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People, Places, and Things: The Relationship Between Presence, Demographic Factors, and Self-Concept on a University Campus

Lydell E. Kerbo Jr
University of Central Florida

PEOPLE, PLACES, AND THINGS: THE RELATIONSHIP BETWEEN PRESENCE, DEMOGRAPHIC FACTORS, AND SELF-CONCEPT ON A UNIVERSITY CAMPUS

by

LYDELL E. KERBO, JR.
A.A. Hillsborough Community College

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Abstract

Within the framework of ecological psychology, environments are places, defined as landscapes of affordances, or the array of potential actions that can be executed. The feedback between direct perception-action and use of affordances results in the sense of presence in place. According to previous research, increased presence has been correlated with greater attachment and connectedness with the place as well as beneficial psychological states in a campus setting. However, it is unclear what factors, such as demographics, may influence differences in engagement with campus affordances, and hence, presence among individuals. The aim of the study is to investigate the relationship between campus presence, demographic factors, and social self-concept. Participants completed a survey that assessed their demographics, aspects of self-concept, degree of campus engagement and their sense of presence on campus.

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CHAPTER 1: INTRODUCTION

Gibsonian Ecological Theory of Perception

At the cognitive level of analysis, the focus is to understand how our mental processes arose and operate, either in conjunction with our physiological systems or in isolation. By delving into phenomena such as attention, language, and memory, a better understanding of the human mind and human behavior can be obtained. In particular, sensory perception is a fundamental theme throughout cognitive psychology. Perception refers to the process of understanding, recognizing, and managing information in the world to interpret the environment (Schacter, 2011). It is vitally important to our functioning and sense of self as it provides us with information about our self and the world around us. Many theories exist concerning the underpinnings of perception to understand, for example, how vision works.

James J. Gibson, a founder of ecological psychology, posed the ecological theory of perception where perception is understood as direct and free of any need for the brain to make inferences about the information that it is receiving or use representations (Fancher & Rutherford, 2011). Generally, this theory ties perception with the environment by viewing perception as a behavior rather than a cognitive process. By doing so, this view emphasizes the role of action and places perception outside of the brain (completely or partially) using concepts, such as affordances, to demonstrate its directness. Affordances—the array of potential actions that can be executed—provide the direct link between perception and action to understand how an organism encounters the environment that it is in. Affordances will differ likely between environments and organisms since they are stipulated by the environment (Chemero, 2009;

Turvey, 1992) and are contingent on the organism's embodiment (Warren, 1984). Affordances become the input that is ultimately perceived, the forefront of the act of perception. When one encounters a place, any environment composed of affordances, it acts upon the affordances that align with its allostatic need of control and regulation of optimal functioning for survival. An organism's basic needs guide its actions by influencing the affordances that it acts on. Thus, intentionality, the quality of mental states to be about something (Pierre, 2019), in behavior emerges from this model of perception. Intentionality with regard to action produces results that are meaningfully relevant to the action and the organism's volition, which informs the organism's future action and its knowledge of the place. Such behavior across the many creatures in a given area results in the place-making process that creates the overall place that they all live in and experience. Each creature's sense-making, or actions that are taken that result in meaning for that creature, collectively comes together to make a place. For the individual, this dance of sense-making and place-making cultivates a sense of presence—the phenomenal experience of being involving the pursuit of one's goal using the affordances of a place and direct perception—within a place. As a result, a cycle forms where perception leads to further behavior, then behavior leads to perception. As the cycle repeats, a sense of purpose is created and, more importantly, a sense of presence in the place is cultivated (Gibson, 1979; McConnell & Fiore, 2017).

This Gibsonian view ideally characterizes the nature of human perception and action and poses an interesting point for investigating this framework within different kinds of places. For example, Fatima Khan (2020) examined nature as a place and how engagement with its affordances affects an individual's sense of presence within nature. In her study, nearly 240 undergraduate students completed an online test battery containing measures to assess affiliation

to nature, self-esteem within nature, and presence within nature. The results indicated that presence in nature held positive significant correlations with nature engagement, nature activism, and nature affiliation. These findings demonstrate that the degree to which one experiences a sense of presence within nature increases as one engages more with nature and its affordances. This would lead to the prediction that someone with more opportunities to engage with nature's affordances, such as someone that lives in a rural environment, would build a greater sense of presence in nature than someone with fewer opportunities, such as someone that lives in an urban environment. If this view holds, this interaction between engagement with a place's affordances and one's sense of presence will display the same positive relationship.

Campus Presence

Indeed, this relationship was exhibited in an earlier study conducted by Daniel M. Kleiman (2017). Kleiman explored this relationship with a university campus serving as the place. This study involved over 280 undergraduate students who finished an online questionnaire that assessed campus presence, self-esteem, collegiate self-efficacy, college affiliation, optimism, personality, and other important variables. He found that some important relationships existed between some of the variables and campus presence. Students who lived on campus reported significantly higher campus presence scores than students who never lived on campus. First-time-in-college students reported significantly higher scores of campus presence than transfer students. Students involved in at least one campus organization displayed significantly higher campus presence levels than those with no involvement. Also, time spent on campus and

attendance to campus events semesterly correlated positively and significantly with campus presence. Altogether, one conclusion was consistently made: greater engagement, regardless of the form it took, was related to a greater sense of presence on campus.

Demographics and Academic Success

Like Khan's (2020) study, Kleiman's (2017) study poses an important consequence that suggests that students with more opportunities to engage with the campus' affordances build a greater sense of presence than those with fewer opportunities within a university campus setting. This is important because a greater sense of presence has been shown to have important positive relationships with positive outcomes, such as self-esteem, self-efficacy, and optimism, within the campus place as observed in Kleiman's (2017) study. Consequently, it is important to understand what individual differences may result in differences in university students' engagement and place-making. Demographic characteristics are an important area of concern that highlights many of the important differences among individuals and would be an important place to study whether individual differences can result in differences in the sense of presence on a university campus. Such characteristics include race/ethnicity, nationality, sexual and gender identity, the presence of a psychiatric or physical disability, socioeconomic status, and much more.

These features have profound effects on academic outcomes, such as enrollment rates, 6-year graduation rates, number of degrees awarded, and more. For example, differential postsecondary outcomes in completion rates, enrollment rates, type of institutions attended, majors pursued, and other academic outcomes have been shown across race/ethnic groups (de

Brey, et al., 2019; Libassi, 2018; Nichols & Evans-Bell, 2017; Shapiro, et al., 2017; Thernstrom, 2001). Nationality status—the relative standing of one and their family belonging to the relevant culture—plays a negative role in enrollment rate (even when compared to people of the same race/ethnic group), financial ability to attend college, attendance rates, grade point average (GPA), and more, and faces their own set of institutional, cultural, and systemic barriers (Kantamneni, et al., 2016; Lopez, 2009; Patel, Barrera, Strambler, Muñoz, & Macciomei, 2016). However, there also exists an academic advantage as a result of nationality due in part to linguistic skill and acculturation strategy (Callahan & Humphries, 2016; Moní, Mealy, Del Ama, & Conway, 2018). Identities such as biological sex, sexual orientation, and gender display generally negative impacts on completion rates, GPA, and cumulative benefits from compulsory schooling (Autor, Figlio, Karbownik, Roth, & Wasserman, 2016; Pearson & Wilkinson, 2017; Watson, Wheldon, & Russell, 2015) while facing harassment and harsh stereotyping (Mathies, et al., 2019; Verniers & Martinot, 2015) when they fall into the minority (e.g., females within male-dominated disciplines, non-heterosexual, transgender, etc.). Enrollment rates, social support, number of credits earned, course completion, and more have followed people with disabilities negatively (Bergey, Deacon, & Parrila, 2017; Deckoff-Jones & Duell, 2018; Lombardi, Murray, & Kowitt, 2016; Newman, et al., 2011). Of many of the demographic factors that exist, socioeconomic status (SES) appears to have one of the more significant impacts on academic success outcomes with a substantial income achievement gap likely due to school delay as well as deficits to attention, memory, verbal, and reading comprehension (Carnoy & Garcia, 2017; Engelhardt, Church, Harden, & Tucker-Drob, 2019; Reardon, 2011; Romero, Hall, & Cluver, 2019; Rosen, Meltzoff, Sheridan, & McLaughlin, 2019; Semega, Kollar, Creamer, & Mohanty, 2020). Lastly, as one would expect, the intersectionality of these factors (Blankenship & Stewart,

2017; Carnoy & Garcia, 2017; Hanushek, Kain, & Rivkin, 2009; Harackiewicz, Canning, Tibbetts, Priniski, & Hyde, 2016; Orfield, Frankenberg, Ee, & Kuscera, 2014; Reardon & Yun, 2001), has profound impacts on academic success outcomes. All in all, demographic factors share associations with academic success outcomes. They will help reveal whether certain individuals have more opportunities to engage with the affordances of a place like a college campus within this Gibsonian framework. Such a finding would highlight what students could build greater campus presence and what students would not be afforded the same luxury. It could help explain the mechanisms that disadvantage certain demographics academically and shed light on potential ways to improve this issue.

Engagement, Affordances, and Race/Ethnicity

Research on affordances, engagement on a university campus, and certain demographic factors are already underway and points to a particular trajectory. For instance, Kimberly Glass and her colleagues (2016) delved into the potential relationship that race/ethnicity has on student engagement and affordances for interaction for their peers from varied cultural backgrounds. The participants included nearly 13,000 undergraduate students across several universities of comparable cross-cultural engagement of student peers, structural racial diversity levels, size, and type. The participants completed the Global Perspective Inventory (GPI), an online questionnaire administered by various universities. The researchers extracted data from sections relating to interaction affordances, student engagement, and demographic factors. Interaction affordances included measures of openness to cross-cultural interaction, campus support for

diversity, and a sense of belonging. Student engagement included measures of cross-cultural peer engagement (such as the amount of interaction between students of different racial/ethnic backgrounds and from different countries), co-curricular engagement (such as extracurricular activities reflecting one's own cultural heritage, religious/spiritual activities, community service, etc.), multicultural curricular engagement (such as courses related to sexual orientation, religion, race, etc.). Demographic factors included information on age, race/ethnicity, gender, and institution. Their findings were divided into three sections.

For the first section, the researchers found that the effect of race/ethnicity on multicultural curricular engagement was significant. Further analysis revealed that significant effects were found between race and cross-cultural peer engagement, co-curricular engagement, and multicultural curricular engagement. Of these relationships, White students displayed a significantly lower score of openness to cross-cultural interaction than the other groups. In comparison, they displayed a significantly higher score in co-curricular engagement. Asian/Pacific Islander students displayed a significantly lower score in multicultural curricular engagement than the other groups. In addition, a significant relationship was found between race and interaction affordance perception. Significant effects were found between race and openness to cross-cultural social interaction, campus support for diversity, and the sense of belonging. Of these relationships, when excluding Native American students, White students displayed a significantly lesser score in openness to cross-cultural social interaction. They also displayed a significantly higher score in campus support for diversity. Asian/Pacific Islander students displayed a significantly lesser score in the sense of belonging.

For the next section, the researchers used an analysis of network structure, which yielded over 47 million distinct connections within the sample. A two-mode structure arose from the

network due to the degree distribution, which indicated the following: 1) many network connections with students with an overwhelmingly central interaction affordance perception, and 2) few network connections with an array of lesser networks comprising like-minded yet separate perceptions. The researchers examined the level of assortativity—the extent to which students with their respective number of connections preferred to connect to students with a similar number of connections—which revealed a high level of assortativity.

For the last section, the researchers found that the network degree distribution differed significantly across the stratified groups and institutions. Overall, institutions varied in their network structure according to cross-cultural peer engagement. There were similarities in network connectivity between students with a similar perception of affordances for cross-cultural interaction. The network model proved to form a two-mode structure. White students tended to have higher campus support for diversity and co-curricular engagement, while they tended to be less open to cross-cultural interaction. Asian/Pacific Islander students tended to feel a lesser sense of belonging and engage less in a multicultural curriculum. Based on the network, there are two types of students concerning connectivity. Students who were highly connected and held a dominant perception of interaction affordances, and students who were less connected and held similar yet distinct perceptions. There wasn't much mingling between the two types of students. In general, this study signifies some level of differential outcomes in engagement and affordance perception due to a demographic factor like race/ethnicity, and there are likely other sorts of relationships with other demographic factors.

Self-Concept as an Underlying Mechanism

When exploring the last study, an important question arises: What mechanism or factor may underlie influences the relationships that different demographic factors have with engagement and affordance perception? If a hidden variable exists mediating these relationships, it could be responsible for the differences in engagement, affordance perception, and academic success outcomes. More importantly, it would be related to sense-making, place-making, and building a sense of presence.

Since demography refers to "the statistical study of human populations…" (Merriam-Webster, 2020, n.p.), culture, as characteristics, relations, and attitudes of social groups (Merriam-Webster, 2020), lies at the core of demography. Culture plays an important role in developing each of us individually, specifically, in developing self-concept (Markus & Kitayama, 1991). Thus, self-concept serves as a potential candidate for such a factor. In fact, Hazel Markus and Elissa Wurf (1987) explained that self-concept "… interprets and organizes self-relevant actions and experiences; it has motivational consequences, providing the incentives, standards, plans, rules, and scripts for behavior; and it adjusts in response to challenges from the social environment" (pp. 299, 300). In light of this view, self-concept sits comfortably within the framework of Gibson's ecological theory, presence, and place. As previously mentioned, as perception produces behavior and behavior produces perception, intentional action results from the intersection of an organism's needs and the affordances that litter an environment to make it a place, and self-concept would serve as a mediating factor of the intentional actions. This creates a sense of purpose and a sense of presence in a place.

To illustrate, one's culture influences their sense of social self and how they behave socially with regards to practices like child-rearing and conformity (Triandis, 1989). An impact like this on the social self could potentially account for the findings of the relationships between race/ethnicity, engagement, and perception of affordances that were uncovered from the study conducted by Glass and her colleagues (2016). In brief, self-concept presents itself as an interesting factor to investigate alongside presence and demographic factors.

Hypotheses

Within this framework cultivated by Gibson (1979), Kleiman (2017), and Khan (2020), the aim of this study is to investigate the relationship between campus presence, demographic factors, and self-concept. The majority groups of the demographic factors (e.g., White/Caucasian, males, middle- and upper-class, etc.) will likely display greater levels of campus presence and social self-concept. As seen in Kleiman's (2017) study, campus presence is likely facilitated by social interactions and relationships. An engagement with most campus affordances involves some level of interaction and any support requires social interaction. This is a facilitation that is probably dependent on the particular place and would not be generalized to Khan's (2020) findings and her work on presence in nature as such a level of social interaction is not required to engage with nature's affordances. Since self-concept can be deconstructed into various dimensions of self-concept (Marsh & O'Neill, 1984), the focus will be on the social self-concepts (relations with same-sex peers, opposite-sex peers, and parents), as well as academic self-concept, and general self-concept.

Campus Presence and Demographic Factors

H_1 research hypothesis: There will be a statistically significant greater level of campus presence in the majority groups' demographic factors compared to the minority groups' demographic factors.

Self-Concepts and Demographic Factors

H_1 research hypothesis: There will be a statistically significant greater level of self-concept in the majority groups' demographic factors compared to the minority groups' demographic factors.

Campus Presence and Self-Concepts

H_1 research hypothesis: There will be a statistically significant positive correlation between campus presence and self-concept.

CHAPTER 2: METHOD

Design

This study employed a survey design where a questionnaire was administered for the participants to self-report information regarding their level of campus presence, self-concept, and demographic characteristics. This particular design was used for a few reasons. First, it allowed for large data collection. Second, it was cost-effective. A survey design made it easier and more reliable to standardize the study's elements, such as questions, items, and formatting, to minimize as many extraneous and confounding variables as possible. Information about many disparate factors, like presence, demographics, and self-concept, was able to be gathered at one time. Quick responses were made and received using this design. Lastly, the data was compiled quickly in a survey design (Jones, Baxter, & Khanduja, 2013). Some controls were put in place to avoid any extraneous variables. This included providing a standardized set of instructions and a standard format for the questionnaire. The questionnaire items were made simple by avoiding technical language and jargon or giving a description of the subject matter where necessary. Any potential negatively worded, loaded, or double-barreled questions were modified or removed to improve clarity. Certain items were reverse coded to spot and exclude yea-sayers and nay-sayers. The questionnaire was presented in a neat, professional, and attractive design. Finally, uniform formatting was used to limit any confusion between items (Cozby & Bates, 2017). The variables that will be examined are campus presence, self-concept, and demographics along with items from Kleiman's (2017) study. As the study will examine the relationship that demographics has with campus presence and self-concepts, demographics will be examined in terms of majority

and minority groups, i.e., groups with more substantial amounts of membership (e.g., Whites, Heterosexuals, etc.) compared to groups with less substantial amounts (e.g., Blacks, members of the LBGTQ+ community, etc.). To comply with ethical guidelines based on IRB Exemption Determination (Appendix A) for regulation as human participant research, an explanation of research (Appendix B) was given first to provide a standard briefing and acquire informed consent from participants to ensure that they participate in their own free-will and are making an informed decision when doing so.

The study was administered to students at the University of Central Florida (UCF) during the 2021 spring semester term.

Participants

The sample was acquired through convenience sampling as it is cost-effective, time-effective, and useful (Cozby & Bates, 2017). Participants were recruited from psychology courses at UCF through the SONA Subject Pool Management software and social media. Participants from certain courses could be award extra credit for their participation.

Overall, 93 participants were recruited. The final sample used included 82 participants after 11 participants were removed as they did not respond to key items. Of the 82 participants, female participants (as determined by assigned biological sex) made up 82.5% of the entire sample. There were two participants that identified as transgender. While 53 participants were heterosexual, two of the participants identified as lesbian, one identified as gay, 18 identified as bisexual, one as queer, one as questioning, and three as pansexual. The age distribution includes

19 as the youngest age and 45 as the oldest age. The median age was 22. Regarding race, there were 60 whites or Caucasians, 4 blacks or African Americans, 6 Asians, and 9 that identified with multiple race groups. Eighteen participants identified as being of Hispanic, Latinx, or Spanish origin.

Materials

The materials for this study included an informed consent page as well as a survey composed of various measures. The survey and the informed consent page were displayed and completed using Qualtrics.

Measures

Campus Presence

In addition to these aforementioned materials, the questionnaire was composed of a few scales. The first was a revised version of the Campus Presence Scale (Appendix C) created by Kleiman (2017) with revisions by Khan (2020). The Revised Campus Presence Scale—which was originally based on the Witmer & Singer (1998) Presence scale—was made up of nine questions on the sense of presence on a college campus. The responses fell on a seven-point Likert scale where the highest response indicates "completely," and the lowest response indicates "not at all." Each item is categorized into three subscales ("Sensory," "Distraction/isolation," and

"Distraction/Involvement") and displayed within their respective categories. The participants responded to the items as they saw themselves on a UCF campus. The minimum score that could have be achieved was nine, and the maximum score was 45.

Self-concept

The second measure included certain facets of the Self Description Questionnaire III (SDQ III; Appendix D; Marsh & O'Neill, 1984). Specifically, these facets were same-sex peer, opposite-sex peer, parent, academic, and general self-concept. There was a total of 52 items related to a specific facet of self-concept. Similar to the Revised Campus Presence scale, the responses fall on an eight-point Likert scale where the highest response indicates "definitely true," and the lowest response indicates "definitely false." The items are not displayed within their respective subscales to mirror the original SDQ III scale's integrity. The participants responded based on the truthfulness of each item to themselves. The minimum score possible was 52, whereas the maximum score was 416.

Demographics

The next measure included demographic items (Appendix E) with certain items taken from appropriate government-related demographics guides (Rasch, 2003; United Nations Statistics Division, n.d.). This portion of the questionnaire had 22 items. The items were grouped

into particular demographic subscales, including age, race/ethnicity, sex/gender identity and sexual orientation, nativity/nationality, marital status, education, employment, household and individual income, and disability.

Self-Esteem

The Rosenberg (1965) Self-Esteem Scale (Appendix F) was also included to measure self-esteem following Kleiman's (2017) study. This measure provided 10 items. Participants responded on a four-point Likert scale where the highest extreme score signifies a "strongly agree" response to the item. The lowest extreme score signified a "strongly disagree" response. The overall self-esteem score ranged from 10 to 40.

Collegiate Self-Efficacy

In addition to the aforementioned measure, the College Self-Efficacy Inventory (CSEI; Appendix G; Solberg, O'Brien, Villarreal, Kennell, & Davis, 1993) assessed the participants' self-efficacy as college students. There were 20 items from this measure to examine self-efficacy within a myriad of areas regarding college. Each response was on a 10-point Likert scale where the highest response signaled "extremely confident," and the lowest response signaled "not at all confident." The lowest possible score was 20, while the highest possible score was 200.

College Affiliation

The next measure was the College Affiliation Questionnaire (CAQ; Appendix H; Cabrera, Nora, & Castaneda, 1993) to gauge the participants' experiences and relationship with their college. Thirteen items made up the CAQ that used a five-point Likert scale. Participants responded to each item according to how it related to them. The highest response designated that they felt it was "exactly like me," whereas the lowest response designated "not at all." The lowest score possible was zero; however, the highest score possible was 52.

Optimism/Pessimism

The Revised Life Orientation Test (LOT-R; Appendix I; Scheier, Carver, & Bridges, 1994) was incorporated to evaluate the participants' overall disposition towards having a pessimistic or optimistic outlook. There were six items from the LOT-R. A five-point Likert scale was employed. The highest response indicated a "strongly agree" response, while the lowest response indicated a "strongly disagree" response. The highest score attainable was 24; the lowest score attainable was zero.

Procedures

First, the participants clicked on a link from SONA provided to direct them to the study on Qualtrics. Second, they viewed the informed consent page and consented to indicate that they

are 18 years or older and willing to participate. They completed the questionnaire beginning with the Revised Campus Presence scale. They then proceeded to the SDQ III items, demographic items, self-esteem items, collegiate self-efficacy items, college affiliation items, and optimism/pessimism items.

CHAPTER 3: RESULTS

Tables of the raw data can be found in Appendix J. Nominal data was collected in the form of categorical distinctions, such as race groups. Interval data was collected, with most being data from the various Likert scales used. Means will be used to report central tendencies for the interval data. According to Robert R. Pagano (2012), a mean serves as an appropriate measure of central tendency for interval data free of outliers as it considers all data points. The measure of variation for the interval data will be standard deviation since all data points and their deviation away from the mean are accounted for (Pagano, 2012).

The one-way analysis of variance (ANOVA) test and a Pearson's product-moment correlation matrix were used to analyze the data based on the levels of measurement of the data and the use of independent samples. ANOVA tests allow for the analysis of data from three or more groups using nominal and interval data. It is a powerful and robust design. A Pearson's product-moment correlation matrix allows for the analysis of data of sets of interval data. It helps reveal the magnitude and direction of a relationship between two variables (Pagano, 2012). Tables of inferential statistics can be found in Appendix K.

General Descriptions

For the general factors examined, the mean presence score for all participants was 37.57, and the standard deviation was 10.71. The mean self-concept score for all was 297.94, and the standard deviation was 47.71. Moving onto the self-esteem score, the mean was 20.16. The standard deviation was 6.60. The mean collegiate self-efficacy score was 148.28, while the

standard deviation was 27.25. For college affiliation, all participants' mean score was 49.55, and the standard deviation was 10.68. At last, the mean life orientation score was 20.05, while the standard deviation was 5.25.

There was a significant correlation ($r = 0.229$, $p < .05$) between presence scores and self-concept scores. Concerning correlations between presence scores and the subscales of self-concept, there was a significant correlation ($r = 0.375$, $p < .01$) between presence scores and Parent self-concept scores; this was the only significant correlation among the subscales. The other correlations are as follows:

- Presence scores and General self-concept scores ($r = 0.046, p = 0.682$)
- Presence scores and Opposite-sex self-concept scores ($r = 0.090, p = 0.423$)
- Presence scores and Same-sex self-concept scores ($r = 0.151, p = 0.177$)
- Presence scores and Academic self-concept scores ($r = 0.045, p = 0.687$).

There was no significant correlation ($r = -0.076, p = 0.498$) between presence scores and Self-esteem scores. There was no significant correlation ($r = 0.216, p = 0.051$) between presence scores and CSEI scores. *There was a significant correlation ($r = 0.329, p < .01$) between presence scores and CAQ scores.* There was no correlation ($r = 0.063, p = 0.573$) between presence scores and LOT scores.

University Class Standing and Transfer Status

When examining class standing, the mean presence score for fifth-year undergraduates was ($\bar{x} = 37.40, S = 8.96$) was higher than the mean presence scores for all other undergraduate students except sophomores. The mean presence score for sophomores/undergraduates in their second year was 46.17, and the standard deviation was 9.28. The other mean presence scores include juniors/undergraduates in their third year ($\bar{x} = 37.19, S = 13.27$), seniors/undergraduates in their fourth year ($\bar{x} = 37.02, S = 10.18$), and freshmen/undergraduates in their first year ($\bar{x} = 30.33, S = 8.74$). For self-concept, the mean score for fifth-year undergraduates was ($\bar{x} = 299.10, S = 55.34$) was higher than the mean presence scores for freshmen and sophomores but not juniors or seniors. The other mean scores are as follows:

- Freshmen ($\bar{x} = 275.33, S = 25.81$),
- Sophomores ($\bar{x} = 290.00, S = 31.47$),
- Juniors ($\bar{x} = 299.19, S = 45.61$),
- and Seniors ($\bar{x} = 300.80, S = 51.34$).

Based on the class standing results, the null hypothesis for presence scores is accepted since the calculated value is lower than the critical value. There was no significant difference ($F = 1.359, df_{SSB} = 4, df_{SSW} = 75, p = 0.256$) in presence scores of fifth-year undergraduates as compared to that in those of the class standing groups. For self-concept, the null hypothesis is accepted since the calculated value is lower than the critical value. There was no significant difference ($F = 0.237, df_{SSB} = 4, df_{SSW} = 75, p = 0.916$) in self-concept scores of fifth-year undergraduates as compared to that in those of the class standing groups.

Regarding transfer status, the mean presence score for students who did not transfer from another school ($\bar{x} = 40.03, S = 7.84$) was higher than the mean presence score for students who transferred from a different school. The mean presence score for transfer students was 35.50, and the standard deviation was 12.36. Likewise, the mean self-concept score for students who did not transfer from another school ($\bar{x} = 308.56, S = 45.78$) was higher than the mean self-concept score for students who transferred from a different school ($\bar{x} = 290.27, S = 49.03$).

Based on the transfer status results, the null hypothesis regarding presence is accepted since the calculated value is lower than the critical value. There was no significant difference ($F = 3.631, df_{SSB} = 1, df_{SSW} = 78, p = 0.060$) in presence scores of students who did not transfer from another school as compared to that in students who transferred from another school. In addition, there was no significant difference ($F = 2.921, df_{SSB} = 1, df_{SSW} = 78, p = 0.091$) in self-concept scores of students who did not transfer from another school as compared to that in students who transferred from another school. The null hypothesis regarding self-concept is accepted since the calculated value is lower than the critical value.

On-Campus Involvement

The mean presence score for students who did live on campus ($\bar{x} = 40.50, S = 7.41$) was higher than the mean for students who did not live on campus ($\bar{x} = 36.76, S = 11.23$). Moreover, the mean self-concept score for students who did live on campus ($\bar{x} = 311.29, S = 51.83$) was higher than the mean for students who did not live on campus ($\bar{x} = 293.18, S = 46.32$).

There was no significant difference ($F = 2.226, df_{SSB} = 1, df_{SSW} = 77, p = 0.140$) in presence scores of students who lived on campus as compared to that in students who did not live on campus. The null hypothesis is accepted since the calculated value is lower than the critical value based on these results. Similarly, there was no significant difference ($F = 2.375, df_{SSB} = 1, df_{SSW} = 77, p = 0.127$) in self-concept scores of students who lived on campus as compared to that in students who did not live on campus. The null hypothesis is accepted since the calculated value is lower than the critical value.

The mean presence score for those who lived on campus for six semesters ($\bar{x} = 30.00, n = 1$) was lower than all other mean scores for those that lived on campus for different numbers of semesters. The mean presence scores included students that lived there for one semester ($\bar{x} = 36.50, S = 4.95$), two semesters ($\bar{x} = 40.36, S = 7.66$), three semesters ($\bar{x} = 43.71, S = 6.18$), and four semesters ($\bar{x} = 45.50, S = 0.71$). In contrast, the mean self-concept score for those who lived on campus for six semesters was ($\bar{x} = 341.00, n = 1$) was higher than the mean self-concept scores for those who lived on campus for one semester ($\bar{x} = 247.50, S = 21.92$), two semesters ($\bar{x} = 322.91, S = 52.90$), three semesters ($\bar{x} = 323.86, S = 37.61$), and four semesters ($\bar{x} = 307.00, S = 35.36$).

Next, the null hypothesis for time in on-campus housing with regard to presence scores is accepted since the calculated value is lower than the critical value based on these results. There was no significant difference ($F = 1.380, df_{SSB} = 4, df_{SSW} = 18, p = 0.280$) in presence scores of students who lived on campus for six semesters as compared to that in students who lived on campus for different numbers of semesters. The null hypothesis for time in on-campus housing concerning self-concept scores is accepted since the calculated value is lower than the critical value. This is because there was no significant difference ($F = 1.311, df_{SSB} = 4, df_{SSW} =$

$18, p = 0.303$) in self-concept scores of students who lived on campus for six semesters as compared to that in students who lived on campus for different numbers of semesters.

The mean presence score for students who attended 11 or more events was ($\bar{x} = 46.67, S = 5.03$) was higher than the mean scores for those that attended two or fewer campus events or activities ($\bar{x} = 36.06, S = 11.77$), three to six events ($\bar{x} = 39.05, S = 6.69$), and seven to 10 ($\bar{x} = 43.29, S = 6.10$). The mean self-concept score for students who attended 11 or more events was ($\bar{x} = 344.67, S = 27.43$) was higher than the mean scores for those that attended two or fewer campus events or activities ($\bar{x} = 288.21, S = 50.58$) three to six events ($\bar{x} = 312.86, S = 40.32$), and seven to 10 ($\bar{x} = 308.29, S = 45.43$).

There was no significant difference ($F = 2.030, df_{SSB} = 3, df_{SSW} = 75, p = 0.117$) in presence scores of students who attended 11 or more campus events as compared to that in students who attended different numbers of campus events. The null hypothesis is accepted since the calculated value is lower than the critical value based on these results. In like fashion, there was no significant difference ($F = 2.472, df_{SSB} = 3, df_{SSW} = 75, p = 0.068$) in self-concept scores of students who attended 11 or more campus events as compared to that in students who attended different numbers of campus events. The null hypothesis is accepted since the calculated value is lower than the critical value.

The mean presence score for students who are on campus for five or more days per week ($\bar{x} = 45.25, S = 6.07$) was higher than the mean scores for those who weren't on campus at all ($\bar{x} = 35.95, S = 12.32$), for one day per week ($\bar{x} = 38.00, S = 7.21$), two days per week ($\bar{x} = 40.75, S = 6.24$), three days per week ($\bar{x} = 38.23, S = 5.80$), and four days per week ($\bar{x} = 39.60, S = 7.89$). The mean self-concept score for students who are on campus for five or more days per week ($\bar{x} = 323.75, S = 56.44$) was higher than the mean scores for those who weren't

on campus at all ($\bar{x} = 288.44, S = 49.27$), for one day per week ($\bar{x} = 313.00, S = 29.34$), two days per week ($\bar{x} = 297.75, S = 37.48$), three days per week ($\bar{x} = 308.31, S = 42.35$). However, it was lower than the mean score for those who attended four days per week ($\bar{x} = 339.60, S = 32.72$).

Based on the results for number of days per week spent on campus, the null hypothesis on presence scores is accepted since the calculated value is lower than the critical value. There was no significant difference ($F = 1.227, df_{SSB} = 5, df_{SSW} = 73, p = 0.305$) in presence scores of students who are on campus for five or more days per week as compared to that in students who are on campus for different numbers of days per week. For self-concept, the null hypothesis is accepted since the calculated value is lower than the critical value. There was no significant difference ($F = 2.261, df_{SSB} = 5, df_{SSW} = 73, p = 0.057$) in self-concept scores of students who are on campus for five or more days per week as compared to that in students who are on campus for different numbers of days per week.

The mean presence score for students who spent 10 or more hours on campus per day ($\bar{x} = 45.00, S = 1.41$) was higher than the mean scores for those who spent between zero to two hours per day ($\bar{x} = 36.24, S = 12.12$), three to five hours per day ($\bar{x} = 40.38, S = 6.62$), and six to nine hours per day ($\bar{x} = 38.90, S = 7.06$). The mean self-concept score for students who spent 10 or more hours on campus per day ($\bar{x} = 341.00, S = 41.01$) was higher than the mean scores for those who spent between zero to two hours per day ($\bar{x} = 287.26, S = 49.60$), three to five hours per day ($\bar{x} = 315.43, S = 41.40$), and six to nine hours per day ($\bar{x} = 307.60, S = 47.36$).

There was no significant difference ($F = 1.156, df_{SSB} = 3, df_{SSW} = 75, p = 0.332$) in presence scores of students who spent 10 or more hours on campus per day as compared to that in students who spent different numbers of hours on campus per day. As a result, the null

hypothesis is accepted since the calculated value is lower than the critical value based on these results. There was no significant difference ($F = 2.437, df_{SSB} = 3, df_{SSW} = 75, p = 0.071$) in self-concept scores of students who spent 10 or more hours on campus per day as compared to that in students who spent different numbers of hours on campus per day. The null hypothesis is accepted since the calculated value is lower than the critical value.

The mean presence score for students who reported being an active member of three or four student organizations ($\bar{x} = 43.54, S = 6.29$) was higher than the mean scores for those who were not active members of any student organizations ($\bar{x} = 35.67, S = 12.00$) and those active in one or two organizations ($\bar{x} = 39.35, S = 5.91$). The mean self-concept score for students who reported being an active member of three or four student organizations ($\bar{x} = 333.23, S = 44.71$) was higher than the mean scores for those who were not active members of any student organizations ($\bar{x} = 293.07, S = 46.68$) and those active in one or two organizations ($\bar{x} = 289.15, S = 47.17$).

There was a significant difference ($F = 3.408, df_{SSB} = 2, df_{SSW} = 76, p < 0.05$) in presence scores of students who reported being an active member of three or four student organizations as compared to that in students who reported being an active member of different numbers of student organizations. Therefore, the null hypothesis is rejected since the calculated value is higher than the critical value. *Likewise, there was a significant difference ($F = 4.344, df_{SSB} = 2, df_{SSW} = 76, p < 0.05$) in self-concept scores of students who reported being an active member of three or four student organizations as compared to that in students who reported being an active member of different numbers of student organizations*. The null hypothesis is rejected since the calculated value is higher than the critical value.

Race/Ethnic Demography

The mean presence score for people who identify themselves as white or Caucasian ($\bar{x} = 37.10, S = 9.88$) was higher than the mean presence scores for all racial/ethnic minority groups except for people who identify as Asian. The other mean presence scores include those that identify as black or African American ($\bar{x} = 36.75, S = 5.91$), Asian ($\bar{x} = 42.40, S = 12.70$), and with multiple races ($\bar{x} = 36.33, S = 16.91$). The mean self-concept score for people who identify themselves as white or Caucasian ($\bar{x} = 298.33, S = 45.75$) was higher than the mean presence scores for all racial/ethnic minority groups except for people who identify with multiple races. The other mean self-concept scores include those that identify as black or African American ($\bar{x} = 273.75, S = 50.14$), Asian ($\bar{x} = 285.00, S = 68.79$), and with multiple races ($\bar{x} = 317.56, S = 57.27$).

The null hypothesis for race with regard to presence scores is accepted since the calculated value is lower than the critical value based on these results. There was no significant difference ($F = 0.576, df_{SSB} = 4, df_{SSW} = 75, p = 0.681$) in presence scores of people who identified as white or Caucasian as compared to that in those who identify with one of the minority race groups. The null hypothesis for race concerning self-concept scores is accepted since the calculated value is lower than the critical value based on the results. This is because there was no significant difference ($F = 0.705, df_{SSB} = 4, df_{SSW} = 75, p = 0.591$) in self-concept scores of people who identified as white or Caucasian as compared to that in those who identify with one of the minority race groups.

With regard to ethnicity, the mean presence score for students who are not of Hispanic, Latinx, or Spanish origin ($\bar{x} = 36.89, S = 11.27$) was lower than the mean presence score for

Hispanic, Latinx, or Spanish origin. The mean presence score for those of Hispanic, Latinx, or Spanish origin was 39.39, and the standard deviation was 8.49. On the other hand, the mean self-concept score for those not of Hispanic, Latinx, or Spanish origin ($\bar{x} = 301.11, S = 48.34$) was higher than the mean self-concept score of Hispanic, Latinx, or Spanish origin ($\bar{x} = 288.11, S = 46.39$).

Based on ethnicity results, the null hypothesis on presence scores is accepted since the calculated value is lower than the critical value. There was no significant difference ($F = 0.760, df_{SSB} = 1, df_{SSW} = 79, p = 0.386$) in presence scores of participants who are not of Hispanic, Latinx, or Spanish origin as compared to that in those that are of Hispanic, Latinx, or Spanish origin. The null hypothesis for self-concept is accepted since the calculated value is lower than the critical value. There was no significant difference ($F = 1.030, df_{SSB} = 1, df_{SSW} = 79, p = 0.313$) in self-concept scores of students who are on campus for five or more days per week as compared to that in participants who are not of Hispanic, Latinx, or Spanish origin as compared to that in those that are of Hispanic, Latinx, or Spanish origin.

Sexual/Gender Demography

The mean presence score for participants whose assigned biological sex at birth was female ($\bar{x} = 37.53, S = 10.40$) was less than the mean presence score of those whose assigned biological sex at birth was male ($\bar{x} = 37.57, S = 12.70$). Simultaneously, the mean self-concept score for people whose assigned biological sex at birth was female ($\bar{x} = 303.62, S = 47.96$) was higher than the mean self-concept score of those whose assigned biological sex at birth was

male. The mean self-concept score for those that were assigned male was 274.36, and the standard deviation was 42.90.

For assigned biological sex, there was no significant difference ($F = 0.000, df_{SSB} = 1, df_{SSW} = 78, p = 0.990$) in presence scores of students whose assigned biological sex at birth was female as compared to that in those whose assigned biological sex at birth was male. The null hypothesis regarding presence scores is accepted since the calculated value is lower than the critical value based on these results. *However, there was a significant difference ($F = 4.448, df_{SSB} = 1, df_{SSW} = 78, p < 0.05$) in self-concept scores of the people whose assigned biological sex at birth was female as compared to that in those whose assigned biological sex at birth was male.* Based on these results, the null hypothesis is rejected since the calculated value is higher than the critical value.

The mean presence score for subjects who identify as cisgender ($\bar{x} = 37.63, S = 10.83$) was higher than the mean presence score for those who identify as transgender ($\bar{x} = 35.00, S = 7.07$). The mean self-concept score for subjects who identify as cisgender ($\bar{x} = 298.32, S = 48.78$) was higher than the mean self-concept score for those who identify as transgender ($\bar{x} = 291.00, S = 21.21$).

Concerning gender identity, there was no significant difference ($F = 0.446, df_{SSB} = 2, df_{SSW} = 78, p = 0.642$) in presence scores of people who identify as cisgender to that in those who identify as transgender. The null hypothesis regarding presence scores is accepted since the calculated value is lower than the critical value based on these results. There was no significant difference ($\mathrm{F} = 0.032, \mathrm{df_{SSB}} = 2, \mathrm{df_{SSW}} = 78, \mathrm{p} = 0.968$) in self-concept scores of the people who identify as cisgender as compared to that in those who identify as transgender.

The null hypothesis is accepted based on these results since the calculated value is lower than the critical value.

The mean presence score for students who identify as heterosexual ($\bar{x} = 36.94, S = 11.59$) was higher than those who identify as lesbian ($\bar{x} = 35.00, S = 7.07$), bisexual ($\bar{x} = 36.44, S = 8.22$), and questioning ($\bar{x} = 30.00, n = 1$); however, it was lower than those who identify as gay ($\bar{x} = 41.00, n = 1$), queer ($\bar{x} = 46.00, n = 1$), and pansexual ($\bar{x} = 50.33, S = 11.68$). The mean self-concept score for people who identify as heterosexual ($\bar{x} = 304.53, S = 52.56$) was higher than the mean self-concept score for those who identify as lesbian ($\bar{x} = 269.50, S = 9.19$), gay ($\bar{x} = 224.00, n = 1$), bisexual ($\bar{x} = 284.72, S = 33.51$), queer ($\bar{x} = 282.00, n = 1$), and pansexual ($\bar{x} = 292.00, S = 53.40$). However, it was lower than the mean for those who identify as questioning ($\bar{x} = 341.00, n = 1$).

There was no significant difference ($F = 0.863, df_{SSB} = 2, df_{SSW} = 73, p = 0.540$) in presence scores of students who identified as heterosexual compared to that in those who identify with one of the minority sexual orientation groups. The null hypothesis regarding presence scores is accepted since the calculated value is lower than the critical value based on these results. There was no significant difference ($\mathrm{F} = 0.946, \mathrm{df_{SSB}} = 2, \mathrm{df_{SSW}} = 73, \mathrm{p} = 0.477$) in self-concept scores of students who identified as heterosexual as compared to that in those who identify with one of the minority sexual orientation groups. The null hypothesis regarding self-concept scores is accepted since the calculated value is lower than the critical value based on these results.

Economic Class Demography

The mean presence score for participants who reported a household financial earning between \$80,000 and \$89,999 ($\bar{x} = 48.50, S = 0.71$) was higher than the mean presence score for those who reported a household financial earning less than \$69,999 and greater than \$90,000; however, it was less than those who reported an earning between \$70,000 and \$79,999. The mean presence scores included participants who reported a household earning of \$0 and \$9,999 ($\bar{x} = 33.60, S = 7.83$), \$10,000 and \$19,999 ($\bar{x} = 28.43, S = 10.75$), \$20,000 and \$29,999 ($\bar{x} = 36.57, S = 11.22$), \$30,000 and \$39,999 ($\bar{x} = 41.00, S = 7.46$), \$40,000 and \$49,999 ($\bar{x} = 39.60, S = 9.84$), \$50,000 and \$59,999 ($\bar{x} = 9.00, n = 1$), \$60,000 and \$69,999 ($\bar{x} = 45.50, S = 12.61$), \$70,000 and \$79,999 ($\bar{x} = 51.00, n = 1$), \$90,000 and \$99,999 ($\bar{x} = 42.25, S = 8.18$), \$100,000 or more ($\bar{x} = 38.88, S = 8.99$). The mean self-concept score for those who reported a household financial earning between \$80,000 and \$89,999 ($\bar{x} = 344.00, S = 9.90$) was higher than the mean self-concept scores for all other household earnings. The mean self-concept scores included participants who reported a household earning of \$0 and \$9,999 ($\bar{x} = 291.00, S = 37.01$), \$10,000 and \$19,999 ($\bar{x} = 281.29, S = 46.25$), \$20,000 and \$29,999 ($\bar{x} = 278.29, S = 26.72$), \$30,000 and \$39,999 ($\bar{x} = 312.57, S = 63.17$), \$40,000 and \$49,999 ($\bar{x} = 299.20, S = 55.15$), \$50,000 and \$59,999 ($\bar{x} = 338.00, n = 1$), \$60,000 and \$69,999 ($\bar{x} = 304.00, S = 49.28$), \$70,000 and \$79,999 ($\bar{x} = 285.00, n = 1$), \$90,000 and \$99,999 ($\bar{x} = 319.25, S = 33.87$), \$100,000 or more ($\bar{x} = 312.00, S = 51.13$).

Next, the null hypothesis for household financial earnings regarding presence scores is rejected since the calculated value is higher than the critical value. *Therefore, there was a significant difference ($F = 2.001, df_{SSB} = 12, df_{SSW} = 67, p < 0.05$) in presence scores of the*

people who reported a household financial earning between $80,000 and $89,999 as compared to that in those who identify with one of the minority economic class groups. For self-concept, the null hypothesis is accepted since the calculated value is lower than the critical value. There was no significant difference ($F = 0.912, df_{SSB} = 12, df_{SSW} = 67, p = 0.540$) in self-concept scores of people who reported a household financial earning between $80,000 and $89,999 as compared to that in those who identify with one of the minority economic class groups.

The mean presence score for participants who reported an individual financial earning between $0 and $9,999 ($\bar{x} = 39.29, S = 9.52$) was higher than the mean presence score for those who reported an individual financial earning between $10,000 and $29,999 and those who reported earning greater than $40,000; however, it was less than those who reported an earning between $30,000 and $39,999. The mean presence scores included participants who reported an individual earning of $10,000 and $19,999 ($\bar{x} = 36.32, S = 10.05$), $20,000 and $29,999 ($\bar{x} = 30.50, S = 10.25$), $30,000 and $39,999 ($\bar{x} = 49.50, S = 19.09$), $40,000 and $49,999 ($\bar{x} = 31.50, S = 10.61$), $50,000 and $59,999 ($\bar{x} = 15.00, n = 1$), and $60,000 and $69,999 ($\bar{x} = 36.00, n = 1$). The mean self-concept score for those who reported an individual financial earning between $0 and $9,999 ($\bar{x} = 305.17, S = 46.05$) was higher than the mean self-concept scores for all other individual earnings except the mean for those who reported an individual financial earning between $50,000 and $59,999. The mean self-concept scores included participants who reported an individual earning of $10,000 and $19,999 ($\bar{x} = 296.47, S = 49.35$), $20,000 and $29,999 ($\bar{x} = 280.00, S = 50.35$), $30,000 and $39,999 ($\bar{x} = 306.00, S = 103.24$), $40,000 and $49,999 ($\bar{x} = 272.50, S = 30.41$), $50,000 and $59,999 ($\bar{x} = 341.00, n = 1$), and $60,000 and $69,999 ($\bar{x} = 241.00, n = 1$).

There was no significant difference ($F = 1.536, df_{SSB} = 8, df_{SSW} = 71, p = 0.160$) in presence scores of subjects who reported an individual financial earning between $0 and $9,999 as compared to that in those who identify with one of the minority economic class groups. The null hypothesis regarding presence scores is accepted since the calculated value is lower than the critical value based on these results. There was no significant difference ($\mathrm{F} = 0.941, \mathrm{df_{SSB}} = 8, \mathrm{df_{SSW}} = 71, \mathrm{p} = 0.489$) in self-concept scores of those who reported an individual financial earning between $0 and $9,999 as compared to that in those who identify with one of the minority economic class groups. The null hypothesis regarding self-concept scores is accepted since the calculated value is lower than the critical value.

Nationality Demography

The mean presence score for students who were born in the U.S. ($\bar{x} = 37.56, S = 10.79$) was higher than those who were not born in the U.S. ($\bar{x} = 37.29, S = 11.10$). The mean self-concept score for students who were born in the U.S. ($\bar{x} = 299.22, S = 49.04$) was higher than the mean for those who were not born in the U.S. ($\bar{x} = 291.00, S = 40.37$).

Regarding participant birthplace, there was no significant difference ($F = 0.004, df_{SSB} = 1, df_{SSW} = 78, p = 0.949$) in presence scores of students who were born in the U.S. as compared to that in those who were not born in the U.S. Consequently, the null hypothesis is accepted since the calculated value is lower than the critical value based on these results. There was no significant difference ($F = 0.184, df_{SSB} = 1, df_{SSW} = 78, p = 0.669$) in self-concept scores of those who were born in the U.S. as compared to that in those who were not born in the

U.S. The null hypothesis is accepted since the calculated value is lower than the critical value as a result.

The mean presence score for students whose parent(s) were born in the U.S. ($\bar{x} = 36.33, S = 9.84$) was lower than those whose parent(s) were not born in the U.S ($\bar{x} = 39.56, S = 12.16$) and those where one parent was born in the U.S. and not the other ($\bar{x} = 39.92, S = 12.08$). The mean self-concept score for students whose parent(s) were born in the U.S. ($\bar{x} = 302.33, S = 46.44$) was higher than those whose parent(s) were not born in the U.S ($\bar{x} = 295.67, S = 53.97$) and those where one parent was born in the U.S. and not the other ($\bar{x} = 295.69, S = 43.00$).

There was no significant difference ($F = 0.884, df_{SSB} = 3, df_{SSW} = 76, p = 0.453$) in presence scores of participants whose parent(s) were born in the U.S. as compared to that in those whose parent(s) were not born in the U.S. The null hypothesis is accepted since the calculated value is lower than the critical value based on these results. There was no significant difference ($F = 1.503, df_{SSB} = 3, df_{SSW} = 76, p = 0.221$) in self-concept scores of those whose parent(s) were born in the U.S. as compared to that in those whose parent(s) were not born in the U.S. Based on these results, the null hypothesis is accepted since the calculated value is lower than the critical value as a result.

People with Disabilities Demography

The mean presence score for people who did not report blindness, deafness, or a severe vision or hard-of-hearing condition ($\bar{x} = 37.92, S = 10.38$) was higher than those who reported

blindness, deafness, or a severe vision or hard-of-hearing condition ($\bar{x} = 22.50, S = 19.09$). The mean self-concept score for people who did not report blindness, deafness, or a severe vision or hard-of-hearing condition ($\bar{x} = 297.44, S = 48.32$) was lower than those who reported blindness, deafness, or a severe vision or hard-of-hearing condition. The mean self-concept score for those who reported blindness, deafness, or a severe vision or hard-of-hearing condition was 340.00, and the standard deviation was 2.83.

Regarding the demography of people with disabilities, *there was a significant difference ($F = 4.177, df_{SSB} = 1, df_{SSW} = 79, p < 0.05$) in presence scores of the people who did not report blindness, deafness, or a severe vision or hard-of-hearing condition as compared to that in people who reported blindness, deafness, or a severe vision or hard-of-hearing condition.* Accordingly, the null hypothesis regarding presence scores is rejected since the calculated value is higher than the critical value. There was no significant difference ($\mathrm{F} = 1.533, \mathrm{df_{SSB}} = 1, \mathrm{df_{SSW}} = 79, \mathrm{p} = 0.219$) in self-concept scores of the people who did not report blindness, deafness, or a severe vision or hard-of-hearing condition as compared to that in people who reported blindness, deafness, or a severe vision or hard-of-hearing condition. The null hypothesis is accepted since the calculated value is lower than the critical value.

The mean presence score for people who did not report any condition that substantially limits one or more basic physical activities ($\bar{x} = 38.03, S = 10.13$) was higher than those who did report a condition that substantially limits one or more basic physical activities. The mean presence score for those who reported a condition that substantially limits one or more basic physical activities was 25.00, and the standard deviation was 20.42. The mean self-concept score for people who did not report any condition that substantially limits one or more basic physical

activities ($\bar{x} = 297.14, S = 48.26$) was higher than those who did report a condition that substantially limits one or more basic physical activities ($\bar{x} = 282.00, S = 52.46$).

Based on the results for any condition that substantially limits one or more basic physical activities, the null hypothesis on presence scores is rejected since the calculated value is higher than the critical value. *There was a significant difference ($F = 4.425, df_{SSB} = 1, df_{SSW} = 78, p < 0.05$) in presence scores of those who did not report any condition that substantially limits one or more basic physical activities as compared to that in those who did report any condition that substantially limits one or more basic physical activities.* The null hypothesis for self-concept is accepted since the calculated value is lower than the critical value. There was no significant difference ($F = 0.363, df_{SSB} = 1, df_{SSW} = 78, p = 0.549$) in self-concept scores of those who did not report any condition that substantially limits one or more basic physical activities as compared to that in those who did report any condition that substantially limits one or more basic physical activities.

The mean presence score for participants who did not report having any difficulty learning, remembering, or concentrating due to a physical, mental, or emotional condition lasting six months or more ($\bar{x} = 37.55, S = 10.75$) was higher than the mean presence score for those who did report having any difficulty learning, remembering, or concentrating due to a physical, mental, or emotional condition lasting six months or more ($\bar{x} = 37.52, S = 10.95$). The mean self-concept score for those who did not report having any difficulty learning, remembering, or concentrating due to a physical, mental, or emotional condition lasting six months or more ($\bar{x} = 307.92, S = 51.77$) was higher than the mean self-concept score for those who did report having any difficulty learning, remembering, or concentrating due to a physical, mental, or emotional condition lasting six months or more ($\bar{x} = 280.00, S = 33.99$).

There was no significant difference ($F = 0.000, df_{SSB} = 1, df_{SSW} = 78, p = 0.991$) in presence scores of people who did not report any difficulty learning, remembering, or concentrating due to a physical, mental, or emotional condition lasting six months or more as compared to that in those who did report any difficulty learning, remembering, or concentrating due to a physical, mental, or emotional condition lasting six months or more. The null hypothesis is accepted since the calculated value is lower than the critical value based on these results. *Also, there was a significant difference ($F = 6.423, df_{SSB} = 1, df_{SSW} = 78,\ p < 0.05$) in self-concept scores of those who did not report any difficulty learning, remembering, or concentrating due to a physical, mental, or emotional condition lasting six months or more as compared to that in those who did report any difficulty learning, remembering, or concentrating due to a physical, mental, or emotional condition lasting six months or more.* Based on these results, the null hypothesis is rejected since the calculated value is higher than the critical value.

The mean presence score for participants who did not report having any difficulty in attending campus events, organization meetings, or on-campus resources due to a physical, mental, or emotional condition lasting six months or more ($\bar{x} = 37.80, S = 10.09$) was higher than those who did report having difficulty in in attending campus events, organization meetings, or on-campus resources due to a physical, mental, or emotional condition lasting six months or more ($\bar{x} = 36.50, S = 13.39$). The mean self-concept score for subjects who did not report having any difficulty in attending campus events, organization meetings, or on-campus resources due to a physical, mental, or emotional condition lasting six months or more ($\bar{x} = 303.69, S = 48.10$) was higher than those who did report having difficulty in in attending campus events, organization meetings, or on-campus resources due to a physical, mental, or emotional condition lasting six months or more ($\bar{x} = 277.75, S = 43.95$).

The null hypothesis for difficulties in attending campus events, organization meetings, or on-campus resources due to a physical, mental, or emotional condition lasting six months or more with regard to presence scores is accepted since the calculated value is lower than the critical value based on these results. There was no significant difference ($F = 0.184, df_{SSB} = 1, df_{SSW} = 78, p = 0.669$) in presence scores of people who did not report any difficulty in attending campus events, organization meetings, or on-campus resources due to a physical, mental, or emotional condition lasting six months or more as compared to that in those who did report any difficulty in attending campus events, organization meetings, or on-campus resources due to a physical, mental, or emotional condition lasting six months or more. The null hypothesis for difficulties in attending campus events, organization meetings, or on-campus resources due to a physical, mental, or emotional condition lasting six months or more with regard to self-concept scores is accepted since the calculated value is lower than the critical value based on the results. This is because there was no significant difference ($F = 3.844, df_{SSB} = 1, df_{SSW} = 78, p = 3.9201$) in self-concept scores of those who did not report any difficulty in attending campus events, organization meetings, or on-campus resources due to a physical, mental, or emotional condition lasting six months or more as compared to that in those who did report any difficulty in attending campus events, organization meetings, or on-campus resources due to a physical, mental, or emotional condition lasting six months or more.

Marital Status Demography

The mean presence score for people who were never married ($\bar{x} = 39.29, S = 8.79$) was higher than the mean presence score for people who were married ($\bar{x} = 28.67, S = 15.72$) and people who were divorced ($\bar{x} = 25.00, n = 1$). The mean self-concept score for people who were never married ($\bar{x} = 299.06, S = 48.36$) was higher than the mean self-concept score for people who were divorced ($\bar{x} = 254.00, n = 1$), but it was lower than the mean for people who were married ($\bar{x} = 300.78, S = 52.47$).

There was a significant difference ($F = 5.605, df_{SSB} = 2, df_{SSW} = 76, p < 0.01$) in presence scores of people who were never married as compared to that in those of the minority marital status groups. As a result, the null hypothesis is rejected since the calculated value is higher than the critical value. In contrast, there was no significant difference ($F = 0.429, df_{SSB} = 2, df_{SSW} = 76, p = 0.653$) in self-concept scores of people who were never married as compared to that in those of the minority marital status groups. The null hypothesis is accepted since the calculated value is lower than the critical value.

CHAPTER 4: DISCUSSION

Relationship to Kleiman's (2017) Study

Kleiman's (2017) study investigated how presence would relate to engagement with a university campus' affordances and positive outcomes. In his study, on-campus residency demonstrated greater levels of campus presence. While students who lived on campus displayed higher presences scores than those who did not live on campus, these results did not appear significantly different. Additionally, it was found that the number of campus events attended and the amount of time spent on campus positively correlated with campus presence. This positive trend was found in the present study, but there did not prove to be any statistically significant differences in those that spent a great deal of time on campus and those that spent little to no time on campus. However, this study's results supported the original study's finding that participation in student organizations related to greater campus presence. In fact, the mean presence score increased across groups as the number of active memberships in student organizations increased. For example, the mean presence score for students who weren't active members of any student organizations was the least, while the mean presence score for students who were active members of three or four student organizations was the greatest. The differences in presence scores across these groups proved to be statistically significant. Regarding the positive outcomes found in the original study, college affiliation was the only positive outcome significantly correlated with campus presence in the present study. All in all, it appears that the quality of engagement with university campus' affordances matters most when examining its relationship with campus presence.

Relationship to the Hypotheses

The hypotheses of this study are as follows: 1) there will be a statistically significant greater level of campus presence in the majority groups' demographic factors compared to the minority groups' demographic factors, 2) there will be a statistically significant greater level of self-concepts in the majority groups' demographic factors compared to the minority groups' demographic factors, and 3) there will be a statistically significant positive correlation between campus presence and self-concepts.

The results partially supported the hypothesis that there will be a statistically significant greater campus presence in the majority groups' demographic factors than the minority groups' demographic factors. Demographic factors like race/ethnicity, biological sex, gender, sexual orientation, individual financial earning, nationality, and certain disabilities did not demonstrate statistically significant differences in presence scores among the majority and minority groups. Therefore, these factors did not appear to influence campus presence. However, demographic factors like household financial earning, significant visual disabilities, significant hearing disabilities, significant mobility disabilities, and marital status did demonstrate statistically significant differences in presence scores among the majority group and the minority groups. Factors such as biological sex, household financial earnings, and marital status may point to certain social barriers to engagement. Moreover, factors such as sensorimotor disabilities reveal the centrality of direct perception and action to the sense of presence. Ultimately, true

engagement with affordances appears to relate to presence, yet certain demographics can impact how one engages.

The results partially supported the hypothesis that there will be a statistically significant greater level of self-concepts in the majority groups' demographic factors than the minority groups' demographic factors. Demographic factors like race/ethnicity, gender, sexual orientation, household financial earning, individual financial earning, nationality, significant visual disabilities, significant hearing disabilities, significant mobility disabilities, and marital status did not demonstrate statistically significant differences in self-concept scores among the majority group and the minority groups. Therefore, these factors did not appear to influence self-concept. However, demographic factors like biological sex and certain disabilities that impact one's learning, memory, or concentration demonstrate statistically significant differences in self-concept scores among the majority and minority groups. Therefore, these factors did appear to influence self-concept.

The results supported the hypothesis that there will be a statistically significant positive correlation between campus presence and self-concepts. There was a significant positive correlation between presence scores and self-concept scores. At further inspection, the Parent self-concept subscale was the only subscale that correlated significantly with presence scores. There was a significant positive correlation between presence scores and Parent self-concept scores. Therefore, Parent self-concept did appear to influence campus presence. Its highly significant, moderate relationship with campus presence uncovers an important avenue that may circumvent social barriers to engagement. Whether it reveals a source of support for the student or some other advantage is unclear, but it presents a worthy route of exploration with regard to presence.

Limitations

The limitations of the design and methods include causation, sampling method, sample size, generalizability, and the use of self-reported data. First and foremost, this study does not employ a true experimental design; all results are based on correlation which does not equate to causation. Therefore, none of the relationships proposed can be said to be causal. Second, participants were recruited through convenience sampling, which is not a probability sampling method. The sample was not sufficiently diverse to adequately compare different groups. Thus, a representative sample of the population of students attending UCF was not sufficiently achieved. In addition, the sample size was not substantial. This limitation further limits its representation of the target population. Furthermore, the results may not generalize well to other university campuses since UCF students and campuses were explored. Lastly, all data were self-reported and cannot be validated objectively. As a result, it is likely subject to some level of bias.

Another important limitation of the study was the zeitgeist that the study was situated in. The study took place during the COVID-19 pandemic, where attendance in most, if not all, places was universally limited. In the university campus case, attendance to on-campus classes, events, and resources was limited following pandemic guidelines. This undoubtedly resulted in students spending less time on campus, which likely led to less engagement. Thus, campus presence would likely have been lower than normal in more typical conditions.

Improvements and Future Research

Possible improvements and ideas for modifications for future research include a true experimental design, use of a probability sampling method, a more substantial sample size, exploring other university campuses and places, focus on high-quality engagement with campus affordances (such as involvement with student organizations, use of campus resources, participation in scholarly activities, student leadership roles, etc.), and exploring the role of parent self-concept, parent-child relationship, and parental support as potential facilitators of campus presence. With a true experimental design, causal forces on presence can be examined with greater control. In addition, using probability sampling methods, such as simple random sampling, cluster sampling, and stratified sampling, would result in a more representative sample of the target population. Along with probability sampling, recruiting a much larger sample would ensure a better representation of the population within the sample. It would also allow for more robust data analytic methods like exploratory factor analysis and structural equation modeling. To increase generalizability, the research would benefit from exploring presence at campuses at multiple other universities and other types of places like the exploration of nature as a place in Khan's (2020) study. The research would also benefit by investigating the quality of engagement with affordances, i.e., what constitutes high-quality engagement and low-quality engagement. The present study results suggest that the amount of time and mere attendance within an environment is not enough to cultivate campus presence; high-quality engagement with campus affordances like activity in student organizations appears to matter more. Finally, this study's results point to the relationship between parent self-concept, parent-child relationship, and parental support as a potentially fruitful and worthwhile research direction.

CHAPTER 5: CONCLUSION

In conclusion, ecological psychology tells us that direct perception of and action towards affordances within an environment, such as resources on a university campus, interacts with one another continuously to develop intentionality within an organism, such as a student at a university campus. The organism's intentionality leads to the organism's sense-making, engaging in personally meaningful behavior over time. The sense-making efforts of all organisms of the shared environment come together in collective place-making. In other words, the place is the product of all meaningful actions taken by all local organisms. Thus, the university place is the result of the sense-making of all students, faculty, staff, and other organisms on the university campus. The sense of presence, like campus presence, is produced as the place-making interacts with the organism's sense-making. Therefore, students' presence will come as they continuously interact with the university place and its affordances. This development of presence cultivates a meaningful connection to the place and allows them to reap the benefits of having a connection. For example, the study reveals that students with greater campus presence (and thus a stronger connection to the university place) experience a greater collegiate affiliation. The findings of the study reinforce this theoretical framework of ecological psychology.

The findings also reinforce the findings of Kleiman (2017). More opportunities to engage highly with campus affordances relate to greater campus presence. The findings point to the potential that sensorimotor disability may be a significant barrier to campus engagement and demonstrate the importance of direct perception and action with affordances in developing presence. Without the sense of presence within an environment, one may be at the disadvantage

of not reaping the psychological outcomes of having a connection and presence. This knowledge highlights the need for research and action on barriers to engagement and presence within all given places.

APPENDIX A: IRB EXEMPTION DETERMINATION FORM

UNIVERSITY OF CENTRAL FLORIDA

Institutional Review Board
FWA00000351
IRB00001138, IRB00012110
Office of Research
12201 Research Parkway
Orlando, FL 32826-3246

EXEMPTION DETERMINATION

January 29, 2021

Dear Daniel Mcconnell:

On 1/29/2021, the IRB determined the following submission to be human subjects research that is exempt from regulation:

Type of Review:	Initial Study
Title:	Feelings of Presence on Campus
Investigator:	Daniel Mcconnell
IRB ID:	STUDY00002696
Funding:	None
Grant ID:	None
Documents Reviewed:	• Campus Presence Scale.docx, Category: Survey / Questionnaire; • College Affiliation Questionnaire.docx, Category: Survey / Questionnaire; • College Self Efficacy.docx, Category: Survey / Questionnaire; • Demographics.docx, Category: Survey / Questionnaire; • HRP-254-FORM Explanation of Research.pdf, Category: Consent Form; • HRP-255-FORM - Request for Exemption.docx, Category: IRB Protocol; • Revised Life Orientation Test.docx, Category: Survey / Questionnaire; • Rosenberg SelfEsteem Scale.docx, Category: Survey / Questionnaire; • Self Description Questionnaire.docx, Category: Survey / Questionnaire

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made, and there are questions about whether these changes affect the exempt status of the human research, please submit a modification request to the IRB. Guidance on submitting Modifications and Administrative Check-in are detailed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system. When you have completed your research, please submit a Study Closure request so that IRB records will be accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Katie Kilgore
Designated Reviewer

APPENDIX B: EXPLANATION OF RESEARCH

UNIVERSITY OF CENTRAL FLORIDA

EXPLANATION OF RESEARCH

Title of Project: Feelings of Presence on Campus

Principal Investigator: Dr. Daniel McConnell

Co-Investigator: Lydell Kerbo

You are being invited to take part in a research study. Whether you take part is up to you.

The purpose of this study is to investigate the relationship between participation in activities on a college campus and individual characteristics such as personality. You will be given surveys that ask you about yourself, such as demographic information, personality, and how you think and feel about yourself.

The study is completed entirely online and the procedures in the study includes filling out surveys.

The study duration is approximately 30 minutes. Please complete the study in one sitting rather than taking breaks throughout.

Your participation in this study is voluntary. You are free to withdraw your consent and discontinue participation in this study at any time without penalty. Your decision to participate or not participate in this study will in no way affect your relationship with UCF, including continued enrollment, grades, employment, or your relationship with the individuals who may have an interest in this study.

Extra credit may be offered for your participation, but this benefit is at the discretion of your class instructor. Upon completion of the online study, you will be awarded 0.5 SONA credits which may be used as extra credit in approved psychology courses. You should contact your course instructor regarding alternative assignments of equal effort for equal credit if you choose not to participate in the research.

The data collected during this study will be stored online without identifiable data on a secure, password-protected server. The data will be stored for a minimum of 5 years after study closure.

You must be 18 years of age or older and have access to a computer or mobile device with internet access to take part in this research study.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints: Dr. Daniel McConnell, principal investigator, Department of Psychology at (407) 823-4202 or by email at Daniel.McConnell@ucf.edu. For mental health counseling resources, you may contact UCF Counseling and Psychological Services at (407) 823-2811.

IRB contact about your rights in this study or to report a complaint: If you have questions about your rights as a research participant, or have concerns about the conduct of this study, please contact Institutional Review Board (IRB), University of Central Florida, Office of Research, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901, or email irb@ucf.edu.

University of Central Florida IRB
IRB Number: STUDY00002696
IRB Approval Date: 1/29/2021

APPENDIX C: REVISED CAMPUS PRESENCE SCALE

Instructions: When answering the questions below, think about how you feel on a typical day attending classes on the UCF campus.

(Not at all) 1 2 3 4 5 6 7 (Completely)

1. How completely were all of your senses engaged on campus at UCF?
2. How much did the visual aspects of the campus environment engage you?
3. How much did the auditory aspects of the campus environment engage you?
4. The way time passed on campus seemed to be different from normal.
5. I was not concerned with what others may have been thinking of me while I was on campus.
6. Things just seemed to be happening automatically on campus.
7. How involved were you in the experience?
8. How well could you concentrate on the activities or events taking place taking place at UCF?
9. Were you involved in the activities to the extent that you lost track of time?

Items 1-3: Sensory subscale

Items 4-6: Distraction/isolation subscale

Items 7-9: Distraction/involvement subscale

Negative scoring items: 4, 6.

APPENDIX D: SELF DESCRIPTION QUESTIONNAIRE III

Instructions: When answering the questions below, think about how true they are for you.

(Definitely False) 1 2 3 4 5 6 7 8 (Definitely True)

1. Overall, I have a lot of respect for myself.
2. I get a lot of attention from members of the opposite sex.
3. I hardly ever saw things the same way as my parents when I was growing up.
4. I enjoy doing work for most academic subjects.
5. I have few friends of the same sex that I can really count on.
6. Overall, I lack self-confidence.
7. I find it difficult to meet members of the opposite sex whom I like.
8. I would like to bring up children of my own (if I have any) like my parents raised me.
9. I hate studying for many academic subjects.
10. I am comfortable talking to members of the same sex.
11. Overall, I am pretty accepting of myself.
12. I have lots of friends of the opposite sex.
13. I still have many unresolved conflicts with my parents.
14. I like most academic subjects.
15. I don't get along very well with other members of the same sex.
16. Overall, I don't have much respect for myself.
17. Most of my friends are more comfortable with members of the opposite sex than I am.
18. My parents have usually been unhappy or disappointed with what I do and have done.
19. I have trouble with most academic subjects.

20. I make friends easily with members of the same sex.

21. Overall, I have a lot of self-confidence.

22. I am comfortable talking to members of the opposite sex.

23. My values are similar to those of my parents.

24. I'm good at most academic subjects.

25. Other members of the same sex find me boring.

26. Overall, I have a very good self-concept.

27. I'm quite shy with members of the opposite sex.

28. My parents have never had much respect for me.

29. I'm not particularly interested in most academic subjects.

30. I share lots of activities with members of the same sex.

31. Overall, nothing that I do is very important.

32. I make friends easily with members of the opposite sex.

33. My parents treated me fairly when I was young.

34. I learn quickly in most academic subjects.

35. Not many people of the same sex like me.

36. Overall, I have pretty positive feelings about myself.

37. I have had lots of feelings of inadequacy about relating to members of the opposite sex.

38. It has often been difficult for me to talk to my parents.

39. I hate most academic subjects.

40. I am popular with other members of the same sex.

41. Overall, I have a very poor self-concept.

42. I am comfortable being affectionate with members of the opposite sex.

43. My parents understand me.

44. I get good marks in most academic subjects.

45. Most people have more friends of the same sex than I do.

46. I value integrity above all other virtues.

47. I never seem to have much in common with members of the opposite sex.

48. I like my parents.

49. I could never achieve academic honors, even if I worked harder.

50. I have lots of friends of the same sex.

51. Overall, I do lots of things that are important.

52. Overall, I am not very accepting of myself.

Items 1, 6, 11, 16, 21, 26, 31, 36, 41, 46, 51, 52: General-self subscale

Items 2, 7, 12, 17, 22, 27, 32, 37, 42, 47: Opposite-sex peer subscale

Items 3, 8, 13, 18, 23, 28, 33, 38, 43, 48: Parent subscale

Item 4, 9, 14, 19, 24, 29, 34, 39, 44, 49: Academic subscale

Items 5, 10, 15, 20, 25, 30, 35, 40, 45, 50: Same-sex peer subscale

Negative scoring items: 3, 5-7, 9, 13, 15-19, 25, 27-29, 31, 35, 37-39, 41, 45, 47, 49, 52

APPENDIX E : DEMOGRAPHIC ITEMS

1. What race do you identify yourself with?
    a. White or Caucasian
    b. Black or African American
    c. Asian
    d. American Indian or Alaskan Native
    e. Native Hawaiian or other Pacific Islander
    f. From multiple races
    g. Some other race (please specify)
2. Are you Hispanic, Latino/a, or Spanish?
    a. Hispanic, Latino/a, or Spanish origin
    b. Not Hispanic, Latino/a, or Spanish origin
3. What was your biological sex assigned at birth?
    a. Female
    b. Male
    c. Other (specify)
    d. Prefer not to answer
4. Do you identify as transgender?
    a. Yes
    b. No
    c. Prefer not to answer
5. What is your identified gender?

a. Female

b. Male

c. Other (specify)

d. Prefer not to answer

6. What is your sexual orientation?

    a. Heterosexual

    b. Lesbian

    c. Gay

    d. Bisexual

    e. Queer

    f. Questioning

    g. Asexual

    h. Pansexual

    i. Prefer not to answer

7. Which of the following categories best describes your employment status?

    a. Employed, working 1-39 hours per week

    b. Employed, working 40 or more hours per week

    c. Not employed, looking for work

    d. Not employed, NOT looking for work

    e. Retired

    f. Disabled, not able to work

8. Do you have an on-campus job?

    a. Yes

b. No

c. Prefer not to answer

9. How much total combined money did all members of your household earn in 2019?

a. $0 – $9,999

b. $10,000 – $19,999

c. $20,000 – $29,999

d. $30,000 – $39,999

e. $40,000 – $49,999

f. $50,000 – $59,999

g. $60,000 – $69,999

h. $70,000 – $79,999

i. $80,000 – $89,999

j. $90,000 – $99,999

k. $100,000 or more

l. Unknown

m. Prefer not to answer

10. How much money did you personally earn in 2019?

a. $0 – $9,999

b. $10,000 – $19,999

c. $20,000 – $29,999

d. $30,000 – $39,999

e. $40,000 – $49,999

f. $50,000 – $59,999

g. $60,000 – $69,999

h. $70,000 – $79,999

i. $80,000 – $89,999

j. $90,000 – $99,999

k. $100,000 or more

l. Unknown

m. Prefer not to answer

11. Which category below includes your age?

a. 18-20

b. 21-29

c. 30-39

d. 40-49

e. 50-59

f. 60 or older

g. Prefer not to answer

12. Were you born in the United States?

a. Yes

b. No

c. Unknown

d. Prefer not to answer

13. If you were born in another country, did you arrive in and have lived in or intended to live in the United States within the last 10 years?

a. Yes

b. No

c. Unknown

d. Prefer not to answer

14. Did your mother live in the United States when she gave birth to you?

a. Yes

b. No

c. Unknown

d. Prefer not to answer

15. Were your parent(s) born in the United States?

a. Yes

b. No

c. One, but not the other

d. Unknown

e. Prefer not to answer

16. Does you have any of the following long-lasting conditions:

a. Blindness, deafness, or a severe vision or hard-of-hearing condition?

i. Yes

ii. No

b. A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying?

i. Yes

ii. No

17. Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities:
    a. Learning, remembering, or concentrating?
        i. Yes
        ii. No
    b. Attending campus events, organization meetings, or on-campus resources?
        i. Yes
        ii. No
18. What is your current grade level for this school year?
    a. Freshman/never attended college and 1st-year undergraduate
    b. Freshman/attended college before and 1st-year undergraduate
    c. Sophomore/2nd-year undergraduate
    d. Junior/3rd-year undergraduate
    e. Senior/4th-year undergraduate
    f. Other/5th-year undergraduate
19. Are you a transfer student?
    a. Yes
    b. No
    c. Prefer not to answer
20. Did anyone in your immediate family attend UCF in the past or attend now?
    a. Yes
    b. No
    c. Unknown

d. Prefer not to answer

21. What major are you pursuing?

a. Psychology

b. Health Sciences

c. Integrated Business

d. Hospitality Management

e. Criminal Justice

f. Finance

g. Interdisciplinary Studies

h. Biomedical Sciences

i. Sport and Exercise Science

j. Elementary Education

k. Nursing

l. Health Services Administration

m. Mechanical Engineering

n. Computer Science

o. Political Science

p. Unknown

q. Other (Specify)

22. Are you now married, widowed, divorced, separated, or never married?

a. Married

b. Widowed

c. Divorced

d. Separated

e. Never married

f. Prefer not to answer

Items 1, 2: Race/Ethnicity subscale

Items 3-6: Sex/Gender Identity and Sexual Orientation subscale

Items 7, 8: Employment subscale

Item 9, 10: Household Income subscale

Item 11: Age subscale

Items 12-15: Nativity/Nationality subscale

Items 16, 17: Disability subscale

Items 18-21: Education subscale

Item 22: Marital Status subscale

APPENDIX F: ROSENBERG SELF-ESTEEM SCALE

Instructions: Please read the following statements and rate how they pertain to you.

Strongly Agree Agree Disagree Strongly Disagree

1. I feel that I am a person of worth, at least on an equal plane with others.
2. I feel that I have a number of good qualities.
3. All in all, I am inclined to feel that I am a failure.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish I could have more respect for myself.
9. I certainly feel useless at times.
10. At times I think I am no good at all.

For items 1, 2, 4, 6, and 7:

Strongly agree = 3

Agree = 2

Disagree = 1

Strongly disagree = 0

For items 3, 5, 8, 9, and 10 (reversed in valence):

Strongly agree = 0

Agree = 1

Disagree = 2

Strongly disagree = 3

The scale ranges from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem.

APPENDIX G: COLLEGE SELF-EFFICACY INVENTORY (CSEI)

Instructions: The following 20 items concern your confidence in various aspects of college. Using the scale below, please indicate how confident you are as a student at UCF that you could successfully complete the following tasks. Levels of confidence vary and there are no right or wrong answers; just answer honestly.

(Not at all confident) 1 2 3 4 5 6 7 8 9 10 (Extremely confident)

1. Make new friends at UCF.
2. Divide chores with others you live with.
3. Talk to UCF staff.
4. Manage time effectively at UCF.
5. Ask a question in class.
6. Participate in class discussions.
7. Get a date when you want one.
8. Research a term paper.
9. Do well on your exams.
10. Join a student organization at UCF.
11. Talk to your professors.
12. Join an intramural sports team.
13. Ask a professor a question.
14. Take good class notes.
15. Get along with others you live with.

16. Divide space in your residence.
17. Understand your textbooks.
18. Keep up to date with your schoolwork.
19. Write course papers.
20. Socialize with others you live with.

Scoring: Each item scale is added together and totaled for a maximum score of 200.

APPENDIX H: COLLEGE AFFILIATION QUESTIONNAIRE (CAQ)

Instructions: Read each statement carefully and decide which response best applies to you.

A = Not at all like me, B = A little like me, C = Like me, D = Very much like me, E = Exactly like me

1. It is important for me to get a degree from UCF.
2. I am confident I have made the right decision in choosing to attend UCF.
3. My close friends rate UCF as a quality institution.
4. I have performed academically as well as I anticipated I would at UCF.
5. I am satisfied with my course curriculum here at UCF.
6. My education at UCF will help me secure future employment.
7. I am satisfied with the amount of financial support (grants, loans, family, jobs) I have received while attending UCF.
8. I am satisfied with my academic experience.
9. It is very important for me to graduate from UCF as opposed to graduating from some other school.
10. Since coming to UCF, I have developed close personal relationships with other students.
11. It is important for me to finish my program of study.
12. It has been easy for me to meet and make friends with other students at UCF.
13. I feel I belong at UCF.

Scoring: Each item scale is added for a total maximum score of 52. Items consist of the following college affiliation subscales:

1. *Institutional Commitment (Items 1, 2, 3, 6, 9, and 11)*
2. *Social Adjustment (Items 10 and 12)*
3. *Academic Adjustment (Items 4, 5, and 8)*
4. *College Adjustment (Items 1, 2, 3, 4, 5, 6, 8, 9, and 11)*

APPENDIX I: REVISED LIFE ORIENTATION TEST (LOT-R)

Instructions: Please answer the following questions about yourself by indicating the extent of your agreement. Be as honest as you can throughout and try not to let your responses to one question influence your response to other questions. There are no right or wrong answers.

(0 = Strongly disagree, 1 = Disagree, 2 = Neutral, 3 = Agree, 4 = Strongly agree)

1. (___) In uncertain times, I usually expect the best.
2. (___) If something can go wrong for me, it will.
3. (___) I'm always optimistic about my future.
4. (___) I hardly ever expect things to go my way.
5. (___) I rarely count on good things happening to me.
6. (___) Overall, I expect more good things to happen to me than bad.

Scoring:

1. Reverse code items 2, 4, and 5 prior to scoring (0=4) (1=3) (2=2) (3=1) (4=0).
2. Sum items 1-6 to obtain an overall score.

REFERENCES

Autor, D., Figlio, D., Karbownik, K., Roth, J., & Wasserman, M. (2016). *School Quality and the Gender Gap in Educational Achievement.* Massachusetts Institute of Technology, Department of Economic. Cambridge: The MIT Press.

Bergey, B. W., Deacon, H., & Parrila, R. K. (2017). Metacognitive Reading and Study Strategies and Academic Achievement of University Students With and Without a History of Reading Difficulties. *Journal of Learning Disabilities*, *50*(1), 81-94.

Blankenship, B. T., & Stewart, A. J. (2017, August 1). Intersectional Identities, Identity Dimensions, and Academic Contingencies of Self-Worth. *Identity*, *17*(3), 109-124.

Cabrera, A. F., Nora, A., & Castaneda, M. B. (1993, March). College Persistence: Structural Equations Modeling Test of an Integrated Model of Student Retention. *Journal of Higher Education*, *64*(2), 123-139.

Callahan, R. M., & Humphries, M. H. (2016, April). Undermatched? School-Based Linguistic Status, College Going, and the Immigrant Advantage. *American Educational Research Journal*, *53*(2), 263-295.

Carnoy, M., & Garcia, E. (2017, January 12). *Five key trends in U.S. student performance.* Retrieved October 12, 2020, from Economic Policy Institute Web site: http://epi.org/113217

Chemero, A. (2009). *Radical Embodied Cognitive Science.* Cambridge, Massachusetts, United States of America: The MIT Press.

Cozby, P. C., & Bates, S. C. (2017). *Methods in behavioral research* (13th Edition ed.). Dubuque, Iowa, United States of America: McGraw-Hill Education.

de Brey, C., Musu, L., McFarland, J., Wilkinson-Flicker, S., Diliberti, M., Zhang, A., . . . Wang, X. (2019). *Status and Trends in the Education of Racial and Ethnic Groups 2018.* U.S. Department of Education. Washington, D.C.: National Center of Education Statistics.

Deckoff-Jones, A., & Duell, M. N. (2018). Perceptions of Appropriateness of Accommodations for University Students: Does Disability Type Matter? *Rehabilitation Psychology, 63*(1), 68-76.

Engelhardt, L. E., Church, J. A., Harden, K. P., & Tucker-Drob, E. M. (2019, January). Accounting for the shared environment in cognitive abilities and academic achievement with measured socioecological contexts. *Developmental Science, 22*(1), 1-16.

Fancher, R. E., & Rutherford, A. (2011). *Pioneers of Psychology: A History* (4th Edition ed.). New York City, New York, United States of America: W. W. Norton & Company.

Gibson, J. J. (1979). *The Ecological Approach To Visual Perception* (1st Edition ed.). New York City, New York, United States of America: Psychology Press.

Glass, K., Glass, C. R., & Lynch, R. J. (2016). Student Engagement and Affordances for Interaction With Diverse Peers: A Network Analysis. *Journal of Diversity in Higher Education, 9*(2), 170-187.

Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2009, July). New Evidence about Brown v. Board of Education: The Complex Effects of School Racial Composition on Achievement. *Journal of Labor Economics, 27*(3), 349-383.

Harackiewicz, J. M., Canning, E. A., Tibbetts, Y., Priniski, S. J., & Hyde, J. S. (2016). Closing Achievement Gaps With a Utility-Value Intervention: Disentangling Race and Social Class. *Journal of Personality and Social Psychology, 111*(5), 745-765.

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big-Five Inventory-Version 4a and 54.* University of California, Berkeley Institute of Personality and Social Research. Berkeley: University of California Press.

Jones, T. L., Baxter, M. A., & Khanduja, V. (2013, January). A quick guide to survey research. *Annals of the Royal College of Surgeons of England, 95*(1), 5-7.

Kantamneni, N., Dharmalingam, K., Tate, J. M., Perlman, B. L., Majmudar, C. R., & Shada, N. (2016). DREAMing Big: Understanding the Current Context of Academic and Career Decision-Making for Undocumented Students. *Journal of Career Development, 43*(6), 483-497.

Khan, F. (2020). *Nature Connectedness Through Nature's Affordances.* University of Central Florida, Department of Psychology. Orlando: University of Central Florida Library.

Kleiman, D. M. (2017). *A Measurement of Campus Presence: The Cognitive Link Between Campus Engagement and Positive Outcomes in College Students.* University of Central Florida, Department of Psychology. Orlando: University of Central Florida Library.

Libassi, C. J. (2018, May 23). *The Neglected College Race Gap: Racial Disparities Among College Completers.* Retrieved October 12, 2020, from Center for American Progress: https://www.americanprogress.org/issues/education-postsecondary/reports/2018/05/23/451186/neglected-college-race-gap-racial-disparities-among-college-completers/

Lombardi, A., Murray, C., & Kowitt, J. (2016). Social support and academic success for college students with disabilities: Do relationship types matter? *Journal of Vocational Rehabilitation, 44*, 1-13.

Lopez, M. H. (2009). *Latinos and Education: Explaining the Attainment Gap* . Pew Research Center, Pew Hispanic Center. Washington, D.C.: Pew Research Center.

Markus, H. R., & Kitayama, S. (1991). Culture and the Self: Implications for Cognition, Emotion, and Motivation. *Psychological Review, 98*(2), 224-253.

Markus, H., & Wurf, E. (1987). The Dynamic Self-Concept: A Social Psychological Perspective. *Annual Review of Psychology, 38*, 299-337.

Marsh, H. W., & O'Neill, R. (1984). Self Description Questionnaire III: The Construct Validity of Multidimensional Self-Concept Ratings by Late Adolescents. *Journal of Educational Measurement, 21*(2), 153-174.

Mathies, N., Coleman, T., McKie, R. M., Woodford, M. R., Courtice, E. L., Travers, R., & Renn, K. A. (2019, February 10). Hearing "that's so gay" and "no homo" on academic outcomes for LGBQ + college students. *Journal of LGBT Youth, 16*(3), 255-277.

Maturana, H. R., & Varela, F. J. (1980). *Autopoiesis and Cognition: The Realization of the Living* (2nd Edition ed.). Dordrecht, South Holland, Netherlands: D. Reidel Publishing Company.

McConnell, D. S., & Fiore, S. M. (2017). A Place for James J. Gibson. In B. B. Janz (Ed.), *Place, Space and Hermeneutics* (1st Edition ed., Vol. 5, pp. 261-273). New York City, New York, United States of America: Springer International Publishing.

Merriam-Webster. (2020, October 23). *Culture*. Retrieved November 1, 2020, from Merriam-Webster Dictionary Web site: https://www.merriam-webster.com/dictionary/culture

Merriam-Webster. (2020, October 30). *Demography*. Retrieved November 1, 2020, from Merriam-Webster Dictionary Web site: https://www.merriam-webster.com/dictionary/demography

Moní, Y., Mealy, M., Del Ama, J. C., & Conway, J. M. (2018). Bidimensional Acculturation and Academic Success Among Latina/o College Students. *Journal of Latina/o Psychology, 6*(3), 220-234.

Newman, L., Wagner, M., Knokey, A.-M., Marder, C., Nagle, K., Shaver, D., . . . Schwarting, M. (2011). *The Post-High School Outcomes of Young Adults With Disabilities up to 8 Years After High School.* U.S. Department of Education. Menlo Park: SRI International.

Nichols, A. H., & Evans-Bell, D. (2017). *A Look at Black Student Success: Identifying Top- and Bottom-Performing Institutions* . Washington, D.C.: The Eduaction Trust.

Orfield, G., Frankenberg, E., Ee, J., & Kuscera, J. (2014). *Brown at 60: Great Progress, a Long Retreat and an Uncertain Future.* University of California, Los Angeles, Graduate School of Education and Information Studies. Berkeley: University of California Press.

Pagano, R. R. (2012). *Understanding Statistics in the Behavioral Sciences* (10th Edition ed.). Boston, Massachusetts, United States of America: Cengage Learning.

Patel, S. G., Barrera, A. Z., Strambler, M. J., Muñoz, R. F., & Macciomei, E. (2016). The Achievement Gap Among Newcomer Immigrant Adolescents: Life Stressors Hinder Latina/o Academic Success. *Journal of Latinos and Education, 15*(2), 121-133.

Pearson, J., & Wilkinson, L. (2017). Same-Sex Sexuality and Educational Attainment: The Pathway to College. *Journal of Homosexuality, 64*(4), 538-576.

Pierre, J. (2019, February 8). *Intentionality*. (E. N. Zalta, Editor) Retrieved November 22, 2020, from Stanford Encyclopedia of Philosophy Web site: https://seop.illc.uva.nl/entries/intentionality/

Rasch, B. (2003, January 9). *Questions used to identify persons with disabilities in non-ESS (European Statistical System) developed countries.* Retrieved November 11, 2020, from

Centers for Disease Control and Prevention Web site: https://www.cdc.gov/nchs/data/washington_group/meeting2/erk_questions.pdf

Reardon, S. F. (2011). The Widening Academic Achievement Gap Between the Rich and the Poor: New Evidence and Possible Explanations. In G. J. Duncan, & R. J. Murnane (Eds.), *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances* (pp. 91-116). New York City, New York, United States of America: Russell Sage Foundation Press.

Reardon, S. F., & Yun, J. T. (2001, April). Suburban Racial Change and Suburban School Segregation, 1987-95. *Sociology of Education, 74*(2), 79-101.

Romero, R. H., Hall, J., & Cluver, L. (2019). Exposure to violence, teacher support, and school delay amongst adolescents in South Africa. *British Journal of Educational Psychology, 89*, 1-21.

Rosen, M. L., Meltzoff, A. N., Sheridan, M. A., & McLaughlin, K. A. (2019). Distinct aspects of the early environment contribute to associative memory, cued attention, and memory-guided attention: Implications for academic achievement. *Developmental Cognitive Neuroscience, 40*, 1-13.

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton: Princeton University Press.

Schacter, D. (2011). *Psychology.* New York City, New York, United States of America: Worth Publishers.

Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology, 67*, 1063-1078.

Semega, J., Kollar, M., Creamer, J., & Mohanty, A. (2020). *Income and Poverty in the United States: 2018.* United States Census Bureau, U.S. Department of Commerce. Washington, D.C.: U.S. Government Printing Office.

Shapiro, D., Dundar, A., Huie, F., Wakhungu, P. K., Yuan, X., Nathan, A., & Hwang, Y. (2017). *A National View of Student Attainment Rates by Race and Ethnicity – Fall 2010 Cohort.* Indiana University. Herndon: National Student Clearinghouse Research Center.

Solberg, V. S., O'Brien, K., Villarreal, P., Kennell, R., & Davis, B. (1993). Self-efficacy and Hispanic college students: Validation of the College Self-Efficacy Instrument. *Hispanic Journal of Behavioral Sciences, 15*, 80-95.

Thernstrom, A. (2001). *The Racial Gap in Academic Achievement.* Stanford University, Hoover Institution. Stanford: Hoover Press.

Triandis, H. C. (1989). The Self and Social Behavior in Differing Cultural Contexts. *Psychological Review, 96*(3), 506-520.

Turvey, M. T. (1992). Affordances and Prospective Control: An Outline of the Ontology. *Ecological Psychology, 4*(3), 173-187.

United Nations Statistics Division. (n.d.). *Standard questions on international migration.* Retrieved November 11, 2020, from United Nations Statistics Division Web site: https://unstats.un.org/unsd/demographic-social/migration-expert-group/methodology/Standard%20set%20of%20migration%20questions.pdf

Verniers, C., & Martinot, D. (2015, July 25). Characteristics expected in fields of higher education and gender stereotypical traits related to academic success: a mirror effect. *Social Psychology of Education, 18*, 719-733.

Warren, J. W. (1984). Perceiving Affordances: Visual Guidance of Stair Oimbing. *Journal of Experimental Psychology: Human Perception and Performance, 10*(5), 683-703.

Watson, R. J., Wheldon, C. W., & Russell, S. T. (2015, October 6). How Does Sexual Identity Disclosure Impact School Experiences? *Journal of LGBT Youth, 12*(4), 385-396.

Witmer, B. G., & Singer, M. J. (1998, June). Measuring presence in virtual environments: A presence questionnaire. *Presence: Teleoperators and virtual environments, 7*(3), 225-240.