

Trauma, Resilience, and Social Support of First-Generation College Students

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Abstract

First-generation college students (hereafter, FGS) experience unique factors that put them at-risk for non-degree completion. The aim of the study was to examine institutional/personal social support factors, trauma related events, and resilience levels of FGS and non-first-generation college students (hereafter, non-FGS). The researcher administered a paper and pencil, self-report survey to multiple undergraduate psychology related classrooms.

The findings of this study indicated that more FGS participated in the study compared to non-FGS. Family and Friends were chosen by FGS and non-FGS as being the most important personal social support factors. FGS reported receiving Financial Aid as the most important institutional social support factor while non-FGS chose Professors. The FGS and non-FGS did not show significant differences in experiencing traumatic life events and level of resilience. A strong perception of social support was associated with the perceived likelihood of staying in college. There was a significant positive correlation between resilience and perceived social support. Regardless of first-generation status, gender, trauma experience, and resilience level, a stronger perception of social support predicted a higher perceived likelihood of staying in college.

Future considerations could consider gathering qualitative reports from these students via in-person, focus groups, increasing the number in the sample size, and establishing a more efficient system to collect data from a wide range of FGS including the Federal TRIO Student Support Services program participants.

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CHAPTER I: INTRODUCTION

Some students who aspire to receive a higher education may go through certain circumstances that could make their journey toward receiving a college degree more likely to not succeed. First-generation students go through various, unique experiences that traditional students do not experience fully. According to Paul (2012, April 11), nearly one in three students who enter college as a freshman in the United States are first-generation college students, with this population increasing. These students could be considered ‘at-risk’ since there is a higher probability for them to fail academically or drop out of school, according to The Glossary of Education Reform (2013). There are certain situations or characteristics that students could face that may jeopardize their chances to successfully perform in an academic setting, such as “homelessness, incarceration, serious health issues, domestic violence, or it may refer to learning disabilities, low test scores, or other learning-related factors that could adversely affect the educational performance and attainment of some students” (The Glossary of Education Reform, 2013).

According to Walsh (2003), there are three categories that at-risk students may fall under, which include 1) those who have made poor choices or decisions that impacted negatively on their academics, 2) may be an adult student who returns to higher education after an extended absence, or 3) students with academic or physical limitations not identified before enrolling in higher education. King (2004) provided a broader categorization of at-risk students in falling under four groups, 1) academically underprepared as a result of prior educational experiences (e.g., academic failure, poor preparation, and low expectations), 2) individual risk factors, such as neurological, cognitive, health, or psychological factors that can contribute to academic failure (e.g., traumatic brain injury, learning disabilities, chronic illness, psychological problems, or

student attitude toward learning), 3) familial risk factors including disturbed family functioning, dependent care issues, familial values concerning education, and lack of financial resources, and lastly, 4) social risk factors (i.e., conflicting ethnic or cultural values or stressful peer and social interactions).

The first year of college enrollment can be impacted by multiple risk factors on college persistence and success across different types of postsecondary institutions. Some of these factors include but are not limited to, “academic under-preparation, completion of high school by [General Educational Development] GED, poverty, being a first-generation college student, being a minority student, having limited English proficiency, having older siblings who dropped out of high school, lacking knowledge about college admissions/matriculation, caring for a child, delayed entry into post-secondary education and financial independence” (Horton, 2015). In relation to the current study, it is important to define ‘at-risk’ student populations and respective risk factors, because some of these categories and factors could have played a role in the target population that was assessed.

CHAPTER II: LITERATURE REVIEW

Defining Resiliency

Resiliency has been widely researched in various fields (e.g., psychology and sociology), and has been defined in different ways. According to Waxman, Gray, and Padrón (2005), “Most definitions of resiliency are similar, [but] the differences between definitions are often rooted in the specific approach or context in which resilience is being studied” (p. 30). It is critical to define resiliency within this study by taking into account previous research that has defined resiliency. Wolin and Wolin (1993) described the term “resilient” in being adopted in lieu of earlier terms (e.g., invulnerable, invincible, and hardy), because “resilient” recognizes the struggle, suffering, and pain that is involved in the maintenance of school and life. Zimmerman and Arunkumar (1994) have a similar point in having resiliency and invulnerability not being equivalent. Resiliency “does not mean that one cannot be wounded- as the term invulnerability implies” (Zimmerman & Arunkumar, 1994). Even in the presence of adversity, “resiliency” is generally referred to be “those factors and processes that limit negative behaviors associated with stress and that result in positive adaptive outcomes” (Waxman et al., 2005). Similarly, Garmezy and Masten (1991) defined resilience as “a process of, or capacity for, or the outcome of successful adaptation despite challenging and threatening circumstances” (p. 459). Resilience has also been defined in the context of education. One of the most widely used definitions of educational resilience is that despite environmental adversities from early life experiences and traits, there exists the heightened likelihood of academic success in school and other life accomplishments (Wang, Haertel, & Walberg, 1994, p. 46).

Risk factors are seen as existing constructs that have the potential to create roadblocks or impediments to educational success (Morales, 2010). Waxman et al. (2005) provided a point to

look at the number of risk factors an individual has along with the magnitude of these risk factors when considering resiliency (p. 31). Levine (2003) stated that early risk factors correlate with later problems (e.g., appearance of psychosocial problems); these two issues can create a cumulative risk if they work together, and the chances of symptomatology or dysfunction are then exponentially increased. Previous findings have identified risk factors that co-exist and interact, but that can be overcome. These risk factors listed under Levine (2003) are 1) poor pre-, peri-, and post-natal care of mother and child, 2) abject poverty, abuse/neglect/molestation and family dysfunction/discord/upheaval/, 3) parental psychopathology, 4) inadequate/poor schools, 5) lack of significant nurturing adults and absence of mentors and models, 6) war/culture of violence and chaos, and 7) forces *majeures* (natural disasters). A large majority of these risk factors could be seen as circumstances in which there would be a heightened risk for co-existence and interaction (e.g., parent-and-child attachment and parental psychopathology).

Protective factors are able to serve as a function by offsetting or mitigating all or some aspects of risk factors (Morales, 2010). A way to increase a child's resiliency would be to look at the protective factors that could benefit and buffer the adverse events that have been experienced. Levine (2003) listed the following positive factors that have been "repeatedly shown to correlate with resiliency and ultimate self-realization" if we wish to improve the conditions for children: 1) *A primary attachment*: Single most important factor in an infant's life is the bond formed with primary caretaker, 2) *Love*: In representing affection, nurturance, 3) *Limits*: Rules, laws, and consequences define expectations, 4) *Stimulation*: Without stimulation of senses, and of cognitive, visual, auditory, olfactory, and tactile explorations, the child is cheated of opportunities to learn, discover, 5) *Relationships with peers*: Helps a child answer questions, such as "Where do I fit in?", "Who am I?", 6) *Models and Mentors*: Older peers or

trustworthy adults can guide, counsel, 7) *Space*: Children need both physical and emotional privacy, and temporal space for explanation, 8) *Respect*: “Transferred” to future generations, modeling civility in everyday discourse and empathy, 9) *Consistency*: Children need a sense of predictability, stability, routine, and they need to know those who care for them are reliable, dependable, 10) *Responsibilities*: Holding a child responsible for certain obligations invites him or her to share in the adults’ reality, 11) *Safety and subsistence*: Freedom from fear and want is a prerequisite of freedom for growth, exploration, 12) *Opportunities*: All children should have access to quality medical care, education, recreational activities, and vocational choice, 13) *Traditions*: Ritual and repetitive family, cultural, or religious events enhance the present and enrich the future and endow the past with a sense of continuity and community, 14) *Altruism*: Receiving kindness; children model their parents’ altruism and generosity, and 15) *Values*: Young people need to be inspired; stimulation of essential energies.

There seems to be an agreeance on the role of adverse events in one’s childhood. According to Wu, Feder, Cohen, Kim, Calderon, Charney, and Mathé (2013), “Severe adverse events in childhood can negatively affect the development of stress response systems, in some cases causing long-lasting damage.” Certain types of trauma can create barriers to resilience, such as childhood abuse. There are certain factors that play a major role in whether a childhood traumatic event will lead to vulnerability or to resilience (Wu et al., 2013). Two factors that could be considered in trauma exposure is the degree to which a person has personal risk and resilience characteristics as well as perceived control and predictability of the event (Feder, Charney, & Collins, 2011). The stressors that children are exposed to may not be as pronounced during the time of the stressor, and may not be apparent until later development. If a person is conditioned to believe that they are unable to change the circumstances of their situation, then

early episodes of uncontrollable stress can lead to “learned helplessness” (Overmier & Seligman, 1967). If a mild or moderate stressor (e.g., the end of a friendship or an illness of a parent) was successfully managed by an individual, resiliency levels of the individual could appear later in a variety of other stressor-related situations (Feder, Nestler, & Charney, 2009; Russo, Murrrough, Han, Charney, & Nestler, 2012). According to Southwick and Charney (2012), this phenomenon is called “stress inoculation”, and occurs when the individual develops an adaptive stress response, and a higher-than-average resilience to negative effects of subsequent, uncontrollable stressors.

Promoting resilience in child rearing could be aided with key factors (positive family functioning and peer relationships, connections to supportive adults and prosocial romantic partners, planfulness, self-discipline, and cognitive ability) in contributing to a more successful transition to adulthood and more resilient functioning (Burt & Paysnick, 2012). Cognition plays an important role in how an individual perceives a stressor or traumatic event. McRae, Ciesielski, and Gross (2012) stated that the ability to monitor and assess negative thoughts and replacing them with more positive ones, or cognitive appraisal, is strongly associated with resilience. There is an emotional regulation strategy that can be involved to change the way one views event or situations, known as cognitive flexibility or cognitive reframing. Gross (2002) discussed the notion that it appears that individuals have varying ways on how one manages their emotions since there are individualistic differences to emotional regulation styles.

An individual’s strengths and external resources are realized to play an important role in defining resiliency. Resiliency “refers to an individual’s utilization of inner strengths and outer resources in order to overcome seriously adverse, even traumatic, circumstances, and still continue to pursue and succeed in one’s endeavors” (Levine, 2003). These inner strengths and

outer resources of an individual are subjective, and can be highlighted in aiding the individual to manage an adverse event. Levine (2003) stated that resiliency is a generic, multidetermined attribute. In other words, there is no one gene site for resilience within an individual. It is an attribute that “varies according to personal hardiness and social supports, as well as the nature and degree of the imposed hardship or impediment” (Levine, 2003). Further, there are differing points on whether resiliency is to be considered an attribute or not. According to Rutter (2012), resilience has “to be viewed as a process and not as a fixed attribute of an individual...” Even if individuals show resilience across a range of circumstances and outcomes, it cannot be assumed that the same features in their resilience are generalizable to all risks. Similarly, Zimmerman and Arunkumar (1994), stated that “resiliency is not a monolithic construct that, once achieved, will always be present... cannot be seen as fixed attribute of the individual, because the circumstances in which it may occur are dynamic.” One’s resiliency may change when the situation changes.

Defining First-Generation College Students

First-generation college students (hereafter, FGS) are a unique student population that has been widely researched. For the purposes of this study, FGS will be defined using the federal regulation definition under the “Higher Education Act of 1965, 1998 Higher Education Act Amendments Subpart 2—Federal Early Outreach and Student Services Programs CHAPTER 1—FEDERAL TRIO PROGRAMS”:

- A) An individual both of whose parents did not complete a baccalaureate degree; or
- B) In the case of any individual who regularly resided with and received support from only one parent, an individual whose only such parent did not complete a baccalaureate degree (Higher Education Act of 1965, SEC. 402A. 20 U.S.C. 1070a–11, n.d.).

Engle and Tinto (2008a) completed a report at The Pell Institute, *Moving Beyond Access: College Success for Low-Income, First-Generation Students*, on the current status of low-income, first-generation college students in higher education: States that there were 4.5 million low-income, FGS enrolled in post-secondary education (approximately 24% of the undergraduate population). The number of enrollment most likely has changed since 2008 since more employers could be looking for their employees to have minimally earned an associate degree or even a Baccalaureate degree. Bureau of Labor Statistics (2005) indicated that over the next 10 years, 80% of the fast-growing occupations in the United States will require at least an associate degree. Further, 50% will require a bachelor's degree or higher.

There are some overlapping characteristics and situations in FGS that has consistently been shown in research. According to Williams and Butler (2010), there is generally three themes of research that empirical studies have conducted on first-generation college students: 1) academic preparation, 2) transition issues, and 3) campus climate. The first theme encompasses the point of Choy (2001) in discussing a comprehensive study of first-generation students. It was found that as a group, FGS at four-year institutions appear to begin college less academically prepared compared to other students. Choy (2001) stated that in high school, potential FGS are less likely to take the SAT or ACT examinations, follow a rigorous curriculum, or take calculus. Post-secondary institutions often require certain curriculum to have been taken during high school, and even further assessed in examinations that will predict future academic work. The second theme focuses on the transitional phase FGS experience when they arrive on campus. Folger, Carter, and Chase (2004) found that FGS are often left at a disadvantage when their transitional issues are not generally met by the university. In comparison to White continuing-generation college students (hereafter, CGS), FGS are less involved in campus life and student

activities (i.e., extra-curricular involvement). Recent research on FGS in extra-curricular activities and on-campus clubs/organizations have found mixed results. According to Aspron-Williams (2012), several FGS participants were active in on-campus clubs/organizations and activities, similarly with Stansberry (2014), many of the FGS participants were involved in extra-curricular activities, and clubs/organizations. Burnett (2017) found that student involvement was experienced by some students via academic or service-oriented clubs or organizations, but for some students, the lack of time they had opposed their desire to be involved on campus.

Instead of being fully committed to the transition to four-year colleges and universities, FGS tend to work more on-campus, are more likely to live at home and commute to school, are more likely to enroll at two-year institutions, and are more likely to register for remedial classes, according to Nunez and Cuccaro-Alamin (1998). Stansberry (2014) found that many of the FGS participants had lived in on-campus housing at one point in time, or were currently residing in on-campus housing. All of the participants except for one had on-campus jobs while some participants held multiple jobs on and off-campus as well as self-disclosing that they were receiving some form of financial assistance. Burnett (2017) found that the environment of FGS could encourage stimulation in academics as well as feelings of comfort and welcoming. The feeling of the college campus being welcoming was exhibited by some participants, and they liked the close proximity of the university to their home. Even though there were sufficient on-campus dormitories, the majority of the participants lived off-campus in an apartment or at home. Some students gained feeling more connected to campus through their on-campus jobs as well as being allowed to study while on the respective job, while other students worked off-campus. This finding suggests that income is an important factor in their selection of an

institution with the inclusion of how to uphold the associated costs that come with pursuing an academic degree (Burnett, 2017).

The third theme encompasses the campus climate that FGS are exposed to, which include interactions with other students, staff, and faculty. Most FGS participants found their campus environment in being neutral and positive for their academic persistence (Cabrera, 1998).

Terenzini and Springer (1996) found that students whose parents did not attend college are less likely to socialize with peers and talk with teachers in high school and that these behaviors continue in college with FGS exhibiting lower levels of academic and social integration. FGS are less likely than continuing-generation students to view faculty as concerned about their academic success (Terenzini & Springer, 1996). Hsiao (1992) found that first-generation college students often face unique challenges in their quest for a degree (e.g., conflicting obligations, false expectations, and lack of preparation or support). These students can experience interpersonal conflicts with family and peers including personal struggles of guilt and stress (Williams & Butler, 2010). These personal issues of inner conflict and stress might weigh heavily on these students, in particular if there are higher demands needing to be met at home. Stansberry (2014) found that a sense of guilt was felt by some of the FGS participants with the knowledge that other members in their family were not able to have their own college experiences along with its accompanying benefits. The participants recognized the sacrifices that came with their college attendance, and expressed the desire to have programs aimed specifically for FGS (e.g., living community or peer mentoring program).

Bui (2002) found that first-generation students expressed a greater fear of failing in college, felt the need to spend more time studying, and worried more about financial aid. The mental health issues of low-income, urban, individuals who were FGS was investigated to see

how these students are applied with the concept of ‘survivor’s guilt’. Piorkowski (1983) found that these students often encountered alcoholism, drug abuse, family violence, mental illness, and criminal behavior while others have gone through emotional and psychosocial experiences associated with poverty. These students questioned their whereabouts in college and if survivor’s guilt is being experienced, FGS can struggle with the idea of being more successful than their parents and members of the family. Further, it was found that these students are ridiculed, discouraged, and criticized by family members and peers if they decided to attend college with possible alienation from friends and family (Piorkowski, 1983; London, 1989). Some of Piorkowski’s findings reflect the risk factors that at-risk students and children who are exposed early on to certain risk factors often experience. Whitten (1992) discussed the concept of ‘survivor conflict’, which includes a broader range of emotional reactions to survival (e.g., anxiety and ambivalence) once the student embarks on their college journey. If feelings of anxiety, guilt, ambivalence, and depression, which are frequently subconscious, are not recognized and addressed, then these feelings can manifest into other ways. For instance, students could engage in self-sabotage, procrastination of their studies, decreased productivity levels, and a devaluation of one’s self-concept, accolades, and ambitions (Whitten, 1992).

Lohnfink and Paulsen (2005) discussed that FGS are often disproportionately over-represented in groups that are the most disadvantaged (i.e., racially-based, socio-economically-based, and gender-based). They are the least likely to continue their collegiate studies and pursue post-secondary degrees, and are more likely to be students of color (Thayer, 2000; Choy, 2001). Further, these students are more likely to have multiple encounters that could impede them from successfully succeeding in post-secondary education. Housel (2012, March 23) mentioned the FGS population being more likely to encounter difficulties in academic, financial, professional,

cultural, and emotional areas while having parents who did not graduate from college. Stansberry (2014) discussed that all of the FGS participants found that finances were a significant concern for them in being that for some participants, they were not well-aware of the financial aid process, families were unable to provide financial assistance, and noted the challenge of completing the Free Application for Federal Student Aid (FASA). Burnett (2017) discussed that all FGS participants felt that financial security was an attractive gain from the attainment of a college degree. One student felt that by bettering her own financial future, her parents would also benefit. Some students experienced that their parents did not fully understand the amount of time that goes into becoming a successful college student at an institution. Aspron-Williams (2012) found that most of the FGS participants worked to provide financial assistance to their family, have their own spending money as to not ask their parents for money, and to pay for academic essentials (e.g., tuition, books); majority were financially independent from their parents, and were either employed part-time or full-time during college. The majority of FGS participants received either scholarships or grants to help them pay for college, and most mentioned the ability to receive scholarships as being a main component of choosing a particular institution (Burnett, 2017).

Parents may allow their children to pursue higher education but can often contradict their consent with conflicting or negative messages, and discourage them from attending college (Hsiao, 1992; Striplin, 1999). The interest in not wanting their children to pursue further schooling could involve the need for money within the family. Parents may discourage their child from attending college because they are depending on them to obtain employment and make contributions to the family income. The feelings of guilt can be expressed by FGS in desiring to further their education since they are seeing their families struggle financially to

survive (Piorowski, 1983). There is a different perspective of the reason FGS have in wanting to further their education that has to do with supporting the family. Bui (2002) stated that FGS pursue higher education so that they can help out their families. Communities can also serve an important role in FGS that would require a form of balancing. Rendon (1992) reported that FGS can experience a sense of disconnection from their families, own cultures of origin, their collegiate community, and experience self-doubt. Some FGS participants experienced incongruency with their own cultural background and the campus environment, and had a feeling of “culture shock.” As a result, students sought places to feel a part of the college campus or through college activities (Aspron-Williams, 2012).

If minority FGS follow their aspirations of attending college, they could then be faced with attempting a balance of their home commitments and obligations alongside peer and community relations (Schmidt, 2003, November 28). Peer relations can be an integral part of a student’s college adjustment since they could provide additional support if the FGS is away from home, and serve as a source of a built-in sense of community while in college. FGS are more likely to benefit from social integration than non-first-generation college students (hereafter, non-FGS), however, are more likely to remain friends with peers in their community (Williams & Butler, 2010).

Trauma in First-Generation College Students

First-generation college students face unique life stressors that could contribute to the overall mental health of these students. Government research has looked at mental health in an extensive fashion in the Surgeon General’s report, *Mental Health: A Report of the Surgeon General* (U.S. Department of Health and Human Services [USDHHS], 1999). *Mental health* was noted to be a “state of successful performance of mental function, resulting in productive

activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity”, according to the USDHHS (1999). USDHHS (1999) stated that “almost everyone has experienced mental health problems in which the distress one feels matches some of the signs and symptoms of mental disorders.” This statement indicates that some FGS are most likely included in the finding that the majority of individuals experience mental health problems. It is critical to effectively assess and treat the symptoms FGS may be experiencing both in an academic setting as well as outside of the classroom in pertaining to their mental health. A major challenge to research is understanding that individuals can differ when it comes to stressful life events (USDHHS, 1999). It is an important task to effectively manage stressful life events when they occur, and to find preventative and coping strategies for future situations.

Epidemiological studies have estimated that the majority of individuals in the United States have experienced at least one traumatic event, defined by the criteria in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM), Third Edition (DSM-III) (Bonanno, 2004). Ozer, Best, Lipsey, and Weiss (2003) stated that “roughly 50%-60% of the U.S. population is exposed to traumatic stress but only 5%-10% develop [Post-Traumatic Stress Disorder] PTSD.” It was noted that there was a large disparity between the lifetime prevalence of exposure to a traumatic event being over 50% and the lifetime prevalence of PTSD at roughly 7% (Ozer et al., 2003). According to Jenkins, Belanger, Londoño Connally, Boals, and Durón (2013), “Traumatic stress reactions and life satisfaction are less often evaluated” while previous studies have looked at other factors (e.g., academic stressors, social support, and depression) when examining FGS and non-FGS populations. An individual’s socioeconomic status (SES) can play a role in whether there is a higher risk for more traumatic events. Hatch and Dohrenwend (2007) discussed that lower SES status is a risk factor for more exposure to traumatic events. This finding suggests that

socioeconomic conditions can be considered a stressor for FGS. It has been noted that socioeconomic factors play a role in an individual's vulnerability to mental illness and mental health problems, and that families of all social classes and backgrounds can be affected (USDHHS, 1999). It is not well understood as to what the reasons are for the association between lower SES and mental illness, however, "it may be that a combination of greater stress in the lives of the poor and greater vulnerability to a variety of stressors leads to some mental disorders, such as depression" (USDHHS, 1999). Similarly, Carter (2007) stated that the most common reactions to stressful life events are anxiety and depression.

Jenkins et al. (2013) conducted a study to look at FGS and non-FGS on PTSD symptoms, depression symptoms, life satisfaction, and social support. There were 1,647 volunteers from undergraduate psychology courses involved in the study with 22.3% (368) participants who answered yes to the question, "Are you the first person in your immediate family to go to college?" This study is meaningful to include in reporting research on FGS since there was a large, diverse sample size that included various ethnicities: "63% Caucasian (52% first-generation, 65% non-first-generation), 14% African American (15% first-generation, 14% non-first-generation), 6% Asian or Asian American (5% first-generation, 7% non-first-generation), 13% Hispanic (24% first-generation, 10% non-first-generation), and 4% other ethnicity (4% for both)" (Jenkins et al., 2013). It was found that FGS "may struggle with higher levels of PTSD symptoms and possibly depression symptoms and less life satisfaction than non-first-generation students" (Jenkins et al., 2013). These results suggest that academic institutions with FGS could benefit from incorporating more mental health services in pertaining to symptoms of mental disorders (e.g., PTSD, depression). It was also found that more women reported social support, but also more depressive symptoms and less life satisfaction. USDHHS (1999) discussed life-

threatening trauma frequently provoking different reactions (emotional, behavioral) in the mental health of an individual. USDHHS (1999) went on to note that “in the most fully developed form, this syndrome is called Post-Traumatic Stress Disorder (PTSD)” of the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM-IV).

Further government research was conducted on mental health including the Surgeon General’s report, *Mental Health: Culture, Race, and Ethnicity- A Supplement to Mental Health: A Report of the Surgeon General* (U.S. Department of Health and Human Services [USDHHS], 2001). Racism and discrimination adversely affect the mental health of individuals, can be considered stressful life events, and can place these individuals *at risk* for future mental disorders (e.g., depression, anxiety). These terms are considered “umbrella terms”, and refer to “beliefs, attitudes, and practices that denigrate individuals or groups because of phenotypic characteristics (e.g., skin color and facial features) or ethnic group affiliation” (USDHHS, 2001). These acts of racism and discrimination can be intentional or unintentional, however, the effects can be lasting. Carter (2007) defined *People of Color* as ethnic groups who have historically been disenfranchised including Americans, Hispanic/Latino, Black/African, Asian/Pacific Islanders, Native-Indigenous Indians, and biracial people.

According to Carter (2007), “Stress is a central construct in the race-based traumatic stress injury model (i.e., an emotional trauma brought on by the stress of racism).” It remains unclear whether racial and ethnic discrimination is associated with symptoms that are characteristic of traumatic stress or PTSD, according to Pieterse, Carter, Evans, and Walter (2010). Butts (2002) examined racial discrimination of African Americans, and their reported symptoms that seemed to have been consistent with PTSD when discriminated against. The symptoms presented from the stressor of discrimination could be dismissed or trivialized because

they may not meet the criteria for PTSD in accordance with the DSM. FGS are oftentimes minority students who can experience forms of discrimination due to the color of their skin or (sub)ethnic group. The emotional responses from racist acts can vary from mild to overwhelming in intensity, and from days to months or years in duration (Butts, 2002). Individuals who do not go on to show symptomatic symptoms of a mental disorder, or have actually been diagnosed with a mental disorder could be displaying a form of resilience. It would be critical to identify and strengthen the resiliency factors and functioning in FGS in relation to trauma outlook.

It has been identified by USDHHS (1999) that there is a negligence to understanding the special needs of racial and ethnic minority groups in acting as a barrier to treatment. If members of racial and ethnic minority groups were to seek treatment services, there is a perceived belief that these services “do not or will not meet their needs, for example, by taking into account their cultural or linguistic practices” (USDHHS, 1999). The outlook members in minority groups have on whether treatment services will be of aid to them, or stressful life events comes as a decisive factor that can either intensify or dampen the response to the stimulus (USDHHS, 1999). The prevalence rates within a given minority population for *each* mental disorder is currently unknown. Progress is being made to have more nationally representative studies in relation to learning more about prevalence rates for mental disorders in a given minority population (USDHHS, 2001). If members of some minority groups were experiencing symptoms that may warrant a diagnosable mental disorder, research has shown that these individuals would be more likely than Whites to delay treatment until these symptoms became more severe (USDHHS, 2001). These findings are important to mention since FGS, in respective to their racial and minority groups, may not have the desire nor confidence in treatment services, and in the health

care providers that would be attending to their symptoms. There may be mistrust in these providers that could act as a barrier to receiving treatment (USDHHS, 1999).

Attrition Rates in First-Generation College Students

The first year of college is a vital year that could help determine the prognosis of the next three years in a traditional four-year institution. Background characteristics including race, ethnicity, the education levels of parents, the financial factor, age, and gender have been discussed in previous research on the study of attrition in college students. According to Paul (2012, April 11), more than a quarter of low-income, FGS leave after their first year of college, and 89% fail to graduate within six years. The attrition rate of FGS is an area of topic that has been explored in previous research. The significance of exploring attrition in FGS is critical since the population of FGS is growing, and nearly one in three students who enter college as freshmen in the United States are FGS (Paul, 2012, April 11). There is a marked difference among some minority groups in college participation versus the White population in lagging behind. According to Chen (2005), African Americans make up nearly 14% of students whose parents have some college, but they only represent 5% of students whose parents have four-year degrees or higher. In Hispanics, 17% of these students are FGS, 8% of students whose parents have some college, and only 4% of students whose parents have baccalaureate degrees or higher. In discussing gender and age, Chen (2005) stated that women outnumber men among those whose parents have less than a four-year degree, but that men outnumber women in the non-FGS group for those parents with 4-year degrees or higher. Engle and Tinto (2008a) completed a report at The Pell Institute, *Moving Beyond Access: College Success for Low-Income, First Generation Students*, on the current status of low-income, first-generation college students in higher education: Found that FGS tend to be older, and had similar findings of FGS being less

likely to receive financial support from their parents as well as FGS having multiple obligations outside of college that could be impacting their college experience.

FGS have lower self-images of their academic ability than students compared to those with college experience (Hellman & Harbeck, 1997). It could be that FGS feel less academically prepared than other students when they enter college, which could impact their way of perceiving and managing their studies. According to Pascarella, Pierson, Wolniak, and Terenzini (2004), FGS tend to be at a distinct disadvantage compared to other students in terms of the academic preparation they received in high school. Stansberry (2014) found that high school played a role in many of the FGS participants take on their college experiences since their level of perseverance and determination from high school served as a continuation. Participants described themselves as “independent, self-reliant, motivated, and resilient and used other terms that focused on confidence and perseverance” (Stansberry, 2014). According to Burnett (2017), the majority of the FGS participants had a positive impact from at least one teacher or counselor from their respective high schools in their entry to college and academic persistence. Although, some students felt that they did not receive a great deal of support from their high school counselors or teachers in their college preparation, or challenging courses. This finding indicates that FGS are willing to put in the work to learn more, perhaps rigorous information to help prepare for college work. Cabrera (1998) interviewed Mexican American students who were FGS. It was found that students persisted in college due to their personal goals to graduate from college, and the favorable outcome that came with their high school academic preparation.

Cahalan, Perna, Yamashita, Wright-Kim, & Jiang (2019) completed a recent publication, *Indicators of Higher Education Equity in the United States- 2019 Historical Trend Report*, at The Pell Institute in which they examine the postsecondary characteristics, experiences, and

outcomes of low-income, first-generation college students. Cahalan et al. (2019) discussed that the average college costs for all institutions (2-year/4-year public, and 2-year/4-year private non-profit and for-profit) for full-time undergraduate enrollment was 2.5 times higher in 2017-2018 than in 1974-1975. The percentage of higher education costs covered by state and local governments has declined since 1975, which has led to an increase of costs being shared by students and parents. The largest portion of college costs are being covered by students and families with the percent of total costs borne by parents and students at 48 percent in 2017. Federal assistance with one's college expenses was provided by the federal government in which they shared the higher education costs and contributed about the same in 2017 as in 1976 (10 percent) (Cahalan et al., 2019).

There have been 7.6 million undergraduate students who received Federal Pell Grants and 2.3 million undergraduates who received state need-based grants in the fiscal year 2016. It is fortunate that "between 1979 and 2016, the number of Federal Pell recipients was 354 percent higher in 2016 than in 1979, while the number of state need-based aid recipients was 86 percent higher" (Cahalan et al., 2019). The average cumulative amount that was borrowed from those individuals who completed a bachelor's degree increased by 22 percent between 2000 and 2016 in constant 2016 dollars (from \$25,050 in 2000 to \$30,460 in 2016). There was a steady increase in money borrowed in 2016 for average cumulative amount from those who completed a bachelor's degree in their respective institution: \$27,420 at public institutions, to \$32,480 at private non-profit institutions, and to \$42,080 at private for-profit institutions (Cahalan et al., 2019). Pertinent to where the current study is taking place, the state of Hawai'i was indicated in the Pell Institute report as making up 49 percent of bachelor's degree recipients who graduated with debt in 2017.

Engle and Tinto (2008a) completed a report at The Pell Institute on the current status of low-income, first-generation college students in higher education. Engle and Tinto (2008b) used data from the National Center for Education Statistics (hereafter, NCES) Beginning Postsecondary Students (BPS) Study, which followed students who first enrolled in postsecondary education in 1995-1996 over a six-year period to 2001-2002, hereafter, BPS: 96/01. The BPS: 96/01 sample was composed of first-time undergraduates who participated in the National Postsecondary Student Aid Study (NPSAS:96) study (Engle & Tinto, 2008b). It was found that “six years later, nearly half (43 percent) of low-income, FGS had left college without earning their degrees” (Engle & Tinto, 2008b). In relation to the first year of college being an important year for college students, among those who left, nearly two-thirds (60%) of students did so after their first year. After six years, 11% of low-income, FGS had earned baccalaureate degrees while more advantaged peers earned them at 55%. There was a difference found between FGS who attended public four-year institutions versus private, not-for-profit four-year institutions. Using the data from the BPS: 96/01, it was found that 34% of low-income, FGS earned their bachelor’s degree in six years compared to 66% of their peers in public four-year institutions. Further, in private, non-for-profit institutions, low-income, FGS earned their bachelor’s degree at 43% compared to the 80% from their peers. The importance of this finding is that low-income, FGS were seven times more likely to earn their bachelor’s degrees if they began their academic studies in a four-year institution versus at a public two-year and for-profit institutions. However, only 25% of these students started at a four-year institution. Students who enroll at another type of institution (e.g., two-year) other than a four-year setting, may not have the intention to pursue a bachelor’s degree in the first place, and would be content with a degree from their respective institution. A final note on this data, associate degrees and certificates have been earned by many of these

students. “63% of low-income, FGS attending public two-year institutions said they planned to earn at least a bachelor’s degree, with nearly half of these students aspiring to post-baccalaureate degrees” (Engle & Tinto, 2008a). But within six years, only 5% of them actually earned bachelor’s degrees. The situation of financially covering the costs of attaining higher education has been widely discussed in being a problem area for FGS. This area could be limiting the opportunity for FGS to attend college. According to the data drawn from the 2003-2004 school year from the NCES National Postsecondary Student Aid Study (NPSAS:04 UG) used by Engle and Tinto (2008c), the amount of \$6,000 (before loans) is the mean amount of unmet need that FGS need to pay for college expenses after applying all financial aid. \$12,100 is the amount of their median annual income, so the unmet amount of \$6,000 provides a representation of taking up half of their annual income. Further, FGS would have to work during the school year to aid in supporting themselves and/or their families with having to borrow money from loan companies. Low-income, FGS who left during their first year owed \$6,557 on average while an average of \$16,548 was owed by those who left in their fourth year without completing their degrees (NPSAS:04 UG). Compared to their more advantaged peers, low-income, FGS have greater levels of accumulated loan debt if they attended a public or private four-year institution regardless of their class level and persistence outcome; loans make up 53% of financial aid (NPSAS:04 UG). 44% of low-income, FGS federal aid come in the form of grants, primarily Pell Grants (NPSAS:04 UG).

Engle and Tinto (2008a) used data from the NCES who conducted studies in having identified seven factors that put students at a risk of leaving their postsecondary institution without earning their degrees: 1) delaying entry into postsecondary education after high school, 2) attending part-time, 3) working full-time while enrolled, 4) being financially independent

from parents, 5) having dependent children, 6) being a single parent, and 7) having a GED (Horn & Premo, 1995; Horn, 1996; Berkner, Cuccaro-Alamin, & McCormick, 1996; Berkner, He, & Cataldi, 2003). These risk factors are often interrelated, and if one student has one risk factor then they tend to have other risk factors as well and are often correlated with students' background characteristics; delaying entry into postsecondary education and attending one's institution on a part-time basis "have the greatest impact on student attrition" (Horn & Premo, 1995; Horn, 1996; Berkner et al., 1996, 2003). If an individual has many risk factors, the more likely it is that the student will fail to earn their bachelor's degree (Engle & Tinto, 2008a).

Risk factors that are experienced more with certain populations than their peers include minority students, students from low-income families, FGS, and other "nontraditional" students (Horn & Premo, 1995; Horn, 1996; Berkner et al., 1996, 2003). There is a difference between two-year institutions and four-year institutions in terms of risk factors. Students who attend two-year institutions are more likely to have one or two more risk factors than those who attend four-year institutions (Engle & Tinto, 2008a). Since the majority of low-income, FGS (at 75%) begin their studies at two-year and for-profit institutions, there is not a wide representation of the FGS population in public and private four-year institutions (18 and 16% of the population), and there is an over-representation of FGS at public two-year and for-profit institutions (27 and 40% of the population) (NPSAS:04 UG). Further, it appears that low-income, FGS prefer attending two-year and for-profit institutions, however, they experience the highest drop-out rates in these sectors, but are more likely to leave post-secondary education after their first year regardless of which type of institution they choose (BPS: 96/01). Further, if FGS were to have started in public, four-year institutions, it was three times more likely that they would leave after their first year compared to their advantaged peers, 12 to 4%, respectively. For private, not-for-profit four-year

institutions, FGS were more than five times as likely to leave in the first year than their advantaged peers (BPS: 96/01).

The information on attrition for FGS stresses the importance of what steps can be taken to aid in the retention of students in their academic institutions. Ishitani (2006b) examined data from a combination of the National Education Longitudinal Study: 1988-2000 (hereafter, NELS:88), which is a national longitudinal data set supported by NCES that followed eighth graders over 12 years beginning in 1988; and NELS:1988-2000 Postsecondary Education Transcript Study (hereafter, PETS:2000) that includes transcript information of NELS:88 participants. 4,427 of these students who were enrolled in public and private four-year institutions were selected to look at attrition and degree completion behavior analyses (Ishitani, 2006c). Attrition behavior was defined by both voluntary withdrawal (i.e., dropout) and academic dismissal. It was found that FGS were 1.3 times more likely to leave their institutions than those students whose parents had gone to college. “Other variables that were significantly associated with departure included family income, lower educational expectation, lower high school class rank quintile, lower high school academic intensity, enrollment in a public institution, and non-selectivity of admission” (Ishitani, 2006a). The second year of college was the highest risk period for departure in FGS, however, their departure risk waned over time after their second year. Research suggests that the financial aid resources students are granted and attain can be a significant factor in relation to whether they commit to continuing with their studies. There were three types of financial aid in this study that showed positive effects on first-year retention. Students who received grants or work study jobs were 37% or 41% less likely to leave their first year than those students who did not receive any type of aid. There was a positive effect on retention in the second year if students received work study since it was 43%

less likely that they would depart in the second year. Statistical significance was shown for financial aid prominently in the first year, which may be because the data from the NELS:88 included the financial aid status only for the first year (Ishitani, 2006a).

Factors in Retaining First-Generation College Students

Bandura (1977) stated that self-efficacy refers to a person's belief in their probability of successful performance or in a specific situation. Self-efficacy is not generalizable to all tasks and situations nor is it inherited. It influences how a person addresses goals, tasks, and challenges, and is the foundation in which student success is built (Tinto, 2017). The first year at a university is a critical year for students since there is an adjustment to the heightened demands of university studies. Many students initially feel confident in their ability to succeed in college, but more than a few do not (Tinto, 2017). For individuals to believe they can succeed at the university level, having a sense of community made up of other peers, academics, and professional staff who value their membership can occur if the students are engaged and self-perceive as being part of the community. In other words, that the students matter and belong (Tinto, 2017). According to Schlossberg (1989), instances of marginality arises when an individual changes roles or experiences of transitions are made. For FGS, in particular, the transition from high school to a university setting, from living at home to on-campus living, and engaging in larger classroom sizes can be perceived as transitions. Burnett (2017) found that small class sizes did not seem to play a large role in the choosing of an institution for the majority of FGS participants, although large freshman science, technology, engineering, and math (hereafter, STEM) classes exhibited some anxiety in the participants. All of the participants felt their involvement in their courses played a major role in their academic persistence. College freshmen, who are marginal at first, can become a part of the community, but it can take time for

students to feel a sense of belonging in the group. Further, “marginality elicits feelings about mattering” to another (Schlossberg, 1989). Even when challenges arise, a sense of belonging can be a strong tie that aids in binding the individual to a group or community (Tinto, 2017).

Students can feel a sense of belonging in smaller communities within an institution, such as those individuals who share the same major or background. If students feel a sense of belonging with the institution or a group itself, this is most directly related to the motivations of students to persist (Tinto, 2017). FGS can experience self-questioning of whether they are fit to be on campus while also self-doubting their ability to academically succeed. Some FGS questioned their sense of belonging on campus, and having doubts about their ability to succeed as a minority student (Aspron-Williams, 2012).

Social Support

An individual’s social support system can encompass college peers, family members, and the community. Parents can play an important role in their children’s pursuit to higher education by providing forms of support (e.g., financial, academic), and approval of them seeking to further their education. Barlis (2013) interviewed African American males who are FGS and who graduated from high-poverty high schools. All of the participants found parental involvement to be a crucial factor in the nurturing for their resilience. Parental involvement was broken down into three themes that were identified in the data of this study: instilling the values of education and hard work, setting high expectations, and enforcing strict discipline. The importance of hard work was prominent in academic tasks, and each participant discussed having a parent who highly valued education and instilled that value by means of their teachings in the importance of hard work. Parents instilled high expectations in their children, and their abilities in their college

education in demonstrating their involvement. A key to success described by the FGS participants was the component of having strict parents.

Similarly, Hicks (2006) found that FGS perceived more support from their families for attending college than did second-generation college students: 95% of FGS had parents that felt that doing well in school is one of the best ways of becoming successful in life, 95% of FGS believed that their parents felt their children could become anyone they wanted to be growing up, and 100% of FGS believed that their parents felt that their children could achieve good grades when they worked hard and believed good grades were important. 79% of FGS believed that their parents placed importance in attending college right after completing high school as being first priority, 98% of FGS believed their parents felt that they should work hard in school if they wanted to be successful, and 100% of FGS believed their parents valued education and achievement. Although, parents may not be as prepared to aid their children with their studies, 79% of FGS felt that their parents tried to help them in their schoolwork. 98% of FGS felt that their parents believed that attending school was important. And lastly, 89% of FGS felt that their parents supported their decision to attend a local college or university. These findings (Barlis, 2013; Hicks, 2006) highlight the prominent and important role parents can have in the lives of children who are FGS. Parents value and desire the attainment of a college education for their children, and attempt to take on a supportive role in their respective forms. Burnett (2017) found that family support was exhibited by all FGS participants in the forms of receiving verbal encouragement, “pushing” their children to attend college, and were being supportive in various other ways (e.g., financial support, living at home).

Ong, Phinney, and Dennis (2006) conducted a longitudinal study to examine the protective influence of psychological and family factors on academic success in 123 Latino

college students whose parents did not attend or complete college. It was found that academic success is tied to both individual and family level influences. When these influences are present, they can be especially critical to the academic success of Latino students who have low SES status. There was a positive impact in Grade Point Average (GPA) performance in students whose parents showed persistent effort to support their children who are in college. St. Clair-Christman (2011) found differences in student support and social/academic integration based on student characteristics and institution type. 518 FGS were in the sample and it was found that 402 of the participants participated in one or both government programs for low-income students (the Pell Grant Program; the National School Lunch Program [free/reduced lunch]); there were high levels of family support in FGS; 49.03% of the sample indicated that their greatest source of affective support (the researchers of the study assessed for affective [emotional] and instrumental [practical] support) were their mothers while 39.36% indicated that their fathers were their greatest source of instrumental support, and 31.27% of respondents chose “other” (peers, friends, roommates, or significant others) when indicating greatest source of institutional affective support. Professors, 26.69%, and advisors, 22.63%, were chosen by some students in being their greatest source of instrumental support, respectively. This may indicate that FGS rely more on family support than the support of the university.

Similarly, to the findings of St. Clair-Christman (2011), Aspron-Williams (2012) found that several participants, in qualitative interviews of 13 females who were Latina and are FGS who already graduated from their respective undergraduate, four-year institutions, expressed having a closer bond with their mothers compared to their fathers. Their parents believed attending primary and secondary education were important for their children’s futures, and thought their parents were doing their best with providing support. Parents were unable to provide guidance

regarding college related tasks, but expressed support via words of encouragement and feelings of pride in their children's accomplishments. At least one other family member was identified to be able to provide the emotional support, guidance, and, at times, financial assistance if the parents were unavailable to provide support. Participants cared for their younger siblings when their parents were unavailable, and in addition to helping their parents, they were invested in helping their siblings and themselves. Teachers and/or professors, mentors, and/or counselors were seen as vital to these students' successes in being supportive relationships. Similarly, Burnett (2017) found that the majority of FGS participants positively viewed the faculty members at their institution, thought that their professors enjoyed the material they were teaching, and were accessible if they needed to ask a question. These findings (Aspron-Williams, 2012; Burnett, 2017) suggest that faculty members could play a role in the adjustment of FGS, and can be viewed as a source of positive support.

Stansberry (2014) conducted a study on focus groups for 138 sophomores and 162 seniors who were FGS. It was found that some students wished they would have been guided better and to have better understood college-related information (e.g., course scheduling, the alignment of choice of majors with career choices). Further, some students had positive interactions with peers, faculty, and staff, and it was noted that parents and family were consistently mentioned to play a role in their college experience as being a supporter and a motivator to the student. Although, parents and families often lacked the knowledge and understanding of FGS in their collegiate experiences, participants identified a high need and often a sense of pressure to make their families proud (Stansberry, 2014).

The role of parental and peer relationships has been shown to be important in college adjustment through goal commitment, personal-emotional and social identity, and academic

commitment (Lapsley, Rice, & Fitzgerald, 1990). Richardson and Skinner (1992) discussed peer support being able to help college students by aiding in the formation of study groups, the sharing of notes and experiences, and the giving of advice about which courses to take along with strategies students can use. According to Cabrera (1998), peer groups were found to be influential for the majority of the FGS population (e.g., studying together, moral support, and to serve as a variation of a secondary family on campus). The moral support of the family as well as the knowledge of older siblings in mentoring these participants through college aided in their academic persistence. These participants viewed faculty of color and faculty of their own ethnicity as an important asset for their institution, and own academic persistence.

Dennis, Phinney, and Chuateco (2005) assessed family and peer support in the environment for ethnic minority FGS by looking at the perceived support and perceived lack of needed support from family and peers to predict college achievement and adjustment. There was more of a need for family and peer resources than the already available family and peer resources that the college students had in relation to college outcomes. Further, the results of the study suggest that those who are experiencing academic and adjustment problems benefit from having someone who can provide a source of comfort to them in those moments versus those students who are less likely to feel a lack of family and peer support due to doing well. This study discusses important implications in the factors of different types of support.

Motivation

According to Tinto (2017), 'persistence' describes another way to discuss motivation. Universities should be questioning how to influence student motivation to stay, persist, and complete their degrees if they are to join the efforts in college retention. A desire has to be present for a student to persist in completing their degree, and "it is the quality that allows

someone to continue in pursuit of a goal even when challenges arise” (Tinto, 2017). Aspron-Williams (2012) found that all FGS participants had either a personal goal or an expectation for themselves to achieve college attendance and completion. Their motivation to attend college took on personal significance in achieving a life goal, and for some, it worked as a way to improve their own lives and become a resource of information for others. Students having a sense of motivation toward their academics can include personal reasons to attend college. A study conducted by Dennis et al. (2005) took an ecological approach to understanding the person and environmental aspects of predicting college achievement and adjustment after two years of school. The authors measured both individualistic and collectivistic motives for attending college for ethnic minority FGS to predict college outcomes; as well as investigating the role of the environment in relation to academic performance. It was found that motivation based on the factors of an individualistic orientation of students was more predictive of college adjustment and commitment in comparison to collectivistic motivations (Dennis et al., 2005). Even when controlling for other variables or calculating correlation analyses, family expectation motivation was not significantly related to any of the college outcome variables.

Participants had a high sense of independence and self-motivation, and encouraged themselves to be successful and self-driven to fulfill a college degree even though they acknowledged the barriers that came with navigating college (i.e., social, economic, or cultural) (Stansberry, 2014). Burnett (2017) found that some FGS participants felt that a driving force to achieving their degree rested in the desire to acquire a better future than the one their parents had experienced. There was an appreciation for their opportunities in college, and were able to see that their families have gone through difficulties without a college degree. All of the participants had personal motivation to succeed, even though there was some uncertainty meeting academic

requirements and work responsibilities. Nonetheless, these students persisted in their respective academic track.

Personal motivation plays an important role in a student's persistence in their respective academics. Burnett (2017) interviewed FGS who were majoring in (STEM) to identify some of the characteristics associated with academic persistence and retention among this group of FGS. The class levels of the students in this study differed from previous work on first-year students in being 13 juniors or seniors who are enrolled in a four-year institution. 11 students were motivated to earn their STEM degree since there seemed to be a strong passion toward their studies. These findings bring a unique perspective to previous research that FGS are more likely to register for remedial courses (Nunez & Cuccaro-Alamin, 1998).

Significance of the Study

A unique perspective of this study is that the participant data were collected in a diverse, rural setting in Hawai'i. It was anticipated that there would be some individuals who identify as being local to Hawai'i or part Hawaiian. The Center on the Family Hawai'i Family Touchstones Survey, 2002, as cited by Stern, Yuen, and He (2004a), discussed the value of '*Ohana* (i.e., family, often includes extended family) and their community in Hawaiian families. *Having a strong and happy family life* and *contributing to society* are two important goals that a large majority of Hawaiian parents have rated for their children. 88% of families that were surveyed agreed or strongly agreed that their family prioritizes time together and that they try to do stuff together as a family (The Center on the Family Hawai'i Family Touchstones Survey, 2002, as cited by Stern et al., 2004a). During a time of crisis, extended family and immediate families can work together to get through this hard time. 97% of families that were surveyed, indicated that

they cope with stress by pulling together as a family during a time of need (The Center on the Family Hawai‘i Family Touchstones Survey, 2002, as cited by Stern et al., 2004a).

The families in Hawai‘i are slightly larger than the national average, have a greater percentage of multigenerational households, and more of the families have multiethnic members who are culturally diverse in their daily lives (The Center on the Family, Hawai‘i Family Touchstones data, Data Center for Children and Families, as cited by Stern, Yuen, & He, 2004b).

According to Yuan, Kole, Hwang, Manlagñit, Yuen, and He (2009), Hawai‘i has improved its quality of life since 2000, and fares above the national average on overall quality of life. There has been a significant decline since 2000 for the percentage of people in Hawai‘i aged 25 and over with less than a high school education. The percentage of those obtaining a bachelor’s degree or higher has increased (Yuan et al., 2009). Compared to the rest of the United States, the residents of Hawai‘i aged 24-44 years old “have a participation rate in college or postgraduate education... data on this indicator has not changed significantly since 2000” (Yuan et al., 2009). Since 2000, the percentage of high school seniors accepted into higher education has increased.

Further, a legislative bill, Senate Bill No. 2320, was introduced by The Senate in the Twenty-Ninth Legislature (2018) to aid in the retention of Native Hawaiian students by introducing the establishment of a health sciences academy at the University of Hawai‘i at West O‘ahu that will serve as a model for this population as well as other under-represented groups. It was found that “current data suggest that Native Hawaiians are less likely to attend college in comparison to other ethnic groups due to low levels of preparation and inadequate finances” (The Senate in the Twenty-Ninth Legislature, 2018). There are significantly lower rates of graduation and retention rates for Native Hawaiian students who attend college than the general

student population. The Senate in the Twenty-Ninth Legislature (2018) found that these students have a strong desire to live close to family, participate in family activities at home, and have cultural pressures that contribute to a non-completion of a degree. Multiple studies that have researched what factors can lead to the retention of these students, found that school activities and more interactions with family and peers that Native Hawaiians have will more likely aid them to academically persist in college. The Senate in the Twenty-Ninth Legislature (2018) stated that 30% of “Native Hawaiian and Pacific Islander students have parents with high school degrees as the highest education level, and 18% have parents with a bachelor’s degree or higher.” This bill states that “an undergraduate health sciences academy [is to be] established within the University of Hawai‘i system to target the recruitment and retention of Native Hawaiian, Pacific Islanders, and first generation college students” (The Senate in the Twenty-Ninth Legislature, 2018). This act was to take effect on July 1, 2018. These findings suggest that more research is needed to be done on how to aid in the retention of these three groups.

Current Study

The current study examined the resilience levels and reported trauma related events of first-generation college students at a four-year university in a rural setting in Hawai‘i. Participants were given a paper and pencil self-report survey, which included demographic information, various measures, and a checklist asking them to identify the type of social support they receive and find useful in college.

Research Questions:

- 1) What factors of institutional (e.g., professors) and personal (e.g., family) social support are more likely to be reported and found useful by FGS and non-FGS?
- 2) What are the differences in reported traumatic events in FGS and non-FGS?

- 3) What are the differences in resilience levels of FGS and non-FGS?

Hypotheses:

- 1) More students will identify as FGS than non-FGS.
- 2) FGS will be more likely to report more traumatic events than non-FGS.
- 3) FGS will be more likely to report higher levels of resilience than non-FGS.

CHAPTER III: METHODS

Participants

Participant data were collected from undergraduate psychology related courses and the Federal TRIO Student Support Services program at a public liberal arts and science university in a rural setting in Hawai'i by the use of a paper and pencil, self-report survey. The survey can be viewed in Appendix A.

Instrumentation

The Connor-Davidson Resilience scale

The Connor-Davidson Resilience scale. (CD-RISC; Connor & Davidson, 2003). Sample items in the scale can be viewed in Appendix B. Copyright Permission to utilize the scale can be viewed in Appendix C. "The CD-RISC is a brief, self-rated measure of resilience that has sound psychometric properties" (Connor & Davidson, 2003). The instrument is comprised of 25 items. Each of the items are rated on a 5-point Likert-type scale (0-4), as follows: (0) *not true at all*, (1) *rarely true*, (2) *sometimes true*, (3) *often true*, and (4) *true nearly all the time*. The CD-RISC is rated based on how the participant has felt over the past month, and has a total score that ranges from 0-100, with higher scores reflecting greater resilience (Connor & Davidson, 2003). Some of the individual items in the CD-RISC include: Item 1 ("I am able to adapt when changes occur"), and Item 2 ("I have at least one close and secure relationship that helps me when I am stressed").

In the development of this instrument, the subjects were drawn from 6 groups, Group 1, ($n = 577$) a random-digit dial based general population (i.e., non-help seeking), Group 2, ($n = 139$) primary care outpatients, Group 3, ($n = 43$) psychiatric outpatients in private practice, Group 4, ($n = 25$) subjects in a study of Generalized Anxiety Disorder (GAD), and (Group 5, $n = 22$; Group 6, $n = 22$) subjects in two clinical trials of PTSD. Group 6 was used in the study as a between-group comparison and in the assessment of pre- to post- treatment change. Accounting for missing data, Groups 1-5 ($n = 806$) had more females than males ($n = 510$; $n = 274$), more White than non-White ($n = 588$; $n = 181$), and a mean (SD) age of 43.8 (15.3) years, respectively. It was found that there were significant differences for Group 1 (general population) versus each of the other groups, Group 2 (primary care) versus Group 4 (GAD), and Groups 5 and 6 (primary care versus PTSD). There was statistical significance in the overall multiple comparison model, $X^2 = 142.80$, $df = 5$, $p = <.0001$.

Cronbach's α for the CD-RISC was 0.89 for Group 1 ($n = 577$), and item-total correlations ranged from 0.30 to 0.70 (Connor & Davidson, 2003). The CD-RISC has been tested with the general population and clinical samples. It demonstrates sound psychometric properties with good internal consistency and test-retest reliability. "The scale exhibits validity relative to other measures of stress and hardiness, and reflects different levels of resilience in populations that are thought to be differentiated, among other ways, by their degree of resilience (e.g., general population vs. patients with anxiety disorders)" (Connor & Davidson, 2003).

Windle, Bennett, and Noyes (2011) systematically reviewed the psychometric rigor of 19 resilience measures that were developed for use in general and clinical populations. It was found that while there is no current 'gold standard' amongst 15 resilience measures (four were refinements of the original measure), the CD-RISC (25 items) among two other scales "received

the highest [psychometric] ratings, although when considering all quality criteria, the quality of these questionnaires might be considered as only moderate” (Windle et al., 2011).

According to Connor and Davidson (2003), three ways have been identified in which the CD-RISC could be useful. The first way being that “the CD-RISC might prove useful in studies of biology of resilience”, the second application “could be in clinical practice with contemporary resiliency interventions” in acting “as an aid to identifying resilient characteristics”, and the third use being in “studies designed to investigate adaptive and maladaptive strategies for coping with stress, and as a tool to assist in screening individuals for high-risk, high-stress activities or occupations” (Connor & Davidson, 2003).

The Life Events Checklist for *DSM-5*

The Life Events Checklist for DSM-5. (LEC-5; Weathers, Blake, Schnurr, Kaloupek, Marx, & Keane, 2013). The scale can be viewed in Appendix D. The LEC-5 is a self-report measure that is designed to screen for potentially traumatic events in the participant’s lifetime. This measure was originally developed in conjunction with the Clinician-Administered PTSD Scale for *DSM-IV* (CAPS) with the premise of it being administered prior to the CAPS. According to Weathers et al. (2013), the LEC-5 “assesses exposure to 16 events known to potentially result in PTSD or distress.” If there is a stressful event that is not captured in the first 16 items in the LEC-5, then there is an additional item that was included in the measure. A sample item includes, Item 13: “Severe human suffering” with Response categories being: “Happened to me; Witnessed it; Learned about it; Part of my job; Not sure; and Doesn’t apply.” This measure is normally used in conjunction with other measures (e.g., CAPS-5) to assess whether criteria has been met for the PTSD Criterion A traumatic event. There are three formats of the LEC-5, which include the Standard self-report: to establish if an event has occurred;

Extended self-report: to establish the worst event if more than one event has occurred, and

Interview: to establish if Criterion A has been met. The current study utilized the Standard self-report format of the LEC-5.

Psychometric properties of the original LEC are adequate when used as a standalone assessment of traumatic exposure, in particular when assessing the consistency of events that occurred to the participant (Gray, Litz, Hsu, & Lombardo, 2004). There is a demonstration of convergent validity with the original scale to various other measures that assessed for varying levels of potentially traumatic events, and psychopathology that is related to traumatic exposure. It was not established that the LEC had met the sufficient severity to meet *DSM-IV* criteria for traumatic exposure for an experienced event. There were a few changes made on the original LEC and the current measure that will be used in the study, the LEC-5. The first change was that Item 15 “Sudden, unexpected death of someone close to you” was converted to “Sudden accidental death.” The second change was that a response category, “Part of my job”, was added. Few psychometric differences are expected to occur with these minimal revisions to the original LEC. Furthermore, there are no psychometrics currently available for the LEC-5.

Procedures

The researcher obtained a pre-determined time and date from the instructors to enter their undergraduate psychology related courses in the classrooms to distribute the survey. The students were informed by the researcher a brief purpose of the study in being mindful of not revealing and showing bias in attaining certain findings. The researcher read the informed consent to the students in emphasizing the study having participant anonymity, the option to withdraw freely, and it being on a volunteer basis. The informed consent contained information

on counseling/psychological services if the participants felt the need to access these services after the study.

Students were informed that participating in this study is one of the options to gain extra credit from the instructors in their respective courses. Alternative means to receive extra credit for the course was at the discretion of the respective instructor. A designated individual (e.g., respective instructor, teaching assistant) was pre-determined prior to the study beginning in order to collect the completed surveys for the researcher.

In addition, participant data were collected from FGS in the Federal TRIO Student Support Services program. The researcher sent the Program Director an email containing the survey, the consent form with the no extra credit option, and the mental health resource sheet. The Program Director was asked by the researcher to place emphasis on anonymity, the option to freely withdrawal, and it being on a volunteer basis to the participants prior to the study being administered. The Program Director distributed the materials to the students via email and included information on how to access the survey via pick up at their respective office on campus. The students turned in their completed study to the office, which was then given to the researcher by the office staff.

Data Analysis

Analyses were conducted on 87 participants whom the data was collected in Spring 2020. The analysis of the data took place in Fall 2020. Outliers and missing data were reviewed prior to analyzing the data. IBM SPSS Statistics 22 was the statistical program utilized for analyzing the data. Descriptive and frequency statistics were conducted to gather demographic information and to count the number of times each variable occurred within the total sample. An Independent Samples T-test was conducted to evaluate the differences between FGS compared to non-FGS by

looking at group means on the LEC-5 and CD-RISC scales. There were correlation analyses conducted in order to assess possible associations between trauma related events, resilience levels, perception of social support, and the perceived likelihood of students remaining in college all four years in the total sample and in the FGS and non-FGS populations. A Multiple Regression analysis was conducted to test whether the dependent variable (perceived likelihood of staying in college) can be predicted based on the following independent variables: perception of social support, LEC-5 scale, CD-RISC scale, FGS status, and gender.

CHAPTER IV: RESULTS

Hypothesis 1: More students will identify as FGS than non-FGS.

The hypothesis was found to be fully supported since there were 47 FGS (54.0%) and 40 non-FGS (46.0%) in the sample (Table 1). The following demographic information for the total sample can also be found in Table 1. More females who were both FGS (36 [76.6%]) and non-FGS (26 [65.0%]) participated than males who were FGS (11 [23.4%]) and non-FGS (14 [35.0%]) in the study with the average age being 23.16 years ($SD = 6.65$). There was indication of a diverse sample in the study: [21 (44.7%) FGS and 15 (37.5%) non-FGS] Multi-Racial, [8 (17.0%) FGS and 7 (17.5%) non-FGS] European (including Portuguese), [5 (10.6%) FGS and 7 (17.5%) non-FGS] Japanese, [4 (8.5%) FGS and 0 (0.0%) non-FGS] Hawaiian, [3 (6.4%) FGS and 2 (5.0%) non-FGS] Hispanic, [2 (4.3%) FGS and 3 (7.5%) non-FGS] Pacific Islands other than Hawai'i, [2 (4.3%) FGS and 2 (5.0%) non-FGS] Continental Asian (China, Korea), [1 (2.1%) FGS and 3 (7.5%) non-FGS] Filipino, [1 (2.1%) FGS and 0 (0.0%) non-FGS] African, [0 (0.0%) FGS and 1 (2.5%) non-FGS] Other, and [0 (0.0%) FGS and 0 (0.0%) non-FGS] American Indian. The category Multi-Racial was created by the researcher during the analysis phase since it was found that various participants marked multiple responses for Ethnicity.

Pertinent to this study having took place in Hawai‘i, the following characteristics were reported: 35 (40.2%) were part-Hawaiian, 52 (59.8%) were not part-Hawaiian, 57 (65.5%) were raised and consider themselves ‘Local’ to Hawai‘i, and 30 (34.5%) were not raised and do not consider themselves ‘Local’ to Hawai‘i.

Table 1

Summary of Descriptive Statistics for Total Sample (N = 87)

Variables		First-Generation Status		
		N	FGS	Non-FGS
Age Group	18-24		36 (76.5%)	32 (80.0%)
	25-36		6 (12.7%)	5 (12.5%)
	37-48		5 (10.6%)	3 (7.5%)
Gender	Male		11 (23.4%)	14 (35.0%)
	Female		36 (76.6%)	26 (65.0%)
Ethnicity	African		1 (2.1%)	0 (0.0%)
	American Indian		0 (0.0%)	0 (0.0%)
	Continental Asian (China, Korea)		2 (4.3%)	2 (5.0%)
	European (including Portuguese)		8 (17.0%)	7 (17.5%)
	Filipino		1 (2.1%)	3 (7.5%)
	Hawaiian		4 (8.5%)	0 (0.0%)
	Hispanic		3 (6.4%)	2 (5.0%)
	Japanese		5 (10.6%)	7 (17.5%)
	Pacific Islands other than Hawai'i		2 (4.3%)	3 (7.5%)
	Multi-Racial		21 (44.7%)	15 (37.5%)
	Other		0 (0.0%)	1 (2.5%)
First-Generation Status	FGS	47 (54.0%)		
	Non-FGS	40 (46.0%)		
Hawai'i Related	Part-Hawaiian	35 (40.2%)		
	Not Part-Hawaiian	52 (59.8%)		
	Raised in Hawai'i	57 (65.5%*)		
	Not raised in Hawai'i	30 (34.5%*)		

Note: Data also reflects being 'Local' to Hawai'i.

Nearly half of the sample size (48.3%) had a Junior class standing followed by 20 (23.0%) Sophomores, 15 (17.2%) Freshmen, and 10 (11.5%) Seniors. The following data reflect respective class standings on having a job at the time of the study: 5 (33.3%) Freshmen, 16

(80.0%) Sophomores, 26 (61.9%) Juniors, and 8 (80.0%) Seniors (Table 2). Twenty-seven (57.4%) FGS and 28 (70.0%) non-FGS participants reported being employed.

Table 2

Frequencies for Class Standings on Having a Job (N = 87)

Variables		Job Status		
		<i>N</i>	Employed	Not Employed
Class Standing	Freshman*	15 (17.2%)	5 (33.3%)	9 (60.0%)
	Sophomore	20 (23.0%)	16 (80.0%)	4 (20.0%)
	Junior	42 (48.3%)	26 (61.9%)	16 (38.1%)
	Senior	10 (11.5%)	8 (80.0%)	2 (20.0%)

*. Missing Value of 1 (6.7%) for Job Status.

Research Question 1: What factors of institutional (e.g., professors) and personal (e.g., family) social support are more likely to be reported and found useful by FGS and non-FGS?

The participants were able to select multiple sources of institutional and personal social support they had while in college (Table 3). It was found that Family and Friends were both reported the highest among FGS [44 (93.6%) each for both social support factors] and non-FGS participants [38 (95.0%) and 40 (100.0%)], respectively. Thirty-four (72.3%) FGS reported that receiving Financial Aid to fund their college expenses is their highest institutional social support. The institutional social support that was reported the most frequently for non-FGS was their classroom Professors [30 (75.0%)], respectively. Table 3 contains the remainder social support categories with their respective frequencies. In the total sample, 29 (33.3%) participants reported feeling Moderately Strong and 28 (32.2%) reported feeling Very Strong in their perception of social support during the last 6 months. Nineteen (40.4%) FGS reported feeling Moderately Strong and 17 (42.5%) non-FGS reported feeling Very Strong in their perception of social

support during the last 6 months. Thirty-nine (83.0%) FGS and 31 (77.5%) non-FGS reported feeling Very Likely about continuing their studies at their respective four-year college institution (Table 3).

Table 3

Frequencies for First-Generation Status on Social Support Factors, Perception of Social Support, and Perceived Likelihood of Staying in College (N = 87)

Variables		First-Generation Status	
		FGS	Non-FGS
Institutional/Personal Social Support	Family	44 (93.6%)	38 (95.0%)
	Friends	44 (93.6%)	40 (100.0%)
	Peers	31 (66.0%)	28 (70.0%)
	Professors	29 (61.7%)	30 (75.0%)
	Academic Advisors	28 (59.6%)	25 (62.5%)
	Mentors	12 (25.5%)	11 (27.5%)
	Counseling Center	11 (23.4%)	16 (40.0%)
	Financial Aid	34 (72.3%)	25 (62.5%)
	On-Campus Job	14 (29.8%)	16 (40.0%)
	Extra-Curricular	15 (31.9%)	16 (40.0%)
	Clubs/Organizations		
	Other	6 (12.8%)	4 (10.0%)
Perception of Social Support	Very Weak	0 (0.0%)	0 (0.0%)
	Moderately Weak	0 (0.0%)	0 (0.0%)
	Slightly Weak	4 (8.5%)	4 (10.0%)
	Slightly Strong	11 (23.4%)	9 (22.5%)
	Moderately Strong	19 (40.4%)	10 (25.0%)
	Very Strong	11 (23.4%)	17 (42.5%)
	Missing Value	2 (4.3%)	0 (0.0%)
Perceived Likelihood of Staying in College	Very Unlikely	0 (0.0%)	0 (0.0%)
	Moderately Unlikely	0 (0.0%)	0 (0.0%)
	Slightly Unlikely	0 (0.0%)	1 (2.5%)
	Slightly Likely	1 (2.1%)	0 (0.0%)
	Moderately Likely	6 (12.8%)	8 (20.0%)
	Very Likely	39 (83.0%)	31 (77.5%)
	Missing Value	1 (2.1%)	0 (0.0%)

Research Question 2: What are the differences in reported traumatic events in FGS and non-FGS?

Hypothesis 2: FGS will be more likely to report more traumatic events than non-FGS.

An Independent Samples T-test was conducted in order to compare FGS and non-FGS group differences (Table 4). Hypothesis 2 was found to not be supported in the current study. There were no significant findings found in relation to the second hypothesis after significance testing was conducted.

Table 4

Independent Samples T-test: Comparing Group Differences on the LEC-5 and CD-RISC Scales

		N	Mean	Std. Deviation	Std. Error Mean
<i>First-Generation Status on Trauma Related Events and Resilience Levels</i>					
N = Number of Students					
LEC	FGS	46	39.7826	16.30394	2.40388
	Non-FGS	40	36.3000	20.82306	3.29242
RES	FGS	46	71.8913	13.98766	2.06237
	Non-FGS	40	74.2000	14.79640	2.33952

		Independent Samples Test						
		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
LEC	Equal variances assumed	3.780	.055	.869	84	.387	3.48261	4.00812
	Equal variances not assumed			.854	73.549	.396	3.48261	4.07660
RES	Equal variances assumed	.046	.831	-.743	84	.459	-2.30870	3.10643
	Equal variances not assumed			-.740	80.851	.461	-2.30870	3.11876

Note: Hereafter, in the following tables, LEC reflects the LEC-5 scale and RES reflects the CD-RISC scale.

Research Question 3: What are the differences in resilience levels of FGS and non-FGS?

Hypothesis 3: FGS will be more likely to report higher levels of resilience than non-FGS.

An Independent Samples T-test was conducted in order to compare FGS and non-FGS group differences on the CD-RISC scale (Table 4 [See above]). Hypothesis 3 was found to not be supported in the current study. There were no significant findings found in relation to the third hypothesis after significance testing was conducted.

Multiple significant findings were found after exploratory analyses were examined in the current study.

A Pearson's Correlation was conducted to assess the relationship between perceived likelihood of staying in college and perception of social support. The first Pearson's Correlation analysis examined the total sample. There was a significant positive relationship between perception of social support and perceived likelihood of staying in college in the total sample, $r(86) = .333^{**}$, $p = .002$ (Table 5).

Table 5

Correlation Matrix: Total Sample on Perceived Likelihood of Staying in College and Perception of Social Support

Variable	1	2
1. Perceived Likelihood of Staying in College	-	.333**
2. Perception of Social Support	.333**	-

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

A Pearson's Correlation was conducted to assess the relationship between perception of social support and the CD-RISC scale. The second Pearson's Correlation analysis examined the total sample. There was a significant positive relationship between perception of social support

and resilience levels in the total sample, $r(86) = .249^*$, $p = .021$ (Table 6). In summary, high resilience levels were positively correlated with perception of social support for the total sample.

Table 6

Correlation Matrix: Total Sample on Perception of Social Support and CD-RISC Scale

Variable	1	2
1. Perception of Social Support	-	.249*
2. RES	.249*	-

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

A Multiple Regression analysis was conducted to test whether the dependent variable (perceived likelihood of staying in college) can be predicted by the following independent variables: perception of social support, trauma experience (LEC-5 scale), resilience (CD-RISC scale), FGS status, and gender. The multiple regression model showed a statistically significant model for perceived likelihood of staying in college, $F(5, 80) = 2.840$, $p = .021$, with an $R^2 = .151$. It was found that perception of social support was a significant predictor of perceived likelihood of staying in college, after controlling for the other variables such as first-generation status, gender, trauma experience, and resilience in the model (Table 7).

Table 7

Multiple Regression: Perceived Likelihood of Staying in College

Variable	Coefficients ^a		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	Unstandardized Coefficients				
	<i>B</i>	<i>SE B</i>	β		
(Constant)	4.579	.554	-	8.266	<.001
Perception of Social Support	.170	.059	.311	2.871	.005
LEC	.001	.004	.019	.179	.858
RES	.006	.005	.139	1.279	.205
First-Generation Status	-.164	.130	-.132	-1.263	.210
Gender	.093	.146	.068	.635	.528

Note: a. Dependent variable: Perceived Likelihood of Staying in College.

CHAPTER V: DISCUSSION

The data collection for the current study was conducted in various undergraduate psychology related classrooms and the Federal TRIO Student Support Services program in Spring 2020 followed by the analyses being completed in Fall 2020. SPSS software was utilized to analyze the research questions and hypotheses. The composition of the study's 87 participants revealed that more females than males participated in the study with the average age of the participant being 23.16 years. The study contained a diverse sample both in class standings and in ethnicity. There were more participants who classified themselves as Juniors with the Seniors being the least represented. The Junior class standing also reflected a higher percentage of those students who had a job at the time of the study. The ethnic group most prominent in the sample was Multi-Racial while American Indian was the least represented. More participants reported being raised in Hawai'i and were 'Local' to Hawai'i, but were not part-Hawaiian.

Three research questions and hypotheses were developed to analyze and explore the comparison of FGS and non-FGS in group size, and the concept of FGS and non-FGS in institutional/personal social support, trauma related events, and resilience levels. The first hypothesis sought to compare the groups, FGS and non-FGS, in the sample: *More students will identify as FGS than non-FGS*. The present study observed a higher number of FGS participating in the study compared to non-FGS. The sample size revealed an unequal difference between FGS and non-FGS (47 compared to 40), although this data gave way to some helpful comparisons between both groups. The first research question sought to identify the various social support factors more likely to be reported and found useful by both groups: *What factors of institutional (e.g., professors) and personal (e.g., family) social support are more likely to be reported and found useful by FGS and non-FGS?* The participants were able to choose multiple items within the social support category. It was found that both Family and Friends are important supportive personal factors for FGS and non-FGS while in college, respectively. For institutional social support, FGS reported receiving Financial Aid as the most important factor while non-FGS chose Professors. Both groups (FGS and non-FGS) reported moderate to high levels of social support in the last few months, respectively. There was a positive perceived likelihood of staying in college reported by both groups.

It appears that both groups in the study benefit from having a close-knit support system of family and friends. Previous research has shown that peer relationships can serve as an important function in college since peers and FGS/non-FGS could be contributing to each other's collegiate career via forming study groups, acting as a variant of a secondary family on campus, and so forth (Cabrera, 1998). Financial Aid was indicated by FGS as being the most supportive institutional factor in their education. Previous research has shown that FGS have worked to

financially aid their families, had their own spending money, paid for their own academic materials, and the majority of the participants in Aspron-Williams (2012) study were financially independent from their parents, and were either employed part-time or full-time during college. It is important to highlight that both groups identified a strong perceived likelihood of staying in college. In summary, family, friends, financial aid, and professors indicate a positive direction in identifying supportive personal and institutional factors for these two groups.

The second research question sought to identify any significant differences in reported trauma related events in FGS and non-FGS: *What are the differences in reported traumatic events in FGS and non-FGS?* Similarly, to the research question, the second hypothesis stated: *FGS will be more likely to report more traumatic events than non-FGS.*

There were no significant findings found in relation to the second hypothesis after significance testing was conducted.

The final research question sought to identify any differences in resilience levels in FGS and non-FGS: *What are the differences in resilience levels of FGS and non-FGS?* Similarly, to the research question, the third hypothesis stated: *FGS will be more likely to report higher levels of resilience than non-FGS.*

Similar to the previous research question, the third hypothesis was found to not be supported after significance testing was conducted.

The findings from the first correlation analysis revealed that there was a positive relationship between perception of social support and perceived likelihood of staying in college for the total sample. This finding indicates that the participants in the study may benefit from having a social support network while in college. The second correlation analysis that was

conducted revealed that those in the total sample who have higher resilience levels may also benefit from having a social support network while in college.

The findings from the multiple regression analysis revealed that regardless of first-generation status, gender, trauma experience, and resilience level, a stronger perception of social support predicted a higher perceived likelihood of staying in college. Further, the current study identified family and friends as being the two most important personal social support factors for both populations. Professors also played a role in being identified by non-FGS as being supportive figures in their college education. It appears that having a social support system is a critical factor to consider when studying both of these populations to aid in college retention.

Implications

The findings from this study indicate that family, friends, financial aid, and professors are the social support factors reported most highly amongst FGS and non-FGS. In summary, FGS and non-FGS appear to place value on having a support system comprising of institutional and personal factors while in college. Previous research has shown similar findings. Burnett (2017) found that family support was exhibited by all FGS participants in the forms of receiving verbal encouragement, “pushing” their children to attend college, and being supportive in various other ways (e.g., financial support, living at home). Peer groups have been shown to play an important role for FGS while in college since peers can act as a variant of a secondary family on campus (Cabrera, 1998). These data have some potential intervention implications. For instance, placing emphasis on the concept of peer groups for FGS and non-FGS while in college, assisting FGS in ensuring financial aid needs are being met, and encouraging the support of professors to aid in the efforts of retaining these populations in higher education.

Limitations

There were some limitations in the current study that were identified by the researcher. These limitations include a low sample size, an unequal sample of female and male participants and class standings, minimal representation of participants who are in the Federal TRIO Student Support Services program, and the location of the study. Although multiple classrooms were visited by this researcher to administer the survey and the Program Director to the Federal TRIO Student Support Services program introducing the study to the TRIO participants, there was a low sample size overall. It is likely that the size of the sample was found to be inadequate when attempting to draw meaningful differences for FGS and non-FGS in trauma related events and resilience levels. It is important to note that even if the TRIO participants in the study were excluded from the analyses, there would still be a higher number of FGS who participated in the study.

Due to the Coronavirus Disease (COVID-19) pandemic, additional data collection in undergraduate psychology related classrooms was unable to be continued. The current study was conducted at a public university in a rural setting in Hawai'i which is known for its diversity of students in all respects. The location of the study is likely to limit the generalizability of the findings to other populations.

Future Considerations

Since it was identified by both groups that social support is perceived favorably in relation to their perceived likelihood to stay in college or resilience, future work could consider gathering qualitative reports from these students via in-person, focus groups to gather more of a personal account of their collegiate experiences. Future work could consider learning more about certain life events that could have more of a direct impact to the FGS population than the non-FGS population in relation to trauma. It would be important to provide sufficient, and reliable

support to this group of students since they are considered to be ‘at-risk’ for dropping out of college or failing academically (The Glossary of Education Reform, 2013).

Although, there were no significant findings in resilience levels for both populations in the current study, there are unique life events that the people of Hawai‘i can experience while living on the islands that speak of their resilient functioning. Some examples of life events that people living in Hawai‘i can experience include volcanic eruptions, natural disasters, and coastal hazards. Future work could consider highlighting more of the uniqueness that comes from studying the student population in Hawai‘i by designing a study with more Hawaiian context.

If this line of study is to be conducted in the future, there are further considerations that could improve the overall quality of the study. For instance, it would be beneficial to increase the number in the sample size, which could aid in more significant findings for FGS and non-FGS. In addition, establishing a more efficient system to collect data from the Federal TRIO Student Support Services program participants would add valuable data from a highly motivated FGS.

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Appendices

Appendix A: The Survey

Thank you for allowing us to collect data for my project. Please be assured that all of your answers will be kept confidential. Your name will be recorded on a separate piece of paper so that extra credit points can be awarded. This survey is anonymous. Your name should not appear anywhere on any of the survey forms. You should not feel obligated to answer any questions that you feel uncomfortable answering.

Please tell us about yourself.

A1. Age: _____

A2. Gender (Circle One): Male Female

A3. From the list below, please indicate which ethnic group you most identify with

(Check one/multiple):

1. African _____
2. American Indian _____
3. Continental Asian (China, Korea) _____
4. European (including Portuguese) _____
5. Filipino _____
6. Hawaiian _____
7. Hispanic _____
8. Japanese _____
9. Pacific Islands other than Hawai'i _____
10. Other: _____

A4. Do you consider yourself "local"? Yes No

A5. Did you grow up in Hawai'i? Yes No

A6. Are you part-Hawaiian? Yes No

For the purposes of this study, first-generation college students will be defined as:

C) An individual both of whose parents did not complete a baccalaureate degree; or

D) An individual who has a single parent that did not complete a baccalaureate degree.

A7. Are you a first-generation college student? Yes No

A8. What is your class standing? _____ (Pick from 1-4)

1. Freshmen 0-29.99 credits successfully completed
2. Sophomore 30-59.99 credits successfully completed
3. Junior 60-89.99 credits successfully completed
4. Senior 90 or more credits successfully completed

A9. What year did you start college (excluding taking college credit in High School)?

_____ (Enter year)

A10. How likely are you to stay in college? (Pick from 1-6)

Very Unlikely	Moderately Unlikely	Slightly Unlikely	Slightly Likely	Moderately Likely	Very Likely
1	2	3	4	5	6

A11. What factors of social support have you found useful during your time in college?
(Please Checkmark **ALL** That Apply)

Family	
Friends	
Peers	
Professors	
Academic Advisors	
Mentors	
Counseling Center	
Financial Aid	
On-Campus Jobs	
Extra-Curricular Clubs/Organizations	
Other (Write in space below)	

A12. How would you rate your perceived social support during the last 6 months?
(Pick from 1-6)

Very Weak	Moderately Weak	Slightly Weak	Slightly Strong	Moderately Strong	Very Strong
1	2	3	4	5	6

A13. Please write "9" in the space: _____

A14. Do you have a job? Yes No

A15. **(Skip this question if you answered "No" to the previous question)**

If you have a job, how much money do you earn per month? _____

If you know how much money your parents earn per year, please indicate how much below
(If you don't know, please write "I don't know" in the space provided):

A16. Mother's annual job earnings: _____

A17. Father's annual job earnings: _____

Please indicate your parents' occupations below (Write "I don't know" if you do not know what your parents' occupations are):

A18. Mother's occupation: _____

A19. Father's occupation: _____

A20. Please write "2" in the space: _____

A21. How many hours a week (on average) did you spend on community involvement in your city/town/island (for example: organizing or actively participating in support, protests, arts, performance, amateur sports, social, volunteering, or other engagement events or programs) during the last 6 months? (Pick from 1-5)

0	1-3	3-5	5-7	7 or more
1	2	3	4	5

A22. How would you rate overall quality of your community involvement during the last 6 months? (Pick from 1-5)

Very Low	Low	Average	High	Very High
1	2	3	4	5

A23. How many hours a week (on average) did you spend on campus involvement in your university (for example: organizing or actively participating in support, protests, arts, performance, amateur sports, social, volunteering, or other engagement events or programs) during the last 6 months? (Pick from 1-5)

0	1-3	3-5	5-7	7 or more
1	2	3	4	5

A24. How would you rate overall quality of your community involvement in your city/town/island during the last 6 months? (Pick from 1-5)

Very Low	Low	Average	High	Very High
1	2	3	4	5

Instructions: Listed below are a number of difficult or stressful things that sometimes happen to people. For each event **check one or more** of the boxes to the right to indicate that: (a) it happened to you personally; (b) you witnessed it happen to someone else; (c) you learned about it happening to a close family member or close friend; (d) you were exposed to it as part of your job (for example, paramedic, police, military, or other first responder); (e) you're not sure if it fits; or (f) it doesn't apply to you.

Be sure to consider your *entire life* (growing up as well as adulthood) as you go through the list of events.

Event	Happened to me	Witnessed it	Learned about it	Part of my job	Not sure	Doesn't apply
1. Natural disaster (for example, flood, hurricane, tornado, earthquake)						
2. Fire or explosion						
3. Transportation accident (for example, car						

accident, boat accident, train wreck, plane crash)						
4. Serious accident at work, home, or during recreational activity						
5. Exposure to toxic substance (for example, dangerous chemicals, radiation)						
6. Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)						
7. Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)						
8. Sexual assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm)						
9. Other unwanted or uncomfortable sexual experience						
10. Combat or exposure to a war-zone (in the military or as a civilian)						
11. Captivity (for example, being kidnapped,						

abducted, held hostage, prisoner of war)						
12. Life-threatening illness or injury						
13. Severe human suffering						
14. Sudden violent death (for example, homicide, suicide)						
15. Sudden accidental death						
16. Serious injury, harm, or death you caused to someone else						
17. Any other very stressful event or experience						

For each item, please mark an “x” in the box below that best indicates how much you agree with the following statements as they apply to you over the last month. If a particular situation has not occurred recently, answer according to how you think you would have felt.

	Not true at all (0)	Rarely true (1)	Sometimes true (2)	Often true (3)	True nearly all the time (4)
1. I am able to adapt when changes occur.					
2. I have at least one close and secure relationship that helps me when I am stressed.					

As indicated in the Copyright Permission under Appendix C, the CD-RISC scale is protected under copyright and is unable to be reproduced in its entirety where it can be accessible to the public.

Appendix B: Sample Items in the CD-RISC Scale

For each item, please mark an “x” in the box below that best indicates how much you agree with the following statements as they apply to you over the last month. If a particular situation has not occurred recently, answer according to how you think you would have felt.

	Not true at all (0)	Rarely true (1)	Sometimes true (2)	Often true (3)	True nearly all the time (4)
1. I am able to adapt when changes occur.					
2. I have at least one close and secure relationship that helps me when I am stressed.					

Appendix D: The LEC-5 Scale

LEC-5 Standard

Instructions: Listed below are a number of difficult or stressful things that sometimes happen to people. For each event check one or more of the boxes to the right to indicate that: (a) it happened to you personally; (b) you witnessed it happen to someone else; (c) you learned about it happening to a close family member or close friend; (d) you were exposed to it as part of your job (for example, paramedic, police, military, or other first responder); (e) you're not sure if it fits; or (f) it doesn't apply to you.

Be sure to consider your entire life (growing up as well as adulthood) as you go through the list of events.

Event	Happened to me	Witnessed it	Learned about it	Part of my job	Not sure	Doesn't apply
1. Natural disaster (for example, flood, hurricane, tornado, earthquake)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Fire or explosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Transportation accident (for example, car accident, boat accident, train wreck, plane crash)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Serious accident at work, home, or during recreational activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Exposure to toxic substance (for example, dangerous chemicals, radiation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Sexual assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Other unwanted or uncomfortable sexual experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Combat or exposure to a war-zone (in the military or as a civilian)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Captivity (for example, being kidnapped, abducted, held hostage, prisoner of war)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Life-threatening illness or injury	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Severe human suffering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Sudden violent death (for example, homicide, suicide)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Sudden accidental death	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Serious injury, harm, or death you caused to someone else	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Any other very stressful event or experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>