, children who grow up in a poor neighborhood are also likely to have unsatisfactory school resources and high crime (multiple risks), while those who grow up in a wealthier community are more likely to enjoy strong school systems and adequate housing (Waller, 2001).

Outcomes. The overcoming of adversity is relevant to the concept of adaptation or outcome. Masten (2001) wrote that people tend to adapt better than society would expect based on their level of threat. Strong adaptors are typically labeled resilient because they are able to adjust well to risk and formulate a positive outcome. Those who do not adapt as well are called vulnerable; their difficulty in overcoming adversity produces negative outcomes (Masten, Monn, & Supkoff, 2011). For instance, after experiencing risks, some people struggle academically, legally, or psychologically, while others are able to achieve in these areas (Brody, Yu, Chen, Miller, Kogan, & Beach, 2013). Using a developmental perspective, Masten, Monn, and Supkoff (2011) explained that outcomes vary with life stages. For small children, obedience to parents and following community regulations tend to be considered outcomes, while for teenagers and adults, outcomes focuses on work, romantic relationships, parental relationships, and community involvement. They specifically noted that psychological outcomes have been well researched at the child level; however, limited findings exist regarding adult psychological functioning.

Protective factors. When overcoming a threat, people may seek internal or external resources to minimize the negative outcomes from a challenge, which can be dependent upon the availability of individual or environmental resources. Protective factors are stimuli that modify adverse situations, bring out positive outcomes (Masten, Monn, & Supkoff, 2011; Perez, Espinoza, Ramos, Coronado, Coretes, 2009; Schoon, Parsons, & Sacker, 2004), decrease the risk of threats, and lessen the outcomes of risks (Carbonell, Reinherz, Giaconia, Stashwick, Parasdis, & Breadslee, 2002). For instance, adolescents' development could be hindered by low self-worth and early sexual activity (risk factors), but the protective factor of educational aspirations (individual protective factor) and family pressure (environmental protective factor) may act as buffers to decrease the likelihood of teenage pregnancy (outcome) (Kumpfer, 1999). Overall, protective factors are predictive of successful life circumstances for those who experience risk factors (Kumpfer, 1999) and can be found at the individual or environmental levels (Carbonell, Reinherz, Giaconia, Stashwick, Parasdis, & Breadslee, 2002).

Individual protective factors tend to be described as personality traits, attitudes, and worldviews (Block & Block, 1980; Kumpfer, 1999; Nelson, Engar-Carlson, Tierney, & Hau, 2006; Wak, Ng, Wong, 2011) that are not necessarily innate, but can be learned over time (Bernard, 2004). Some of the characteristics mentioned in the theoretical and empirical research include *temperament, social competence, problem solving, self-regulation*, and *feeling a sense of purpose* (Beltman & MacCallum, 2006; Bernard, 1995; Block & Block, 1980; Buckner, Mezzacappa, & Beardslee, 2003; Eisenberg, Fabes, Shepard, Murphy, Guthrie, & Jones, 1997; Kim-Cohen, Moffitt, Caspi, & Taylor, 2004; Kumpfer, 1999; Masten & Coatsworth, 1998; Masten, Monn, & Supkoff, 2011; Nelson, Engar-Carlson, Tierney, & Hau, 2006; Vanderbilt-Adriance & Shaw, 2009; Wak, Ng, Wong, 2011; Werner & Smith, 1992).

On the other hand, environmental protective factors are described as stimuli outside of the person that contribute to resilient outcomes (Hauser & Allen, 2006; Southwick, Morgan, Vythilingam, & Charney, 2006), such as family dynamics and social support (Carbonell, Reinherz, Giaconia, Stashwick, Parasdis, & Breadslee, 2002; Kim-Cohen, Moffitt, Caspi, & Taylor, 2004; Perez, Espinoza, Ramos, Coronado, & Coretes, 2009; Werner & Smith, 1977, 1992). Studies examining poverty or disadvantaged neighborhoods as risk factors have tended to focus on environmental factors predicting resiliency (Kim-Cohen-Moffitt, Caspi & Taylor, 2004; Werner & Smith, 1977, 1992, 2001); these will be discussed in a later section.

Resilience and psychological outcomes. As mentioned, the majority of literature pertaining to the psychological affects of resiliency has focused on children and adolescents (Campbell-Sills, Cohan, & Stein, 2006; Hjemdal, Vogal, Solem, Hagen, & Stiles, 2011). The relatively small amount of lifespan and adult research, however, has displayed similar results to the youth research in regards to levels of resiliency and psychopathology (Carbonell, Reinherz, Giaconia, Stashwick, Parasdis, & Breadslee, 2002; Haddadi & Besharat, 2010; Petros, Opacka-Juffry, & Huber, 2013; Gloria & Steinhardt, 2014; Hjemdal, Vogal, Solem, Hagen, and Stiles, 2011; Petros, Opacka-Juffry, & Huber, 2013).

Carbonell et al. (2002) used a longitudinal design to investigate the psychosocial development of a cohort of participants, ages 5 (1977) to 26 (1998). Risk factors for depression were examined during childhood and adolescence. Protective factors were also investigated at the age of 15 in the areas of family cohesion, social support, positive outlook, and interpersonal relations as well as how those factors influenced depression. Participants were considered resilient if by the age of 26 they lacked psychological pathology, demonstrated self-reported positive functioning, and lacked behavior problems. At the age of 26, it was found that there

were no significant demographic (gender, SES, ethnicity, and level of education) differences between the resilient and depressed group of adults, but there were differences with regard to protective factors during adolescents. Resilient participants showed more enhanced protective factors (more time spent with family, disclosed more personal information with family members, and expressed more positive interpersonal relationships) than the depressed group. This study indicated that protective factors are associated with depressive symptoms across the lifespan.

Hjemdal, Vogal, Solem, Hagen, and Stiles (2011) surveyed 307 Norwegian adolescents to explore the association of psychiatric symptoms and resilience. Negative significant correlations were found between resilience and depression, anxiety, stress, and obsessive-compulsive symptoms. Resilience, along with protective factors of social support outside the family and perceived levels of social cohesion, were associated with a decrease in psychiatric symptoms.

At the adult level, Petros, Opacka-Juffry, and Huber (2013) surveyed a sampled 196 adults on resiliency and self reported depression and anxiety symptomology. Thirty-two members of the sample were tested using a saliva sample for cortisol and dehydroepiandrosterone (DHEA) levels (hormones involved in stress). The study examined emotional health and neurobiological stress factors in a non-clinical sample of adults. Findings showed resilience was inversely correlated with depressive symptoms, anxiety, and stress. Similarly, Haddadi and Besharat (2010) surveyed 256 college students to investigate the relationship between resilience with psychological distress, depression, anxiety, and general health. They found a statistically significant positive correlation between resilience and psychological distress, depression, anxiety, and general health were significantly negatively correlated.

More recently, Gloria and Steinhardt (2014) surveyed the effect of positive emotions, coping strategies and mental health on resilience using a sample of 200 post-doctoral students. They found a positive correlation between positive emotions (e.g. amused, fun-loving or silly) and resilience, with a partial mediation of coping strategies (e.g. active coping, planning, positive reframing, acceptance). Resilience also moderated the affect of stress on anxiety and depressive symptoms. Specifically, participants with high resilience seemed to have a stronger buffer against stress. When they experienced low stress, they had already showed lower levels of anxiety than the lower-resilient participants. Even once stress was introduced, low and high resilient groups showed significantly different levels of anxiety. Depressive symptoms, on the other hand, were similar between the two groups when stress levels were low, yet, when stress was heightened, resilient participants showed less depressive symptoms than less resilient participants. The researchers suggest that even though stress is unavoidable, it was evident that resiliency can help buffer against pathology.

Resilience and culture. Waller (2001) reviewed resiliency literature from the past two decades and suggested that resiliency "is a multi-determined and ever-changing product of interacting forces within a given ecosystemic context" (p. 290). Waller argued that resiliency literature has consistently neglected to incorporate the contexts of culture and social class. However, she stressed that separating people's risk factors from the cultural context can overpathologize populations who do not fit into the mainstream culture. For example, based on conventional American norms, parents from working class communities with many children and limited educational attainment (risk factors) might be considered inadequate caregivers raising their children to struggle in the future (outcomes), yet that is not always the case. In some communities, these family dynamics are the norm and it cannot be assumed that these families

do not provide for their children.

Shih's (2004) theoretical review acknowledged the lack of literature and research on people with stigmatized identities who flourish in society, and she created a framework of three strategies (compensation, strategic interpretations of their social environment, and focusing on multiple identities) that people may use to overcome feelings of distress from cultural stigma, biases, or adversity. Compensation specifically refers to people's persistence or assertiveness to become more likeable, influential, and powerful when feeling social stigma. People may refine their social skills to compensate for stigma, such as monitoring their social interactions to grasp the thoughts and behaviors of the majority group. In addition, stigmatized people may attempt to distance themselves from their stigmatized group to avoid the experiences of prejudice or even disengage with dimensions of their cultural group that are typically stereotyped. Next, people who are stigmatized can reframe their social environments to ward off feelings of low self-worth. For instance, people in marginalized groups may compare themselves to people in their own group who have had worse outcomes, rather than comparing themselves to people in the majority cultural group who tend to have better outcomes. Marginalized people may also attribute failures to their cultural group membership rather than to individual abilities. Last, stigmatized people may look at their multiple identity groups as a defense against feelings of distress, as these identities may shield psychological well-being. Acknowledging multiple identity groups has been shown to help people be more resilient to stressful stigmatization, because people can transfer their thoughts to an identity that does not possess the biases.

**Resiliency and social class.** Experiences of oppression have relevance for an understanding of resiliency at the individual level (Jessor, 1993). As previously discussed, researchers have demonstrated that social class affects living conditions (Block, Scribner, &

DeSalvo, 2004; Dwyer, 2010; Evans & English, 2002), mental health (Ali & Lees, 2013; Belle & Doucet, 2003; Evans & English, 2002; Smith, Chambers, & Bratini, 2009), and academic achievement (Kozol, 2005; Kuriloff & Reichert, 2003; Lareau, 2003). In turn, these effects can have a negative impact on life events and outcomes (Buckner, Mezzacappa, & Beardslee, 2003; Buckner & Waters, 2011; Schoon, Parons, & Sacker, 2004), a set of circumstances that can be defined as socioeconomic adversity (Buckner, Mezzacappa, Beardslee, 2003; Ducan & Brooks-Gunn, 1997; Schoon, Parsons, & Sacker, 2004). Not all people from disadvantaged social class backgrounds are completely obstructed by such barriers (Schoon, Parons, & Sacker, 2004; Shih, 2004). Nevertheless, people who lack social class privilege tend to struggle at some point with adaptation to the stressors associated with socioeconomic adversity (Buckner & Waters, 2011). For instance, a home fire for a middle-class family with financial resources (an environmental protective factor) may result in their moving to a hotel, while a family with less financial means (lacking the environmental protective factor) might move to a shelter. Overall, socioeconomic adversity can limit the protective factors that could act as buffers to help foster positive outcomes in the face of setbacks and barriers (Buckner & Waters, 2011).

In *Journeys from Childhood to Midlife: Risk, Resilience, and Recovery*, Werner and Smith (2001) described one of the earliest known studies on resiliency, which featured variables that corresponded to socioeconomic adversity. In 1955, the researchers began an analysis of children in Kauai, Hawaii from birth to the age of 40 in order to understand the outcomes of early exposure to perinatal trauma, poverty, parental psychopathology, and other challenging childhood conditions. Six hundred and ninety eight subjects began the study and were evaluated using psychological assessments, physical examinations, naturalistic observations, school/legal/health records, parent/teacher reports, and self-reports. By the age of 40, 489 of the

participants remained in the study. Werner and Smith (1995; 2001) identified protective factors that enhanced resilience throughout the lifespan: individual characteristics (good health, sense of independence, strong interpersonal relationships, interests, goal setting, and willingness to seek support when needed), parental involvement (supportive, set rules, and displayed respect for children), and external support networks (school, work or church, people who rewarded children's skills and believed in them).

Werner (1995) further reported resilient children (not necessarily the most academically gifted) were able to effectively utilize skills and qualities (e.g. sharing or feeling pride in accomplishments). In regards to families, resilient participants' family dynamics tended to include at least one adult who was emotionally attuned to the children's needs. In their communities, the participants had a teacher as a positive role model. Moreover, Werner saw that resilient people were found to have personalities that engaged other people, strong problem solving and communication skills, and the belief that their own actions would positively affect their lives. Possessing a nurturing/attentive caregiver, relying on peers and the community members for emotional support, and/or having a teacher who offered support were considered community and family protective factors. Communication skills and self-esteem were considered within-the individual factors, in that participants with these protective factors were found to have more positive life outcomes in adulthood after experiencing childhood risk factors (e.g. poverty). These results highlight the varieties of protective factors at work in the lives of the study's participants.

At the 40-year follow up, Werner and Smith (2001) examined the concept of adult adaptation as an outcome factor. They specifically looked at work (employment/school achievement), relationships with spouse/mate (committed relationship/satisfaction), relationships

with children (abuse/satisfaction), relationships with peers (presence of close friendships), and self-assessment (life satisfaction/substance use/psychiatric history). These constructs were examined using clinical interviews and surveys. The higher the scoring on these outcomes, the more adaptive the participants were rated, meaning the more resilient qualities exhibited. Forty-two-point-two percent of the participates were rated as having "good" adaptive qualities, 36.7% were rated as "adequate", and 16% were rated as "doing poorly" (e.g. struggling financially, having domestic conflicts, violence, substance abuse, mental health problems, and/or low-self esteem). The researchers found that participants who had more positive outcomes at 40, displayed protective factors, starting in childhood, of having a caring mother and social support from family members as well as possessing the qualities of autonomy, social maturity, scholastic competence, and self-efficacy. These results indicate the existence of external and internal protective factors to ward against adverse events.

Kim-Cohen, Moffitt, Caspi, and Taylor (2004) tested the genetic and environmental factors of children's resilience to socioeconomic deprivation. Participants were members of the E-Risk Study, a 1,203 family cross-sectional study using twins in England and Wales that examined genetic and environmental factors contributing to child development. The researchers used parent and teacher surveys, psychological assessments, and home visits to measure socioeconomic status, antisocial behaviors, children's intelligence, maternal warmth, children's temperament, and mother's perceived social support. Specifically, the researchers examined how a child's temperament and emotional treatment from mothers could protect against behavioral and cognitive consequences of socioeconomic adversity. The results suggested that temperament, maternal warmth, and cognitively stimulating resources helped enhance children's resilience to socioeconomic threats. Genes and the environment (twins raised in the same household) were

found to sometimes interact to influence a child's development. For instance, a child who has a genetic predisposition (having outgoing or extroverted parents) for an outgoing temperament will likely elicit attention from others in their environment, leading to more stimulation, learning experiences, and cognitive skills.

Schoon and Parson (2002) used longitudinal data from the National Child Development Study (NCDS) and the British Cohort Study (BCS 70). Specifically, they extracted subsamples (6,801 and 2,587) from the larger sample that experienced socioeconomic disadvantages at the ages of five (BCS70) or seven (NCDS). The researchers measured the family protective and risk factors (assessed via socio-demographic characteristics, parental support/education level, and family stability) that enhanced or hindered positive outcomes (academic and behavioral adjustment). They compared the experiences of children in the study based on their social class and found significantly different influences on resiliency outcomes. For instance, socially disadvantaged children demonstrated stronger resiliency when a father helped with house chores, while socially advantaged children were more resilient when their mothers were older. Risk factors associated with social disadvantage included having older mothers, having more than two siblings, and experiencing more than two moves, but there were no significant risk factors for socially advantaged children. Overall, resilient youth were more likely than other participants to graduate from school and hold a full time job, indicating that the impact of early social disadvantage lasted into adulthood.

Social class and resiliency factors on college campuses. How might the aforementioned variables come together in the lives of college students from poor/working-class backgrounds? Research on resiliency among these college students is nearly non-existent. However, the challenge themes described earlier present an opportunity for inquiry regarding

relevant resilience factors: if some students experienced individual and/or environmental protective factors that corresponded to these crucial areas, those factors might function as important supports or buffers. As was the case with the challenges, such protective factors probably often operate interactively. For the purpose of this discussion, however, they will be presented for consideration separately according to the five themes previously discussed: *a) finances; b) communication; c) academic cultural navigation; d) interpersonal relationships;* and *e) dual-class identity*. The table referenced earlier (Table 1) displays the forms of capital that, if supplied in the appropriate area, would offer protection in a theme that might otherwise have been a source of challenge. The table also indicates that the provision of campus support services or mentoring in a particular area could also contribute toward resiliency in that area.

Finances. As discussed, the absence of a crucial external resource – financial resources – defines much of the stress for poor/working-class college students (Armstrong & Hamilton, 2013; Bergerson, 2007; Heiselt & Bergerson, 2007; Schwarz, Donovan, & Guido-DiBrito, 2009). However, the provision of adequate financial resources or capital to such a student would likely mitigate at least some of this stress and constitute a factor in their resiliency. No research has been found indicating the outcomes of poor/working-class college students who obtained a significant scholarship or another means of obtaining money to finance college. However, it is conceivable that to be supported by a considerable amount of money would afford these students the luxury of not having to work part-time to pay for expenses.

Communication. As previously mentioned, poor/working-class students often display communication styles that are different from what is expected in a middle-class college environment. Nelson, Englar-Carlson, Tierney, and Hau's (2006) interviews with successful academics who came from poor/working-class backgrounds described how students were

required to learn a middle-class language and needing to "speak two languages" (p. 8).

Participants reported being able to address their poor/working-class roots using certain ways of speaking and behaving, but then being able to model different norms in their academic lives.

Students who had this social class "bilingualism" would possess a resiliency factor in the form of discursive capital that other poor/working-class students did not; similarly, students who had a supportive campus mentor who worked with them in this area might be at less of a disadvantage.

Academic cultural navigation. Despite the difficulty that many poor/working-class students experience in navigating the academic environment, some of them have personal characteristics and/or external resources that may function as academic cultural navigation capital. Having a campus mentor who facilitates knowledge of campus culture may be one such resource; having family members or personal characteristics that lead students to investigate the college environment more fully may be another. Perez, Espinoza, Ramos, Coronado, and Coretes (2009) used an online survey of open-ended questions, demographics, and Likert-type self report measures to investigate the academic resilience of 110 undocumented immigrant Latino high school, community college, and university students throughout the United States. Psychosocial risk factors for academic success included working more than 20 hours/week, feeling a sense of rejection due to undocumented status, large family, and low-parental education. Protective factors included identification as gifted/talented in early childhood, a high valuing of school, bilingualism, and low feelings of distress as well as parental valuing of school, friends valuing of school, participation in extracurricular activities, participation in volunteer activities, and growing up with both parents. Overall, results suggested that the protective factors fostered academic success among the youth, and the most resilient students in the study had higher levels of parental valuing of school and higher levels of participation in extra-curricular

and volunteering activities.

Interpersonal relationships. Aspects of the social environment, such as family support and social support in the form of peer networks, have the potential to act as buffers in protecting students against feelings of isolation and marginalization. Denny, Clark, Fleming, and Wall (2004) surveyed 268 alternative education students in New Zealand between the ages of 11 and 17. The students were considered to be at risk of dropping out of high school based on enrollment in an alternative education (AE) school for children with behavior problems, expulsions, and/or being a teenage parent. The aim of the research was to understand the prevalence of depression among this community, identify risks and protective factors for depression, and to classify protective factors that moderated the risk of depression. The researchers identified the risk factors for depression as poverty, being a victim of violence, and experiencing bullying, while the protective factors identified were family and peer connections. Specifically, family connectedness was shown to be the most significant protective factor for the students.

Stuber (2011) interviewed 28 first-generation, working-class White university students to understand how participants made sense of their academic, social, and cultural adjustment to college. She found that 50% of the participants felt marginalized on campus and 25% reported extreme marginalization. Twenty-five percent of the participants reported being able to overcome feelings of marginalization by channeling them into motivation for social change. Other participants described being able to overcome feelings of isolation and discomfort by actively finding communities of people who held similar interests through clubs and activities. Similarly, Nelson, Englar-Carlson, Tierney, and Hau (2006) interviewed counseling psychology and counselor education academics, and found that resilient lower-class college students had

formed relationships with working-class staff members on campus, such as custodians. These relationships allowed poor/working-class students to benefit from supportive connections with others from similar backgrounds on campus.

Phinney and Haas (2003) asked 30 predominately first-generation ethnic minority college freshmen to journal about their personal, academic, social, and family stressors as well as the resources that they used to cope with the distress. Participants reported coping through seeking support (or obtaining help from others), distancing/avoiding (separating themselves from the problem), acceptance (living with the problem), positive reframing (looking at the situation in a positive manner), and proactivity (or actively working to solve the problem); other reported that no coping was needed. Participants in the study also reported seeking resources to assist with the stress, such as academic, emotional, or material resources. Phinney and Haas determined that participants who experienced successful coping had high levels of social support and also high levels of self-efficacy – a personal resource that will be discussed in the following section.

In Stuber's (2011) previously discussed interviews with first-generation White university students, two participants described joining a pre-college program that offered services for first-generation students. The program allowed them to connect with a peer support network that differed from the mainstream middle-class students. In seeing the social class differences between themselves and mainstream students on campus, they developed a *social class* consciousness that enabled them to develop a vocabulary regarding their experiences as White first-generation working-class college students. In using their newfound analysis, they felt encouraged to share their experiences with others, and began to recognize the significance of understanding their social class in creating a fulfilling academic situation. Overall, the precollege program was a meaningful resource that not only gave students social support, but also

helped them find a reference group that fostered resilience throughout college.

*Dual-class identity.* For poor/working-class students on college campuses, the concept of *bicultural identity* may have relevance as a personal resource. Bicultural identity refers to living between two cultures where the application of either cultural dynamic may be required in the appropriate situation, known as *code-switching* (Sadeo, 2003). In this way, poor/working-class individuals learn to navigate a middle-class college lifestyle while finding ways to connect back to their working-class cultural roots (Nelson, Englar-Carlson, Tierney, & Hau, 2006). Success in moving between cultures while making necessary accommodations is facilitated by cultural awareness of one's social location. It also may require personal maintenance of the non-dominant cultural identification with simultaneous acceptance of the mainstream culture (Sadeo, 2003).

LaFromboise, Hoyt, Oliver, and Whitbeck (2006) interviewed and surveyed the levels of resilience (defined as prosocial behaviors) of 212 fifth through eighth graders living on or close to a Native American reservation in the Midwest. Researchers measured self-esteem, enculturation, maternal warmth, community support, perceived discrimination, school attitude, academic plans, school grades, alcohol/substance use, and home adversity (e.g. receiving public assistance or having a financial struggle). Results showed that perceived discrimination was a significant risk factor for a decrease in resilience, and that enculturation was the strongest predictor of high levels of resilience. This result indicates that young participants who were able to identify and analyze the cultural gulfs in their lives were most likely to have resilient outcomes.

Ong, Phinney, and Dennis (2006) surveyed psychological and family factors in the academic resiliency of 123 Latino college students in southern California. Approximately 55%

of the students were classified as very low SES based on their parents' reported educational levels and occupations; 27% were categorized as moderately low, and 16% as medium or average SES. Findings showed that low SES participants with low levels of ethnic identity had a lower GPA than low SES participants with a high level of ethnic identity. Although ethnic identity is, of course, not identical to social class identity, this result provides further evidence that higher levels of cultural awareness may be a protective factor in resilient outcomes and academic success among college students.

Social media. As previously discussed, poor/working-class students have used Facebook to express some of the challenges they have faced on campus. These forums may provide a source of resiliency for some students who have not had the opportunity to share their experiences or feel that they are the only ones on campus with these thoughts or feelings.

Blogger #233 (2015) on Columbia's Class Confidential page wrote, "This page has honestly changed my life," suggesting that the webpage afforded the individual an opportunity to learn about others who have a shared experience. Similarly, Blogger #497 (2015) wrote that the posts have contributed to his/her feeling less alone on campus. These narratives specifically exemplify how the ability to share and hear about the stories of others can have a positive affect on the students' well-being.

## Counseling Psychology and the Resiliency of Working-Class College Students

The historic emphases of counseling psychology lend themselves well to the study of poor/working-class students in higher education. First, counseling psychologists have traditionally used their skills in educational settings to support students as they progress through college and into careers. In fact, the majority of college counseling centers (64.5%) are headed by counseling psychologists (Gallagher, 2004). As college is a transitional period for many

students, counseling psychologists have been able to facilitate strength-based work to foster a successful and meaningful academic experience (e.g. Consoli & Llamas, 2013; Lee, Olson, Locke, Michelson, Odes, 2009; Schmidt, Piontkowski, Raque-Bogdan, Ziemer, 2014).

Second, as a discipline, counseling psychologists have prioritized the well-being of marginalized groups by incorporating multiculturalism in research and clinical practice.

(Ponterotto, 2010; Sue & Sue, 2012). Nevertheless, the field of psychology has faced challenges in objectively defining and understanding social class dynamics, and as a result, calls for further exploration have been noted (e.g., Liu et al. 2004, Thompson, Cole, & Nitzarim, 2012; Smith, Mao, Perkins, & Ampuero, 2011). When social class has been addressed by counseling psychologists, it has most often been via the therapeutic alliance (Smith, Mao, Perkins, & Ampuero, 2011; Thompson, Cole, & Nitzarim, 2012), or through a focus on social class in the primary and secondary schooling levels (Lapour & Heppner, 2009; Navarro, Flores, & Worthington, 2007). Only a few studies stand as exceptions to this rule (e.g., Smith, Mao, & Deshpande, in press).

Because classism is inherent in class-privileged environments where people are seen as "transcending" their social classes, college students may be an especially relevant population for study (Langhout, Rosselli, & Feinstein, 2007). Moreover, students who experience classism on campus are more likely to feel like outsiders (Langhout, Drake, & Rosselli, 2009) and to experience poor mental health outcomes (Aspelmeier, Love, McGill, Elliott, & Pierce, 2012; Cuellar & Roberts, 1997; Eisenberg, Gollust, Golberstein, & Hefner, 2007; Grant-Vallone, Reid, Umanli, & Pohlert, 2004; Hefner & Eisenberg, 2009; Roberts, Golding, Towell, & Weinreb, 1999; Weitzman, 2004).

A study of well-being among college students also has the potential to add meaningfully to the resilience literature. Specifically, most research has been conducted on children, (Campbell-Sills, Cohan, & Stein, 2006; Hjemdal, Vogal, Solem, Hagen, & Stiles, 2011), and the study of the challenges faced by poor/working-class college students would extend that focus (Buckner & Waters, 2011). Research regarding challenges and resiliency factors in the experiences of poor/working-class college students stands, therefore, to add valuably to a) research on poor/working-class college students, b) the class-related psychological literature, and c) the study of resilience generally.

### **Purpose of the Proposed Study**

The preceding discussion began by explicating poverty, social class, and classism as sources of discrimination in the lives of poor/working-class people. As such, class-related experiences can be a source of stress in a variety of settings, including college campuses. Class-related differences can create characteristic barriers for poor/working-class students related to forms of material and cultural capital that these students may not possess, including challenges related to finances, communication, navigation of campus culture, interpersonal interactions, and living in a different culture. These barriers can result in a diminished sense of belongingness among poor/working-class students in addition to other psychological outcomes.

Despite these challenges, some poor/working-class students are successful at college. How can we understand (and therefore better facilitate) the successes and achievements of more poor/working-class students? The construct of resilience offers a framework by which we can examine these experiences in terms of risks and protective factors for success. Sources of support and resilience for poor/working-class students can be theorized as corresponding to the same themes (finances, communication, academic cultural navigation, interpersonal relationships, and

dual-class identity), yielding protective factors that may buffer against negative outcomes. All of these challenges and resiliency factors are relevant to our understanding of college student's well-being, and are well-suited for examination by counseling psychologists, yet they have seldom been addressed.

To allow for a broad-based analysis of the interactions of variables like these in students' success requires an instrument by which researchers can assess and evaluate them. However, no scales have yet been developed by which to evaluate challenge and resiliency factors among poor/working-class college students. The proposed study represents an initial attempt toward the creation of such an instrument. Although no one study can fully establish the validity and usefulness of any scale, this proposed research study is a first in a potential series of studies that will examine the validity and usefulness of the Poor/Working-Class College Students' Challenges and Resiliency Factors Scale (P/W-CRS).

With a comprehensive measure to gauge challenges and resiliency factors, researchers and counselors working with college students will ultimately be able to better understand the unique experiences of poor/working-class college students. The following section will delve into the formal creation of the measure and specifically outline steps that will be taken to generate a psychometrically sound instrument.

### **Chapter 3: Method**

This study represents the first stage in the creation of an instrument to be used in the assessment of variables representing challenge and resiliency factors in the success of students from low-income backgrounds. Although no such instrument currently exists, a model for its creation exists in the example of an analogous scale that was recently developed with regard to race-related resilience: the Multiracial Challenges and Resilience Scale (MCRS; Salahuddin & O'Brien, 2011).

#### The MCRS

Nazish M. Salahuddin and Karen M. O'Brien's (2011) Multiracial Challenges and Resilience Scale (MCRS) inspired the development of the proposed study. The MCRS was designed to measure the challenges and resiliency experiences of multiracial people using a psychological measure. Salahuddin and O'Brien reviewed theoretical and empirical research. Additionally, they conducted a focus group using adults who identified as multiracial in order to develop themes of the challenges multiracial people face and protective factors used to foster resiliency. Four themes were generated for challenges (perceived racism, social invalidation, negative psychological outcomes, and multiracial hassles), and two themes were generated for resiliency factors (enhanced social functioning and positive psychological outcomes). One hundred and nine items were generated based on these six themes, which four expert raters reduced to 74 (25 challenges and 49 resiliencies). The authors reported having retained more resiliency items because of the limited resiliency information known regarding multiracial adults. They hypothesized that psychological health, social connectedness, and ethnic identity would

correlate to the challenges and resiliency factors; the challenges would positively correlate with one another, and income and education would not relate to the challenges. Using an internet sample of urban, multiracial adults, the MCRS challenges and resiliency items were administered to 317 participants along with a demographic questionnaire and the following scales: Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965), Center for Epidemiological Studies-Depression Scale (CES-D; Radloff, 1977), the Social Connectedness Scale (SCS; Lee & Robbins, 1995), and the Ethnic Identity scale on the Multigroup Ethnic Identity Measure (MEIM-EI; Phinney, 1992). Participants were instructed to rate the challenge items (e.g. "I told someone about my racial background(s), but they did NOT believe me") on a scale of 0 (This never happened to me) to 5 (This happened, and I was extremely upset about it). Then participants were asked to rate the Resiliency items (e.g. I love being multiracial) on a scale from 0 (strongly disagree) to 5 (strongly agree).

After conducting an exploratory factor analysis (EFA) on the challenge and resiliency items, six factors were identified (Others' Surprise and Disbelief Regarding Racial Heritage, Lacking of Family Acceptance, Multiracial Discrimination, Challenges with Racial Identity, Appreciation of Human Differences, and Multiracial Pride), and 30 items were identified according to the highest factor loadings. Next, a confirmatory factor analysis (CFA) was conducted and the 30-item, 6-factor model was found to be a good fit (RMSEA = .057, 90% CI [.051, .063]; SRMR = .07; CFI = .88) for the data. In addition, the researchers interpreted the relationships between the MCRS factors and the psychological scales as showing construct and discriminant validity, in that patterns were shown that were consistent with the researchers' hypotheses.

Finally, a second study was conducted to evaluate whether exposure to racist events and the distress related to those events would correlate with the MCRS items. First, the authors hypothesized that the items under challenges would show positive associations with the number of observed racist events and an increase in distress related to the events. Second, it was hypothesized that the resiliency items would not correlate to either the number of racist experiences or the distress from the events. Using 172 multiracial adults, participants were administered the initial 74 MCRS items along with a demographic questionnaire (age, gender, race/s, mother's and father's races, location, sexual orientation, education, and income) and the Racism Experiences subscales of the Racism and Life Experiences Scale (Harrell, 1997). A CFA was conducted using the items identified by the first study's factor analysis, which suggested that the 30-item, six-factor model was a reasonably good fit (RMSEA = .068, 90% CI (.058, .074); SRMR = .08; CFI = .86) for this new set of data; the researchers also reported adequate internal consistency (α = .67).

## **P/W-CRF Item Development**

Creation of initial item pool. The development of an item pool most often begins with a theory-driven conceptualization of the area(s) to be assessed (DeVellis, 2003; Worthington & Whittaker, 2006). As outlined in Chapter 2, challenges were defined for this study as the individual, environmental, and systematic experiences of class-related barriers and discrimination that potentially disrupts poor/working-class college students' psychological functioning. Resiliency factors were defined as the protective elements that potentially buffer against adverse experiences and thereby optimize positive outcomes. Five areas were preliminarily theorized to encompass relevant challenges and resiliency factors: finances, communication, academic cultural navigation, relationships, and dual-class identity.

A large pool of items was assembled to reflect these challenge and resiliency factors (DeVellis, 2003; Worthington & Whittaker, 2006). DeVellis (2003) suggested creating about three or four times the number of items desired in the scale in order to have more options to use in the final review of the items. Therefore, a total of 135 items were generated by the author from the theoretical, empirical, and autobiographical literature.

Likert scales were provided to participants for the purpose of rating these items. The items representing challenges were matched with a Likert scale measuring frequency ranging from 1 (This never happened to me) to 6 (This happened to me more than 10 times) and the distress measure ranging from 1 (Not at all distressed) to 6 (Extremely distressed). Regarding the resiliency factors, the Likert scale ranged from 1 (Strongly disagree) to 6 (Strongly agree).

Reduction of the initial item pool. The items were presented to a counseling psychology research team of masters and doctoral students (along with the faculty supervisor) who conduct research in the areas of social class and exclusion. Team members were asked to review items for relevance and clarity. Based on the feedback received, the item pool was reduced to 117 items. Next, two doctoral students who have worked in college counseling centers independently reviewed the items for relevance and clarity, which further reduced the pool of items to 109. Afterward, two educators who identified as growing up in a poor/working-class community, attending college, and who are currently working in a poor/working-class neighborhood also reviewed the items and reduced them to 101 items. (See Appendix A).

#### **Procedures**

Participants responded to an online questionnaire via the online survey platform

Qualtrics. The link was distributed in person and online to individuals, groups, forums, and

organizations of people that might potentially be interested in participating. Social media and snowballing were used until the number of desired participants was obtained.

The survey administration portion of the study was open to low-income students enrolled in four-year colleges in the United States who identified as 18 years old or older. In order to identify a sample corresponding to students from low-income backgrounds, the study's recruitment materials indicated that participants were eligible if their families received governmental assistance (e.g. food stamps, WIC, SNAP, Medicaid etc.) at some point in their lives, and/or self-identified as growing up in a community or family that was considered working-class or poor, and/or were first-generation college students (none of the person's parents/legal guardians attended college). The recruitment e-mail announcement can be found in Appendix B.

Personal identifying information was not required for participation in the study beyond the information requested in the demographic questionnaire, which will be detailed in the following section. The principal investigator numerically coded surveys; codes were not related to any actual identifying information. Data was temporarily stored in a Qualtrics database as data was collected. After the completion of the data collection, the information was downloaded on a password-protected computer, which was only accessible by the principal investigator. At the end of the study, participants had the option of providing their email address to be submitted for a raffle to win a \$50 Amazon gift card. This information was collected using a separate Qualtrics link and was kept separate from the study data collected. After the prize was offered, email addresses were deleted.

### **Measures**

**Demographic questionnaire**. The demographics questionnaire elicited participants' information regarding age, gender, race, ethnicity, self-reported social class background, parents or guardians' educational level, college or university, year in college, transfer status, reason for transfer, and location of housing (on or off campus). Respondents who did not meet the criteria for participation were directed to an exit page.

Self-esteem. The Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) is a 10-item measure of self-esteem. Response items range from 1 (strongly disagree) to 4 (strongly agree). Higher scores indicate higher self-esteem. Some examples of items are: "I feel I do not have much to be proud of" and "On the whole, I am satisfied with myself". The RSE was originally designed to be used with high school students; however, it has been used with college-age students and adults in research (e.g. Robins, Hendin, Trzesniewski, 2001). Cronbach alpha has been sited as .88 for American adults (Schmitt & Allik, 2005). Robins, Hendin, and Trzesniewski (2001) found a high correlation between the RSE and the Single-Item Self Esteem Scale (SISE), showing convergent validity in a sample of adults. (See Appendix C).

**Depression**. The Center for Epidemiologic Studies Depression Scale (CES-D; Herrero & Meneses, 2004) was developed for the purpose of exploring the general population's current levels of depressive symptomology. The 20 items were extracted from validated depression scales (e.g. Beck, Ward, Mendelson, Mock & Erbaugh, 1961; Raskin, Schulterbrandt, Reatig, & McKeon, 1969; Zung, 1965) (Radloff, 1977). Radloff (1977) reported high internal consistency for the scale (Spearman-Brown, split-halves method = .85). The longer version was turned into a seven-item version (Herrero & Meneses, 2004) with item responses rated on a 4-point scale: 1 (rarely or none of the time, less than once a week) to 4 (most or all of the time, 5-7 days a week). Higher scores indicate more depressive symptoms. The brief version encompassed items

corresponding to dysphoric mood ("I felt that I could not shake off the blues even with the help from my family or friends", "I felt depressed", and "I felt sad") and one item for each of the main themes: motivation ("I felt everything I did was an effort"), concentration ("I had trouble keeping my mind on what I was doing"), pleasure ("I enjoyed life"), and poor sleep ("My sleep was restless") (Herrero & Meneses, 2004). Herrero and Meneses (2004) reported a Chronbachs' alpha of 0.82. (See Appendix D).

Stress. Cohen, Kamarck, and Mermelstein's Perceived Stress Scale (PSS; 1983) is a widely-used instrument dedicated to measuring the level people experience their lives as stressful. It was normed using college students living on campus. The measure consists of 14 items, which are rated from 0 (never) to 4 (very often). Respondents are asked to rate items based on their experiences over the last month. Examples are: "How often have you felt nervous and stressed?" and "How often have you been angered because of things that happened that were out of your control?". Coefficient alpha reliability was reported to be .84 and .85 for the two college samples used in the study. The test-retest correlation was .85. It also showed convergent validity with the number of stressful life events and the measure predicted physical symptomology. (See Appendix E).

**Resiliency**. The Conner-Davidson Resilience Scale (CD-RISC)- short version is a 10-item measure of resiliency developed by Campbell-Sills and Stein (2007). The measure is based on Conner and Davidson's (2003) original CD-RISC, a 25-item scale of resiliency. The short version is on a 5-point rating scale from not true at all (0) to true nearly all of the time (4). Examples of the items are "Able to adapt to change," "Coping with stress can strengthen me," and "Thinks of self as a strong person". Campbell-Sills and Stein reported the short version to have an alpha value of .85 and a good model fit,  $X^2$  (35) = 176.10, p < .001, RMSEA = .050,

90% CI = .043-.057, CFit = 0.50, SRMR = .028, CFI = .97, determinacy = .93. They also noted that scores of the short version were highly correlated with scores from the original scale (r = .92). (See Appendix F).

Classism. Langhout, Rosselli, and Feinstein's (2007) The Classism Experiences

Questionnaire-Academe (CEQ-A) was developed to measure the internalized experiences of
classism of college students. The CEQ-A is a 22-item measure, which are rated on a 5-point
Likert scale (1- Never to 5-Many Times). The items are prefaced with the statement, "During
your time at college, have you been in situations where...". Some examples of items are as
follows: "You could not take a class (e.g., music, science, film) because you could not afford the
fees for the class (for materials, travel, etc.)?", "Told stories or jokes about people who are
poor?", and "Were dismissive of your financial situation?". One additional item at the end
states, "During your time at college, were you ever in a situation where any college students or
professors harassed or discriminated against you because of your socio-economic class?".

Langhout, Rosselli, and Feinstein noted the single item was used to determine if participants
related their experiences to classism. The authors reported the measure to be a good fit for it's
three factor model (institutionalized classism, citational classism, and interpersonal via
discounting) (CFI= .97; TFI = .99; RMSEA= .05; RSMR = .07). (See Appendix G).

Social Desirability. The Marlow-Crowne Social Desirability Scale 10-item (M-C 1[10]) Short Version (Strahan & Gerbasi, 1972) is used to assess whether participants are responding to items based on socially accepted answers. It was developed from Crowne and Marlowe's (1960) 33-item scale. Higher scores represent participants who are responding in a more socially acceptable manner. Strahan and Gerbasi (1972) reported the M-C 1(10) is about as reliable as the original version with correlates between the short and the long version in the .80s and .90s.

The Kuder-Richardson (K-R) was reported as .70 for university males and .66 for university females. (See Appendix H).

### **Participants**

A total of 843 people logged on to the online study. During the preliminary analysis, those who completed the survey in its entirety were separated from those who did not. Of those who completed the survey, five participants were removed from the analysis, because they did not meet eligibility criteria. Two hundred and fifty three met inclusion criteria and completed the instruments in their entirety. Missing data for items to be used in the factor analyses ranged from 1.6% to 8.3% and missing dependent items ranged from 0% to 2%.

Participants' (*N*=253) ages ranged from 18 to 51 years of age with a mean of 20.4 (*SD* = 4.26). One hundred and five participants identified as female/woman (73.1%), 59 participants identified as a male/man (23.3%), seven as other (2.8%), and two did not respond (0.8%). Eighty one participants identified their race as Hispanic/Latino(a) (32%), four as Native American/American Indian (1.6%), 76 as White/Non-Hispanic/European American (30%), 43 as Asian/Asian American/Pacific Islander (17%), 27 as Black/African American (10.7%), 17 as Bi/Multiracial (6.7%), and four as Other (1.6%). Fifty-eight different ethnicities were identified by the participants, which can be found in Table 1.

The sample of participants was mainly made up of first (73; 28.9%), second (64; 25.3%), or third (55; 21.7%) year students. The majority of participants reported high school (116; 45.8%) or some college (49; 19.4%) to be one of their parent/guardian's highest level of education, while high school (107; 42.3%) or middle school (26; 10.3%) tended to be the highest level of education for a second parent/guardian.

Participants were asked to identify the university or college in which they were currently enrolled, and a total of 69 institutions were represented within the sample. This information was compared with The Carnegie Classification of Institutions of Higher Education, which is a classification system developed in 1970 to categorize colleges and universities (Center for Postsecondary Research Indiana University School of Education, 2015). Seventy participants reported being enrolled in a public institution (27.7%), while 171 participants reported being from a private institution (67.6%). In regards to size of school, "very small" is defined by the classification system as having fewer than 1,000 degree-seeking students, "small" is 1,000-2,999 students, "medium" is 3,000-9,999 students, and "large" is at least 10,000 students. The majority of participants reported being enrolled in large schools (135; 53.4%)

Of the participants, 206 indicated they had not transferred from a different school (81.4%), while 41 declared they had transferred (16.2%). Thirty-nine participants listed reasons they chose to transfer and the majority of responses fell into the categories of having graduated from a community college (15; 39%), academic reasons (7; 17%), or unhappiness (6; 15%). Demographic information of participants can be found in Table 1.

#### Attrition

Of the participants who identified as poor/working-class/low-income at the start of the study, 272 did not complete the survey in its entirety. Overall, the majority of people who did not complete the survey identified similarly to those who completed the survey: the majority were Latinas who were 18-20 years of age. They reported parents whose highest level of education was high school, and were first-year students enrolled in a large private university.

## **Chapter 4: Results**

# The Current Study: Analyzing the P/W-CRF

An exploratory factor analysis (EFA) was first used to identify the potential underlying structure within the item pool, which was followed by a confirmatory factor analysis (CFA) to confirm the pattern of relationships predicted by the EFA (DeVellis, 2003). Next, correlational analyses were used to explore the distress associated with the items as well as convergent and divergent validity. Overall, it was hypothesized that the challenge items would show convergent validity with the depression, stress, and classism scales and divergent validity with the self-esteem scale. The resiliency items were hypothesized to show convergent validity with the self-esteem and resiliency scales and divergent validity with the depression and stress scales. It was also hypothesized the challenge items would not be associated with the social desirability scale. Correspondingly, the current study's analyses involved the following steps, which will be explicated in the subsequent sections: 1) Section I: Factor Analysis; 2) Section II: Validity; and 3) Section III: Distress Scales.

Before the factor analyses, Pearson's chi-square tests were used to analyze the attrition of participants. No significant association was found between participant attrition and gender,  $X^2$  (2) = .07, p > .05, race,  $X^2$ (6) = 4.47, p > .05, 1st parent's highest level of education,  $X^2$ (6) = 1.27, p > .05, 2nd parent's highest level of education,  $X^2$ (7) = 2.42, p > .05, year in college,  $X^2$ (6) = 2.15, p > .05, transfer status,  $X^2$ (1) = .09, p > .05, or location of housing,  $X^2$ (1) = 1.25, p. > .05. In comparison, Pearson's chi-square tests did find significant relationships between attrition with the type of institution (public or private),  $X^2$ (4) = 731.49, p < .01 and size of institution,  $X^2$ (8) = 731.42, p < .01. Participants who left the study were more likely to have been enrolled in large private institutions.

### **Section I: Factor Analysis**

**Preliminary analysis.** Prior to running the factor analysis, the potential factorability of the data was examined with regard to both the challenges and resilience items. Pairwise deletion was used to manage missing data.

*Challenges*. A correlation matrix was created for the frequency of challenges items. Of the items displayed there were some correlates of r = .3 or greater. Next, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was found to be significant, KMO = .92 as well as the Bartlett's Text of Sphericity,  $X^2(1711) = 7963.27$ , p = .00.

**Resilience**. A correlation matrix was created for the frequency of challenges item. Of the items displayed there were some correlates of r = .3 or greater. Next, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was found to be significant, KMO = .86 as well as the Bartlett's Text of Sphericity,  $X^2(861) = 4349.02$ , p = .00.

**Exploratory factor analysis**. Specifically, a form of EFA called Principal Components Analysis (PCA) was utilized as a means of establishing a manageable number of new variables that contained the most information from the groupings of items.

Extracting challenges factors. Kaiser's criterion was used to extract components with eigenvalues greater than 1.0. According to the eigenvalues, 13 factors explained 67.27% of the variance. Individual eigenvalues and variances can be found in Table 3. Next, a screeplot, found in Figure 1, was examined, which suggested a 4-, 5-, or 6-factor solution, accounting for 46.8%, 49.82%, and 52.47% of the variance, respectively. Next, four PCA factor analyses with promax rotations (oblique) were computed (4, 5, 6, and 13 factors were extracted). Highest loading items, cross loadings, and percent of variance explained were examined between these four groups. A four-factor solution was determined and the top five items on each factor were

retained, resulting in a 20 item, four-factor model. Each of these items loaded above .50 on a single factor and below .032 on more than one factor. Table 4 identifies the loadings for each challenge item. The following four factors were identified and interpreted by the researcher: a) *Isolation from Peers*, which assessed the experience of feeling isolated or different from peers ( $\alpha = .85$ ); b) *Financial Strain*, which examined the financial strain of being at college ( $\alpha = .77$ ); c) *Family Connection*, which corresponded to the connection students feel with their families ( $\alpha = .85$ ); and d) *Comparison to Peers*, which assessed feeling different compared to peers ( $\alpha = .83$ ).

The entire 20-item, four-factor Challenges model exhibited adequate internal consistency reliability ( $\alpha$  = .91). On a challenge scale ( $\leq$  14 = low levels, 15-22 = moderate levels, and  $\geq$  23 = high levels), participants reported moderate levels of Isolation from Peers, M = 16.26, SD = 6.91 and Comparison to Peers, M = 16.99, SD = 7.00. Responses were in the low levels for Financial Strain, M = 10.22, SD = 5.28 and Family Connections, M = 11.85, SD = 7.3. Table 5 outlines the means, standard deviations, and reliability coefficients for the challenge factors.

The correlations were examined to assess the association between the Total Challenge scale and the individual factors with participants' demographic information. It was found that participants from private institutions reported more challenges regarding Isolation from Peers, Family Connection, and Comparison to Peers. Participants who had more years in college had a greater likelihood of reporting challenges in the Total Challenge Scale, Isolation from Peers, Financial Strain, and Comparison to Peers. Those who lived off campus reported more challenges in Financial Strain. Table 6 presents details regarding demographics and reported challenges.

*Extracting resilience factors*. Kaiser's criterion was used to extract components with eigenvalues greater than 1.0. According to the eigenvalues, 11 factors explained 65.80% of the

variance. Individual eigenvalues and variances can be found in Table 3. Next, a screeplot, found in Figure 2, was examined, which suggested an 8- or 11- factor solution, accounting for 58.10% or 65.80% of the variance. Next, two PCA factor analyses with promax rotations (oblique) were computed (8- and 11- factors were extracted). Highest loading items, cross loadings, and percent of variance explained were examined between these two groups. An eight-factor solution was determined and the top three item loadings were extracted. Each of these items loaded above .51 on a single factor and below .52 on more than one factor. Table 7 identifies the loadings for each resilience item. The following eight factors were identified and interpreted by the researcher: a) Belonging, which assessed the experience of feeling comfortable and connected with peers on campus ( $\alpha = .83$ ); b) *Mentorship*, which focused on the experience of having a mentor on campus ( $\alpha = .81$ ); c) Communication, which examined the experience of communicating with others on campus ( $\alpha = .85$ ); d) Finances, which focused on the experience of having the monetary resources to cover expenses ( $\alpha = .70$ ); e) External Resources, which the assessed the opportunities to learn about college and interact with college students ( $\alpha = .67$ ); f) Social Class Teachings, which evaluated the teachings and values students learned through their social class experiences ( $\alpha = .69$ ); g) Family Connection, which considered the experience of feeling connected to and support by family members ( $\alpha = .69$ ); and i) *Identification and Awareness*, which concentrated on the experiences of understanding and being aware of one's social class identity ( $\alpha = .65$ ).

The entire 24-item, eight-factor resilience model exhibited adequate internal consistency reliability ( $\alpha$  = .86). On the resilience scale ( $\leq$  3 = low levels, 9-13 = moderate levels, and  $\geq$  14 = high levels), participants reported moderate levels of resilience for Belonging, M = 12.98, SD = 3.56, Mentorship, M = 9.35, SD = 4.40, Communication, M = 12.65, SD = 3.63, Finance, M =

9.8. 65, SD = 4.01, External Resources, M = 12.71, SD = 3.50, and Identification and Awareness, M = 13.21, SD = 3.19. Participants reported high levels of resilience for Social Class Teachings, M = 14.86, SD = 2.81 and Family Connections, M = 14.19, SD = 3.39. Table 5 outlines the means, standard deviations, and reliability coefficients for the resilience factors.

The correlations were examined to assess the association between the Total Resilience scale and factors with participants' demographic information. It was found that participants whose parents held higher degrees of education were more likely to have resilience in Family Connection. Students from private institutions reported more resilience in the areas of Finances and External Resources. Those participants from smaller institutions showed more resilience according to the Total Resilience Scale, Belonging, Mentorship, and Identification and Awareness. Participants with fewer years in school reported more resilience in the Total Resilience Scale, Belonging, Mentorship, Finances, and Family Connection. Participants who transferred between institutions reported less resilience in the Total Resilience Scale, Belonging, Mentorship, Finances, External Resources, and Family Connection. Lastly, those who reported living on campus reported higher levels of resilience in the Total Resilience Scale, Mentorship, Finances, and Family Connection. Further details are displayed in Table 8.

Confirmatory factor analysis. Hypotheses generated from the EFA were tested for model fit through the construction of a challenge and resilience measurement model. Mplus (Muthen & Muthen, 2015) was used to estimate the fit of the model to the data via a confirmatory factor analysis (CFA) procedure. Missing data was coded as 999. Model fit was assessed via several indices including chi-square (Schumacker & Lomax, 2004), root-mean-square error of approximation (RMSEA) (Byrne, 1998; Hu & Bentler, 1999; Steiger, 1990), standardized root-mean-square residual (SRMR) (Kline, 2015), and the comparative fit index

(CFI) (Bentler, 1990).

The chi-square statistic is commonly used in structural equation modeling to indicate the statistical significance of the theoretical model. A value of zero indicates a perfect fit or in other words, a non-significant chi-square value indicates that the theoretical model fits the sample data (Schumacker & Lomax, 2004). Other goodness-of-fit statistics were selected based upon the guidelines reported by Byrne (2010), Hu and Bentler (1999), Kline (2015), and Garsen (2013). For the RMSEA values, Hu and Bentler suggested a good fit value to be approximately  $\leq$  .06, while Byrne indicated that values < .08 represent a reasonably good fit. For the SRMR value, Hu and Bentler indicated a good fit to be  $\leq$  .08. For the CFI, Hu and Bentler considered values  $\geq$  .95 to represent a good fit and Garsen suggested a cutoff of .90 indicated a marginal fit.

*CFA: Challenge model.* The results of the CFA conducted using the 20-item, four-factor challenge model were as follows:  $X^2$  (164) = 281.53, p < .001; RMSEA = .05, 90% CI [.04 - .06]; SRMR = .05; CFI = .94. Taken together, these values suggest a good fit. The  $X^2$  was statistically significant, however, Schumacker and Lomax (2004) noted that the chi-square statistic is affected by sample size. Specifically, samples above 200 have a tendency to produce a significant probability level. Noting this qualification, the remaining indices indicate a good fit between the proposed model and the sample data.

Factor loadings or parameter estimates can be interpreted as validity coefficients, estimating how accurately the items measure the latent construct (Schumacker & Lomax, 2004). In examining the standardized parameter estimates, also known as factor loadings, all critical values appeared statistically significant (p < .001), with a range from .40 to .86. The standardized residual variance values fell between .25 and .84, which indicated that additional factors may be unaccounted for by the model. The R-square values provide information on how

much variance is explained by the variables and ideally should be > .50 for each item (Schumacker & Lomax, 2004). These values ranged from  $R^2 = .16$  to  $R^2 = .74$ , indicating some variation in the reliability of the items. The factor loadings, residual variances, and the  $R^2$  values for the sample are presented in Table 9 and Figure 3.

*CFA: Resilience model.* Fit indices for the 24-item, eight-factor resilience model were as follows:  $X^2$  (224) = 470.34, p < .001; RMSEA = .07, 90% CI [.06-.07]; SRMR = .07; CFI = .88. Taken together, these values suggest a poor fit. The  $X^2$  was statistically significant, however, as previously mentioned; the statistic tends to produce a significant level for larger sample sizes (Schumacker & Lomax, 2004). The CFI's value suggested a poor model fit. Kenny and McCoach (2003) found that CFI tended to decrease as the number of variables in the model increased, which may have influenced the value, and Kline (2015) noted that CFI tends to decrease in large samples.

All standardized factor loadings were statistically significant (p < .001), with a range from .48 to .89. The standardized residual variances values fell between .21 and .77, which indicated that additional factors may be unaccounted for by the model. The  $R^2$  values ranged from  $R^2$  = .23 to  $R^2$  = .79, indicating some variation in the reliability of the items. The standardized factor loadings, standardized residual variances, and the  $R^2$  values for the sample are presented in Table 10 and Figure 4.

**Post hoc analysis: Principal axis factoring.** A Principal axis factoring (PAF) procedure was conducted on both the challenge and resilience items to determine if using this alternative factoring method would affect the results. No differences were observed for the challenge items or the resilience items.

Post hoc analysis: Parallel analysis. Horn's (1965) Parallel analysis (PA) is another procedure related to factor analysis, and is based on the creation of random variables. PA compares the eigenvalues extracted during the factor analysis with those obtained from uncorrelated normal variables. This is considered a Monte Carlo, or probability, simulation process. Using sample size and the number of variables, expected eigenvalues are obtained by simulating random samples that parallel the observed data. Through PA, a factor is retained if the relevant eigenvalue is larger than the mean of those obtained from the expected eigenvalues. Using Watkins' (2000) Monte Carlo PCA for Parallel Analysis computer software, a PA was conducted on the challenge and resilience items. Results are presented in Table 11. Similar to the previous factor extraction methods, the PA suggested a 4-factor solution for the challenge. The PA suggested a six-factor solution for the resilience scale.

Six-factor resilience scale. Based on the PA's six-factor solution, a PCA and CFA were conducted to determine if this structure would have a better fit to the data than the previously developed 8-factor solution. First, a six-factor PCA with promax rotations was computed and the top three items on each factor were retained, resulting in an 18-item, six-factor model. Each of these items loaded above .54 on a single factor and below .69 on more than one factor. Table 12 identifies the loadings for each challenge item. The following six factors were identified and named as follows: a) *Belongingness*, which assessed for feelings of connection and belonging on campus ( $\alpha = .85$ ); b) *Mentorship*, which focused on the experience of having a mentor on campus ( $\alpha = .78$ ); c) *Family Connection*, which considered the experience of feeling connected to and supported by family members ( $\alpha = .78$ ); d) *Finances*, which stressed the experiences of having the monetary resources to cover experiences ( $\alpha = .70$ ); e) *Communication*, which concentrated on the experience of understanding and being aware of one's social class identity ( $\alpha$ 

= .85), and f) a subscale without clear conceptual unity which will be called *Actively Adapting* and *Navigating*; it corresponded in part to the internal and external ways of adapting to and navigating campus ( $\alpha$  = .60).

The entire 18-item, six-factor resilience model exhibited strong internal consistency reliability ( $\alpha$  = .83). On the resilience scale ( $\leq$  6 = low levels, 7-11 = moderate levels, and  $\geq$  12 = high levels), participants reported moderate levels for Mentorship, M = 8.43, SD = 4.70 and Finances, M = 10.93, SD = 4.12. Participants reported high levels of resilience for Belonging, M = 12.88, SD = 3.61, Actively Adapting and Navigating, M = 13.67, SD = 3.12, Family Connection, M = 14.19, SD = 3.39, and Communication, M = 12.65, SD = 3.63. Table 13 outlines the means, standard deviations, and reliability coefficients for the resilience factors.

The results of a CFA performed on the 18-item, six-factor resilience model were as follows:  $X^2(120) = 221.42$ , p < .001; RMSEA = .06, 90% CI [.05-.07]; SRMR = .06; CFI = .94. The six-factor solution RMSEA suggests a good fit. Although still not a good fit overall, the CFI is slightly improved in the six-factor solution.

All standardized factor loadings were statistically significant (p < .001), with a range from .34 to .89. The standardized residual variances values fell between .21 and .88, which indicated that additional factors might be unaccounted for by the model. The  $R^2$  values ranged from  $R^2$  = .12 to  $R^2$  = .79, indicating some variation in the reliability of the items. The standardized factor loadings, standardized residual variances, and the  $R^2$  values for the sample are presented in Table 14.

The correlations were examined to assess the association between the six-factor

Resilience scale and factors with participants' demographic information. It was found that

participants whose parents held higher degrees of education were less likely to have resilience in

Mentorship and Family Connection. Students from private institutions reported more resilience in the areas of Actively Adapting and Navigating and Finances. Those participants from smaller institutions showed more resilience according to Belonging. Participants with fewer years in school reported more resilience in the Total Resilience Scale, Mentorship, Family Connection, and Finances. Participants who transferred between institutions reported less resilience in the Total Resilience Scale, Belonging, Mentorship, Actively Adapting and Navigating, Family Connection, and Finances. Lastly, those who reported living on campus reported higher levels of resilience in the Total Resilience Scale, Family Connection, and Finances. Further details are displayed in Table 15.

# **Section II: Validity**

**Preliminary analysis.** Before assessing convergent and divergent validity of the outcome variables, preliminary analyses were conducted to check for assumptions of multivariate normality to discern whether accurate information could be drawn from the data (Field, 2009). First, the potential for multicollinarity was examined via a correlation matrix of all dependent variables to detect correlations in the vicinity of .90 (Field, 2009). The correlations did not show evidence of potential multicollinarity. Second, the Shapiro-Wilk statistic was used to compare the variables to a normally distributed set of scores with the same mean and standard deviation. The residuals for the PSS, W(243) = .99, p >.01 were not significantly different from a normal distribution, suggesting a possible deviation from normality. However, based on the population examined, it is expected that the levels of stress may deviate from a normal distribution.

Next, histograms were examined for skew and kurtosis. The three CEQ-A (classism) scales were positively skewed, suggesting a possible non-normal distribution. However, this result can be expected based on the population measured in this study. Levene's Test of

Homogeneity of Variance was conducted to test whether the variances were significantly different for men and women and it was found that all variances were significantly equal for all dependent variables, suggesting Homogeneity of Variance was not violated.

Finally, box-plots were examined for outliers, which were found to exist in in the CDRS (depression), MC-SDS (social desirability), and PSS (stress) variables. Each outlier was examined to assess the possibility that it should be removed from the data (Field, 2009). Regarding the CDRS outlier, the participant appeared to respond to all items indicating low feelings of resilience and the outlier for the MC-SDS appeared to be a result of the participant not completing the full scale. The PSS outliers indicated some participants had low and high feelings of stress, which is possibly based on the variation of feelings the participants experienced. Overall, there was no clear indication that these outliers were not representative of the lived experiences of the participants, and they were therefore not removed from the dataset.

**Validity.** Correlations between the P/W-CRF with previously validated scales were conducted to provide information regarding convergent validity, divergent validity, and criterion validity. The following describes the validity of the factors and overall scales. These correlations are displayed in Tables 16 and 17.

Among the challenge factors and whole scale, all were negatively and significantly related with the self-esteem scale and positively and significantly related with the depression, stress, and classism scales. All factors were negatively related to the social desirability scale, however, only the Total Challenge Scale and Financial Strain factor were significantly correlated with the scale. All factors were also negatively correlated with the resilience scale, however; only Isolation from Peers was significantly related to the scale. All correlations were in the directions predicted by the hypotheses. More detailed information can be found in Table 16.

Among the resilience factors and the whole scale, all were positively related with selfesteem and negatively related with depression and stress. However, the External Resources
factor was not significantly related to depression or stress and the Social Class Teachings factor
was not significantly related with depression. In regards to social desirability, all factors were
positively related, yet the Communication, External Resources, and Family Connection factors
were not found to be statistically significant. All classism scales were negatively correlated with
the resilience factors; however, the External Resources and Family Connection factors were not
found to be significant. The Communication factor was also not significantly related to the
Interpersonal Classism scale. All factors were found to be positively correlated with a previous
resilience scale, yet the Mentorship and Family Connection factors were not significant. All
correlations were in the directions predicted by the hypotheses. More detailed information can be
found in Table 17.

Post hoc analysis. Similar correlational analyses were conducted with the six-factor resilience model and previously validated scales. Among the resilience factors and the whole scale, the majority were positively related with self-esteem and negatively related with depression and stress. The Actively Adapting and Navigating factor was an exception, indicating a non-significant positive correlation with the stress scale. This factor also did not display a significant relationship to the self-esteem or depression scales. In regard to social desirability, all factors were positively related, yet Belonging, Actively Adapting and Navigating, Family Connection, and Communication were not found to be statistically significant. With the exclusion of the Actively Adapting and Navigating factor, all classism scales were negatively correlated with the resilience factors. The Communication factor was also not significantly related to the Interpersonal Classism scale. Actively Adapting and Navigating displayed a

significant positive correlation with the Citation classism scale and a non-significant correlation with the Interpersonal classism scales; the Institutional Classism scale was found to have no correlation with this factor. All factors were found to be positively correlated with a previous resilience scale, yet the Mentorship and Family Connection factors were not significant. More detailed information can be found in Table 18.

#### **Section III: Distress Scales**

Having proposed the existence of four challenge factors, it is possible to assess the degree of distress associated with each item. On a scale of 5 to 30, participants reported moderate levels of distress for Isolation from Peers, M = 14.91, SD = 6.87. Participants reported low levels of distress for Financial Strain, M = 11.95, SD = 6.15, Family Connection, M = 10.72, SD = 6.45, and Comparison to Peers, M = 12.79, SD = 6.32. All challenge factors were found to be highly correlated with their corresponding distress factors, Isolation from Peers, r(205) = .86, p < .00, Financial Strain, r(194) = .91, p < .00, Family Connection, r(191) = .89, p < .00, and Comparison to Peers, r(209) = .79, p < .00.

The correlations were examined to assess any associations between the corresponding factors with demographic information. It was found that participants who reported attending private institutions were more likely to have higher levels of distress in the categories of Isolation from Peers, Family Connection, and Comparison to Peers. The higher year the participants were in college, the more likely they were to experience distress in the overall scale as well as in the categories of Isolation from Peers and Financial Distress. More details can be found in Table 19.

**Post hoc: Regression analysis**. Regression analyses were used to assess the relationship of variables to Isolation from Peers, the highest distress factor. Preliminary analyses were

conducted to insure that no violation of the assumptions of normality, linearity, and multicollinearity occurred. The Financial Strain and Comparison to Peers challenge factors explained 37%, F(2, 200) = 58.78, p < .00, of the variance from the distress factor. Taken together, the 8-factor resilience model using factors of Communication, Finances, and External Resources explained 21% of the variance, F(3,185) = 16.15, p < .00. Next, the resilience factor of Belongingness (eight-factor model) explained 8.0% of the variance, F(1,195) = 17.36, p < .00. When year in college was added to the Belongingness factor (eight-factor model), they explained 11.4% of the variance, F(2,194) = 12.47, p < .00. Table 20 includes further details.

In using the factors from the six-factor model of resilience, similar results were found. The resilience factors of Communication and Finance explained 11% of the variance, F(2, 193) = 12.36, p < .00. Next, the resilience factor of Belongingness explained 7.0% of the variance, F(1, 196) = 14.51, p < .00. When year in college was added to the Belongingness factor, they explained 10% of the variance, F(2,195) = 11.27, p < .00. Table 20 includes further details.

## **Summary of Findings**

The initial development of the P/W-CRF Scale used a sample of 253 college students who identified as coming from a poor/working-class background. Through an EFA, two scales were generated. First, the challenge scale was a 20-item, four-factor scale with an overall  $\alpha$ = .91 and with individual factors ranging between  $\alpha$  = .77 to  $\alpha$ = .85. Second, the resilience scale was a 24-item, eight-factor scale with an overall  $\alpha$ = .86 and with individual factors ranging between  $\alpha$  = .65 to  $\alpha$  = .85. A CFA procedure suggested that the challenge model was a good fit to the data, while the resilience model was a poor fit. In examining convergent and divergent validity, the overall challenge scale was found to show convergent validity with the depression, stress, and classism scales, and divergent validity with the self esteem and social desirability scales. The

resilience scale demonstrated convergent validity with the self esteem and resilience scales and divergent validity with the depression and stress scales. In addition, distress levels were found to be low to moderate for each of the challenge scale factors. The highest distress factor, Isolation from Peers, was also found to show significant relationships to various challenge and resilience factors as well as demographics characteristics.

In an effort to explore a stronger fit for the challenge and resilience models, post hoc analyses using a PA for a factor extraction was conducted. Similar to the previous analyses, a four-factor solution was suggested for the challenge model, while a six-factor solution was suggested for the resilience model. Using a PCA 18-item, six-factor model was computed with an overall  $\alpha$  = .83 and with individual factors ranging between  $\alpha$  = .60 and  $\alpha$  = .85. A CFA procedure suggested the six-factor solution suggested a slightly improved fit from the eight-factor model. The overall six-factor resilience scale demonstrated convergent validity with the self-esteem and resilience scales and divergent validity with the depression and stress scales.

# **Chapter 5: Discussion**

Few empirical studies have examined the experience of students who come from poor/working-class backgrounds. The overall purpose of this study was to initiate the development of the PW/CRF scale to measure the challenges and resiliency factors of poor/working-class college students on four-year campuses. The following sections will be presented in this chapter to outline the overall discussion of the scale development: 1) Summary of Research Findings; 2) Discussion of Research Findings; 3) Implications for Future Directions; 4) Limitations; and 5) Concluding Comments.

## **Summary of Research Findings**

Challenge scale. The PW/CRF challenge scale as proposed within this study demonstrated satisfactory psychometric properties. An EFA suggested a four-factor structure pattern including the following factors: a) *Isolation from Peers*; b) *Financial Strain*; c) *Family Connection*; and d) *Comparison to Peers*. This model achieved an acceptable fit to the data using a CFA with a non-independent sample. Internal consistency for the scale ranged from moderate to high. Additional post hoc analyses were not found to offer improvements to the challenge scale.

Resilience scale. The PW/CRF resilience scale demonstrated marginally acceptable psychometric properties. An EFA suggested an eight-factor structure pattern including the following factors: a) *Belonging*; b) *Mentorship*; c) *Communication*; d) *Finances*; e) *External Resources*; f) *Social Class Teachings*; g) *Family Connection*; and i) *Identification and Awareness*. A CFA with a non-independent sample suggested a marginally acceptable fit of the model to the data. Internal consistency for the scale ranged from moderate to high.

*Modifications to the resilience scale*. Post hoc analyses were conducted in effort to improve

upon the eight-factor solution. As described in the Results chapter, these analyses suggested a potential enhancement via a six-factor model. Specifically, a PA suggested a six-factor structure pattern including the following factors: a) *Belonging*; b) *Mentorship*; c) *Actively Adapting and Navigating*; d) *Family Connection*; e) *Finances*; and f) *Communication*. Overall, the six-factor solution offered a weaker internal consistency than the eight-factor model. The weaker internal consistently may be because the eight-factor model consists of 24 items and the six-factor consists of a smaller number of items at 18. In addition, although still not robust, the CFA displayed a slightly stronger pattern of fit than the original model.

Exploring the six-factor versus eight-factor models. The six-factor and eight-factor models provided two potential versions of a resilience model solution for the PW/CRF. A comparison of these versions yields several observations. First, based on the CFA, the six-factor model displays a stronger pattern of fit. However, this fit is only slightly improved; and neither model can be fully determined to be a good model of fit. Second, five of the same factors with matching items were found in both the six-factor and eight-factor models (Belonging, Mentorship, Finances, Communication, and Family Connection). This finding underscores the theoretical understanding that these are likely to be influential factors in the lives of students.

Next, the eight-factor model produced three factors that were not present in the six-factor model (External Resources, Social Class Teachings, and Identification and Awareness). These factors relate to a broader cultural experience that poor/working-class students may experience on campus, and the items making up these factors are theoretically related. Alternatively, the six-factor model had one factor, Actively Adapting and Navigating, which was not previously identified. A conceptual analysis of the items making up this factor suggests that the three do not necessarily fit together theoretically. The three items related to a valuing of the college

experience, engagement in extracurricular opportunities, and adapting to college. Although these are all items that can indeed be related to the experience of poor/working-class college students (as do all the items explored for scale inclusion), they present together as a slightly disjointed group that does not necessarily capture a well-delineated area or factor. The lessened degree of theoretical coherence for this factor calls into question the grouping of these items as a meaningful factor as opposed to an artifact of this particular sample of participants. A fuller understanding of the statistical and theoretical validity of this factor awaits future research.

Overall, the resilience model that represents the authentic experience of poor/working-class college students is inconclusive and there is reason to believe that neither model is a good solution. Specifically, six-factor model's improvement of fit is slight, and its theoretical coherence is not as strong in comparison to the eight-factor model. Based upon these interpretations, the discussion will proceed for the most part on the presumption of an eight-factor solution (with acknowledgement that neither this model nor the six-factor solution can be considered robust). Although the primary investigator generally values a shorter scale, it appears to be too early in the research process to reject the eight-factor model. In order to better determine the model of best fit, the items will require further analysis among additional samples of participants.

Distress scales. The degree of distress associated with each challenge factor was assessed. Participants reported moderate levels of distress for Isolation from Peers and low levels of distress for Financial Strain, Family Connection, and Comparison to Peers. Analyses were conducted to assess the influence of predictive variables on the reportedly distressing factor, Isolation from Peers. The following four groupings of variables were found to influence the factor: 1) Financial Strain and Comparison to Peers challenge factors; 2) Communication,

Finances, and External Resources resilience factors; 3) Belonging resilience factor; and 4) Belonging resilience factor and Year in College.

**Hypotheses.** It was originally hypothesized that the challenge items would show convergent validity with the depression, stress, and classism scales, and divergent validity with the self-esteem scale. The resiliency items were hypothesized to show convergent validity with the self-esteem and resilience scales and divergent validity with the depression and stress scales. It was also hypothesized the challenge items would not be associated with the social desirability scale.

Generally, convergent, divergent, and criterion validity of the PW/CRS was supported by their relationships with self-esteem, stress, and depression, as well as with previously validated challenge and resilience scales. Interestingly, the challenge items showed a small negative association with social desirability, which suggested participants who reported more challenges, were less motivated to present socially desirable responses. Possibly, participants who were open to reporting more challenges faced by their social class experiences were less inhibited to appear in a socially acceptable manner. The openness and self-awareness of the difficulties faced may influence participants to respond to the scale in a less socially desirable way.

# **Discussion of Research Findings**

Originally, the challenge and resiliency literature review was understood to fall into five themes: finances, communication, academic cultural navigation, interpersonal relationships, and dual-class identity issues. The theme of belonging was also viewed as permeating the various challenge themes. The psychological outcomes of self-esteem, depression, and stress were proposed to be associated with the factors derived from the data. In fact, many of the factors and associated items that emerged from the results correspond well to the themes that describe the literature; additional constructs were suggested as well. The associations of these and other

findings with extant research will be profiled below.

Challenge Factors. The first factor, Isolation from Peers, was associated with observations of the experiences of people from various social class backgrounds, hearing negative comments about low-income people, and having different levels of finances. The meaning expressed within these items corresponds to previous literature reporting that poor/working-class college students struggled to form peer connections (Soria & Steleton, 2013), felt like outsiders (Armstrong & Hamilton, 2013; Lubrano, 2005, Schwartz, Donovan, & Guid-Dibrito, 2009), and experienced feelings of inadequacy (Armstrong & Hamilton, 2013). The existence of classist microaggressions as documented by Smith, Mao, and Deshpande (2016) is also relevant: participants reported feeling isolated in the context of hearing negative comments about poor and working class people.

Financial Strain, the second factor, drew together items associated with an inability to afford class materials and housing, with others not understanding their financial circumstances, and with feelings of stress associated with the financial requirements of remaining in college. Accordingly, previous literature has documented reports of poor/working-class students struggling to pay for basic necessities and specific supplies for the classroom (Armstrong & Hamilton, 2013; Beagon, 2005; Bergerson, 2007; Schwartz, Donovan, & Guido-DiBrito, 2009), professors' naive responses to students' financial difficulties (Collier & Morgan, 2008), and students' obligations to provide financial assistance to their families (Heiselt & Bergerson, 2007; Schwartz, Donovan, & Guido-DiBrito, 2009).

Surprisingly, even though five out of the 15 original finance-themed challenge items addressed students working at jobs unrelated to their academic work, none of the highest loading items directly referenced the strain associated with working in addition to taking classes.

Previous literature, on the other hand, has frequently addressed this specific issue (Armstrong & Hamilton, 2013; Beagon, 2005; Bergerson, 2007; Martin, 2012). Since the majority of current participants were first year students, it is possible that they may not have had lengthy experiences with the burden of juggling work and school, which may have influenced their responses. As an aside, the more advanced participants were as college students, the more challenges they reported for Financial Strain. Alternatively, students who were working the longest hours may have self-selected out of participation because they did not have sufficient free time.

The next factor, Family Connection, focused on students' relationships with their families and previous homes, and signified how being in a different social class environment may have changed them. This factor represents the potential "conversion experience" noted by Barrett (2010) and what Lubrano (2004) described as the "straddlers." Interestingly, this factor only pulled items from the dual class identity theme that was first used to develop items for the original survey items; no other factor incorporated items from that particular theme. This finding underscores the significance of family connections to student wellbeing when they live in a different social class environment than their families. It is possible students feel less connected to their families, because they no longer have the same experiences as their caregivers and may feel a sense of guilt or confusion for being offered opportunities from a more privileged social class. Despite students no longer living in their family's homes, this factor indicates that family connections can be a challenge although students also recognize these connections as important.

The last challenge factor, Comparison to Peers, expressed how students may feel different from their peers regarding their use of vocabulary, language, familiarity with college, and sounding/appearing intelligent. It also related to participants' observations that their peers spoke differently from their own family and friends. This factor affirms the notion that varying

class-based communication styles exist, as posited by Aries and Seider (2005), Berstein (1960), Gros (1995), and Peckham (1995). As poor/working-class students observe peers communicating in ways that are different from what they are accustomed to, students may feel a lack of belonging amongst peers and the classroom environment. It is likely for poor/working-class students to struggle in comprehending the communication of others on campus and visa versa. Overall, as poor/working-class students compare themselves to those around them, it can be challenging to feel as though a different language is being spoken.

Participants also felt that, as compared to their peers, they were more confused by academic expectations, by college related topics, and by navigation of the college system, findings that echo previous research (Beagan, 2005; Casey, 2005; Collier & Morgan, 2008; Greenwald, 2012). Participants reported that the majority of their parents/guardians did not attend college, which likely contributed to participants' limited familiarity with college experiences. Participants who reported to have a parent/guardian's with lower levels of education were more likely to report higher levels of challenges in Comparison to Peers. As previously discussed, Collier and Morgan's (2008) research provides an example of how first generation college students struggled more than other students regarding the structure of the classroom (e.g. the definition of office hours or how to take notes). Students who come from families whose parents/guardians had attended college are more likely to hear about these topics in the home. Alternatively, many poor/working-class college students may have come from high schools that lacked educational resources that prevented them from learning about college expectations or have a high school curriculum that corresponded to one of a college environment.

*Peers and reported challenges*. On average, the Isolation from Peers and Comparison to Peers factors had the highest levels of challenges reported. Despite the differences in these

factors, both emphasize the importance of peers within the social class experiences of poor/working class students. This finding is consistent with previous work that has documented the effect of social class on peer relationships (e.g. Armstrong & Hamilton, 2013; Smith, Mao, & Deshpande, in press; Soria & Stebleton, 2013). It also links to research suggesting that a sense of belonging at college is strongly influenced by quality of peer relationships and participation in social organizations (Hurtado & Carter, 1997). Since high schools populations often draw from relatively homogenous communities, college may be the first time students are exposed to people from widely varying social classes (Jones, 2003; Langhout, Rosselli, & Feinstein, 2007). Poor/working-class students may be newly faced, then, with the challenges associated with having different social and behavioral styles than their peers on campus.

Demographics and reported challenges. First, students who attended private institutions were more likely to report challenges in the areas of Isolation from Peers, Family Connection, and Comparison to Peers. Despite the limited research explicitly addressing social class experiences in private versus public schools, some researchers have discussed the challenges that students have faced at specific private colleges (e.g. Nisonoff, Tracy, & Warner, 1992; Ostrove, 2003).

As previously discussed, Aries and Seider (2005) interviewed low-income students from elite (private) and state (public) institutions to understand how a college environment influences students' social class identity. The authors noted that the low-income students from elite universities spoke differently about their environments than those from state schools.

Participants from elite institutions mentioned material possessions of peers, including expensive meals, large purchases, or travel, while the state schools did not tend to mention observing these experiences on campus. State college students were also not as outwardly aware of how their

speech may be different from peers and did not make note of feeling powerlessness, which were mentioned by the low-income elite university students. When low-income students from the state institutions, however, interacted with more affluent students, they did report feeling less adequate. Similarly, poor/working-class students in this study who attended private institutions indicated experiencing more challenges than those who attended public institutions.

Second, students who had had more years in college were more likely to have challenges in the areas of Isolation from Peers, Financial Strain, and Comparison to Peers. This finding is not echoed anywhere in the literature — no study was found to specifically address the influence of the year in college on social class or challenges at college. However, based on the current study, it appears that over time students may report more challenges. As discussed in an earlier section, it is possible that more challenges are added to students' lives as they progress further in their education. For instance, over the years, students may begin to run out of money or work longer hours in order to take on less debt, which all contribute to more challenges on campus. These student's financial obligations may also be preventing them from engaging in social experiences, leading to an increase in isolation or a lack of connection to peers.

Students who reported living off campus were more likely to have challenges in Financial Strain. It is possible that this is related to students need to pay expenses that are typically covered by universities, such as electricity, cable, and water. Living outside the university may result, therefore, in added stressors regarding finances.

Students with more years in college reported significantly higher overall levels of challenge across factors that corresponded to the individual challenge elements described above. Interestingly, this suggests that in general over time poor/working-class students face more challenges. As previously mentioned, no study was found that directly addresses this association.

It is possible, however, that students with fewer years in college have not yet had the opportunity to face some of the challenge items (e.g. "My professors do not understand when I cannot afford the supplies needed for college"). Perhaps if the same students responded to these items later in their collegiate careers, they would have had encountered more of these experiences.

Psychological outcomes and reported challenges. The current results suggest that there are associations between challenges and psychological outcomes. Students who reported more social class challenges were more likely to indicate increased depression and stress as well as decreased self-esteem. This information builds upon previous research suggesting that students with financial difficulties were more likely to endorse depression, anxiety, and suicidal thoughts (Eisengberg, Gollust, Golberstein, & Hefner, 2007). Mental health, therefore, appears to be associated with the class-related challenges that students experience on campus.

Definition of social class and reported challenges. As previously discussed, typically, social class is frequently addressed in psychological research via income level or socioeconomic status (SES) (e.g. Johnson, Richeson, & Finkel, 2011; Matthews & Gallo, 2011; Santiago, Wadsworth, & Stump, 2011). For the purposes of this paper, social class was understood to correspond to Lott (2012) and Lott and Bullock's (2007) definition, which included structural power, preferences, lifestyles, and behaviors. Of note, two of the challenge factors, Family Connection and Comparison to Peers, did not include any items pertaining to finances or monetary resources. The operation of these factors affirm the notion that social class expands beyond traditional conceptions that focus on finances. Social class as an element of sociocultural identity seems to include a range of experiences and environmental factors that influence individuals from specific social class groups.

**Resilience Factors.** The first factor, Belonging, addressed students' feelings of comfort,

connection, and belonging within the campus community. People have a tendency to function better in environments where they feel a sense of belonging (Strayhorn, 2012), which in turn stands to affect students' academic and social experiences (Cohen & Garcia, 2008; Freeman, Anderson & Jenson, 2007; Ostrove & Long, 2007; Pittman & Richmond, 2008). Limited research exists focusing on social class and belongingness of college students; however, Ostrove (2003) and Hurtado and Carter (1997) inferred that belongingness did affect the experiences of social and racial minority college students. Across the board, it appears that poor/working-class college students can be affected by the degree of belongingness that they experience, and that it can act as a shield of resilience. As noted, some of the heaviest challenges for poor/working-class college students are associated with peer relationships. The Belonging factor appears to be the corresponding resilience factor regarding the challenges related to peers.

Mentorship, the second factor, described the positive effect of having a mentor on campus. The items suggest that the mentorship relationship could be supportive for financial planning as well as for understanding the college environment. Correspondingly, seeking support from others or participating in specific university programs have been found to help students flourish on campus (e.g. Nelson, Englar-Carlson, Tierney, & Hau, 2006; Phinney & Haas, 2003; Stuber, 2011). Werner and Smith (1995; 2001) similarly cited the willingness to seek support when needed, having an external support network, and having role models acted as protective factors that enhanced resilience. Given that students from poor/working-class backgrounds may themselves lack the knowledge to navigate the college experience, a mentorship can help students learn their way around the academic environment.

Communication was the third factor in the resilience scale. These items indicated that knowledge of how to enter classroom discourse and feeling comfortable with academic

communication styles was helpful in navigating college. This finding related to Nelson, Englar-Carlson, Tierney, and Hau's (2006) suggestion that the ability to speak the language of the college environment offers resiliency to poor/working-class students. Similarly, Werner (1995), a researcher on the Kauai Longitudinal Study, examined risk and protective factors of children who experienced chronic poverty. In this paper she offered a theoretical outline of the individual, family, and community protective factors of participants in the Kauai Study from infancy through adolescence and compared these results with the findings of other researchers. The paper indicated that communication skills were significant protective factors for youth. In other words, it appeared that those who displayed greater communication abilities were able to use these abilities to overcome the experiences of challenges.

Finances, the fourth factor, emphasized the significance of having the ability to pay for college matriculation. Even though finances have been shown to be a source of stress for college students (e.g. Armstrong & Hamilton, 2013; Bergerson, 2007; Heiselt & Bergerson, 2007; Schwarz, Donovan, & Guido-DiBrito, 2009), previous research has not elaborated upon outcomes for poor/working-class students who found scholarships or adequate employment to support themselves in college. Clearly, it can be assumed that students who found such means would have an easier time navigating college.

The fifth factor was External Resources, which encompassed students' abilities to use such resources as websites, online forums, or extracurricular activities to help navigate the college systems. Similar to the Mentorship factor, these items potentially provide students with opportunities to learn more about college and what it means to be a student. Participating in extracurricular activities has previously been shown to be a protective factor for academic success (Perez, Espinoza, Ramos, Coronado, & Coretes, 2009). Online forums (e.g. *Columbia's* 

Class Confidential page) have not been studied, but appear to be sources were students could learn about the experiences of other students (e.g. Blogger #233, 2015; Blogger #497, 2015). Similarly, Werner and Smith (1995; 2001) also explained that the willingness to seek support when needed and having an external support network act as protective factors that have been found to enhance resilience.

Social Class Teaching, the sixth factor, focused on the positive attributes that participants associated with or had learned from being part of a poor/working-class family. Students reported that attributes such as being resourceful and adaptive and having strong work ethic helped them to navigate college. Being able to adapt well to new cultural experiences is similar to Lubrano's (2004) discussion of being able to interact in both a middle class and poor/working-class world. These attributes, therefore, seem to represent protective factors for poor/working-class students, although the literature often portrays social class identity only as a risk factor for poor/working-class people (e.g. Buckner & Waters, 2011).

The next factor, Family Connection, corresponds to the role that families can play in helping students build resilience. In this factor, resiliency seems to have been derived directly from family support and feelings of connection to family. Family support is often cited as a key protective factor in resilience research (e.g. Schoon and Parson, 2002; Werner and Smith, 1995, 2001).

Lastly, Identification and Awareness addressed students' feeling a sense of identity as poor/working class individuals as well as being able to switch between the two cultural environments that they navigate. Sadeo's (2003) bicultural identity work helps in understanding how maintaining feelings of connection between college and family can act as a buffer in the face of a challenging campus. The ability to code switch (Sadeo, 2003) affords students the

opportunity to live in two worlds without feeling a loss in either environment (Nelson, Englar-Carlson, Tierney, & Hau, 2006). This conception also relates to LaFromboise, Hoyt, Oliver, and Whitbeck (2006) and Ong Phinney, and Dennis's (2006) finding that having an understanding and awareness of one's cultural group increases resiliency.

Demographics and resilience factors. Demographics appeared to have an influence on the resilience scale and its factors. Students who attended smaller schools were more likely to report resilience in the areas of Belonging, Mentorship, and Identification and Awareness.

Speculatively, it is possible that smaller institutions afford students more personalized attention that helps develop protective factors to navigate the institution. For instance, there may be more opportunities for mentorship programs and/or community building experiences. Next, students who transferred between institutions indicated less resilience in the areas of Belonging,

Mentorship, Finances, External Resources, and Family Connection. It is possible that these students transferred after struggling without having the necessary resilience factors to help them persist through the original school; they may also not have been able to acquire them in the new environment. Third, students who lived on campus had higher resilience levels in Mentorship,

Finances, and Family Connection. Living on campus may have given these students easier access to connections with mentors, and residential students may have more easily utilized campuses resources and less need to fund resources needed for living (e.g. furniture).

Fourth, students whose parents held higher degrees of education were more likely to have increased levels of resilience in the area of Family Connection. It is possible that these students felt a stronger connection to family members who had experienced similar educational opportunities. They may have also been told about the expectations of college and/or felt that they could inquire about the experience.

Students who had fewer years at college were more likely to report higher levels of resilience in the form of Belonging, Mentorship, and Family Connection. This might be considered a counterintuitive finding in that resilience may be assumed to develop over time as students become acclimated to the campus would seem to be less likely to persist in college. However, studies have shown that pre- and early college programming and other activities (Perez, Espinoza, Ramos, Coronado, & Coretes, 2009; Stuber, 2011) acted as protective factors in supporting student resiliency. These experiences, which are likely taking place in the earlier years of college, may be offering important supports and guidance for poor/working class students. By contrast, students in the later years may be, relatively speaking, on their own. The early years of college may also be a time when students may still feel more connected to their families and still using their families as a source of support. As students progress through the years of college, they may begin to feel less connected to their families as they become more chronologically and culturally distant from the poor/working-class environment. Overall, it seems reasonable to suppose that more resources may be in place to support resilience during the early years of college.

Demographic groups reporting higher levels of resilience according to the total resilience score were associated with having fewer years at college, not transferring from another institution, and living on campus. As previously mentioned, upon arriving to college, students were more likely to have a greater number of resources via campus services to support their transition, which are often no longer in place once students become upperclassmen. Students who choose not to transfer to new institutions may also possess other forms of resiliency factors that support their decision to remain at a campus. This is something that can be examined in the future in order to understand if additional resiliency factors are prevalent for students who do not

transfer institutions. Additionally, living on campus may allow for students to be exposed to more resources and social support networks.

Psychological outcomes and resilience factors. The current data suggests that there may be associations between resilience factors and psychological outcomes. Students who reported more resilience factors indicated decreased levels of depression and stress and higher levels of self-esteem. Even though limited research has been conducted regarding the mental health of poor/working-class college students in the context of resilience, this association corresponds to the results of resilience and mental health research more generally (e.g. Carbonell, Reinherz, Giaconia, Stashwick, Parasdis, & Breadslee, 2002; Gloria & Steinhardt, 2014; Haddadi & Besharat, 2010; Hjemdal, Vogal, Solem, Hagen, & Siles, 2011; Petros, Opacaka-Juffry, & Huber, 2013).

**Distress.** With regard to the relationship between the distress scales and the challenge scales, Isolation from Peers appeared to be the factor associated with the highest level of reported distress. Throughout the study, peer social relationships were affirmed as a major source of challenge for students. As challenges can be, in turn, associated with mental health, it is not surprising that Isolation from Peers was reported by participants to be significantly distressing. The sections below will discuss variables associated with the distress factor.

Challenges and distress: Financial strain and comparison to peers. The challenge factors of Financial Strain and Comparison to Peers were found to be associated with the Isolation from Peers distress factor. In other words, students who reported more challenges in Financial Strain and Comparison to Peers were more likely to have reported higher levels of distress regarding Isolation from Peers. This supports the previously discussed ethnographic research by Armstrong and Hamilton (2013), which outlined similar challenge and distress

predictions through narratives. In their work, students who lacked finances were unable to participate in the same activities or engage in the same behaviors as their middle class peers, which left them with feeling left out of social engagements and feeling heightened levels of distress.

Resiliencies and distress: Communication, finances, external resources, and belonging. The resilience factors of Communication, Finances, and External Resources were found to be associated with the Isolation from Peers distress factor. In other words, students who reported being able to communicate effectively in the college environment, had adequate financial support, and had helpful external resources reported less distress in the form of Isolation from Peers. Overall, students who had more resilience factors had lower levels of distress in this category, suggesting resilience's potential to buffer against increasing levels of distress.

The resilience factor of Belonging was also found to be associated with the Isolation from Peers distress factor. Students who reported higher levels of Belonging were predicted to have lower levels of distress in Isolation from Peers. Because isolation can be viewed as the opposite of belonging, it could be argued that the relationship here is essentially a different measure of the same concept. With that said, this relationship underscores the significance of Belonging in understanding distress. As previously noted, many researchers have found that human beings desire a feeling of attachment towards others (e.g. Bollen & Hoyle, 1990, Cohen & Garcia, 2008; Lee & Robins, 2000; Osterman, 2000; Strayhorn, 2012), which can affect one's psychological well being (Langhout, Drake, Rosselli, 2009; Ryan 1995; Walton & Cohen, 2011), academic pursuits, and social functioning (e.g. Cohen & Garcia, 2008; Freeman, Anderson & Jenson, 2007; Ostrove & Long, 2007; Pittman & Richmond, 2008). Strayhorn (2012) emphasized that

belongingness is "a basic human need and motivation, sufficient to influence behavior" (p.3). Specifically, students who are able to form rewarding relationships and participate in extracurricular or social clubs on campus typically show a greater sense of belongingness on campus (Hurtado & Carter, 1997) and are better adjusted to college (Grant-Vallone, Reid, Umanli, & Pohlert, 2004).

*Belonging and year in college*. The resilience factor of Belonging and year in college were found to be associated with the Isolation from Peers distress factor. Students who reported higher levels of Belonging and less years in college were predicted to have lower levels of distress in Isolation from Peers. In this result, the year in college significantly influenced how belonging and distress levels related. It is possible that students who have been on campus for longer without a feeling of belonging feel more distressed as a result of their isolation – they may have expected to feel less isolated over time and now experience disappointment with that, and/or years of isolation have contributed to even more distress.

## **Implications and Future Directions**

The results of the study offer important practical implications for interventions on behalf of poor/working class students, and provide ideas for future directions for college counselors, psychologists, and educators. The sections below will provide implications and future directions in the following areas: a) *Research*; b) *Theory*; c) *Clinical Practice*; d) *Student Affairs or Services*; e) *Policy*; and f) *High School College Counselors*.

**Research.** The purpose of this study was to institute the initial steps in the development of a scale that could contribute to an understanding of the experiences of poor/working-class students on college campuses. Future research could build productively on this work by expanding upon these early efforts. A next step might be to administer the original items to

another large sample of participants with similar demographics. A confirmatory factor analysis conducted among a second sample would assist in confirming a pattern of good fit.

As previously mentioned, an estimation of the number of resilience factors is inconclusive. Additional studies could re-evaluate the model to determine if the six- or eight-factors would best represent the model., or perhaps even investigate a different number of factors. One suggestion might be a five-factor model, because both the six-and eight-factor models have five overlapping factors. Continued research will help to formulate a model with a firm foundation in measuring the resiliency of poor/working-class college students.

Regarding the resilience scale, additional samples are needed to examine the possibilities regarding a six-factor model versus an eight-factor model. The PA factor extraction method called into question the eight-factor model originally determined and offered the possibility of a six-factor model. Currently, evidence is mixed regarding the theoretical soundness of the six-factor model, and further research will be needed for closer analysis of the factor structure of the resilience section of the PW/CRF.

Moreover, the current study is correlational in nature, and the identification of predictive relationships between variables cannot, therefore, be established. The factors presented here derive from one moment in the poor/working-class students' lives, and examining these factors at various points in students' academic careers may offer another perspective on how these factors change over time. In viewing the developmental progression of these factors, research can explore a more complex understanding of the progression of challenges and resiliency factors experienced by students throughout their tenure at college. Future research is needed for full consideration of the longitudinal influences of the challenges and resilience factors that were suggested by this study.

Additionally, more research in the area of resilience and poor/working-class college students is needed. A better understanding of the variables at work in this area could assist college administrators and faculty in supporting such students as they face characteristic challenges and risks in their lives. Correspondingly, it could also aid in the reduction of negative psychological outcomes derived from these struggles, and help reduce the challenge situations that create them. Qualitative studies may be helpful in beginning to unpack the operations of the resiliency factors that help students persist through college and avoid negative psychological outcomes.

Theory. The development of PW/CRF can be simultaneously viewed as the development of a model representing the challenges and resiliency factors experienced by poor/working-class college students. As such, the scale suggests major areas that potentially expand previous theoretical understandings of social class, higher education, and resiliency. It provides for examination of the major areas (factors) of challenge and resiliency, along with the more specific details (in the form of items) that students experience. These important areas and details suggest directions for a potential theoretical foundation of the lived experiences of poor/working-class college students. Overall, this study can act as a building block for future theory development regarding this population.

The current study also expands upon specific elements of existing theoretical treatments of poor/working-class college students. First, the current results emphasized that peer/social relationships presented some of the biggest challenges for students and contributed to the highest levels of distress. These results affirm previous theorizing that linked feelings of belongingness on campus to academic and social experiences (e.g. Cohen & Garcia, 2008; Freeman, Anderson & Jenson, 2007; Ostrove & Long, 2007; Pittman & Richmond, 2008). The current data supports

Hurtado and Carter (1997) and Ostrove's (2003) work indicating that social connection adds to feelings of belonging. Overall, it appears that social relationships may be a key factor in increasing feelings of belonging and limiting challenges experienced by poor/working-class college students.

Regarding resilience, the model represented by this study develops the idea of positive adaptation: why do some people have positive outcomes when exposed to adversity while others do not (Masten & Reed, 2002)? Although limited research has examined specific protective factors for this demographic, this study presented factors that represent the risks and/or challenges that poor/working-class college students face, as well as the protective factors (or resiliency factors) that provide support for them. Although this scale requires continued development, its early results already convey the power of belonging, mentorship, communication understanding, finances, external resources, social class teachings, family connection, and identification and awareness in the lives of poor/working class students who make it to college campuses. These factors seem to offer protective buffers for students who face class-related disadvantages in higher education settings.

Although previous research has found similar associations between resilience and mental health, this study builds upon these theoretical formations with this unique population. The current findings showed that poor/working-class students who reported increased resilience were less likely to experience symptoms of depression and stress, and were more likely to report higher levels of self-esteem. This addition to the theoretical understanding of resilience work offers potential opportunities to help increase resilience among students. Future work should address methods by which to help students gain additional resilience in the areas described by these factors. Moreover, although not surprising, challenges showed a positive association with

depression and stress, and a negative association with self-esteem. These findings confirm the significant outcomes that can be associated with social class challenges.

Using the PW/CRF scale in clinical practice. The PW/CRF holds promise as a measure to help identify the challenges as well as the resiliency factors that could be helpful to particular students as they navigate their academic careers. Integrating the scale within a counseling session could initiate conversations that allow students to unpack their own experiences of college. It can sometimes be difficult to identify or predict difficulties, and the scale can be a tool to assist in this exploration. Additionally, the resiliency scale can support conversations about the ways that students have been (or can be) resilient and possibly offer suggestions on additional ways to combat challenges. Overall, the scale has potential use a clinical tool to open up dialogue and provide different avenues of exploration.

Interventions. Through the PW/CRF's development, the importance of social relations and connections, which encompass peers and family, has been highlighted. These are areas that counselors might helpfully address in session, as it seems evident that counselors cannot assume finances are the major, or only, challenges faced for poor/working-class college students. It is vital, therefore, that interventions be created to guide discussions into areas pertinent to these students. For instance, a counselor may want to ask questions about ways the family relationships have evolved since a student matriculated, or explore the connection that students feel to campus life. Although the scale can offer some directions for potential areas of exploration, it is important, as always, to be open to what feels significant to the student.

It is also important for counselors to recognize and learn about the positive qualities that students may have acquired as the result of being part of a poor/working-class family. The scale offers direction for the exploration of such attributes as being resourceful and careful with

money, having a strong work ethic, and showing the ability to adapt to new situations.

Counselors can help students understand how their social class backgrounds have not only presented challenges on campus, but also have provided them with strengths that help navigate the college environment. These tools and values can assist students in using their resources to persist through college.

Expanding the definition of counseling. The traditional role of counselors involves a 45-50 minute individual counseling session. When working with poor/working-class college students, it is evident that a more expanded role for counselors would be beneficial.

Incorporating a mentoring and/or an advocacy role will allow students to receive assistance that is tailored to their needs. Such role expansion is in keeping with Lewis, Arnold, House, and Toporek's (2002) "ACA Advocacy Competencies" work, which integrates ways counselors can advocate at the individual, community or public levels. Additionally, this perspective builds on Atkinson, Thompson, and Grant's (1993) focus on the benefits of conceptualizing and enacting alternative counseling roles (e.g. adviser, advocate, facilitator of indigenous support systems, facilitator of indigenous healing systems, consultant, change agent, counselor, and psychotherapist).

There are a number of ways that counselors can provide a mentoring function for their students. Providing advice and information on where and how certain problems can be addressed on campus may be incredibly helpful to students who are not familiar with the structure of a college environment. For instance, when it is time for financial aid documents to be completed, a counselor can offer a reminder and suggest that students set up an appointment with the financial aid office to review it. Although such reminders and advice may be outside the traditional realm of a counselor, these small interventions can be deeply meaningful for students.

Counselors can also advocate for their students on campus. Counselors are in a unique position to learn from students about the challenges faced on campus and can gain a valuable understanding of what can be done to improve the situation. When counselors are able to discern such systematic issues in action on campus, they should work to address them. One such area may be the impact of expensive classroom material for students. Counselors should advocate with the financial aid office or other departments to find ways to provide additional aid for these materials or to limit the cost of classroom materials that students are required to purchase.

Family counseling. When working with poor/working class college students, it may be beneficial to offer family sessions. Since many students do not live near their families, these sessions could occur over the phone and/or through video conferencing. As this study suggests, family connection can represent both a source of challenge and a protective resiliency factor. Counselors can work to incorporate family members within the counseling session and be flexible in the ways that these individuals are able to participate in the work. Counselors can also provide counseling referrals to family members of their students if the individuals believe it may be helpful.

Group experiences. Since social isolation was found to be a major distress factor, counselors might provide groups in various formats to support students. These interventions might take the form of group counseling, however, many students may find them to be stigmatizing. Non-traditional counseling groups, therefore, can also be effective for students who are looking for ways to find support and explore relationships. For instance, a walk ingroup could be formed for first generation students to chat and meet other students on campus. Although this is not a counseling group *per se*, such a group can offer benefits that are significant for isolated students.

Online presence. Social media, blogs, and other online mediums were suggested by the current study to be meaningful for students as ways of learning about college and feeling less alone. A section of the college counseling website could be devoted to supporting poor/working-class students, which could be an opportunity to reach students who may not feel comfortable coming into the counseling center.

Student Affairs or Services: First generation or poor/working class programming. Poor/working class students would benefit from programming geared towards the specific needs of students who may experience class-related unfamiliarity with how to navigate a campus. Guided by research regarding resiliency, this programming should address the building of resiliency factors via language that reflects a strength-based model of student success rather than a deficit model or culture-of-poverty explanation. *Culture-of-poverty* refers to theorizing similar to that used by Lewis (1961), who suggested that people living in poverty shared a consistent disorganized and dangerous lifestyle that they passed along to children. College programming should ensure their messages do not represent a deficit model and in turn recognize the damaging role that structural oppression plays in the lives of poor/working-class college students (e.g. Foss, Generali, & Kress, 2011; Lott, 2012; Smith, 2010).

First, a peer mentor, faculty member, or community member mentor could be assigned to students. The mentor would provide students with an opportunity to learn about the ins and outs of college and could help them begin to tackle the new experiences associated with the higher education setting. One option may be to reach out to members of the school community who come from similar backgrounds and invite them to be mentors. This may assist students in feeling more comfortable asking questions about the college experience. Second, colleges spend a large amount of money on sending recruiters out to various parts of the country and world to

scout for students. It might be beneficial if a team of staff members were able to connect with poor/working-class students before school begins to offer insights on what to expect upon arrival at college. This could also be an opportunity to provide contact information for peer mentors and other students, so social relationships can begin early on. Similarly, staff members can also be in contact with parents or guardians to help them through the adjustment to the new environment.

Third, sometimes colleges have programming (e.g. via orientation or sports events) that involve additional fees. This may be a deterrent for students who are unable to afford the costs. It is always important to remember that, although a certain fee may not appear to represent a significant cost for many students, faculty, or staff members, it might be an impossible expense for poor/working-class students. Students who are unable to afford the fees may be limited in the activities that they can participate in, which in turn works against social opportunities and feelings of belongingness on campus. Therefore, college administrators should identify ways to wave fees or provide easily accessible funding for students who choose to participant in programming on campus.

Lastly, student clubs or activity groups that allow for poor/working-class students to meet one another would contribute toward the formation of peer connections. It may be helpful for students to become acquainted with other students with similar backgrounds who could potentially be going through similar challenges on campus. Organized groups could allow for students to interact and hopefully feel less isolated on campus.

Accessible financial planning support. Financial planning and budgeting support can be helpful for students who are attempting to juggle financial obligations. Even filling out the Free Application for Financial Aid (FAFSA) can be a daunting task -- as well as an essential one for receiving access to financial aid. Financial planners might set up workshops or walk-in hours in

residence halls or student public spaces to work with students on finding the best ways to manage their finances. Students may not otherwise even be aware that these resources are available on campus.

Taking out money through loans and debt accumulation should also be part of programming or discussions with students. Dwyer, McCloud, and Hodson (2012) looked at the effects of borrowing money, social class, and graduating from the university. They found that graduation for low-income students is typically contingent upon the amount students borrow. In fact, the authors noted that students with fewer family resources may struggle with the funds to even complete college and could potentially leave without the degree and a great deal of debt. It is evident that debt may be a challenge that was missing from this model and students may benefit from further exploration of this topic.

Programming for community college transfer students. Based on the American Association of Community Colleges (2012), a core mission of community colleges is to enable students to transfer to a Bachelor's Degree granting college or university. Approximately 37% of the participants who noted a reason for transferring schools reported that they came from community colleges. It is important for four-year institutions to collaborate with community colleges in facilitating meaningful programming to support the transfer process and increase resiliency within these students.

Information and professional development for professors. Some professors may not be familiar with the unique needs of their poor/working-class students; especially at elite institutions, they may have little awareness of the presence of these students in their classes. It is possible for professors or teaching assistants (or anyone who may not be familiar with this demographic) to make assumptions about the students in their classes. For instance, it may be

assumed that the students understand the meaning of office hours or know how to read a syllabus. Professional development on working with poor/working-class college students would afford better working relationships between students and faculty as well as help students be more successful in the classroom.

Policy. Without financial resources, students have limited access to higher education. Counselors, college personnel, and other human services professionals should support calls for federal and state governments and individual colleges and universities to provide more funding opportunities for poor/working class students. Students who arrive at college with inadequate finances may not be able to persist through graduation. However, with that said, the results indicate that there are additional needs of poor/working-class college students that should also be reflected in policy initiatives. Higher education policies are needed to consistently enact precollege and on-campus programming to specifically support poor/working-class college students, as was discussed above. Across the board, a mandate should be instituted for all colleges or universities to actively support this population.

High school college counselors. The models presented for this study address the issues and needs of students on college campuses. However, part of the responsibilities of high school college counselors is to prepare students to venture into the world of college. High school college counselors could benefit from learning about the potential challenges and resiliency factors that may be presented to their students in the future. It would be helpful for these counselors to develop programming at the high school level to prepare students. Building resiliency factors can begin, therefore, before students set foot on campus. For instance, presenting students with websites or Internet resources where poor/working-class students speak about their experiences on campus, or helping students examine how the values that may have

been associated with their social class background can serve them well on campus. Future research could address the building of such resiliency factors for college beginning at the high school level.

## Limitations

Results of this study should be interpreted with caution due to limitations that may have influenced its outcomes. First, over fifty percent of the participants reported being first or second year students. It is possible that many of these students had not had the opportunity to experience some of the situations presented by the study and if they had been on campus longer, they may have encountered more of the events. Future research should, therefore, focus on the inclusion of students from across all years of college, and the results of looking at a broader range of years may suggest different interventions to further support this population. Similarly, this study was correlational in design, and as such does not permit interpretation of the predictive ability of variables. Thus, the findings presented are descriptive in nature and give a picture of the association between variables rather than determination of cause-and-effect relationships.

Second, one of the challenges that appears to arise with this population is the struggles with peers and feeling connected on campus. It is possible that the participants who accessed the study were more connected on campus because the survey was frequently distributed online via student organizations or other support centers on campuses. This may have influenced the results by limiting the sample to poor/working-class students who are more connected to resources on campus. It is possible that additional students were eligible for this study, yet could not be reached through the recruitment methodology. In the future, this study could be given out in academic classes as a way to reach students who are not necessarily tied to the campus community.

Third, taking the time to fill out the survey may have been more possible for students who do not work long hours and therefore had a bit more free time. This may have contributed to some of the discussion mentioned above regarding the limited representation of items on working.

Next, students who left the study before completing the survey were more likely to have been enrolled in large private institutions. Therefore, the perspectives of these students were not taken into account. It is possible, for example, that students from these institutions may feel least supported in their colleges because of the size of the school. The size may, therefore, contribute to students' struggle to find a connection to the campus and peers. In addition, students from public institutions may not report as many challenges as students from private institutions because the culture of social class privileges may not be as prominent in public schools. The existence of discrepancies like these are not known and may have affected some of the current results.

As previously mentioned, this is an exploratory study to examine the challenges and resiliency factors of poor/working-class college students. Only one sample of participants was collected, so the confirmatory factor analysis conducted does not confirm the data, but only provides a slightly more rigorous testing of the exploratory factor analysis. The results presented are not fully generalizeable past the current population of participants who completed the survey. Additional studies would need to be conducted to offer a stronger confirmation of the model presented.

## **Concluding Comments**

Overall, this initial study of the viability of the PW/CRF affirmed earlier finding from the literature and also suggested new understandings and questions to be explored in the future. The

study began the development of a scale to identify the major challenges and resiliency factors that are faced by poor/working-class college students on four-year campuses and presented a model by which to conceptualize their experiences in higher education. This model requires future exploration, but provides a starting point for the examination of these crucial factors in students' successful persistence through college. The scale and its implications highlight the significance of enacting these understandings to support psychologists, counselors, and higher education professionals in creating a campus experience that meets the needs of all students.

## References

- #64a. (2015, April 13). Brown university class confessions. [Web log post]. Retrieved from <a href="https://www.facebook.com/brownclassconfessions?fref=ts">https://www.facebook.com/brownclassconfessions?fref=ts</a>
- #64b. (2015, March 23). Columbia university class confessions [Web log post]. Retrieved from <a href="https://www.facebook.com/columbiaclassconfessions?fref=nf">https://www.facebook.com/columbiaclassconfessions?fref=nf</a>
- #110. (2015, March 23). Columbia university class confessions [Web log post]. Retrieved from <a href="https://www.facebook.com/columbiaclassconfessions?fref=nf">https://www.facebook.com/columbiaclassconfessions?fref=nf</a>
- #111. (2015, April 7). Stanford university class confessions. [Web log post]. Retrieved from https://www.facebook.com/stanfordclassconfessions?fref=ts
- #182. (2015, March 25). Columbia university class confessions [Web log post]. Retrieved from <a href="https://www.facebook.com/columbiaclassconfessions?fref=nf">https://www.facebook.com/columbiaclassconfessions?fref=nf</a>
- #233. (2015, March 28). Columbia university class confessions [Web log post]. Retrieved from https://www.facebook.com/columbiaclassconfessions?fref=nf
- #422. (2015, April 10). Columbia university class confessions [Web log post]. Retrieved from <a href="https://www.facebook.com/columbiaclassconfessions?fref=nf">https://www.facebook.com/columbiaclassconfessions?fref=nf</a>
- #450. (2015, April 12). Columbia university class confessions [Web log post]. Retrieved from <a href="https://www.facebook.com/columbiaclassconfessions?fref=nf">https://www.facebook.com/columbiaclassconfessions?fref=nf</a>
- #463. (2015, April 13). Columbia university class confessions [Web log post]. Retrieved from <a href="https://www.facebook.com/columbiaclassconfessions?fref=nf">https://www.facebook.com/columbiaclassconfessions?fref=nf</a>
- #478. (2015, April 14). Columbia university class confessions [Web log post]. Retrieved from <a href="https://www.facebook.com/columbiaclassconfessions?fref=nf">https://www.facebook.com/columbiaclassconfessions?fref=nf</a>
- #489. (2015, April 15). Columbia university class confessions [Web log post]. Retrieved from <a href="https://www.facebook.com/columbiaclassconfessions?fref=nf">https://www.facebook.com/columbiaclassconfessions?fref=nf</a>

- #497. (2015, April 16). Columbia university class confessions [Web log post]. Retrieved from <a href="https://www.facebook.com/columbiaclassconfessions?fref=nf">https://www.facebook.com/columbiaclassconfessions?fref=nf</a>
- Ali, A., & Lees, K. E. (2013). The therapist as advocate: Anti-oppression advocacy in psychological practice. *Journal of Clinical Psychology*, 69(2), 162-171. doi:10.1002/jclp.21955
- Aries, E., & Seider, M. (2005). The interactive relationship between class identity and the college experience: The case of lower income students. *Qualitative Sociology*, 28(4), 419-443. doi: 10.1007/s11133-005-8366-1
- Armstrong, E., & Hamilton, L. T. (2013). *Paying for the party*. Boston, MA: Harvard University Press.
- Aspelmeier, J. E., Love, M. M., McGill, L. A., Elliott, A. N., & Pierce, T. W. (2012). Self-esteem, locus of control, college adjustment, and gpa among first-and continuing-generation students: A moderator model of generational status. *Research in Higher Education*, *53*(7), 755-781. doi:10.1007/s11162-011-9252-1
- Atkinson, D. R., Thompson, C. E., & Grant, S. K. (1993). A three-dimensional model for counseling racial/ethnic minorities. *The Counseling Psychologist*, 21(2), 257-277.
- Barnard, C. (1994). Resiliency: A shift in our perception? *American Journal of Family Therapy*, 22, 135-144. doi: 10.1080/01926189408251307
- Barrett, W. (2011). Social class on campus: Theories and manifestations. Sterling, Virginia: Stylus Publishing, LLC.
- Beagan, B. L. (2005). Everyday classism in medical school: experiencing marginality and resistance. *Medical Education*, *39*(8), 777-784. doi: 10.1111/j.1365-2929.2005.02225.x
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for

- measuring depression. *Archives of General Psychiatry*, *4*, 561-571. Retrieved from http://counsellingresource.com/lib/wp-content/managed-media/Beck\_AT\_1961.pdf
- Belle. D., & Doucet, J. (2003). Poverty, inequality, and discrimination as sources of depression among US women. *Psychology of Women Quarterly*, 27(2), 101-113. doi:10.1111/1471-6402.00090
- Beltman, S., & MacCallum, J. (2006). Mentoring and the development of resilience: An australian perspective. *International Journal of Mental Health Promotion*, 8, 17-28. doi:10.1080/14623730.2006.9721898
- Bernard, B. (1991). Fostering resiliency in kids: protective factors in the family, school, and community. Washington, DC: U.S. Department of Education.
- Bernard, B. (2004). *Resiliency: what we have learned*. San Francisco, CA: West Ed Regional Educational Laboratory.
- Benson, P. L. (1997). All kids are our kids. Minneapolis, MN: Search Institute.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238–246.
- Bergerson, A. A. (2007). Exploring the impact of social class on adjustment to college: Anna's story. *International Journal of Qualitative Studies in Education*, 20(1), 99-119. doi:10.1080/09518390600923610
- Bernard, B. (1995). Fostering resiliency in kids: Protective factors in the family school and community. San Francisco, CA: West Ed Regional Educational Laboratory.
- Bernstein B. (1974). Class, codes and control. volume 3: towards a theory of educational transmissions. New York: Routledge.
- Bernstein, B. (1960). Language and social class. The British Journal of Sociology, 11(3), 271-

- Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. A. Collins (Ed.), *Development of cognition, affect and social relations:*the minnesota symposia on child psychology (pp. 39-101). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Block, J. P., Scribner, R.A., & DeSalvo, K. B. (2004). Fast food, race/ethnicity, and income: A geographic analysis. *American Journal of Preventative Medicine*, 27(3), 211-217. doi:10.1016/j.amepre.2004.06.007
- Bollen, K.A., & Hoyle, R. H. (1990). Perceived cohesion: A conceptual and empirical examination. *Social Forces*, *69*, 479-504. doi: 10.1093/sf/69.2.479
- Bonanno, G. A., Brewin, C. R., Kaniasty, K., & La Greca, A. M. (2010). Weighing the costs of disaster consequences, risks, and resilience in individuals, families, and communities.

  \*Psychological Science in the Public Interest, 11(1), 1-49.

  doi:10.1177/1529100610387086
- Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Cambridge, MA: Harvard University Press.
- Bourdieu, P. & Passeron, J. C. (1990). *Reproduction in education, society and culture* (Vol. 4). London: SAGE publications.
- Bourdieu, P. & Wacquant, L. J. D. (1992). *An invitation to reflexive sociology*. Chicago, IL: University of Chicago Press.
- Boushey, H. (2007). Working family values. Sojourners Magazine, 9(7).
- Brody, G. H., Yu, T., Chen, E., Miller, G. E., Kogan, S. M., & Beach, S. R. (2013). Is resilience only skin deep? Rural arican americans' socioeconomic status—related risk and

- competence in preadolescence and psychological adjustment and allostatic load at age 19. Psychological Sciences, 24(7). doi:10.1177/0956797612471954
- Brown University Class Confessions. (2015). *Brown University Class Confessions*. Retrieved from <a href="https://www.facebook.com/brownclassconfessions?fref=ts">https://www.facebook.com/brownclassconfessions?fref=ts</a>
- Byrne, B.M. (1998), Structural equation modeling with lisel, prelis, and simplis: Basic concepts, applications and programming. Mahwah, NJ: Lawrence Erlbaum Associates.
- Byrne, B. M. (2010). Structural equation modeling with AMOS: Basic concepts, applications and programming (2nd ed.). New York, NY: Taylor and Francis.
- Buckner, J. C., Mezzacappa, E., & Beardslee, W. R. (2003). Characteristics of resilient youths living in poverty: The role of self-regulatory processes. *Development and Psychopathology*, *15*(1), 139-162. doi:10.1017.S0954579403000087
- Buckner, J. C., & Waters, J.S. (2011). Resilience in the context of poverty. In S. M. Southwick,
  B.T. Litz, D. Charney, & M. J. Friedman (Eds.), *Resilience and mental health: challenges*across the lifespan, (pp. 103-119). Cambridge, England: Cambridge University Press.
- Bullock, H.E. (1995). Class acts: Middle-class responses to the poor. In H. E. Bullock and D. Maluso (Eds.), *The social psychology of interpersonal discrimination* (pp. 118-159). New York, NY: Guilford Press.
- Buss, D. M. (2000). The evolution of happiness. *American Psychologist*, *55*(1), 15-23. doi:10.1037/0003-066X.55.1.15
- Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behavior Research and Therapy*,

- 44(4), 585-599. doi: 10.1016/j.brat.2005.05.001
- Carbonell, D. M., Reinherz, H. Z., Giaconia, R. M., Stashwick, C. K., Paradis, A. D., & Beardslee, W. R. (2002). Adolescent protective factors promoting resilience in young adults at risk for depression. *Child and Adolescent Social Work Journal*, *19*(5), 393-412. doi:10.1023/A:1020274531345
- Casey, J. G. (2005). Diversity, discourse, and the working-class student. Academe, 91(4), 33-36.
- Center for Postsecondary Research Indiana University School of Education. (2015, November 15). Institution look up. *The Carnegie Classification of Institutions of Higher Education*. Retrived from http://carnegieclassifications.iu.edu/lookup/lookup.php
- Chen, E., & Paterson, L. Q. (2006). Neighborhood, family, and subjective socioeconomic status:

  How do they relate to adolescent health?. *Health Psychology*, 25(6), 704.

  doi:10.1037/0278-6133.25.6.704
- Cohen, G. L., & Garcia, J. (2008). Identity, belonging, and achievement: A model, interventions, implications. *Current Directions in Psychological Science*, *17*, 365–369. doi:10.1111/j.1467-8721.2008.00607.x
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396.
- Collier, P.J., & Morgan, D.L. (2008). "Is that paper really due today?": Differences in first-generation and traditional college students' understandings of faculty expectations. *The International Journal of Higher Education and Educational Planning*, 55(4), 425-446. doi:10.1007/s10734-007-9065-5.

- Columbia First Generation Low-Income Partnership. (2015). *Columbia University Class Confessions*. Retrieved from <a href="https://www.facebook.com/columbiaclassconfessions?fref=nf">https://www.facebook.com/columbiaclassconfessions?fref=nf</a>
- Consoli, M. L. M. & Llamas, J.D. (2013). The relationship between mexican american cultural values and resilience among mexican american college students: A mixed method study.

  Journal of *Counseling Psychology*, 60(4), 617-624. doi:10.1037/a0033998
- Cozzarelli, C., Wilkinson, A.V., Tagler, M. J. (2001). Attitudes toward the poor and attributions for poverty. *Journal of Social Issues*, *57*, 2, 207-227. doi: 10.1111/0022-4537.00209
- Crossley, N. (2008). Social class. In M. Grenfell (Ed.), *Pierre Bourdieu: Key concepts* (pp. 87-99). Stockfield, UK: Acumen.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24(4), 349.
- Cuellar, I., & Roberts, R. E. (1997). Relations of depression, acculturation, and socioeconomic status in a Latino sample. *Hispanic Journal of Behavioral Sciences*, 19(2), 230-238. doi:10.1177/07399863970192009
- Cutrona, C. E., Wallace, G., & Wesner, K. A. (2006). Neighborhood characteristics and depression: An examination of stress processes. *Current Directions in Psychological Science*, 15(4), 188-192. doi:10.1111/j.1467-8721.2006.00433.x
- Denny, S., Clark, T. C., Fleming, T, & Wall, M. (2004). Emotional resilience: Risk and protective factors for depression among alternative education students in new zealand.

  American Journal of Orthopsychiatry, 74(2), 137-149. doi:10.1037/0002-9432.74.2.137
- DeVellis, R.F. (2003). *Scale development: theory and applications* (2<sup>nd</sup> ed). Thousand Oaks, CA: Sage.

- Duncan, G. J., & Brooks-Gunn, J. (1997). *Consequences of growing up poor*. New York: Russell Sage.
- Dwyer, R. E. (2010). Poverty prosperity, and place: The shape of class segregation in the age of extremes. *Social Problems*, *57*(1), 114-137. doi:10.1525/sp.2010.57.1.114
- Eisenberg, D., Gollust, S. E., Golberstein, E., & Hefner, J. L. (2007). Prevalence and correlates of depression, anxiety, and suicidality among university students. *American Journal of Orthopsychiatry*. 77(4), 534-542. doi:10.1037/0002-9432.77.4.534
- Eisenberg, N., Fabes R.A., Shepard, S.A., Murphy, B.C., Guthrie, I.K., Jones, S., Friedman, J., Poulin, R., & Maszk, P. (1997). Contemporaneous and longitudinal prediction of children's social functioning from regulation and emotionality. *Child Development*, 68, 642–664. doi:10.1111/j.1467-8624.1997.tb04227.x
- Ellwood, M. J., & Bane, D.T. (1994). Welfare realities. Cambridge, MA: Harvard Press.
- Espenshade, T. J. & Radford, A. W. (2009). No longer separate, not yet equal: race and class in elite college admission and campus life. Princeton. NJ: Princeton University Press.
- Evans, G. W., & English, K., (2002). The environment of poverty: Multiple stressor exposure, psychophysiological stress, and socioemotional adjustment. *Child Development*, 73(4), 1238-1248. doi:10.1111/1467-8624.00469
- Field, A. (2009). *Discovering Statistics Using SPSS (3<sup>rd</sup> edition)*. Thousand Oaks, CA: Sage Publications.
- Fiske, S. T. (2007). On prejudice and the brain. *Daedalus*, *136*, 156-160. doi:10.1162/daed.2007.136.1.156

- Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of belonging in college freshmen at the classroom and campus levels. *Journal of Experimental Education*, 75, 203–220. doi:10.3200/JEXE.75.3.203-220
- Gallagher, R. P. (2004). *National survey of counseling center directors*. Alexandria, VA: International Association of Counseling Services.
- Garson, G. D. (Ed.). (2013) Hierarchical linear modeling: Guide and applications. Thousand Oaks, CA: Sage.
- Gloria, C. T., & Steinhardt, M. A. (2014). Relationships among positive emotions, coping, resilience and mental health. *Stress and Health*. 1532-3005. doi:10.1002/smi.2589
- Godley, J., & McLaren, L. (2010). Socioeconomic status and body mass index in Canada:

  Exploring measures and mechanisms. *Canadian Review of Sociology*, 47(4), 381-403.

  doi:10.1111/j.1755-618X.2010.01244.x
- Goodenow, C. (1993). Classroom belonging among early adolescent students: relationships to motivation and achievement. *Journal of Early Adolescence*, *12*, 21-43. doi:10.1177/0272431693013001002
- Gos, M. W. (1995). Overcoming social class markers: Preparing working class students for college. *The Clearing House*, 69, 1, 30-34. Retrieved from http://www.jstor.org/stable/30185854
- Grant-Vallone, E., Reid, K., Umali, C., & Pohlert, E. (2004). An analysis of the effects of self-esteem, social support, and participation in student support services on students' adjustment and commitment to college. *Journal of College Student Retention*, *5*(3), 255-274. doi:10.2190/C0T7-YX50-F71V-00CW

- Greenwald, R. (2012, November 12). Think of first-generation students as pioneers, not problems. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com.ezproxy.cul.columbia.edu/article/Think-of-First-Generation/135710/
- Haas, S.A., Krueger, P.M., & Rohlfsen, L. (2012). Race/ethnic and nativity disparities in later life physical performance: the role of health and socioeconomic status over the life course. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 67(2), 238–248, doi:10.1093/geronb/gbr155.
- Haddadi, P., & Besharat, M. A. (2010). Resilience, vulnerability and mental health. *Procedia-Social and Behavioral Sciences*, 5, 639-642. doi:10.1016/j.sbspro.2010.07.157
- Harrell, S. (1997). The Racism and Life Experiences Scales—Revised. Unpublished manuscript.
- Hauser, S. T., & Allen, J. P. (2007). Overcoming adversity in adolescence: narratives of resilience. *Psychoanalytic Inquiry*, 26(4), 549-576. doi:10.1080/07351690701310623
- Hausmann, L. R., Ye, F., Schofield, J.W. & Woods, R. L. (2009). Sense of belonging and persistence in white and african american first-year students. *Research in Higher Education*, 50(7), 649-669. doi:10.1007/s11162-009-9137-8
- Hefner, J., & Eisenberg, D. (2009). Social support and mental health among college students.

  \*American Journal of Orthopsychiatry, 79(4), 491. doi:10.1037/a0016918
- Heiselt, A. K., & Bergerson, A. A. (2007). Will work for a college education: An analysis of the role employment plays in the experiences of first- year college students. *Higher Education in Review*, 4, 83-106.
- Herrero, J., & Meneses, J. (2006). Short web-based versions of the perceived stress (pss) and center for epidemiological studies-depression (cesd) scales: a comparison to pencil and

- paper responses among internet users. *Computers in Human Behavior*, 22(5), 830-846. doi:10.1016/j.chb.2004.03.007
- Hill, C. B., & Winston, G. C. (2006). How scarce are high-ability low- income students? In M. S.McPherson & M. O. Schapiro (Eds.), *College Access: Opportunity or Privilege?* New York: The College Board.
- Hjemdal, O., Vogel, P. A., Solem, S., Hagen, K., & Stiles, T. C. (2011). The relationship between resilience and levels of anxiety, depression, and obsessive—compulsive symptoms in adolescents. *Clinical Psychology & Psychotherapy*, *18*(4), 314-321. doi: 10.1002/cpp.719
- hooks, b. (1994). Teaching to transgress. New York: Routledge
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis:

  Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
- Hurtado, S., & Carter, D.F. (1997). Effects of college transition and perceptions of campus racial climate on latino college students' sense of belonging. *Sociology of Education*, 70(4), 324-345.
- Hwang, J., & Sampson, R. J. (2014). Divergent pathways of gentrification racial inequality and the social order of renewal in chicago neighborhoods. *American Sociological Review*, 79(4), 726-751. doi:10.1177/0003122414535774
- Jessor, R. (1993). Successful adolescent development among youth in high-risk settings.

  \*American Psychologist. 48, 117-126. doi:10.1037/0003-066X.48.2.117
- Johnson, S. E., Richeson, J. A., & Finkel, E. J. (2011). Middle class and marginal?

  Socioeconomic status, stigma, and self-regulation at an elite university. *Journal of Personality and Social Psychology*, 100(5), 838. doi:10.1037/a0021956

- Jones, S. J. (2003). Complex subjectivities: class, ethnicity, and race in women's narratives of upward mobility. *Journal of Social Issues*, *59*, 803–820. doi:10.1046/j.0022-4537.2003.00091.x
- Kahn, J. H. (2006). Factor analysis in counseling psychology research, training, and practice principles, advances, and applications. *The Counseling Psychologist*, *34*(5), 684-718. doi:10.1177/0011000006286347
- Kaiser, H. F. (1958). The varimax criterion for analytic rotation in factor analysis. *Psychometrika*, 23, 187-200.
- Kelly, J. B., & Emery, R. E. (2003). Children's adjustment following divorce: risk and resilience perspectives. *Family Relations*, 52(4), 352-362. doi:10.1111/j.1741-3729.2003.00352.x
- Kenny, D. A., & McCoach, B. D. (2003). Effect of the number of variables on measures of fit in structural equation modeling. *Structural Equation Modeling*, *10*, 333-351.
- Kim-Cohen, J., Moffitt, T. E., Caspi, A., & Taylor, A. (2004). Genetic and environmental processes in young children's resilience and vulnerability to socioeconomic deprivation. *Child Development*, 75(3), 651-668. doi:10.1111/j.1467-8624.2004.00699.x
- Kline, R. (2005). *Principles and practice of structural equation modeling.* (2<sup>nd</sup> edition.). New York: The Guilford Press.
- Kline, R. (2015). *Principles and practice of structural equation modeling.* (4<sup>th</sup> edition.). New York: The Guilford Press.
- Kosut, M. (2006). Professional capital: Blue-collar reflections on class, culture, and the academy. *Cultural Studies Critical Methodologies*, 6(2), 245- 262. doi:10.1177/1532708604268222
- Kozol, J. (2005). Shame of the nation. New York, New York: Crown.
- Kraus, M. W. & Keltner, D. (2009). Signs of socioeconomic status: A thin-slicing approach.

- Psychological Science, 20(1), 99-106. doi:10.1111/j.1467-9280.2008.02251.x
- Kraus, M. W., Piff, P. K., & Keltner, D. (2011). Social class as culture: The convergence of resources and rank in the social realm. *Current Directions in Psychological Science*, 20, 246-250. doi:10.1177/0963721411414654
- Kraus, M.W., Piff, P.K., Mendoza-Denton, R., Rheinschmidt, M.L., & Keltner, D. (2012). Social class, solipsism, and contextualism: How the rich are different from the poor.

  \*Psychological Review, 119(3), 546-572. doi:10.1037/a0028756
- Kraus, M. W. & Stephens, N. M. (2012). A road map for an emerging psychology of social class.

  \*Social and Personality Psychology Compass\*, 6, 642-656. doi:10.1111/j.1751-9004.2012.00453.x
- Kumpfer, K. L. (1999). Factors and processes contributing to resilience. In M. Glantz & A. L. Johnson (Eds) *Resilience and development* (pp. 179-224). New York, NY: Kluwer Academic/Plenum Publishers.
- Kuriloff, P., & Reichert, M. C. (2003). Boys of class, boys of color: Negotiating the academic and social geography of an elite independent school. *Journal of Social Issues*, *59*(4), 751-769. doi:10.1046/j.0022-4537.2003.00088.x
- LaFromboise, T. D., Hoyt, D. R., Oliver, L., & Whitbeck, L. B. (2006). Family, community, and school influences on resilience among american indian adolescents in the upper midwest. *Journal of Community Psychology*, 34(2), 193-209. doi:10.1002/jcop.20090
- Langhout, R. D., Drake, P., & Rosselli, F. (2009). Classism in the university setting: Examining student antecedents and outcomes. *Journal of Diversity in Higher Education*, 2, 166-181. doi:10.1037/a0016209
- Langhout, R. D., Rosselli, F., & Feinstein, J. (2007). Assessing classism in academic settings.

- *The Review of Higher Education*, *30*(2), 145-184. doi:10.1353/rhe.2006.0073
- Lapour, A. S., & Heppner, M. J. (2009). Social class privilege and adolescent women's perceived career options. *Journal of Counseling Psychology*, *56*(4), 477. doi:10.1037/a0017268
- Lareau, A. (2003). *Unequal childhoods: class, race, and family life*. Los Angeles, CA: University of California Press.
- Lee, D., Olson, E. A., Locke, B., Michelson, S. T., & Odes, E. (2009). The effects of college counseling services on academic performance and retention. *Journal of College Student Development*, 50(3), 305-319. doi:10.1353/csd.0.0071
- Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The Social Connectedness and the Social Assurance scales. *Journal of Counseling Psychology*, 42, 232–241. doi:10.1037/0022-0167.42.2.232
- Lee, R. M., & Robbins, S. B. (2000). Understanding social connectedness in college women and men. *Journal of Counseling and Development*, 78, 484-491. doi:10.1002/j.1556-6676.2000.tb01932.x
- Leondar-Wright, B. (n.d). Working definitions. *Class Matters*. Retrieved from <a href="http://www.classmatters.org/working\_definitions.php">http://www.classmatters.org/working\_definitions.php</a>
- Lewis, J. A., Arnold, M. S., House, R., & Toporek, R. L. (2002). *ACA Advocacy Competencies*.

  Retrieved from

  https://www.counseling.org/Resources/Competencies/Advocacy\_Competencies.pdf
- Li, M. H. (2008). Relationships among stress coping, secure attachment, and the trait of

- resilience among taiwanese college students. College Student Journal, 42(2), 312-325.
- Liu, W. M. (2001). Expanding our understanding of multiculturalism: Developing a social class worldview model. In D.B. Pope-David & H. L. K. Coleman (Eds.), *The Intersection of Race, Class, and Gender in Counseling Psychology* (pp. 127- 170). Thousand Oaks, CA: Sage.
- Liu, W. M., Ali, S. R., Soleck, G., Hopps, J., & Pickett Jr, T. (2004). Using social class in counseling psychology research. *Journal of Counseling Psychology*, 51(1), 3. doi:10.1037/0022-0167.51.1.3
- Lott, B. (2012). The social psychology of class and classism. *Women*, *57*(2), 650-658. doi:10.1037/a0029369
- Lott, B., & Bullock, H. E. (2007). *Psychology and economic injustice: Personal, professional, and political intersections*. Washington, DC: American Psychological Association.
- Lott, B., & Saxon, S. (2002). The influence of ethnicity, social class, and context on judgments about us women. *The Journal of Social Psychology*, *142*(4), 481-499. doi:10.1080/00224540209603913
- Lubrano, A. (2005). *Limbo: blue-collar roots, white-collar dreams*. Hoboken, NJ: John Wiley & Sons.
- Luthar, S.S., Ciccetti, D., & Becker, B. (2000). The construct of resilience: a critical evaluation and guidelines for future work. *Child Development*, 71, 543–562. doi:10.1111/1467-8624.00164
- Martens, M. P. (2005). The use of structural equation modeling in counseling psychology research. *The Counseling Psychologist*, *33*, 269-298. doi: 10.1007/s11162-011-9234-3 10.1177/0011000004272260

- Martin, N. (2012). The privilege of ease: Social class and campus life at highly selective, private universities. *Research in Higher Education*, *53*(4), 426-452. doi:10.1007/s11162-011-9234-3
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, *56*, 227–238. doi:10.1037/0003-066X.56.3.227
- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: lessons from research on successful children. *American Psychologist*, 53(2), 205. doi:10.1037/0003-066X.53.2.205
- Masten, A. S., & Reed, M. J. (2002). Resilience in development. In C. R. Snyder & S. J. Lopez (Eds.) *Handbook of Positive Psychology* (pp. 74-88). New York: Oxford University Press.
- Masten, A., Monn, A., & Supkoff, L. (2011). Resilience in children and adolescents. In Southwick, S.M., Litz, B. T., Charney, D., & Friedman, M. J (Eds.) *Resilience and Mental Health: Challenges Across the Lifespan* (pp. 103-119). Cambridge: Cambridge University Press.
- Matthews, K. A., & Gallo, L. C. (2011). Psychological perspectives on pathways linking socioeconomic status and physical health. *Annual Review of Psychology*, 62, 501-530. doi:10.1146/annurev.psych.031809.130711
- McIntosh, P. (1998). White privilege and male privilege: A personal account of coming to see correspondence through work in women's studies. Wellesley, MA: Working Paper Series, Wellesley College. doi:10.1146/annurev.psych.031809.130711
- Muthén, L.K. & Muthén, B.O. (2015). *Mplus User's Guide (Seventh Edition)*. Los Angeles, CA: Muthén & Muthén

- National Center for Education Statistics. (2013). Percentage of recent high school completers enrolled in 2-year and 4-year colleges, by income level: 1975 through 2012. *Digest of Education Statistics*. Retrieved from <a href="http://nces.ed.gov/programs/digest/d13/tables/dt13\_302.30.asp">http://nces.ed.gov/programs/digest/d13/tables/dt13\_302.30.asp</a>
- Navarro, R. L., Flores, L. Y., & Worthington, R. L. (2007). Mexican American middle school students' goal intentions in mathematics and science: A test of social cognitive career theory. *Journal of Counseling Psychology*, *54*(3), 320. doi:10.1037/0022-0167.54.3.320
- Nelson, L., Englar-Carlson, M., Tierney, S.C., & Hau, J. M. (2006). Class jumping into academic: Multiple identities for counseling academics. *Journal of Counseling Psychology*, *53* (1), 1-14. doi:10.1037/0022-0167.53.1.1
- Nisonoff, L., Tracy, S. J., & Warner, S. (1992). Stories out of school: poor and working-class students at a small liberal arts college. In R. C. Rosen (Ed.), *Class and the College Classroom: Essays on Teaching* (pp. 99 -108). Retrieved from https://books.google.com/books?hl=en&lr=lang\_en&id=MZHFAgAAQBAJ&oi=fnd&pg=PA99&dq=Stories+Out+Of+School:+Poor+and+Working-Class+Students+at+a+Small+Liberal+Arts+College&ots=GsILJvL\_x0&sig=ieRq3vcek2fBUtvGctm8M7s56ng#v=onepage&q=Stories%20Out%20Of%20School%3A%20Poor%20and%20Working-
- Class% 20Students% 20at% 20a% 20Small% 20Liberal% 20Arts% 20College&f=false

  Oldfield, K. (2007). Humble and hopeful: welcoming first-generation and working-class students to college. *About Campus*, 11(6), 2-12. doi:10.1002/abc.188

- Ong, A. D., Phinney, J. S., & Dennis, J. (2006). Competence under challenge: exploring the protective influence of parental support and ethnic identity in latino college students.

  \*Journal of Adolescence\*, 29(6), 961-979. doi:10.1016/j.adolescence.2006.04.010
- Osterman, K. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70 (3), 323-367. doi:10.3102/00346543070003323
- Ostrove, J. M. (2003). Belonging and wanting: Meanings of social class background for women's constructions of their college experiences. *Journal of Social Issues*, *59*(4), 771-784. doi:10.1046/j.0022-4537.2003.00089.x
- Ostrove, J. M., & Cole, E. R. (2003). Privileging class: toward a critical psychology of social class in the context of education. *Journal of Social Issues*, *59*(4), 677-692. doi:10.1046/j.0022-4537.2003.00084.x
- Ostrove, J. M., & Long, S. M. (2007). Social class and belonging: Implications for college adjustment. *The Review of Higher Education*, *30*(4), 363-389. doi:10.1353/rhe.2007.0028
- Peckham, I. (1995). Complicity in class codes: The exclusionary function of education. In C. L. Barney Dews & C. L. Law (Eds). *This Fine Place from Home: Voices of Working Class Academics*. (pp. 263-276). Philadelphia, PA: Temple University Press.
- Perez, W., Espinoza, R., Ramos, K., Coronado, H.M., & Cortes, R. (2009). Academic resilience among undocumented latino students. *Hispanic Journal of Behavioral Sciences*, 2(31), 149-181. doi:10.1177/0739986309333020
- Peterson, C. (2000). The future of optimism. *American Psychologist*, *55*, 44-55. doi:10.1037/0003-066X.55.1.44
- Petros, N., Opacka-Juffry, J., & Huber, J. H. (2013). Psychometric and neurobiological assessment of resilience in a non-clinical sample of adults. *Psychoneuroendocrinology*,

- 38(10), 2099-2108. doi:10.1016/j.psyneuen.2013.03.022
- Phinney, J. S. (1992). The multigroup ethnic identity measure: a new scale for use with diverse groups. *Journal of Adolescent Research*, 7, 156–176. doi:10.1177/074355489272003
- Phinney, J.S., & Haas, K. (2003). The process of coping among ethnic minority first-generation college freshman: a narrative approach. *The Journal Social Psychology*, *143*(6), 707-726. doi:10.1080/00224540309600426
- 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), 771-784. doi:10.1037/a0020092
- Pittman, L. D., & Richmond, A. (2008). University belonging, friendship quality, and psychological adjustment during the transition to college. *The Journal of Experimental Education*, 76(4), 343-362. doi:10.3200/JEXE.76.4.343-362
- Ponterotto, J.G. (2010). *Handbook of Multicultural Counseling (3<sup>rd</sup> edition)*. Thousand Oaks, California: SAGE Publications.
- Prilleltensky, I. (2008). The role of power in oppression, wellness, and liberation: the promise of psychopolitical validity. *Journal of Community Psychology*, *36*(2), 116-136. doi:10.1002/jcop.20225
- Radloff, L. S. (1977). The CES–D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385–401. doi:10.1177/014662167700100306
- Raskin, A., Schulterbrandt, J., Reatig, N, & McKeon, J. (1968). Replication of factors of psychopathology in interview, ward behavior and self report ratings of hospitalized depressives. *Journal of Nervous and Mental Diseases*, 148, 87-96.

- Rencher, A.C. & Christensen, W. F. (2012). *Methods of multivariate analysis, third edition*. Somerset, NJ: John Wiley & Sons.
- Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 58(3), 307-321. doi:10.1002/jclp.10020
- Richardson, G.E., Neiger, G., Jensen, S., & Kumpfer, K. (1990). The resiliency model. *Health Education*, 21, 33-39.
- Roberts, R., Golding, J., Towell, T., & Weinreb, I. (1999). The effects of economic circumstances on British students' mental and physical health. *Journal of American College Health*, 48(3), 103-109. doi:10.1080/07448489909595681
- Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: construct validation of a single-item measure and the rosenberg self-esteem scale.

  \*Personality and Social Psychology Bulletin, 27(2), 151-161.

  doi:10.1177/0146167201272002
- Rosenberg, M. (1965). *Society and the adolescent self-Image*. Princeton, NJ: Princeton University Press.
- Russell, G. (1996). Internalized classism: the role of class in the development of self. *Women & Therapy*, 18(3-4), 59-71. Retrieved from http://drglendarussell.com/wp-content/uploads/2013/05/InternalizedClassism.pdf
- Ryan, J., & Sackrey, C. (1996). *Strangers in paradise*. New York: University Press of America, Inc.
- Ryan, R. M. (1995). Psychological needs and the facilitations of integrative processes. *Journal of Personality*, 63, 397-427. doi:10.1111/j.1467-6494.1995.tb00501.x
- Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic

- motivation, social development, and well-being. *American Psychologist*, *55*, 79-88. doi:10.1037/0003-066X.55.1.68
- Sadeo, K. C. (2003). Living in two worlds: Success and the bicultural faculty of color. *Review of Higher Education*, 26, 397–418. doi:10.1353/rhe.2003.0034
- Salahuddin, N. M., & O'Brien, K. M. (2011). Challenges and resilience in the lives of urban, multiracial adults: An instrument development study. *Journal of Counseling Psychology*, 58(4), 494. doi:10.1037/a0024633
- Santiago, C. D., Wadsworth, M. E., & Stump, J. (2011). Socioeconomic status, neighborhood disadvantage, and poverty-related stress: prospective effects on psychological syndromes among diverse low-income families. *Journal of Economic Psychology*, 32(2), 218-230. doi:10.1016/j.joep.2009.10.008
- Sarsour, K., Sheridan, M., Jutte, D., Nuru-Jeter, A., Hinshaw, S., & Boyce, W. T. (2011). Family socioeconomic status and child executive functions: The roles of language, home environment, and single parenthood. *Journal of the International Neuropsychological Society*, 17(01), 120-132. doi:10.1017/S1355617710001335
- Schmidt, C. K., Piontkowski, S., Raque-Bogdan, T. L., & Ziemer, K. S. (2014). Relational health, ethnic identity, and well-being of college students of color a strengths-based perspective. *The Counseling Psychologist*, 42(4), 473-496.

  doi:10.1177/0011000014523796
- Schmitt, D. P., & Allik, J. (2005). Simultaneous administration of the rosenberg self-esteem scale in 53 nations: exploring the universal and culture-specific features of global self-esteem. *Journal of Personality and Social Psychology*, 89(4), 623. doi:10.1037/0022-3514.89.4.623

- Schoon, I. & Parsons, S. (2002). Competence in the face of adversity: The influence of early family environment and long-term consequences. *Children & Society*, 16(4), 260-272. doi:10.1002/chi.713
- Schoon, I, Parsons, S., & Sacker, A. (2004). Socioeconomic adversity, educational resilience, and subsequent levels of adult adaptation. *Journal of Adolescent Research*, 19, 383-404. doi:10.1177/0743558403258856.
- Schubert, J. D. (2008), 'Suffering/symbolic violence'. In M. Grenfell (ed.), *Pierre Bourdieu Key Concepts* (pp. 183–98). Stocksfield England: Acumen Publicans.
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling*.

  Mahwah, New Jersey: Psychology Press.
- Schwartz, J., Donovan, J., & Guido-DiBrito, F. (2009). Stories of social class: self-identified mexican male college students crack the silence. *College Student Development*, 50(1), 50-66. doi:10.1353/csd.0.0051
- Seligman, M. E., & Csikszentmihalyi, M. (2000). *Positive psychology: An introduction.*American Psychologist, 55, 5-14. doi:10.1037//0003-066X.55.1.5
- Shih, M. (2004). Positive stigma: Examining resilience and empowerment in overcoming stigma.

  The ANNALS of the American Academy of Political and Social Science, 591(1), 175-185.

  doi:10.1177/0002716203260099
- Smith, L. (2005). Psychotherapy, classism, and the poor: Conspicuous by their absence.

  \*American Psychologist, 60(7), 687-696. doi:10.1037/0003-066X.60.7.687
- Smith, L. (2008). Positioning classism within counseling psychology's social justice agenda. *The Counseling Psychologist*, *36*(6), 895-924. doi:10.1177/0011000007309861

- Smith, L. (2010). *Psychology, poverty, and the end of social exclusion: putting our practice to work.* New York: Teachers College Press.
- Smith, L., Allen, A., & Bowen, R. (2010). Expecting the worst: Exploring the associations between poverty and misbehavior. *Journal of Poverty*, 14, 33 54. doi:10.1080/10875540903489397
- Smith, L., Chambers, D. A., & Bratini, L. (2009). When oppression is the pathogen: The participatory development of socially just mental health practice. *American Journal of Orthopsychiatry*, 79(2), 159. doi:10.1037/a0015353
- Smith, L., Mao., S., Deshpande, A. (in press). Talking across worlds: Classist microaggressions and higher education. *Journal of Poverty*.
- Smith, L., Mao, S., Perkins, S., & Ampuero, M. (2011). The relationship of clients' social class to early therapeutic impressions. *Counselling Psychology Quarterly*, 24(1), 15-27. doi:10.1080/09515070.2011.558249
- Smith, L. & Redington, R. (2010). Class dismissed: making the case for the study of classist microaggressions. In D. W. Sue (Ed.), *Microaggressions and marginality:*manifestations, dynamics, and impact (pp. 269-285). Hoboken, New Jersey: John Wiley & Sons.
- Soria, K. M., & Stebleton, M. J. (2013). Social capital, academic engagement, and sense of belonging among working-class college students. *College Student Affairs Journal*, 31(2), 139-153.
- Southwick, S. M., Morgan, C. A., Vythilingam, M., & Charney, D. (2006). Mentors enhance resilience in at-risk children and adolescents. *Psychoanalytic Inquiry*, 26, 577-584. doi:10.1080/07351690701310631

- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & The Patient Health Questionnaire Primary Care Study Group. (1999). Validation and utility of a self-report version of prime-md: the phq primary care study. *Journal of the American Medical Association*, 282, 1737–1744. doi:10.1001/jama.282.18.1737
- Strahan, R. & Gerbasi, K. C. (1972). Short, homogeneous versions of the marlow-crowne social desirability scale. Journal of Clinical Psychology.
- Stanford University Class Confessions. (2015). *Stanford University Class Confessions*. Retrieved from <a href="https://www.facebook.com/stanfordclassconfessions/timeline">https://www.facebook.com/stanfordclassconfessions/timeline</a>
- Strayhorn, T. (2012). College students' sense of belonging: a key to educational success for all students. New York: Routledge.
- Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*, 25(2), 173-180.
- Stephens, N. M., Markus, H. R., & Phillips, L. T. (2014). Social class culture cycles: how three gateway contexts shape selves and fuel Inequality. *The Annual Review of Psychology*, 65, 611-634. doi:10.1146/annurev-psych-010213-115143
- Stuber, J. M. (2011). Integrated, marginal, and resilient: race, class, and the diverse experiences of white first-generation college students. *International Journal of Qualitative Studies in Education*, 24(1), 117-136.
- Sue, D.W., Capodilupo, C.M., Torino, G.C., Bucceri, J.M., Holder, A.M.B., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: implications for clinical practice. *American Psychologist*, 62, 271-286. doi:10.1037/0003-066X.62.4.271

- Sue, D. W., & Sue, D. (2012). Counseling the culturally diverse: theory and practice. Hoboken, NJ: John Wiley & Sons.
- Swartz, D. (1997). *Culture and power: the sociology of pierre bourdieu*. Chicago, IL: The University of Chicago Press.
- Tett, L. (2000). 'I'm working class and proud of it' gendered experiences of non-traditional participants in higher education. *Gender and Education*, 12(2), 183-194. doi:10.1080/09540250050009993
- The Pell Institute for the Study of Higher Education Opportunity. (2015). Indicators of Higher Education Equity in the United States. *Penn Ahead: Alliance for Higher Education and Democracy*. Retrieved from http://www.pellinstitute.org/downloads/publications-Indicators\_of\_Higher\_Education\_Equity\_in\_the\_US\_45\_Year\_Trend\_Report.pdf
- Thompson, M. N., Cole, O. D., & Nitzarim, R. S. (2012). Recognizing social class in the psychotherapy relationship: a grounded theory exploration of low-income clients. *Journal of Counseling Psychology*, 59(2), 208. doi:10.1037/a0027534
- Tsui, L. (2003). Reproducing social inequalities through higher education: critical thinking as valued capital. *The Journal of Negro Education*, 72(2), 318-332. Retrieved from http://www.jstor.org/stable/3211250
- Van Vliet, K. J. (2008). Shame and resilience in adulthood: a grounded theory study. *Journal of Counseling Psychology*, 55(2), 233. doi:10.1037/0022-0167.55.2.233
- Vanderbilt-Adriance, E., & Shaw, D. S. (2008). Protective factors and the development of resilience in the context of neighborhood disadvantage. *Journal of Abnormal Child Psychology*, *36*(6), 887-901. doi:10.1007/s10802-008-9220-1
- Wak, W. W.S., Ng, I. S., & Wong, C. Y. (2011). Resilience: Enhancing well-being through the

- positive cognitive triad. *Journal of Counseling Psychology*, 58(4), 610-617. doi:10.1037/a0025195
- Waller, M. A. (2001). Resilience in ecosystemic context: Evaluation of the concept. *American Journal of Orthopsychiatry*, 71(3), 290-297.
- Walpole, M.B (2003). Socioeconmic status and college: How ses affects college experiences and outcomes. *The Review of Higher Education*, 27(1), 45-73. doi:10.1353/rhe.2003.0044
- 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. doi:10.1126/science.1198364
- Watkins, M.W. (2000). *Monte Carlo PCA for parallel analysis* [computer software]. State College, PA: Ed & Psych Associates.
- Waxman, H. C., Gray, J. P., & Padron, Y. N. (2003). *Review of research on educational*resilience. Santa Cruz, CA: University of California's Center for Research on Education,

  Diversity, & Excellence
- Weil, A. (2007). A health plan to reduce poverty. *The Future of Children*, 17(2), 97-116. doi:0.1353/foc.2007.0020
- Weitzman, E. R. (2004). Poor mental health, depression, and associations with alcohol consumption, harm, and abuse in a national sample of young adults in college. *The Journal of Nervous and Mental Disease*, 192(4), 269-277.
- Werner, E. E. (1995). Resilience in development. *Current Directions in Psychological Science*, 4(3), 81-85. Retrieved from https://www2.viu.ca/resilience/documents/ResilienceinDevelopment.pdf

- Werner, E. E., & Smith, R. S. (1992). Overcoming the odds: High risk children from birth to adulthood. Ithaca, NY: Cornell University Press.
- Werner, E. E. & Smith, R. S. (2001). *Journey's from childhood to midlife: Risk, resilience, and recovery*. Ithaca, New York: Cornell University Press.
- Werner, E. E., & Smith, R. S. (1977). *Kauai's children come of age*. Honolulu, HI: University of Hawaii Press.
- Weston, R., & Gore, P. A., Jr. (2006). A brief guide to structural equation modeling. *The Counseling Psychologist*, 34, 719-751. doi:10.1177/0011000006286345
- Williams College Class Confessions. (2015). *Williams College Class Confessions*. Retrieved from https://www.facebook.com/WilliamsClassConfessions?fref=ts
- Winkle-Wagner, R. (2009). The perpetual homelessness of college experiences: Tensions between home and campus for african american women. *The Review of Higher Education*, 33(1), 1-36. doi:10.1353/rhe.0.0116
- Wolin, S., & Wolin, S. (1995). Resilience among youth growing up in substance-abusing families. *Pediatric Clinics of North America*, 42(2), 415-429.
- Worthington, R. L. & Whittaker, T. A. (2006). Scale development research: a content analysis and recommendations for best practices. *The Counseling Psychologist*, *34*, 806-838. doi:10.1177/0011000006288127
- Zung, W. W. (1965). A self-rating depression scale. *Archives of General Psychiatry*, 12(1), 63-70. doi:10.1001/archpsyc.1965.01720310065008
- Zweig, M. (2012). Working class majority: America's best kept secret (2nd Edition). Ithaca, NY: Cornell University Press.

Table 1

Categories of Resources, Challenges, and Protective Factors Affecting Poor/Working Class College Students

| Categories                      | Challenges  | Protective Factors  |
|---------------------------------|---|---|
| Finances                        | Low levels of financial capital; financial barriers and stress  | Adequate financial capital and/or support and mentoring                       |
| Communication                   | Low levels of discourse capital; class–related communication barriers and stress                            | Adequate class-related discourse capital and/or support and mentoring         |
| Academic Cultural<br>Navigation | Low levels of academic cultural capital; class-<br>related academic mis-navigation, barriers, and<br>stress | Adequate class-related academic cultural capital and/or support and mentoring |
| Interpersonal<br>Relationships  | Low levels of campus social capital; class-<br>related campus isolation and stress                          | Adequate campus social networks and/or support and mentoring                  |
| Dual-Class Identity<br>Issues   | Dual-class identity conflicts and stress  | Dual-class identity awareness and/or support and mentoring                    |

Table 2
Frequencies and Percentages of Demographic Variables for Total Sample

|  | Total Sample | (N = 253) |
|--|--------------|-----------|
| Variables  | N            | Percen    |
| Age  |              |           |
| 18-20  | 163          | 64.       |
| 21-23  | 51           | 20.       |
| 24-26  | 10           | 3.        |
| >26  | 10           | 3.        |
| Missing  | 19           | 7.:       |
| Gender   |              |           |
| Male/Man   | 59           | 23        |
| Female/Woman   | 185          | 73.       |
| Other  | 7            | 2.        |
| Missing  | 2            | 0.3       |
| Race   |              |           |
| Asian/Asian American Pacific Islander                  | 43           | 17.       |
| Black/African American                                 | 27           | 10.       |
| Hispanic/Latino(a)                                     | 81           | 32.       |
| Native American/American Indian                        | 4            | 1.        |
| White/None Hispanic/European American                  | 76           | 30.       |
| Bi/Multiracial   | 17           | 6.        |
| Other  | 4            | 1.        |
| Missing  | 1            | 0.        |
| Parent/Guardian's Highest Level of Education           |              |           |
| Elementary School                                      | 20           | 7.        |
| Middle School  | 30           | 11.       |
| High School  | 116          | 45.       |
| Some College   | 49           | 19.       |
| Community College                                      | 19           | 7.        |
| 4-Year College   | 15           | 5.        |
| Graduate Degree  | 4            | 1.        |
| Missing  | 0            | 0.        |
| Second Parent/Guardian's Highest Level of<br>Education |              |           |
| Elementary School                                      | 16           | 6.        |
| Middle School  | 26           | 10.       |
| High School  | 107          | 42.       |
| Some College   | 40           | 15.       |
| Community College                                      | 14           | 5.        |
|  |              |           |
| 4-Year College   | 14           | 5.        |

| Not Applicable                     | 19  | 7.5         |
|------------------------------------|-----|-------------|
| Missing                            | 15  | 5.9         |
| Type of Institution                |     |             |
| Public                             | 70  | 27.7        |
| Private                            | 171 | 67.6        |
| Missing                            | 12  | 4.7         |
| Size of Institution                |     |             |
| Very Small                         | 3   | 1.2         |
| Small                              | 56  | 22.1        |
| Medium                             | 47  | 18.6        |
| Large                              | 135 | 53.3        |
| Missing                            | 12  | 4.7         |
| Year                               |     |             |
| First Year                         | 73  | 28.9        |
| Second Year                        | 64  | 25.3        |
| Third Year                         | 55  | 21.7        |
| Fourth Year                        | 43  | 17.0        |
| Fifth Year                         | 10  | 4.0         |
| Sixth Year                         | 3   | 1.2         |
| Seventh Year or More               | 5   | 2.0         |
| Missing                            | 0   | 0.0         |
| Transfer Student                   | 4.4 | 1.50        |
| Yes                                | 41  | 16.2        |
| No                                 | 206 | 81.4        |
| Missing                            | 6   | 2.4         |
| Reason for Transfer                | _   | 45.0        |
| Academic                           | 7   | 17.0        |
| Graduated from a Community College | 15  | 0.4         |
| Distress or Unhappiness            | 6   | 15.0        |
| Financial                          | 4   | 10.0        |
| Family Issues                      | 1   | 3.0         |
| Came Back to School Later in Life  | 1   | 3.0         |
| Reason was Not Clearly Stated      | 6   | 15.0        |
| Location of Housing                | 172 | <b>60.4</b> |
| On Campus                          | 173 | 68.4        |
| Off Campus                         | 80  | 31.6        |
| Missing                            | 0   | 0.0         |
| Ethnicity                          | ~   | 1.00        |
| African American                   | 5   | 1.98        |
| American                           | 4   | 1.58        |
| Arab                               | 1   | 0.40        |
| Asian                              | 1   | 0.40        |

| Danaladaah:        | 2  | 0.70         |
|--------------------|----|--------------|
| Bangladeshi        | 2  | 0.79<br>0.40 |
| Basques<br>Black   | 4  | 1.58         |
| Brazilian          | 2  |              |
|                    |    | 0.79         |
| Caribbean American | 1  | 0.40         |
| Caucasian          | 4  | 1.58         |
| Chicano/a          | 2  | 0.79         |
| Chinese            | 15 | 5.93         |
| Columbian          | 4  | 1.58         |
| Cuban              | 1  | 0.40         |
| Danish             | 1  | 0.40         |
| Dominican          | 3  | 1.19         |
| Eritrean           | 1  | 0.40         |
| Ethiopian          | 1  | 0.40         |
| European           | 1  | 0.40         |
| Ghanaian           | 1  | 0.40         |
| Guyanese           | 1  | 0.40         |
| Haitian            | 1  | 0.40         |
| Hispanic           | 9  | 3.56         |
| Hmong              | 1  | 0.40         |
| Irish              | 2  | 0.79         |
| Irish American     | 1  | 0.40         |
| Italian            | 1  | 0.40         |
| Jamaican           | 1  | 0.40         |
| Japanese           | 2  | 0.79         |
| Jewish             | 1  | 0.40         |
| Korean             | 2  | 0.79         |
| Korean American    | 1  | 0.40         |
| Latino/a           | 8  | 3.16         |
| Macedonian         | 1  | 0.40         |
| Mexican            | 14 | 5.53         |
| Mexican American   | 4  | 1.58         |
| Mexican Honduran   | 1  | 0.40         |
| Mexican-American   | 3  | 1.19         |
| Mixed Heritage     | 11 | 4.35         |
| Moroccan           | 1  | 0.40         |
| Mountain Apache    | 1  | 0.40         |
| Muscogee (Creek)   | 1  | 0.40         |
| Non-Hispanic       | 1  | 0.40         |
| Puerto Rican       | 1  | 0.40         |
| Puerto Rican       | 1  | 0.40         |
| Romanian           | 2  | 0.79         |
| Salvadoran         | 1  | 0.40         |
|                    |    |              |

| Salvadorian-American | 1  | 0.40  |
|----------------------|----|-------|
| Spanish              | 1  | 0.40  |
| Sudanese             | 1  | 0.40  |
| Syrian               | 1  | 0.40  |
| Tibetan              | 2  | 0.79  |
| Ukrainian            | 1  | 0.40  |
| Ukrainian American   | 1  | 0.40  |
| Vietnamese           | 3  | 1.19  |
| Vietnamese-American  | 2  | 0.79  |
| White                | 23 | 9.09  |
| White American       | 2  | 0.79  |
| Missing              | 86 | 33.99 |
|                      |    |       |

Note. Under the Reason for Transfer category, one participant's response fell into two categories.

Table 3
Individual Eigenvalues and Variances for Initial PCA

|            |           | V          | Percentage of |
|------------|-----------|------------|---------------|
| Scale      | Component | Eigenvalue | Variance      |
| Challenge  | 1         | 19.44      | 32.96         |
|            | 2         | 3.59       | 6.08          |
|            | 3         | 2.53       | 4.29          |
|            | 4         | 2.06       | 3.50          |
|            | 5         | 1.77       | 3.00          |
|            | 6         | 1.57       | 2.66          |
|            | 7         | 1.55       | 2.63          |
|            | 8         | 1.38       | 2.34          |
|            | 9         | 1.32       | 2.23          |
|            | 10        | 1.20       | 2.03          |
|            | 11        | 1.15       | 1.95          |
|            | 12        | 1.10       | 1.87          |
|            | 13        | 1.04       | 1.75          |
| Resilience | 1         | 10.29      | 24.50         |
|            | 2         | 2.81       | 6.70          |
|            | 3         | 2.51       | 5.97          |
|            | 4         | 2.26       | 5.38          |
|            | 5         | 1.90       | 4.51          |
|            | 6         | 1.78       | 4.24          |
|            | 7         | 1.47       | 3.49          |
|            | 8         | 1.38       | 3.30          |
|            | 9         | 1.13       | 2.68          |
|            | 10        | 1.07       | 2.56          |
|            | 11        | 1.05       | 2.50          |

Component Factor Analysis Loadings for Retained Challenges Items

|                | Item Content by Challenge Factors   |       | Components |       |       |  |  |  |
|----------------|---|-------|------------|-------|-------|--|--|--|
|                |   | 1     | 3          | 3     | 4     |  |  |  |
| Factor 1: Isol | ation from Peers  |       |            |       |       |  |  |  |
| 40             | It's difficult for me to connect with other students who come from wealthier families   | 0.81  | -0.12      | -0.17 | 0.20  |  |  |  |
| 36             | I've heard another student say something negative about low-income people.  | 0.73  | 0.04       | 0.10  | -0.07 |  |  |  |
| 45             | I feel isolated from the other students due to my financial situation.  | 0.70  | 0.16       | -0.03 | 0.11  |  |  |  |
| 7              | I feel inadequate when I hear about the opportunities<br>my peers have experienced (e.g. travel, trips to<br>museums).                  | 0.68  | 0.03       | -0.13 | 0.04  |  |  |  |
| 43             | Other students have made comments about their ability to pay for things that I cannot afford, which makes me feel less than.            | 0.65  | 0.15       | 0.01  | -0.05 |  |  |  |
| Factor 2: Fin  | ancial Strain   |       |            |       |       |  |  |  |
| 25             | I'm embarrassed to tell the professor that I can't afford<br>the supplies for class.<br>I have struggled to keep up with class material | 0.02  | 0.71       | -0.16 | 0.14  |  |  |  |
| 9              | because I could not afford the books or supplies for the class.   | 0.03  | 0.71       | -0.04 | 0.01  |  |  |  |
| 11             | My housing has not been adequate because I cannot afford to pay for the rent.   | -0.21 | 0.69       | 0.11  | -0.09 |  |  |  |
| 24             | My professors do not understand when I cannot afford the supplies needed for the class.   | 0.01  | 0.68       | -0.14 | 0.14  |  |  |  |
| 10             | I am discouraged from staying at college due to the financial constraints it puts on my family.   | -0.15 | 0.66       | 0.16  | -0.07 |  |  |  |

153

| Factor | 3: Fan | nily Connection   |       |       |       |       |
|--------|--------|---|-------|-------|-------|-------|
|        | 57     | My family tells me that I seem different, and they don't like that. | -0.21 | 0.10  | 0.81  | 0.05  |
|        | 59     | I feel like I have grown apart from my family members.              | 0.06  | -0.01 | 0.77  | -0.01 |
|        | 57     | I no longer feel as connected to where I grew up.                   | 0.14  | -0.07 | 0.74  | -0.11 |
|        | 53     | My family does not understand my new ways of living.                | 0.19  | -0.15 | 0.72  | 0.03  |
|        | 54     | My family does not understand my new ways of speaking.              | 0.04  | 0.01  | 0.72  | 0.07  |
| Factor | 4: Con | nparison to Peers   |       |       |       |       |
|        |        | I feel that I use different vocabulary than many other              |       |       |       |       |
|        | 17     | •   | -0.09 | 0.07  | 0.02  | 0.80  |
|        | 19     | My language is more casual than most other students.                | -0.02 | -0.04 | 0.06  | 0.74  |
| 154    |        | Most other students seem to understand how college                  |       |       |       |       |
| -      | 31     | works better than I do.   | 0.23  | -0.09 | -0.05 | 0.66  |
|        | 16     | I feel that I sound less intelligent than my peers.                 | 0.20  | -0.14 | -0.03 | 0.66  |
|        |        | My family and friends back at home speak differently                |       |       |       |       |
|        | 21     | than my peers.  | -0.14 | -0.02 | 0.31  | 0.60  |

Table 5

Means, Standard Deviations, and Reliability Coefficients for the P/W-CRF

| Total            | Scales and Factors           | M     | SD    | α   |
|------------------|------------------------------|-------|-------|-----|
| Challenges Scale |                              | 54.76 | 20.30 | .91 |
|                  | Isolation from Peers         | 16.26 | 6.91  | .85 |
|                  | Financial Strain             | 10.22 | 5.28  | .77 |
|                  | Family Connection            | 11.85 | 7.30  | .85 |
|                  | Comparison to Peers          | 16.99 | 7.00  | .83 |
| Resilience Scale |                              | 99.00 | 17.45 | .86 |
|                  | Belonging                    | 12.98 | 3.56  | .83 |
|                  | Mentorship                   | 9.35  | 4.40  | .81 |
|                  | Communication                | 12.65 | 3.63  | .85 |
|                  | Finances                     | 9.82  | 4.01  | .70 |
|                  | External Resources           | 12.71 | 3.50  | .67 |
|                  | Social Class Teachings       | 14.86 | 2.81  | .69 |
|                  | Family Connection            | 14.19 | 3.39  | .69 |
|                  | Identification and Awareness | 13.21 | 3.19  | .65 |

Table 6
Challenge Scale and Demographic Associations

| Variables              | 1    | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11   |
|------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1. First               |      |       |       |       |       |       |       |       |       |       |      |
| Parents/Guardians'     |      |       |       |       |       |       |       |       |       |       |      |
| Highest Level of       |      |       |       |       |       |       |       |       |       |       |      |
| Education              | 1.00 |       |       |       |       |       |       |       |       |       |      |
| 2. Type of Institution | .07  | 1.00  |       |       |       |       |       |       |       |       |      |
| 3. Size of Institution | 03   | 27**  | 1.00  |       |       |       |       |       |       |       |      |
| 4. Year in College     | .08  | 14*   | 04    | 1.00  |       |       |       |       |       |       |      |
| 5. Transfer Status     | .07  | 21**  | .15*  | .46** | 1.00  |       |       |       |       |       |      |
| 6. Location of         |      |       |       |       |       |       |       |       |       |       |      |
| Housing                | 06   | 31**  | .18** | .40** | .31** | 1.00  |       |       |       |       |      |
| 7. Total Challenge     |      |       |       |       |       |       |       |       |       |       |      |
| _ Scale                | 01   | .09   | 01    | .29** | .06   | .08   | 1.00  |       |       |       |      |
| \$ 8. Isolation from   |      |       |       |       |       |       |       |       |       |       |      |
| Peers                  | .05  | .15*  | 01    | .28** | .06   | .08   | .84** | 1.00  |       |       |      |
| 9. Financial Strain    | 06   | 07    | .05   | .23** | .12   | .18** | .65** | .45** | 1.00  |       |      |
| 10. Family             |      |       |       |       |       |       |       |       |       |       |      |
| Connection             | 08   | .14*  | 08    | .11   | .03   | .05   | .74** | .51** | .33** | 1.00  |      |
| 11. Comparison to      |      |       |       |       |       |       |       |       |       |       |      |
| Peers                  | 09   | .18** | 11    | .14*  | 07    | 05    | .74** | .54** | .26** | .49** | 1.00 |

*Note*. \*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed).

*Note.* First Parents/Guardians' Highest Level of Education ranged from 1 to 7, with 7 being the highest level of education.

Type of Institution was coded as 1 for public and 2 for private. Size of Institution ranged from 1 to 4, with 4 being the largest institution.

Transfer Status was coded as 1 for did not transfer and 2 for did transfer.

Location of housing was coded 1 for on campus and 2 for off campus.

Table 7

Component Factor Analysis Loadings for Retained Resilience Items

|             | Item Content by Resilience Factors   |       |       | Components |       |       |       |       |       |  |  |  |
|-------------|--|-------|-------|------------|-------|-------|-------|-------|-------|--|--|--|
|             |  | 1     | 3     | 3          | 4     | 5     | 6     | 7     | 8     |  |  |  |
| Factor 1: B | Belonging  |       |       |            |       |       |       |       |       |  |  |  |
|             | I have found groups of people at college that I feel   |       |       |            |       |       |       |       |       |  |  |  |
| 28          | comfortable with.  | 0.90  | -0.14 | -0.14      | -0.05 | 0.12  | 0.00  | -0.09 | 0.14  |  |  |  |
| 27          | I feel connected to my peers at college.   | 0.85  | -0.01 | 0.02       | 0.01  | 0.03  | -0.04 | 0.04  | -0.02 |  |  |  |
|             | My college campus feels like a place where I   |       |       |            |       |       |       |       |       |  |  |  |
| 31          | belong.  | 0.82  | -0.04 | 0.07       | -0.02 | -0.13 | 0.11  | 0.13  | -0.09 |  |  |  |
| Factor 2: M | <b>Mentorship</b>  |       |       |            |       |       |       |       |       |  |  |  |
|             | A mentor or department at my school (e.g. HEOP, EOP, financial aid) that supports first generation or low-income students has helped me navigate the |       |       |            |       |       |       |       |       |  |  |  |
| 9           | finances of college.   | -0.01 | 0.87  | -0.18      | 0.06  | -0.18 | 0.13  | -0.04 | 0.06  |  |  |  |
|             | I have a campus mentor who has helped me figure  |       |       |            |       |       |       |       |       |  |  |  |
| 6           | out a financial plan for getting through school.   | -0.18 | 0.84  | 0.07       | 0.13  | -0.06 | 0.01  | -0.09 | 0.05  |  |  |  |
|             | I have a campus mentor who has helped me figure  |       |       |            |       |       |       |       |       |  |  |  |
| 17          | out the college environment.   | 0.20  | 0.77  | -0.01      | -0.03 | 0.01  | 0.02  | -0.07 | -0.13 |  |  |  |
| Factor 3: C | Communication  |       |       |            |       |       |       |       |       |  |  |  |
|             | I'm comfortable with the communication style of  |       |       |            |       |       |       |       |       |  |  |  |
| 13          | my campus community.   | 0.15  | -0.04 | 0.73       | 0.00  | 0.03  | 0.02  | 0.16  | -0.16 |  |  |  |
|             | I know how to speak up to professors and express   |       |       |            |       |       |       |       |       |  |  |  |
| 12          | my opinions.   | -0.04 | -0.10 | 0.93       | 0.08  | -0.01 | -0.01 | -0.11 | 0.04  |  |  |  |
|             | I know how to participate effectively in classroom   |       |       |            |       |       |       |       |       |  |  |  |
| 11          | discussions and debates.   | -0.09 | -0.04 | 0.94       | 0.03  | -0.02 | 0.12  | -0.01 | -0.04 |  |  |  |
| 11          | discussions and debates.   | -0.09 | -0.04 | 0.94       | 0.03  | -0.02 | 0.12  | -0.01 |       |  |  |  |

15

| Factor 4: Fi   | inances   |       |       |       |       |       |       |       |       |
|----------------|---|-------|-------|-------|-------|-------|-------|-------|-------|
|                | My financial aid package gives me sufficient  |       |       |       |       |       |       |       |       |
| 3              | spending money.   | -0.10 | 0.09  | 0.16  | 0.77  | 0.17  | -0.06 | -0.04 | 0.03  |
|                | I don't worry about paying for college, because I   | 0.00  | 0.11  | 0.10  |       | 0.01  | 0.00  | 0.05  | 0.00  |
| 1              | have a scholarship or other financial resources.  | 0.09  | 0.11  | -0.13 | 0.71  | -0.06 | 0.09  | -0.05 | -0.03 |
| 4              | My job pays me adequately.  | -0.09 | 0.01  | 0.13  | 0.70  | 0.12  | 0.04  | -0.04 | 0.04  |
| Factor 5: Ex   | xternal Resources   |       |       |       |       |       |       |       |       |
|                | I have used websites to learn more about being a  |       |       |       |       |       |       |       |       |
| 21             | college student.  | 0.04  | -0.08 | 0.06  | 0.12  | 0.81  | -0.01 | 0.16  | -0.19 |
|                | Reading about students like me online helps me  |       |       |       |       |       |       |       |       |
| 34             | feel less alone on campus.  | -0.16 | 0.13  | -0.19 | 0.10  | 0.70  | -0.08 | 0.23  | 0.19  |
| 20             | I participate in extracurricular activities in college.   | 0.35  | -0.05 | -0.02 | 0.01  | 0.61  | 0.13  | 0.10  | -0.09 |
| 5 Factor 6: So | ocial Class Teaching  |       |       |       |       |       |       |       |       |
| 7              | Coming from a low-income family has made me resourceful and careful with money, and that has helped me get through school.      | -0.08 | 0.13  | 0.03  | 0.16  | -0.08 | 0.72  | 0.10  | -0.01 |
| 8              | Because we didn't have much money, my family taught me to have a very strong work ethic, which has helped me succeed at school. | 0.00  | 0.15  | -0.01 | 0.09  | -0.23 | 0.68  | 0.02  | 0.09  |
| O              | •   | 0.00  | 0.13  | -0.01 | 0.09  | -0.23 | 0.00  | 0.02  | 0.09  |
| 24             | Being from a low-income background has taught me to adapt to different situations.  | -0.02 | -0.12 | 0.11  | 0.06  | 0.24  | 0.65  | -0.01 | 0.11  |
| Factor 7: Fa   | amily Connection  |       |       |       |       |       |       |       |       |
| 19             | My family really supports my college education.   | -0.09 | -0.12 | -0.04 | -0.05 | 0.25  | 0.00  | 0.91  | 0.12  |
|                | My parents/guardians are emotionally supportive   |       |       |       |       |       |       |       |       |
| 26             | of my academic pursuits.  | -0.07 | -0.02 | -0.01 | -0.03 | 0.05  | 0.08  | 0.87  | 0.04  |
| 37             | I have maintained feelings of connection to both my family and my college environment.  | 0.08  | 0.02  | 0.02  | 0.01  | -0.04 | -0.08 | 0.51  | 0.52  |

| Factor 8: Identification and Awareness |   |       |       |       |       |       |       |       |      |  |
|--|---|-------|-------|-------|-------|-------|-------|-------|------|--|
| 38                                     | I identify with other low-income people.  | -0.09 | -0.10 | -0.21 | 0.00  | 0.09  | 0.23  | 0.05  | 0.77 |  |
| 40                                     | It is easy for me to switch between my home and college environment.                    | 0.00  | -0.01 | 0.17  | -0.05 | -0.15 | 0.10  | 0.36  | 0.53 |  |
|  | I can speak comfortably and openly about the ways that my home community and my college |       |       |       |       |       |       |       |      |  |
| 35                                     | community are different.  | 0.23  | 0.03  | 0.07  | 0.12  | 0.01  | -0.15 | -0.02 | 0.52 |  |

Table 8
Resilience Scale (8-factor) and Demographic Associations

| Varia   | ables       | 1    | 2     | 3     | 4     | 5     | 6    | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15   |
|---|-------------|------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1. First Parents/Guard Highest Leve Education | l of        | 1.00 |       |       |       |       |      |       |       |       |       |       |       |       |       |      |
| 2. Type of Ins                                | stitution   | .07  | 1.00  |       |       |       |      |       |       |       |       |       |       |       |       |      |
| 3. Size of Ins                                | titution -  | 03   | 27**  | 1.00  |       |       |      |       |       |       |       |       |       |       |       |      |
| 4.Year in Col                                 | lege        | .08  | 14*   | 04    | 1.00  |       |      |       |       |       |       |       |       |       |       |      |
| 5. Transfer St                                | atus        | .07  | 21**  | .15*  | .46** | 1.00  |      |       |       |       |       |       |       |       |       |      |
| 6. Location of                                | f Housing - | 06   | 31**  | .18** | .40** | .31** | 1.00 |       |       |       |       |       |       |       |       |      |
| 7. Total Resil                                | ience Scale | .01  | .13   | 16*   | 20**  | 19**  | 21** | 1.00  |       |       |       |       |       |       |       |      |
| 8. Belonging                                  | -           | 05   | .02   | 14*   | 13*   | 17**  | 08   | .72** | 1.00  |       |       |       |       |       |       |      |
| 9. Mentorship                                 | -           | 12   | 07    | 14*   | 24**  | 18**  | 16*  | .65** | .40** | 1.00  |       |       |       |       |       |      |
| 10. Communi                                   | ication     | .09  | 04    | 04    | 01    | .12   | .07  | .54** | .36** | .23** | 1.00  |       |       |       |       |      |
| 11. Finances                                  |             | .01  | .16*  | 02    | 14*   | 16*   | 17*  | .59** | .25** | .34** | .12   | 1.00  |       |       |       |      |
| 12. External l                                | Resources - | 02   | .26** | 13    | 07    | 16*   | 12   | .55** | .35** | .19** | .14*  | .23** | 1.00  |       |       |      |
| 13. Social Cla<br>Teachings                   |             | 04   | 03    | .00   | 05    | 08    | 10   | .55** | .26** | .23** | .16*  | .37** | .27** | 1.00  |       |      |
| 14. Family Co                                 | onnection . | .15* | 01    | 04    | 14*   | 14*   | 15*  | .59** | .33** | .25** | .24** | .20** | .19** | .24** | 1.00  |      |
| 15. Identifica<br>Awareness                   |             | 12   | .06   | 15*   | 11    | 08    | 11   | .65** | .39** | .35** | .27** | .26** | .29** | .30** | .42** | 1.00 |

*Note.* \*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed).

Note. First Parents/Guardians' Highest Level of Education ranged from 1 to 7, with 7 being the highest level of education.

Type of Institution was coded as 1 for public and 2 for private. Size of Institution ranged from 1 to 4, with 4 being the largest institution.

Transfer Status was coded as 1 for did not transfer and 2 for did transfer.

Location of housing was coded 1 for on campus and 2 for off campus.

CFA: Standardized Factor Loadings, Residual Variances, and R-Square for Four-Factor Challenge Model

| Factor                         | Item   | Estimate  | Residual<br>Variances | R-Square |
|--------------------------------|--|-----------|-----------------------|----------|
| Factor 1: Isolation from Peers | rtem   | Littilate | v ar iances           | T Square |
| 43                             | Other students have made comments about their ability to pay for things that I cannot afford, which makes me feel less than. | .72       | .59                   | .41      |
| 7                              | I feel inadequate when I hear about the opportunities my peers have experienced (e.g. travel, trips to museums).             | .64       | .42                   | .58      |
| 45                             | I feel isolated from the other students due to my financial situation.   | .86       | .79                   | .21      |
| 36                             | I've heard another student say something negative about low-income people.   | .68       | .84                   | .16      |
| 40                             | It's difficult for me to connect with other students who come from wealthier families  | .75       | .55                   | .45      |
| Factor 2: Financial Strain     |  |           |                       |          |
| 25                             | I'm embarrassed to tell the professor that I can't afford the supplies for class.  | .80       | .39                   | .61      |
| 9                              | I have struggled to keep up with class<br>material because I could not afford the books<br>or supplies for the class.        | .76       | .42                   | .58      |
| 11                             | My housing has not been adequate because I cannot afford to pay for the rent.  | .40       | .61                   | .39      |
| 24                             | My professors do not understand when I cannot afford the supplies needed for the class.                                      | .74       | .45                   | .55      |

161

|     | 10                            | I am discouraged from staying at college due<br>to the financial constraints it puts on my<br>family. | .46 | .36 | .64 |
|-----|-------------------------------|---|-----|-----|-----|
|     | Factor 3: Family Connection   |   |     |     |     |
|     | 57                            | My family tells me that I seem different, and they don't like that.                                   | .76 | .51 | .49 |
|     | 59                            | I feel like I have grown apart from my family members.  | .81 | .53 | .47 |
|     | 57                            | I no longer feel as connected to where I grew up.   | .72 | .44 | .56 |
|     | 53                            | My family does not understand my new ways of living.  | .79 | .48 | .52 |
|     | 54                            | My family does not understand my new ways of speaking.  | .77 | .26 | .74 |
| 162 | Factor 4: Comparison to Peers |   |     |     |     |
|     | 17                            | I feel that I use different vocabulary than many other college students.                              | .78 | .38 | .62 |
|     | 19                            | My language is more casual than most other students.  | .76 | .40 | .59 |
|     | 31                            | Most other students seem to understand how college works better than I do.                            | .70 | .42 | .58 |
|     | 16                            | I feel that I sound less intelligent than my peers.   | .67 | .48 | .52 |
|     | 21                            | My family and friends back at home speak differently than my peers.                                   | .63 | .34 | .66 |

|                         |   | Residual |           |          |  |  |
|-------------------------|---|----------|-----------|----------|--|--|
| Factor                  | Item  | Estimate | Variances | R-Square |  |  |
| Factor 1: Belonging     |   |          |           |          |  |  |
| 2                       | I have found groups of people at college that I feel comfortable with.  | .74      | .60       | .40      |  |  |
| 2                       | 7 I feel connected to my peers at college.  | .87      | .47       | .53      |  |  |
| 3                       | My college campus feels like a place where I belong.  | .76      | .60       | .39      |  |  |
| Factor 2: Mentorship    |   |          |           |          |  |  |
|                         | A mentor or department at my school (e.g. HEOP, EOP, financial aid) that supports first generation or low-income students has helped me navigate the finances of college. | .80      | .39       | .61      |  |  |
|                         | I have a campus mentor who has helped me figure out a financial plan for getting through school.  | .78      | .42       | .58      |  |  |
| 1                       | I have a campus mentor who has helped me figure out the college environment.  | .73      | .59       | .41      |  |  |
| Factor 3: Communication |   |          |           |          |  |  |
| 1                       | I'm comfortable with the communication style of my campus community.  | .67      | .36       | .64      |  |  |
| 1                       | 2 I know how to speak up to professors and express my opinions.   | .87      | .21       | .79      |  |  |
| 1                       | I know how to participate effectively in classroom discussions and debates.   | .89      | .25       | .75      |  |  |
| Factor 4: Finances      |   |          |           |          |  |  |
|                         | My financial aid package gives me sufficient spending money.  | .72      | .55       | .45      |  |  |
|                         | I don't worry about paying for college, because I have a scholarship or other financial resources.  | .63      | .47       | .53      |  |  |

| • | _ |
|---|---|
| 1 | ⇁ |
| • | ۲ |
|   | ◺ |
| ٠ | _ |

|           | 4                  | My job pays me adequately.  | .63 | .35 | .65 |
|-----------|--------------------|---|-----|-----|-----|
| Factor 5: | External Resource  | s   |     |     |     |
|           | 21                 | I have used websites to learn more about being a college student.   | .62 | .39 | .61 |
|           | 34                 | Reading about students like me online helps me feel less alone on campus.   | .51 | .62 | .38 |
|           | 20                 | I participate in extracurricular activities in college.   | .78 | .65 | .35 |
| Factor 6: | Social Class Teach | ing   |     |     |     |
|           | 7                  | Coming from a low-income family has made me resourceful and careful with money, and that has helped me get through school.      | .76 | .33 | .66 |
|           | 8                  | Because we didn't have much money, my family taught me to have a very strong work ethic, which has helped me succeed at school. | .64 | .24 | .76 |
| 2         | 24                 | Being from a low-income background has taught me to adapt to different situations.  | .59 | .45 | .55 |
| Factor 7: | Family Connection  | 1   |     |     |     |
|           | 19                 | My family really supports my college education.   | .81 | .42 | .58 |
|           | 26                 | My parents/guardians are emotionally supportive of my academic pursuits.  | .82 | .74 | .26 |
|           | 37                 | I have maintained feelings of connection to both my family and my college environment.  | .62 | .62 | .38 |
| Factor 8: | Identification and | Awareness   |     |     |     |
|           | 38                 | I identify with other low-income people.  | .48 | .61 | .39 |
|           | 40                 | It is easy for me to switch between my home and college environment.  | .72 | .77 | .23 |
|           | 35                 | I can speak comfortably and openly about the ways that my home community and my college community are different.                | .62 | .48 | .52 |

Table 11

Comparison of Eigenvalues and Criterion Values from PA.

|    | 1 ,        | , 6       |            | J               |          |
|----|------------|-----------|------------|-----------------|----------|
|    |            |           |            | Criterion Value |          |
|    |            |           | Eigenvalue | from Parallel   |          |
| _  | Scale      | Component | from PCA   | Analysis        | Decision |
|    | Challenge  | 1         | 19.44      | 2.09            | accept   |
|    |            | 2         | 3.59       | 2.00            | accept   |
|    |            | 3         | 2.53       | 1.91            | accept   |
|    |            | 4         | 2.06       | 1.85            | accept   |
|    |            | 5         | 1.77       | 1.80            | reject   |
|    |            | 6         | 1.57       | 1.73            | reject   |
|    |            | 7         | 1.55       | 1.68            | reject   |
|    |            | 8         | 1.38       | 1.63            | reject   |
| 1  |            | 9         | 1.32       | 1.59            | reject   |
| 65 |            | 10        | 1.20       | 1.55            | reject   |
|    |            | 11        | 1.15       | 1.51            | reject   |
|    |            | 12        | 1.10       | 1.47            | reject   |
|    |            | 13        | 1.04       | 1.44            | reject   |
|    | Resilience | 1         | 10.29      | 1.88            | accept   |
|    |            | 2         | 2.81       | 1.77            | accept   |
|    |            | 3         | 2.51       | 1.70            | accept   |
|    |            | 4         | 2.26       | 1.63            | accept   |
|    |            | 5         | 1.90       | 1.58            | accept   |
|    |            | 6         | 1.78       | 1.52            | accept   |
|    |            | 7         | 1.47       | 1.47            | reject   |
|    |            | 8         | 1.38       | 1.43            | reject   |
|    |            | 9         | 1.13       | 1.38            | reject   |
|    |            | 10        | 1.07       | 1.34            | reject   |
|    |            | 11        | 1.05       | 1.30            | reject   |

Table 12.

Component Factor Analysis Loadings for Retained Six Factor Resilience Items

| Item Content by Resilience                       | ce Facto | ors   |     |     | Compo | nents |     |     |
|--|----------|---|-----|-----|-------|-------|-----|-----|
|  |          |   | 1   | 2   | 3     | 4     | 5   | 6   |
| Factor 1: Belongingness                          |          |   |     |     |       |       |     |     |
|  | 28       | I have found groups of people at college that I feel comfortable with.  | .92 | 15  | .17   | 06    | 03  | 12  |
|  | 27       | I feel connected to my peers at college.  | .85 | 06  | 03    | .02   | .04 | .05 |
|  | 25       | I feel supported and connected socially at college.   | .78 | .06 | 07    | 04    | .10 | .03 |
| Factor 2: Mentorship                             |          |   |     |     |       |       |     |     |
|  | 6        | I have a campus mentor who has helped me figure out a financial plan for getting through school.  | 19  | .86 | -0.10 | 03    | .16 | .07 |
| 166  | 9        | A mentor or department at my school (e.g. HEOP, EOP, financial aid) that supports first generation or low-income students has helped me navigate the finances of college. | 09  | .81 | 12    | .07   | .19 | 12  |
|  | 36       | I have a mentor on campus who is from a similar background, and we can talk about our past and present experiences together.  | 09  | .78 | .07   | .05   | 09  | 05  |
| Factor 3: Actively<br>Adapting and<br>Navigating |          |   |     |     |       |       |     |     |
|  | 24       | Being from a low-income background has taught me to adapt to different situations.  | 08  | 16  | .70   | .05   | .25 | .15 |
|  | 18       | I place a higher value on being at college than other students.   | .07 | 05  | .56   | .09   | 13  | .06 |
|  | 20       | I participate in extracurricular activities in college.   | .39 | 01  | .54   | 09    | .00 | 03  |

| Factor 4: Family Connection |    |  |     |     |     |     |     |     |
|-----------------------------|----|--|-----|-----|-----|-----|-----|-----|
|                             | 19 | My family really supports my college education.  | 04  | 12  | .04 | .83 | 08  | 05  |
|                             | 26 | My parents/guardians are emotionally supportive of my academic pursuits.                                 | 08  | 07  | 09  | .83 | .02 | .01 |
|                             | 34 | I have maintained feelings of connection to both my family and my college environment.                   | .18 | .08 | 06  | .71 | 05  | 02  |
| <b>Factor 5: Finances</b>   |    |  |     |     |     |     |     |     |
|                             | 1  | I don't worry about paying for college,<br>because I have a scholarship or other financial<br>resources. | .12 | .10 | 10  | 10  | .76 | 15  |
|                             | 3  | My financial aid package gives me sufficient spending money.   | .04 | .19 | .00 | 14  | .67 | .07 |
|                             | 4  | My job pays me adequately.   | .02 | .09 | .05 | 11  | .65 | .06 |
| Factor 6: Communication     |    |  |     |     |     |     |     |     |
|                             | 11 | I know how to participate effectively in classroom discussions and debates.                              | 08  | .00 | .08 | .01 | .02 | .90 |
|                             | 12 | I know how to speak up to professors and express my opinions.  | .02 | 02  | .05 | 07  | .00 | .86 |
|                             | 13 | I'm comfortable with the communication style of my campus community.                                     | .15 | 04  | 03  | .09 | 01  | .71 |

Table 13
Means, Standard Deviations, and Reliability Coefficients for Post Hoc Six Factor Resilience Scale

| <b>Total Scales and Factors</b>  | M     | SD    | α    |
|----------------------------------|-------|-------|------|
| Resilience Scale                 | 72.45 | 13.81 | 0.83 |
| Belonging                        | 12.88 | 3.61  | 0.85 |
| Mentorship                       | 8.43  | 4.7   | 0.78 |
| Actively Adapting and Navigating | 13.67 | 3.12  | 0.60 |
| Family Connection                | 14.19 | 3.39  | 0.78 |
| Finances                         | 10.93 | 4.12  | 0.70 |
| Communication                    | 12.65 | 3.63  | 0.85 |

| Factor                      |    | Item   | Estimate   | Residual<br>Variances | R-Square |
|-----------------------------|----|--|------------|-----------------------|----------|
| Factor 1: Belongingness     |    |  |            |                       |          |
| ggg                         | 25 | I feel supported and connected socially at college.  | .83        | .31                   | .69      |
|                             | 27 | I feel connected to my peers at college.   | .87        | .25                   | .75      |
|                             |    | I have found groups of people at college that I feel   |            |                       |          |
|                             | 28 | comfortable with.  | .73        | .46                   | .54      |
| Factor 2: Mentorship        |    |  |            |                       |          |
|                             |    | I have a campus mentor who has helped me figure out  |            |                       |          |
|                             | 6  | a financial plan for getting through school.   | .78        | .39                   | .61      |
|                             |    | A mentor or department at my school (e.g. HEOP,  |            |                       |          |
|                             |    | EOP, financial aid) that supports first generation or  |            |                       |          |
|                             |    | low-income students has helped me navigate the   |            |                       |          |
|                             | 9  | finances of college.   | .80        | .36                   | .64      |
|                             |    | I have a campus mentor who has helped me figure out  |            |                       |          |
|                             | 17 | the college environment.   | .73        | .46                   | .53      |
| Factor 3: Actively          |    |  |            |                       |          |
| Adapting and Navigating     |    |  |            |                       |          |
|                             | 10 | I place a higher value on being at college than other  |            |                       |          |
|                             | 18 | students.  | .34        | .88                   | .12      |
|                             | 20 | I participate in extracurricular activities in college.  | .88        | .22                   | .78      |
|                             | 21 | I have used websites to learn more about being a   | <b>7</b> 4 | 7.1                   | 20       |
|                             | 21 | college student.   | .54        | .71                   | .29      |
| Factor 4: Family Connection |    | My family really supports my college education   | 0.1        | 2.4                   | 70       |
|                             | 19 | My family really supports my college education.  My parents/guardians are emotionally supportive of my | .81        | .34                   | .78      |
|                             | 26 | academic pursuits.   | 02         | 20                    | 70       |
|                             | 26 | academic pursuits.   | .83        | .30                   | .70      |

| Factor 5: Finances      | 34 | I have maintained feelings of connection to both my family and my college environment. | .59 | .65 | .35 |
|-------------------------|----|--|-----|-----|-----|
| ractor 5: Finances      |    | I don't worry about paying for college, because I have a                               |     |     |     |
|                         | 1  | scholarship or other financial resources.  | .70 | .51 | .49 |
|                         |    | Part of my financial aid package covers room and                                       |     |     |     |
|                         | 2  | board.   | .59 | .65 | .35 |
|                         |    | My financial aid package gives me sufficient spending                                  |     |     |     |
|                         | 3  | money.   | .66 | .56 | .44 |
| Factor 6: Communication |    |  |     |     |     |
|                         |    | I know how to participate effectively in classroom                                     |     |     |     |
|                         | 11 | discussions and debates.   | .89 | .21 | .79 |
|                         |    | I know how to speak up to professors and express my                                    |     |     |     |
|                         | 12 | opinions.  | .86 | .25 | .75 |
|                         |    | I'm comfortable with the communication style of my                                     |     |     |     |
| 17                      | 13 | campus community.  | .67 | .55 | .45 |
|                         |    |  |     |     | •   |

Table 15.
Six-Factor Resilience Scale and Demographic Associations

| Variables   | 1    | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12   | 13   |
|---|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| First Parents/Guardians' Highest Level of Education |      |       |       |       |       |       |       |       |       |       |       |      |      |
|   | 1.00 |       |       |       |       |       |       |       |       |       |       |      |      |
| 2. Type of Institution                              | .07  | 1.00  |       |       |       |       |       |       |       |       |       |      |      |
| 3. Size of Institution                              | 03   | 27**  | 1.00  |       |       |       |       |       |       |       |       |      |      |
| 4. Year in College                                  | .08  | 14*   | 04    | 1.00  |       |       |       |       |       |       |       |      |      |
| 5. Transfer Status                                  | .07  | 21**  | .15*  | .46** | 1.00  |       |       |       |       |       |       |      |      |
| 6. Location of Housing                              | 06   | 31**  | .18** | .40** | .31** | 1.00  |       |       |       |       |       |      |      |
| 7. Total Resilience Scale                           | .03  | .10   | 12    | 20**  | 19**  | .20** | 1.00  |       |       |       |       |      |      |
| 8. Belonging  | 06   | .03   | 15*   | 12    | 15*   | 09    | .72** | 1.00  |       |       |       |      |      |
| 9. Mentorship                                       | 14*  | 12    | 07    | 21**  | 14*   | 11    | .67** | .36** | 1.00  |       |       |      |      |
| 10. Actively Adapting and Navigating                | 03   | .20** | 08    | 04    | 14*   | 07    | .53** | .43** | .13*  | 1.00  |       |      |      |
| 11. Family Connection                               | .15* | 01    | 04    | 14*   | 14*   | 15*   | .57** | .30** | .24** | .15*  | 1.00  |      |      |
| 12. Finances  | .06  | .21** | .01   | 18**  | 21**  | .28** | .58** | .26** | .32** | .19** | .19** | 1.00 |      |
| 13. Communication                                   | .09  | 04    | 04    | 01    | .12   | .07   | .56** | .35** | .21** | .19** | .24** | .07  | 1.00 |

Note. First Parents/Guardians' Highest Level of Education ranged from 1 to 7, with 7 being the highest level of education.

Type of Institution was coded as 1 for public and 2 for private. Size of Institution ranged from 1 to 4, with 4 being the largest institution.

Transfer Status was coded as 1 for did not transfer and 2 for did transfer.

Location of housing was coded 1 for on campus and 2 for off campus.

Table 16
Validity for Four-Factor Challenges Scale

| vanung jor i om i acie  | or Chance | iges beai | ,c    |       |       |       |       |       |       |       |       |      |      |
|-------------------------|-----------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| Variables               | 1         | 2         | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12   | 13   |
| 1. Challenge Scale      | 1.00      |           |       |       |       |       |       |       |       |       |       |      |      |
| 2. Isolation from       |           |           |       |       |       |       |       |       |       |       |       |      |      |
| Peers                   | .45**     | 1.00      |       |       |       |       |       |       |       |       |       |      |      |
| 3. Financial Strain     | .51**     | .33**     | 1.00  |       |       |       |       |       |       |       |       |      |      |
| 4. Family Connection    | .54**     | .26**     | .49** | 1.00  |       |       |       |       |       |       |       |      |      |
| 5. Comparison to        |           |           |       |       |       |       |       |       |       |       |       |      |      |
| Peers                   | .84**     | .64**     | .79** | .78** | 1.00  |       |       |       |       |       |       |      |      |
| 6. RSES                 | 36**      | 27**      | 27**  | 27**  | 38**  | 1.00  |       |       |       |       |       |      |      |
| 7. CEDS                 | .38**     | .33**     | .36** | .25** | .42** | 51**  | 1.00  |       |       |       |       |      |      |
| 8. PSS                  | .38**     | .32**     | .35** | .26** | .42** | 52**  | .70** | 1.00  |       |       |       |      |      |
| 9. MC-SDS               | 18**      | 10        | 15*   | 04    | 17*   | .11   | 16*   | 20**  | 1.00  |       |       |      |      |
| 10. Academic            |           |           |       |       |       |       |       |       |       |       |       |      |      |
| classism- Institutional | .58**     | .50**     | .28** | .24** | .51** | 26**  | .37** | .29** | 12    | 1.00  |       |      |      |
| 11. Academic            |           |           |       |       |       |       |       |       |       |       |       |      |      |
| classism- Citational    | .60**     | .34**     | .38** | .39** | .56** | 20**  | .30** | .33** | 22**  | .45** | 1.00  |      |      |
| 12. Academic            |           |           |       |       |       |       |       |       |       |       |       |      |      |
| classism-               |           |           |       |       |       |       |       |       |       |       |       |      |      |
| Interpersonal           | .66**     | .49**     | .39** | .32** | .61** | 19**  | .30** | .36** | 20**  | .58** | .66** | 1.00 |      |
| 13. CD-RS               | 04        | 12*       | 02    | 02    | 05    | .47** | 31**  | 36**  | .19** | .02   | 02    | .08  | 1.00 |
| 13. CD-RS               | 04        | 12*       | 02    | 02    | 05    | .47** | 31**  | 36**  | .19** | .02   | 02    | .08  | 1.00 |

173

Table 17
Validity for Eight-Factor Resilience Scale.

| Variables   | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16   | 17   |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 1. Belonging                                      | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |      |
| <ul><li>2. Mentorship</li><li>3.</li></ul>        | .40** | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |      |      |
| Communication                                     | .36** | .23** | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |      |      |
| <ul><li>4. Finances</li><li>5. External</li></ul> | .25** | .34** | .12   | 1.00  |       |       |       |       |       |       |       |       |       |       |       |      |      |
| Resources<br>6. Social Class                      | .35** | .19** | .14*  | .23** | 1.00  |       |       |       |       |       |       |       |       |       |       |      |      |
| Teachings 7. Family                               | .26** | .23** | .16*  | .37** | .27** | 1.00  |       |       |       |       |       |       |       |       |       |      |      |
| Connection 8.                                     | .33** | .25** | .24** | .20** | .19** | .24** | 1.00  |       |       |       |       |       |       |       |       |      |      |
| Identification<br>and Awareness                   | .39** | .35** | .27** | .26** | .29** | .30** | .42** | 1.00  |       |       |       |       |       |       |       |      |      |
| 9.Resilience<br>Scale                             | .70** | .65** | .54** | .59** | .54** | .55** | .59** | .65** | 1.00  |       |       |       |       |       |       |      |      |
| 10. RSES  | .35** | .25** | .39** | .20** | .07   | .29** | .26** | .28** | .46** | 1.00  |       |       |       |       |       |      |      |
| 11. CEDS  | 31**  | 16*   | 23**  | 26**  | 06    | 13    | 28**  | 21**  | 38**  | 51**  | 1.00  |       |       |       |       |      |      |
| 12. PSS   | 20**  | 24**  | 23**  | 26**  | 01    | 13*   | 30**  | 22**  | 35**  | 52**  | .70** | 1.00  |       |       |       |      |      |
| 13. MC-SDS<br>14. Academic<br>classism-           | .13*  | .24** | .01   | .15*  | .11   | .18** | .05   | .14*  | .20** | .11   | 16*   | 20**  | 1.00  |       |       |      |      |
| Institutional<br>15. Academic                     | 40**  | 33**  | 20**  | 38**  | 01    | 09    | 31**  | 22**  | 46**  | 26**  | .37** | .29** | 12    | 1.00  |       |      |      |
| classism-<br>Citational<br>16. Academic           | 18**  | 31**  | 14*   | 21**  | .11   | 01    | 33**  | 22**  | 30**  | 20**  | .30** | .33** | 22**  | .45** | 1.00  |      |      |
| classism-<br>Interpersonal                        | 22**  | 33**  | 08    | 23**  | .06   | .02   | 33**  | 18**  | 29**  | 19**  | .30** | .36** | 20**  | .58** | .66** | 1.00 |      |
| 17. CD-RS   | .20** | .07   | .26** | .21** | .25** | .37** | .11   | .33** | .38** | .47** | 31**  | 36**  | .19** | .02   | 02    | .08  | 1.00 |

Table 18. Validity for Six-Factor Resilience Scale.

| Variables                                   | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14   | 15   |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 1. Resilience                               |       |       |       |       |       |       |       |       |       |       |       |       |       |      |      |
| Scale                                       | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |      |      |
| 2. Belonging                                | .72** | 1.00  |       |       |       |       |       |       |       |       |       |       |       |      |      |
| 3. Mentorship                               | .67** | .36** | 1.00  |       |       |       |       |       |       |       |       |       |       |      |      |
| <ol><li>Actively<br/>Adapting and</li></ol> |       |       |       |       |       |       |       |       |       |       |       |       |       |      |      |
| Navigating 5. Family                        | .53** | .43** | .13*  | 1.00  |       |       |       |       |       |       |       |       |       |      |      |
| Connection                                  | .57** | .30** | .24** | .15*  | 1.00  |       |       |       |       |       |       |       |       |      |      |
| 6. Finances                                 | .58** | .26** | .32** | .19** | .19** | 1.00  |       |       |       |       |       |       |       |      |      |
| 7.  |       |       |       |       |       |       |       |       |       |       |       |       |       |      |      |
| _ Communication                             | .56** | .35** | .21** | .19** | .24** | .07   | 1.00  |       |       |       |       |       |       |      |      |
| 8. RSES                                     | .40** | .35** | .22** | .08   | .26** | .15*  | .40** | 1.00  |       |       |       |       |       |      |      |
| 9. CEDS                                     | 33**  | 30**  | 11    | 02    | 28**  | 24**  | 23**  | 51**  | 1.00  |       |       |       |       |      |      |
| 10. PSS                                     | 33**  | 19**  | 22**  | .04   | 30**  | 27**  | 23**  | 52**  | .70** | 1.00  |       |       |       |      |      |
| 11. MC-SDS                                  | .18** | .12   | .24** | .07   | .05   | .17** | .01   | .11   | 16*   | 20**  | 1.00  |       |       |      |      |
| 12. Academic<br>Classism-                   |       |       |       |       |       |       |       |       |       |       |       |       |       |      |      |
| Institutional                               | 44**  | 39**  | 28**  | .00   | 31**  | 30**  | 20**  | 26**  | .37** | .29** | 12    | 1.00  |       |      |      |
| <ol> <li>Academic Classism-</li> </ol>      |       |       |       |       |       |       |       |       |       |       |       |       |       |      |      |
| Citation                                    | 26**  | 16*   | 25**  | .14*  | 33**  | 12*   | 14*   | 20**  | .30** | .33** | 22**  | .45** | 1.00  |      |      |
| <ul><li>14. Academic Classism-</li></ul>    |       |       |       |       |       |       |       |       |       |       |       |       |       |      |      |
| Interpersonal                               | 29**  | 22**  | 27**  | .10   | 33**  | 17**  | 08    | 19**  | .30** | .36** | 20**  | .58** | .66** | 1.00 |      |
| 15. CD-RS                                   | .26** | .19** | .02   | .26** | .11   | .20** | .26** | .47** | 31**  | 36**  | .19** | .02   | 02    | .08  | 1.00 |

Table 19
Corresponding Distress Factors and Demographic Associations

Variables

| -                                 |      |      |       |       |       |       |       |       |       |       |      |
|-----------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1. First Parents/Guardians'       |      |      |       |       |       |       |       |       |       |       |      |
| Highest Level of Education        | 1.00 |      |       |       |       |       |       |       |       |       |      |
| 2. Type of Institution            | .07  | 1.00 |       |       |       |       |       |       |       |       |      |
| 3. Size of Institution            | 03   | 27** | 1.00  |       |       |       |       |       |       |       |      |
| 4. Year in College                | .08  | 14*  | 04    | 1.00  |       |       |       |       |       |       |      |
| 5. Transfer Status                | .07  | 21** | .15*  | .46** | 1.00  |       |       |       |       |       |      |
| 6. Location of Housing            | 06   | 31** | .18** | .40** | .31** | 1.00  |       |       |       |       |      |
| 7. Total Distress                 | 04   | .08  | .00   | .23** | .01   | .15*  | 1.00  |       |       |       |      |
| 8. Distress: Isolation from Peers | .07  | .15* | .01   | .21** | 02    | .07   | .83** | 1.00  |       |       |      |
| 9. Distress: Financial Strain     | 02   | 12   | .07   | .27** | .09   | .24** | .73** | .52** | 1.00  |       |      |
| 10. Distress: Family Connection   | 04   | .15* | 08    | .10   | .00   | .07   | .76** | .40** | .38** | 1.00  |      |
| 11. Distress: Comparison to       |      |      |       |       |       |       |       |       |       |       |      |
| Peers                             | 11   | .15* | 12    | .09   | 10    | .06   | .78** | .59** | .38** | .50** | 1.00 |

5

6

7

8

10

11

9

*Note.* \*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed).

*Note.* First Parents/Guardians' Highest Level of Education ranged from 1 to 7, with 7 being the highest level of education. Type of Institution was coded as 1 for public and 2 for private. Size of Institution ranged from 1 to 4, with 4 being the largest institution.

Transfer Status was coded as 1 for did not transfer and 2 for did transfer.

Location of housing was coded 1 for on campus and 2 for off campus.

Table 20. *Variables Predictive of Distress* 

| Variables  | В     | $\mathbb{R}^2$ | F (df)            |
|--|-------|----------------|-------------------|
| <b>Model 1: Isolation From Peers Distress</b>    |       | 0.37           | 58.78 (2,200)**   |
| Financial Strain Challenge                       | .35** |                |                   |
| Comparison to Peers Challenge                    | .41** |                |                   |
| <b>Model 2: Isolation From Peers Distress</b>    |       | 0.21           | 16.15 (3, 185)**  |
| External Resources Resilience (eight-<br>factor) | 30**  |                |                   |
| Communication Resilience (eight-<br>factor)      | 28**  |                |                   |
| Finance Resilience (eight-factor)                | .27** |                |                   |
| <b>Model 3: Isolation From Peers Distress</b>    |       | 0.08           | 17.36 (1,195)**   |
| Belonging Resilience (eight-factor)              | 29**  |                |                   |
| <b>Model 4: Isolation From Peers Distress</b>    |       | 0.11           | 12.471 (2, 194)** |
| Belonging Resilience (eight-factor)              | 26**  |                |                   |
| Year in College                                  | .18*  |                |                   |
| <b>Model 5: Isolation From Peers Distress</b>    |       | 0.11           | 12.36 (2, 193)**  |
| Communication Resilience (six-factor)            | 53    |                |                   |
| Finance Resilience (six-factor)                  | 23*   |                |                   |
| <b>Model 6: Isolation From Peers Distress</b>    |       | 0.07           | 14.51 (1,196)**   |
| Belonging Resilience (six-factor)                | .51** |                |                   |
| <b>Model 7: Isolation From Peers Distress</b>    |       | 0.10           | 11.27 (2, 195)**  |
| Belonging Resilience (six-factor)                | 46**  |                |                   |
| Year in College                                  | .89*  |                |                   |

Figure 1. Challenge Scree Plot.

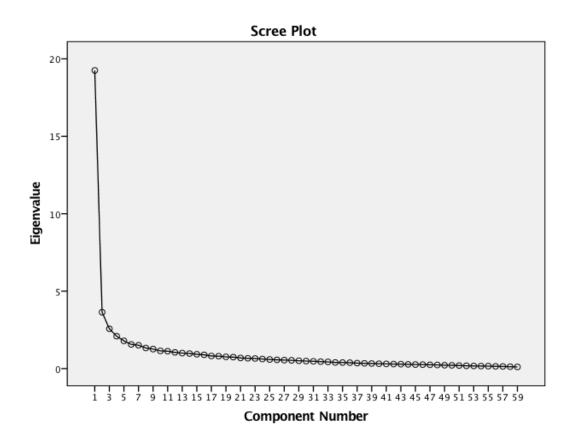


Figure 2. Resilience Scree Plot.

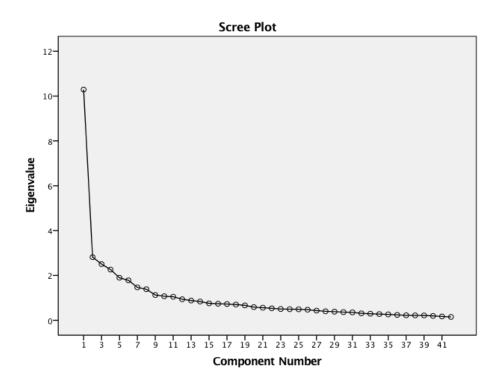


Figure 3. Challenges Measurement Model

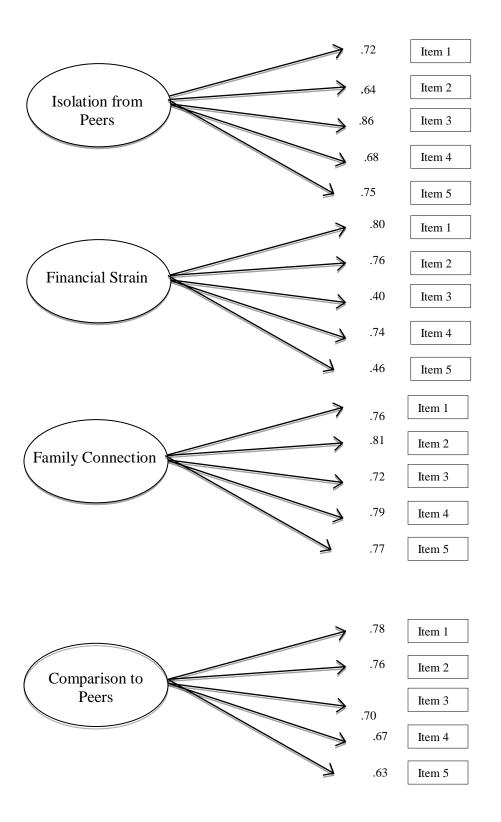
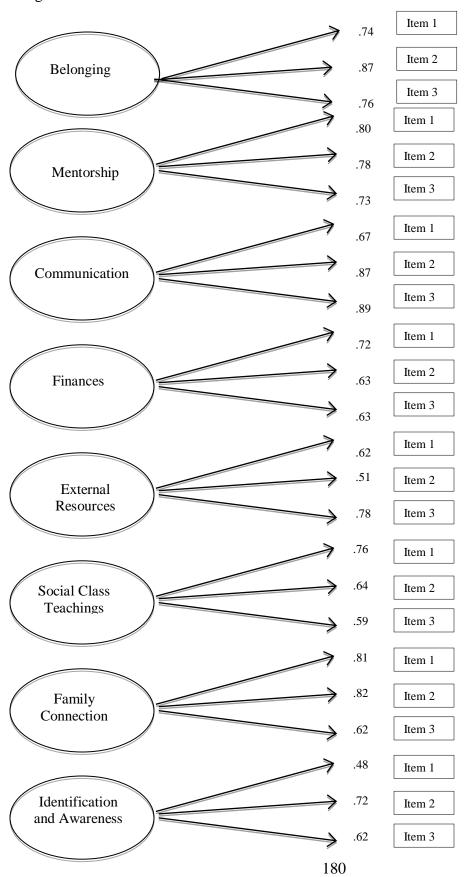


Figure 4. Resilience Measurement Model



## **Appendix A: Challenges and Resiliency Factor Items**

# **Challenges Directions**

Below is a list of experiences you may have had at college. You will be asked to note 1) how often this has occurred and 2) how upsetting the experience was (if at all). **Please make sure to think about your social class (e.g. low-income, poor/working-class) when thinking about your response.** 

The following scale will be used for frequently: 0 = never happened to me; 1 = happened to me 1 time; 2 - happened to me 2 -4 times; 3 = happened to me 5 -7 times; 4 = happened to me 8 -10 times; 5 = happened to me more than 10 times.

The following scale will be used for how upsetting the experience was: 0 = not at all distressing; 1 = slightly distressing; 2 = somewhat distressing; 3 = moderately distressing; 4 = very distressing; 5 = extremely distressing.

## **Resiliency Directions**

Below is a list of experiences that may have been helpful in navigating college. You are asked to indicate whether you agree or disagree that these are true for you. Please make sure to think about your social class (e.g. low-income) when thinking about your response.

The following scale will be used: 0 = strongly disagree; 1 = disagree; 2 = slightly disagree; 3 = slightly agree; 4 = agree; 5 = strongly agree.

#### Finances Challenges.

- 1. I question whether I should be attending college due to my finances.
- 2. To stay in college, I find myself working so many hours that it affects my grades.
- 3. Even though I'm at college, I also need to work to send money home to my family.
- 4. To stay in college, I have to work so many hours that I haven't had time to make friends on campus.
- 5. Money is a barrier between me and other students.
- 6. Professors and other students don't realize that I can't afford the little things that they take for granted.
- 7. I feel inadequate when I hear about the opportunities my peers have experienced (e.g. travel, trips to museums).
- 8. I think I was one of the only students that couldn't do a class activity, because I did not have the money.
- 9. I have struggled to keep up with class material because I could not afford the books or supplies for the class.
- 10. I am discouraged from staying at college due to the financial constraints it puts on my family.
- 11. My housing has not been adequate because I cannot afford to pay for the rent.
- 12. I find myself skipping meals due to my financial limitations.
- 13. I am embarrassed by the job I'm working to pay for college.

- 14. Lack of finances prevents me from seeking medical attention.
- 15. The job I have to pay for college puts my physical safety at risk.

## Resiliency factors.

- 1. I don't worry about paying for college, because I have a scholarship or other financial resources.
- 2. Part of my financial aid package covers room and board.
- 3. My financial aid package gives me sufficient spending money.
- 4. My job pays me adequately.
- 5. My job doesn't take too much time away from school.
- 6. I have a campus mentor who has helped me figure out a financial plan for getting through school.
- 7. Coming from a low-income family has made me resourceful and careful with money, and that has helped me get through school.
- 8. Because we didn't have much money, my family taught me to have a very strong work ethic, which has helped me succeed at school.
- 9. A mentor or department at my school (e.g. HEOP, EOP, financial aid) that supports first generation or low-income students has helped me navigate the finances of college.

#### Communication

#### Challenges.

- 1. I feel that I sound less intelligent than my peers.
- 2. I feel that I use different vocabulary than many other college students.
- 3. I think that I speak more straight-forward than other students do.
- 4. My language is more casual than most other students.
- 5. I express myself using my hands more than my peers.
- 6. My family and friends back at home speak differently than my peers.
- 7. Fights don't always occur at college when people argue, which differs from home.
- 8. People at college speak in a different volume than from my home community.

### Resiliency factors.

- 1. I'm able to speak like my family when I go home, and then switch to academic language when I'm back on campus.
- 2. I know how to participate effectively in classroom discussions and debates.
- 3. I know how to speak up to professors and express my opinions.
- 4. I'm comfortable with the communication style of my campus community.
- 5. I have a mentor or teacher who has helped me communicate better at college.
- 6. I have taught myself to speak like other students at college.

# **Academic Cultural Capital**

#### Challenges.

- 1. My professors do not understand when I cannot afford the supplies needed for the class.
- 2. I'm embarrassed to tell the professor that I can't afford the supplies for class.
- 3. I don't completely understand the financial aid procedures at my college.
- 4. I don't know whether there are additional grants or scholarships that could help me out financially.

- 5. My professors are unclear of what they expect from me.
- 6. I feel intimidated by my professors.
- 7. I feel less experienced then other students, because growing up my family did not travel, go to museums, or cultural events very often (or at all).
- 8. Most other students seem to understand how college works better than I do.
- 9. Sometimes I feel that I am not supposed to be at college.
- 10. I feel that I am more confused about things like choosing a major than most other students.
- 11. Other students can get more advice about school from their families than I can.
- 12. I've heard a professor say something negative about low-income people.
- 13. I've heard another student say something negative about low-income people.

# Resiliency factors.

- 1. I was recognized as a gifted/talented student earlier in my education.
- 2. I have a campus mentor who has helped me figure out the college environment.
- 3. I place a higher value on being at college than other students.
- 4. My family really supports my college education.
- 5. I participate in extracurricular activities in college.
- 6. I have used websites to learn more about being a college student.
- 7. My college understands the needs of people from my social class background.
- 8. I am part of a department/organization in my school that helps me adjust to college life.
- 9. Being from a low-income background has taught me to adapt to different situations.

# Personal Relationships/Socialization

#### Challenges.

- 1. My normal way of eating is different from other students on campus.
- 2. My normal way of dressing is different from other students on campus.
- 3. I feel like I don't fit in at social gatherings at college.
- 4. It's difficult for me to connect with other students who come from wealthier families.
- 5. I find it difficult to connect with my professors.
- 6. I find it difficult to connect to my academic adviser.
- 7. Other students have made comments about their ability to pay for things that I cannot afford, which makes me feel less than.
- 8. I have heard other students being rude to workers on campus (like janitors, security guards, or cafeteria staff).
- 9. I feel isolated from the other students due to my financial situation.
- 10. I hide parts of my social class background when I'm at school.
- 11. When I told someone at school about my social class background, they acted surprised.

### Resiliency factors.

- 1. I feel supported and connected socially at college.
- 2. My parents/guardians are emotionally supportive of my academic pursuits.
- 3. I feel connected to my peers at college.
- 4. I have found groups of people at college that I feel comfortable with.
- 5. I know students on campus who share similar backgrounds.
- 6. I have found professors on campus that I feel comfortable with.

- 7. My college campus feels like a place where I belong.
- 8. My friends on campus are sensitive to my level of financial resources.
- 9. I have found campus staff that I feel connected to.
- 10. Reading about students like me online helps me feel less alone on campus.

## **Dual-Class Identity Challenges**

#### Challenges.

- 1. I feel alienated at college.
- 2. I feel stressed about trying to change myself to fit in at college.
- 3. I see myself behaving differently from before I went to college.
- 4. I struggle to fit in when I return back to my family's home.
- 5. I feel like I'm pulled between two worlds college and home.
- 6. I do not feel like I really fit in either at home or at school.
- 7. My family does not understand my new ways of living.
- 8. My family does not understand my new ways of speaking.
- 9. My friends from home complain that I am different now.
- 10. My family tells me that I seem different, and they don't like that.
- 11. I no longer feel as connected to where I grew up.
- 12. I feel like I have grown apart from my family members.

#### Resiliency factors.

- 1. I can speak comfortably and openly about the ways that my home community and my college community are different.
- 2. I'm comfortable having other students meet my family, and vice versa.
- 3. I have maintained feelings of connection to both my family and my college environment.
- 4. I identify with other low-income people.
- 5. I have a mentor on campus who is from a similar background, and we can talk about our past and present experiences together.
- 6. It is easy for me to switch between my home and college environment.
- 7. Sharing my experiences with a therapist or counselor makes me feel more supported.
- 8. Coming to college from the community where I grew up makes me feel proud.

### **Appendix B: Email Announcement**

#### Hello:

I'm writing to invite you to take part in my study exploring the experiences of low-income 4-year college students. This online study is being conducted by Rebecca Reed, a doctoral student at Teachers College, Columbia University. The survey should take about 20-30 minutes of your time. Afterward, participants will have the option to enter a raffle for 1 of 2 \$50 Amazon gift cards as a "thank you" for participation.

You are invited to participate if you:

- 1) Are 18 years or older
- 2) Are currently an undergraduate student enrolled in a 4-year college or university
- 3) Meet at least 1 of these 3 criteria:
- A) Come from a family who has received governmental assistance (e.g. food stamps, WIC, SNAP, Medicaid etc.) at some point in their lives
- B) Self-identify as growing up in a community or family that was considered low-income or poor/working-class
  - C) First-generation college student

You can accept this invitation by clicking onto the link below. The link will take you to a page that tells you more about the survey, the informed consent documentation, and then to the survey itself.

#### Here's the link to the survey:

https://tccolumbia.qualtrics.com/SE/?SID=SV\_4MjQQcTRQatdNVr

After you take the survey, I would greatly appreciate your forwarding it to others who qualify as participants.

**Thanks in advance for considering this request** – I understand that your time is limited!

Appreciatively,

Becky Reed Teachers College, Columbia University

\*\*\*This study has been approved by the Teachers College, Columbia University Institutional Review Board: Protocol # 15-361. If you have any complaints, questions, concerns, or would like to know the results, please feel free to contact me via e-mail at <a href="https://results.ncbi.nlm.ncbi

# Appendix C: Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965)

#### **Directions**

Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, click 1. If you agree with the statement, click 2. If you disagree, click 3. If you strongly disagree, click 4.

- 1 =Strongly Agree
- 2= Agree
- 3= Disagree
- 4= Strongly Disagree
  - 1. I feel that I have a number of good qualities.
  - 2. I am able to do things as well as most other people.
  - 3. I feel I do not have much to be proud of.
  - 4. I certainly feel useless at times.
  - 5. I feel that I'm a person of worth, at least on an equal plane with others.
  - 6. I wish I could have more respect for myself.
  - 7. All in all, I am inclined to feel that I am a failure.
  - 8. I take a positive attitude toward myself.

# Appendix D: Center for Epidemiological Studies-Depression (CESD) Scale: Short Version (Herrero & Meneses, 2004)

# **Directions**

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

- 1= Rarely or none of the time (less than 1day)
- 2= Some of a little of the time (1-2 days)
- 3= Occasionally or a moderate amount of time (3-4 days)
- 4= Most or all of the time (5-7 days)
  - 1. I feel that I could not shake off the blues even with the help from my family or friends.
  - 2. I had trouble keeping my mind on what I was doing.
  - 3. I felt depressed.
  - 4. I felt everything I did was an effort.
  - 5. My sleep was restless.
  - 6. I enjoyed life.
  - 7. I felt sad.

## Appendix E: Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983)

#### **Directions**

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. Although some of the questions are similar there are differences between them and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate.

For each question choose from the following alternatives:

- 0 = never
- 1 = almost never
- 2 =sometimes
- 3 = fairly often
- 4 = very often
  - 1. In the last month, how often have you been upset because of something that happened unexpectedly?
  - 2. In the last month, how often have you felt that you were unable to control the important things in your life?
  - 3. In the last month, how often have you felt nervous and "stressed"?
  - 4. \*\*In the last month, how often have you dealt successfully with irritating life hassles?
  - 5. \*\*In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?
  - 6. \*\*In the last month, how often have you felt confident about your ability to handle your personal problems?
  - 7. \*\*In the last month, how often have you felt that things were going your way?
  - 8. In the last month, how often have you found that you could not cope with all of the things that you had to do?
  - 9. \*\*In the last month, how often have you been able to control irritations in your life?
  - 10. \*\*In the last month, how often have you felt that you were on top of things?
  - 11. In the last month, how often have you been angered because of things that happened that were out of your control?
  - 12. In the last month, how often have you found yourself thinking about things that you have to accomplish?
  - 13. \*\*In the last month, how often have you been able to control the way you spend your time?
  - 14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

<sup>\*\*</sup> scored in reverse direction

# Appendix F: Connor-Davidson Resilience Scale (CD-RISC)- Short Version (Campbell-Sills & Stein, 2007)

Below is a list of the ways you might have felt or behaved. Based on your experiences over the past month, please choose from the alternatives:

Not true at all (0)
Rarely true (1)
Sometimes true (2)
Often true (3)
True nearly all of the time (4)

- 1. I am able to adapt to change
- 2. I can deal with whatever comes
- 3. I try to see humorous side of problems
- 4. Coping with stress can strengthen me
- 5. I tend to bounce back after illness or hardship
- 6. I can achieve goals despite obstacles
- 7. I can stay focused under pressure
- 8. I am not easily discouraged by failure
- 9. I thinks of self as strong person
- 10. I can handle unpleasant feelings

# Appendix G: Classism Experiences Questionnaire- Academe (CEQ-A) (Langhout, Rosselli, & Feinstein, 2007).

Please indicate if the event you will read had occurred 1) never; 2) one or twice; 3) sometimes; 4) often; or 5) many times.

## During your time at college, were you ever in a situation where:

- 1. You could not take a class (e.g., music, science, film) because you could not afford the fees for the class (for materials, travel, etc)?
- 2. You could not join a sports team because you could not afford the associated expense?
- 3. You could not join an activity (e.g., Student Association) because your job hours consistently conflicted with the activity meeting/events?
- 4. You could not afford social activities (e.g., events at the Fine Arts Center) because of the fees?
- 5. You had to live in the dorms because you could not afford another housing option?

# During your time at college, were you ever in a situation where college students or professors:

- 1. Told stories or jokes about people who are poor?
- 2. Made stereotypic remarks about people who are poor?
- 3. Made offensive remarks about people who are poor?
- 4. Made offensive remarks about the appearance of people who are poor?
- 5. Made offensive remarks about the way people who are poor act?
- 6. Made offensive remarks about the way people who are poor speak?
- 7. Made statements suggesting that people who are poor are inferior?
- 8. Made statements suggesting that rich people are superior?
- 9. Made offensive remarks about people on welfare?

#### During your time at college, were you ever in a situation where students or professors:

- 1. Were dismissive of your financial situation?
- 2. Invited you to events/outings that you could not afford?
- 3. Didn't seem to appreciate your financial burdens?
- 4. Encouraged you to purchase things you couldn't afford?
- 5. Assumed you could afford things that you couldn't (e.g., dinner at an expensive restaurant)?
- 6. Assumed you could provide your own method of transportation?
- 7. Did not put books on reserve for class?

During your time at college, have you ever been harassed or discriminated against because of your socio-economic class?

# Appendix H: Marlow-Crowne Social Desirability Scale (M-C 1[10]) Strathan and Gerbasi (1972)

#### Answer True or False:

- 1. I'm always willing to admit it when I make a mistake.
- 2. I always try to practice what I preach.
- 3. I never resent being asked to return a favor.
- 4. I have never been irked when people expressed ideas very different from my own.
- 5. I have never deliberately said something that hurt someone's feelings.
- 6. I like to gossip at times.
- 7. There have been occasions when I took advantage of someone.
- 8. I sometimes try to get even rather than forgive and forget.
- 9. At times I have really insisted on having things my own way.
- 10. There have been occasions when I felt like smashing things.