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**THE *VALUE* IN MARKETING:  
THE INFLUENCE OF MEMORY ON MARKETING CAMPUS ACTIVITIES**

by

Melissa Banuelos

A Thesis

Submitted to the  
Department of Educational Services and Leadership  
College of Education  
In partial fulfillment of the requirement  
For the degree of  
Master of Arts in Higher Education  
at  
Rowan University  
April 30, 2021

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## **Dedication**

This thesis is dedicated to my first mentor, Sam P. You may not be aware, but you are the inspiration behind pursuing this degree. Thank you for being the first person to ignore my stubbornness and continue to support and encourage me to push me past my limits. Thank you for teaching me to enjoy writing. Finally, thank you for forcing me to believe that someone like me was deserving of more than I gave myself credit, and showing me I was worthy enough to share my thoughts with the world.

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To the participants in this study: this study would not be possible without you! Thank you for choosing to take a few minutes in the midst of the chaotic semester and allowing me to gain a bit of knowledge from your thoughts. Special shoutout to each individual who participated in the letter writing activity. Your honesty and vulnerability have been so “valuable” to me and I am so grateful to have learned a bit more about each of you through your letters.

## Abstract

Melissa Banuelos

THE *VALUE* OF MARKETING: THE INFLUENCE OF MEMORY ON MARKETING  
CAMPUS ACTIVITIES

2020-2021

Raquel Wright-Mair, Ph.D.

Master of Arts in Higher Education

The following mixed methods study sought to uncover relationships among value, identity, and memory to aid in the utilization of value in marketing campus activities. 12 students participated in a free recall memory task as well as a word value ranking task to help better understand possible relationships. There were no significant differences in the number of words recalled based on a participant's affiliation with a specific identity group. There was also no significant relationship between word value and frequency was found. However, following the completion of the quantitative portion of this study, four of the 12 participants engaged in narrative letter writing regarding the concept and personal definition of value(s). Using the Values Coding technique, four emergent values were uncovered: enjoyment/happiness, celebration, community, and self. Findings regarding current student values could prove useful in creating targeted marketing to increase interest and attendance for campus activities. Also, limited significant relationships provide direction for future researcher replication and potential for improvements to study.

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## **Chapter 1**

### **Introduction**

The world shut down in early 2020 because of COVID-19, and with resulting quarantines and remote learning, obstacles emerged for the world to entertained themselves and find ways to remain connected with one another. As higher education began to reopen that fall, colleges and universities across the country continued to face the challenge of providing in-person and virtual activities or services to students. Now, more than ever, campus activities administrators are challenged with maintaining or even exceeding student attendance amid national crises. Yet, even prior to the global pandemic there was limited higher education research regarding targeted market strategies in relation to campus activities. Additionally, it has been demonstrated that student values are greatly altered following major national crisis (Park et al., 2016). However, higher education is yet to understand how COVID-19 has altered undergraduate student values and how these changes may influence their willingness to participate in campus activities. Looking outward to combine research from other fields may prove useful in developing appropriate tactics for marketing to students, bearing in mind the possible shift in values that may have occurred. Increasing such involvement would then hopefully assist in bringing some normalcy and community back to campuses across the country who have been devastated by the health crisis (Burki, 2020; Hartman, 2020).

### **Statement of Problem**

Higher education does not often acknowledge its relationship to the fields of marketing and cognition. For example, psychological science research, which includes

the understanding of cognitive processes and behavioral tendency, forms a basis for many other fields of learning like higher education. Consumer Psychology, for example, is a type of study that utilizes psychological science principles to understand the nature of consumer choice behaviors (Foxall, 1993). Such behaviors may include buying habits or responses to marketing campaigns and practices. Similarly, as the field of marketing borrows from psychological science, the field of higher education borrows from marketing. In terms of motivation to get students involved, higher education utilizes experiential learning theory and expectancy theory. Simplified, this relationship demonstrates that more attractive outcomes make students more motivated to participate (Munoz et al., 2016; Vroom, 1965). Therefore, because higher education borrows from marketing principles, in the context of student involvement, it also indirectly borrows from psychological science.

The connection among all three fields may prove useful when assessing how to increase student involvement in campus activities. It has been demonstrated that word value, defined as the importance or motivation to remember a word, directly impacts a person's ability to recall that word (Stefanidi et al., 2017; Jantz, 2019). Often, words that are valued higher by a participant are remember more often (Stefanidi et al., 2017). One's ability to recall has a direct impact on their decision-making processes (Matlin & Farmer, 2016; Tversky & Kahneman, 1974). If higher education practitioners are able to create written marketing material that is more easily remembered by students, then marketing efforts may be more effective in increasing motivation and ability to participate in campus events.

## **Purpose of Study**

The purpose of this study is to analyze the effect attributed word value has on students' ability to remember written marketing materials. It is the belief that students will attribute varying value to different words based on the importance of those words to them. Therefore, if a student attributes higher value to specific words or phrases utilized in campus activity marketing, then those words or phrases should be remembered more easily. If so, students should be more readily able to recall event descriptions and important event information. It is expected that their being able to recall this information more readily would heighten their interest in participating in the associated campus events.

## **Significance of Study**

Because of limited work between the three disciplines, there are few studies that offer examples of how higher education can manipulate marketing or psychology principles to better serve students. This study's findings will inform new techniques to boost student involvement in campus programming. Additionally, cognitive research in value-directed memory has shown that age is a major factor that influences recall and sensitivity to value (Castel et al., 2011; Castel et al., 2013). However, few studies have attempted to analyze the influence of ethnicity on value-directed memory. This study hopes to bridge a gap in this knowledge by demonstrated a statistically significant correlational relationship among attributed value and student racial/ethnic identity. Then, with prior knowledge that ethnicity plays a role in other areas of collegiate experiences, it is the hope that this study can analyze its potential influence in student involvement to

better understand how to market campus activities and increase student attendance at campus events.

### **Research Questions**

This study addresses the following research questions:

1. What is the relationship between word value and number of items recalled by undergraduate students at Rowan University?
2. What is the relationship between identity and recall?
3. How do undergraduate students at Rowan University explain what they believe the concept value means in relation to the recall task?

### **Limitations and Assumptions**

This study was limited to undergraduate students at Rowan University in Glassboro, NJ in the 2020-2021 school year. Additionally, in terms of sampling, strata were limited to four ethnic groups: Hispanic, African American/Black, Asian, and White. It therefore fails to consider multiracial identities. The study also assumes that students will have differentiated attributed value to works and will therefore answer both the survey and word ranking truthfully and accurately. Lastly, this research was impacted by the ongoing global COVID-19 health crisis. This includes a required shift in methodology from in-person interaction to virtual. Moreover, it is the belief of the researcher that the ongoing pandemic has influenced students' willingness or interest in participating which resulted in limited access to the student population.

## **Operational Definitions**

Recall: refers to the cognitive, mental process of retrieving past encoded information.

(Matlin & Farmer, 2016).

Word Value: the importance or motivation to remember a word (Stefanidi et al., 2017).

SCCA: the acronym for Rowan University's Student Center and Campus Activities department. This department contains two of the largest programming organizations and programming boards on campus, Rowan After Hours and the Student University Programmers.

## Chapter 2

### Literature Review

Perhaps one of the most well researched areas of higher education is student involvement. There is much research to support the idea that involvement during a student's collegiate journey has an overall positive effect on success and experience (Astin, 1984; Carini et al., 2006; Deneui et al., 2003; Moore et al., 1998; Munoz et al., 2016; Vroom, 1965). However, much less research has been conducted that looks at how student involvement is influenced by memory and decision-making. Multi-disciplinary approaches allow for more developed explanations of these phenomena within the context of student involvement. Psychological science, as heavily informed by biological science (Matlin & Farmer, 2016), tells the story of how basic human processes like perception or sensation occur and expands to explain processes as complex as memory. Such an understanding of a possible relationship between psychological processes and higher education research may positively affect overall student experience and success at a university. It could then provide an opportunity for even deeper analysis of cognitive processes in terms of higher education students.

#### Benefits of Student Involvement

Sense of community and sense of belonging are both strongly influenced by student involvement. A well-studied phenomenon first shaped from research by Sarason (1974), sense of belonging relates to feeling supported in structures or institutions that are reliable and available (Pretty et al., 1994). Research indicates a negative correlation in loneliness and sense of belonging and demonstrated the importance this phenomenon has



in shedding light on a student's social perceptions (Pretty et al., 1994). In alignment with prior research, students who participated in more campus activities reported higher end of semester psychological sense of community and greater change in their sense of community (Deneui et al., 2003). A longitudinal study conducted by Deneui et al. (2003) saw no predictor for increased sense of community throughout the academic year. However, researchers did see that students who participated in more campus activities reported higher end of semester psychological sense of community and greater change in their sense of community (Deneui et al., 2003).

With prior knowledge of student involvement having a positive influence on student experience, research began exploring how involvement was impacting different areas of the student experience. In their work, Moore et al. (1998) explored how different types and aspects of involvement influence students. For example, they demonstrated the importance of involvement that seeks to connect students to faculty and staff members. Students who participated in such activities were more likely to utilize the campus services and facilities they learned about from faculty. Additionally, this type of student-faculty interaction helped students cross disciplines and promoted more diverse ways of thinking (Moore et al., 1998).

Moore et al. (1998) were inspired by the well-researched foundational theory of involvement developed by Alexander Astin (1984). In this model, involvement includes both the quantity and quality of energy a student invests in their collegiate experience. Astin (1984) posits increased involvement will increase student personal development and influence learning. Another interesting aspect within this model is its practical application for educators and administrators. The theory of involvement hypothesized

that educational policy/practice effectiveness is connected to its capacity to increase student involvement (Astin, 1984). Astin's theory encourages professionals to measure activity success by the ability to get more students involved. It informs practitioners how to better tailor outreach efforts to involve students by viewing student time and energy as institutional resources so administrators and educators may better serve their campuses.

### **Student Motivation to Participate**

After understanding the benefits of involvement, it is important to look at why students participate. Through the use of both experiential learning theory and expectancy theory, Munoz et al. (2016), were able to provide a look at reasoning behind intentionality to participate. According to expectancy theory, a positive or more attractive outcome increases an individual's motivation to reach it (Munoz et al., 2016; Vroom, 1965). On the other hand, experiential learning theory, in terms of their research, involved learning by doing that extends outside of classroom activities (Munoz et al., 2016). Analyzing members of professional student organizations, Munoz et al. (2016) offered a potential explanation that students expect greater rewards from such organizations which lead to greater participation. Similarly, Carini et al. (2006) found a relationship between student engagement and desirable outcomes like critical thinking skills and grades. Therefore, it is evident that the benefits of high value to a specific population can be strong factors in increased motivation to participate and could prove useful in seeing how more generalized populations remain involved.

## **Marketing Student Involvement**

Since research has supported involvement as beneficial to overall collegiate success (Deneui et al., 2003; Moore et al., 1998; Astin, 1984; Munoz et al., 2016; Vroom, 1965; Carini, et al., 2006), it is important to customize marketing for such events to best practices that could increase participation. Applying research from the field of marketing helps inform strategies to influence consumer behavior. This work illuminates the role of value in marketing, blends consumer psychology principles to explain decision marketing, and analyzes the effectiveness of types of promotional materials.

### ***Influence of Decision-Making***

For convenience, individuals have an innate ability to access mental shortcuts, called heuristics, which are influenced by personal needs and drive behavioral choices (Caverni, Fabre, & Gonzalez, 1990; Matlin & Farmer, 2016; McGuire, 2001; Tversky & Kahneman, 1974). The positivity bias heuristic involves the idea that messages which stress gains instead of benefits are more impactful (McGuire, 2001). Based on this heuristic, marketing promoting the benefits of getting involved instead of stressing the harm of not getting involved are more likely to attract students. Another mental shortcut important to decision making is the availability heuristic. Here, an individual evaluates information based on the availability to recall examples from prior memory (Matlin & Farmer, 2016; Tversky & Kahneman, 1974). Through this heuristic, the effectiveness of marketing materials would rely on its ability to involve information or examples that are available in an undergraduate's experience. The last heuristic that could prove important to creating student involvement marketing is the anchoring and adjustment heuristic. The

anchoring and adjustment heuristic states that decisions are made by beginning with an initial approximation, then making adjustments based on that approximation (Matlin & Farmer, 2016). This heuristic suggests that student involvement marketing may benefit from including more persuasive information that would cause the student to adjust decisions and be more involved.

### ***Expectancy and Value***

In addition to heuristics, marketing research highlights the influence expectancy and value have on consumer behavior. Again, expectancy theory explains that positive or more attractive outcomes increases an individual's motivation to reach it (Munoz et al., 2016; Vroom, 1965). As shown through professional student organizations, the value that was attributed to the benefits of participation proved a strong motivator for continued involvement (Munoz et al., 2016; Carini et al., 2006). According to expectancy models developed by consumer behavior theorists, commitment to goals is influenced by motivation (Behling & Starke, 1973, Shahs & Higgins, 1997). When a goal is seen as aspirational or an accomplishment, expectancy or value has a positive interacting influence. When a goal is seen as a necessity or obligation, the interactive effect actually has a negative relationship (Shahs & Higgins, 1997). Student involvement marketing may benefit from knowledge and use of strong, positively valued pieces of information to entice students to participate.

### ***Types of Promotional Materials***

While content of marketing is essential to increase involvement, the type of marketing also has a strong impact on its effect. In a world today that is shaped by digital

media, a common practice in campus activity promotion is to utilize visual objects and images. However, consumer psychology supports the idea that visual marketing may not be the best approach to having students remember and participate in activities. Rajsic et al. (2017), demonstrated limitations in overall visual working memory. Issues of overcoming partial information and errors brought upon from correspondence to prior knowledge limit one's ability to encode visual information (Rajsic et. al, 2017). Such findings support a potential benefit to utilizing written marketing and recruitment materials over visual sources.

### **Cognition and Student Involvement**

As higher education borrows principles from marketing research (Munoz et al., 2016; Carini et al., 2006), marketing borrows principles from psychological science (McGuire, 2001). Cognitive processes, like memory, have a huge impact on collegiate experience, yet are much less discussed in higher education research. The process with which individuals encode and retrieve information influences how they use this information (Matlin & Farmer, 2016). If higher education practitioners are able to create written marketing material that is more easily remembered, it could prove beneficial to increased involvement.

### ***Encoding Dynamics***

Research demonstrates how certain factors influence the information encoding process (Stefanidi et al., 2017; Overschelde, 2002; Diana & Reder, 2006). Encoding information involves how one processes and represents information in memory for later retrieval and use (Matlin & Farmer, 2016). Word frequency has been investigated using

free recall tasks to determine its effect on memory. Frequency effect, which claims more recall for high-frequency words, has been demonstrated in free recall tests in prior research (Overschelde, 2002; Diana & Reder, 2006). It is thought that frequency effect occurs because low-frequency words actually require more attention to be remembered (Diana & Reder, 2006). Yet, while there has been prior research investigating types of memory dynamics, more work utilizing instruments like free recall is necessary to better understand their effects.

### ***Value-Directed Memory***

Another important dynamic that influences encoding is value. Value, the importance or motivation to remember a word, has been shown in research to have an effect on memory (Stefanidi et al., 2017; Jantz, 2019). Research conducted by Tiffany Jantz (2019) showed that for all lengths of list, the effect of remembering higher valued words remains. This suggests that such an effect is consistent across long-term and working memory (Jantz, 2019). Stefanidi et al. (2017), also demonstrated the value effect and showed higher valued words were remembered more often. Their work suggests participants appear to allocate more attention to remembering high-value words which created more of a reliance on temporal context and allowed for better encoding.

Interestingly, research has also shown the effect divided attention has on remembering high value words. As Stefanidi et al. (2017) suggested, more attention may be required when remembering higher value words. Elliot & Brewer (2019) showed that value directed memory could be part of an executive process and is not the result of rehearsal. When initially testing participants, they also showed a pattern of value effect.

However, when researchers added a simultaneous divided attention task the value effect appeared to be lost (Elliot & Brewer, 2019). Then when replicating the experiment with a different divided attention task, results stayed consistent and value effect was lost (Elliot & Brewer, 2019). Demonstrating the negative impact divided attention could have on encoding could prove useful for decisions regarding marketing materials for student involvement. Perhaps materials that heavily combine two types of information, for example visual and written, could prove harder to recall over solely written materials.

Other research in this area has studied how value-directed encoding changes over the lifespan. Castel et al. (2011), conducted a longitudinal study that looked at the ability and selectivity of high value encoding as one ages. They showed that their younger adults' age group (ages 18-23) had recall reach its peak at this stage and slowly decreased as time progressed (Castel et al., 2011). However, selectivity was actually improved between this age group and the adolescent group before them (Castel et al., 2011). In other words, ability to select and encode words based on value, opposed to complete recall of a list, improved with age and remains somewhat stable post young adulthood. Researchers believed this improvement could be contributed with strategic and metacognitive skills that develop later in life and remain relatively stable with aging (Castel et al., 2011). The development of this skill would supplement memory capacity and could be why higher value is easier to remember unlike complete recall tasks (Castel et al., 2011). This research demonstrates how sensitive this age group, which represents a large percentage of traditional undergraduate students, can be to higher valued words.

Similarly, in self-regulated learning, both younger (18-23) and older adults are more sensitive to the value of a word (Castel et al., 2013). When self-regulated, though,

they spend more time learning the words that are of higher value. Thus, they again recall more high value words. Yet, young adults seem to spend less time learning high value words, so they studied and recalled more words than older adults (Castel et al., 2013). The ability to control the amount of time spent on different valued words proves resourceful for memory. Results show efficient metacognitive control operations in younger adults, which can allow for strategic regulation time spent on remembering information (Castel et al., 2013). Paired with prior research on aging and value directed memory, it is clear value and age have a significant impact on an individual's ability to encode and retrieve information deemed important to them.

## **Conclusion**

As evident by the work of three independent fields of study (marketing, psychology, and higher education), there is much overlap in influence across disciplines in relation to student involvement and collegiate experience. However, as mentioned, few studies have attempted to bridge the gap regarding interaction between these fields. This study will utilize principles in marketing and psychological science to investigate indirect influence on higher education's theories regarding student involvement. The study analyzes a sample of marketing in the form of event descriptions created by a campus activities team to see if attributed value measured through free recall has an effect on remembering the descriptions.

Traditional undergraduate students (ages 18-24) appear to fall into the category of those who are most sensitive to selecting words assigned with a higher value to be encoded and retrieved (Castel et al., 2011). This places this population as an ideal group



to manipulate marketing to account for higher value, so it is remembered more easily. Yet, more work has focused on analyzing students with specific values, like those of professional development organizations, and it is less known how value of a generalized undergraduate population plays a role (Munoz et al., 2016; Carini et al., 2006). Looking through the lens of student involvement and campus activities provides an opportunity to peak the interests of more students, so they attend events or organizations. Therefore, by increasing the involvement of a student, and consistent with prior literature, it is the hope that memory indirectly influences overall student experience.

## **Chapter 3**

### **Methodology**

The purpose of the current investigation is to analyze, through the use of mixed methods, the effect word value has on traditionally aged undergraduate college students. This study utilized principles in marketing and psychological science to investigate indirect influence on higher education's theories regarding student involvement. The study analyzed a sample of marketing in the form of event descriptions created by a campus activities team to see if attributed value measured through free recall has an effect on remembering the descriptions. It then invited a select group of participants to explain through personal accounts their experiences with word value in an attempt to discover differing viewpoints on the overall concept of value. Findings of this study will be applied to propose recommendations to campus activity marketing models used to increase student engagement.

### **Context of the Study**

This study took place at Rowan University during the Spring 2021 semester. Rowan University is a four-year public institution located in Glassboro, New Jersey. In Fall 2020, the university had 15,063 enrolled undergraduate students (Fast Facts, 2020). According to Rowan's Information Resources & Technology department (2020), demographic information of undergraduate students includes: 10,432 White (Non-Hispanic), 1,929 Hispanic, 1,630 African American, and 886 Asian students. The university offers a variety of on-campus events and virtual programming for residents and commuter students. A large portion of this programming is conducted by the

Chamberlain Student Center and Campus Activities (SCCA) department. According to the SCCA 2019-2020 annual report, 51% of the Rowan undergraduate population attended at least one SCCA-sponsored event.

Each semester, the SCCA releases a promotional calendar highlighting weekly initiatives and major campus programs. This calendar includes brief descriptions of each event and important details. It acts as one of the primary forms of marketing for SCCA events. The calendar is distributed to all on-campus residents at the beginning of each new semester. It is also available through the department's Information Desk located in the Chamberlain Student Center and virtually through the SCCA webpage. Such marketing is intended to increase the involvement/engagement of all undergraduates.

### **Research Design Approach**

A convergent mixed methods research design was selected for this for this study. While a more time-consuming process for a researcher, a mixed methods design is complex approach that is useful to have a deeper understanding of research questions and problems (Creswell, 2018; Caruth, 2013; Frels & Onwuegbuzie, 2013). This type of design is a single-phase approach, where researchers collect and analyze quantitative and qualitative data independently and compare results to determine whether they confirm or disconfirm one another (Creswell, 2018). It is assumed that both types of data will provide different information yet, together, yield similar results (Creswell, 2018). According to Venkatesh et al., (2013), one of the seven purposes for a mix methods design is “complementarity.” This purpose involves the research design's ability to obtain common viewpoints about similar or shared experiences and associations (Venkatesh et

al., 2013; Caruth, 2013). Since this study will discuss individual students' viewpoints on the generalized concept of value and how it has been influenced by personal experiences, a mix methods design is appropriate.

To determine the types of quantitative and qualitative designs to implement, the researcher considered the purpose of each designs. In the quantitative approach, correlational research analyzes the degree to which two or more variables are related (Johnson, 2001; McMillian, 2016). This research aims to determine the relationships between these variables and use them to make predictions (Johnson, 2001). As this study sought to investigate value-directed memory and its relationship to racial/ethnic identity to make predictions on its connection to campus activities participation, a non-experimental correlational design was chosen for quantitative data investigation. For qualitative data, researchers sought to determine participant experience with word value and general concept of value. This reasoning led to the utilization of a narrative letter writing approach. This form of writing studies the way individuals experience the world (Connelly & Clandinin, 1990; Pithouse-Morgan et al., 2012). This type of approach engages participants through storytelling and allows for the inclusion of social and cultural constructs (Clandinin, 2006; Connelly & Clandinin, 2006). Narrative letter writing allows for participants to have their voice heard within data (Connelly & Clandinin, 1990; Pithouse-Morgan et al., 2012), so this approach assist in exploring the study's belief that participant identity influences the concept and experience of value.

## Population and Sampling

Research analyzing value on free recall has demonstrated younger adults (ages 18-23) reach a peak level of recall and show an increase in sensitivity and selectivity to word value (Castel et al., 2011; Castel et al., 2013). A stratified random sampling technique was then implemented, which further divided the population into subgroups based on racial/ethnic group affiliation. The subgroups included students who identified as African American, Hispanic, Asian, and White (Non-Hispanic). These subgroups are taken from Rowan University's categorization of the undergraduate community for marketing use (Fast Facts, 2020). Based on this information, the target population for this study was narrowed to 100 traditional Rowan undergraduates. However, per sample size calculations provided by G\* Power (Faul et al., 2007), it was determined that effect size would be 48 participants among the four groups (12 per group). Based on university student demographics provided by Rowan's Information and Technology Resources department, identity groups Native American and Native Islander presented as having under 20 students in each group and were therefore unable to be included as subgroups.

Stratified random sampling is advantageous as it allowed researchers to analyze the effect size of each subgroup separately so between-group differences were more easily shown (Elfil & Negida, 2017). This sampling technique also allowed for a higher probability of samples from minority and under-represented groups, which directly benefitted researcher's subgroups (Elfil & Negida, 2017). Rowan's Information and Technology Resources department provided access to a list of current, traditional undergraduate students from each identifying group. From there, each ethnic group was divided into strata of 300 possible participants. Finally, using an online accessible

random sampling number generator, 25 participants were selected from strata to create the random sample of 100 participants. Participants were recruited via rowan student email and the consent form was sent to them electronically. Following completion of the first step of the study, four students (one selected from each strata based on email response with participant interest) were contacted and asked to participate in a follow up which saw them write letters to the researcher based on pre-provided prompts.

## **Data Collection**

### ***Free Recall Task***

Much of the methods and procedure for the quantitative portion of the study was adapted from prior research in recall (Rohrer & Wixted, 1994; Unsworth, 2008; Unsworth et al., 2010; Stefanidi et al., 2017). Initially adapted from the methodology of Unsworth et al. (2010), participants were presented a word from the 15-item list for one second each and asked to remember it. The list was comprised of 15 commonly used nouns, verbs, or adjectives within the descriptions of the SCCA events calendar over one academic year, which combines two semester programming calendars (Fall 2018 and Spring 2019). Items were selected based on two factors: frequency used in the calendar and part of speech. 10 items within the list were action verbs. Two items were pronouns, two were nouns, and the last word was an adjective. Following the completion of the list, participants were presented with a distractor task. The distractor task was adapted from prior research (Rohrer & Wixted, 1994; Unsworth, 2008; Stefanidi et al., 2017). During the distractor task, a participant was presented with eight three-digit numbers. They were then told to write the digits in descending order (Rohrer & Wixted, 1994; Unsworth,

2008; Stefanidi et al., 2017). This task took approximately 15-30 seconds. Following the task, participants were then given 60 seconds to recall as many words as possible from the original list (Unsworth et al., 2010).

### ***Post-Task Questionnaire***

In the last step of the survey, participants were asked to complete involved word ranking so researchers were able analyze word value. Participants were presented with the complete list of the original 15 items. They were instructed to rank the words according to how important the word was to their life as an undergraduate student. Words were ranked from 1 (most important) to 15 (least important).

### ***Narrative Letter Writing***

Following completion of the first step of data collection, four participants (one from each strata) were contacted and asked to take part in the qualitative phase of collection. Following agreement to participate, these individuals were asked to write letters addressed to the researchers. According to Keats (2009), it is beneficial for the researcher to offer questions or prompts to guide and assist in writing about experience. Here, the researcher provided the following guiding questions for letter writing:

“Using as much detail and as many words as you wish, please write a letter to researchers that addresses the following:

- What do you believe the word ‘value’ means and what experiences have you had with the word ‘value?’

- Your top ranked word from the first part of this study was: (words were provided based on participant response to post-task questionnaire). what does this word mean to you?
- Did any other words in the ranking task stand out to you and why?"

### **Data Analysis**

This study took a side-by-side comparison approach to data analysis. This approach is seen in mixed-methods research, and it involves researchers making comparisons of quantitative and qualitative data simultaneously (Creswell, 2018). Within this approach, quantitative data is reported first, then qualitative findings are discussed through the lens of confirming or disconfirming the quantitative findings (Creswell, 2018).

In terms of the quantitative data, descriptive statistical tests were conducted and provided frequencies, percentages, means, and standard deviations for sample demographics. Similar descriptive statistical tests were applied to analyze the frequency of recall per word and average ranked value of each word. Next, the researcher ran a dependent correlation to assess the relationship between average ranked value of a word to the frequency of recall to the words. A one-way repeated measure analysis of variance (ANOVA) was also conducted on the means of each subgroup to determine possible difference in number of words recalled among the identity groups.

There were two types of coding techniques uses to analyze the qualitative data. The first, In Vivo Coding involves utilizing words or small phrases as codes that are taken directly from the qualitative data (Charmaz, 2006; Corbin & Strauss, 2008; Glaser,



1978; Glaser & Straus, 1967; Saldana, 2009; Strauss 1987; Strauss & Corbin, 1998). This type of coding is useful when trying to highlight the phrases a participant is more likely to use in everyday life as opposed to those found in academic or professional work (Saldana, 2009). The other coding technique that was used to code qualitative data was Values Coding. Here, codes represent an individual's values, attitudes, or beliefs. This should represent the individual's perspectives or worldview (Gable & Wolf, 1993; LeCompte & Preissle, 1993; Saldana, 2009).

### **Ethical Considerations**

Participation in the letter-writing portion was voluntary. As mentioned, the sample was based on the original randomly selected pool of participants. From there, those who participated in the free recall task were able to opt into the letter-writing task. The four letter-writing participants were then selected based on the order then interest emails were sent to the researcher.

## Chapter 4

### Findings

#### Profile of Sample

##### *Free Recall Task*

Participants in this study were randomly selected based on age, undergraduate status, and affiliation with the four main identity groups Rowan University uses to describe the undergraduate community. All participants were between the ages of 20-23, were current Rowan University undergraduate students, and self-identified as one of the following groups: Hispanic, African American/Black, Asian, White (Non-Hispanic). 12 participants completed the free recall task, and four of those 12 completed both the free recall task and the narrative letter writing task. Table 1 reports the sample demographics of all twelve participants. The participants were fairly distributed in terms of gender and identity group. However, majority of these participants were upperclassmen, having reported being either Juniors (41.7%) or Seniors (50%) at Rowan.

**Table 1**

*Sample Demographics (N=12)*

Variable	<i>f</i>	%
Gender		
Male	5	41.70
Female	7	58.30
Class Year		
Freshman	0	0.00
Sophomore	1	8.30
Junior	6	41.70
Senior	5	50.00
To Which Identity Group Do You Most Identify? (Select All That Apply)		
Hispanic	3	25.00
African American/Black	2	16.70
Asian	3	25.00
White (Non-Hispanic)	4	33.30

*Note.* N = 12. Participants were an average age of 21.42 (SD = .996).

### *Narrative Letter Writing*

Following completion of their free recall task, participants were contacted through the email provided in the demographic questionnaire inquiring about possible voluntary participation in the second part of the study. The goal of this sample was to recruit four total participants, one participant per identity group strata. After confirmation of participation, four participants were sent a follow up email that contained the before-mentioned letter writing prompts and included a copy of the ranking task as well as the participant's highest ranked word in reference to prompts two and three. Participants were given one week following the completion of their free recall task to provide the researcher a digital copy of their letters. All four participants were between the ages of 21-23. Three of the four participants were male, and one participant was female. Two participants were seniors at Rowan and the other two participants were in their junior year.

**Sample Biographies.** Below is a short biography of each of the four participants who took part in letter writing. In order to protect the confidentiality of the individuals within this study, all names have been deidentified and will be referred to as Participant 1-4.

- Participant 1 is a 21-year-old male. He is in his senior year at Rowan University and identifies as white (non-Hispanic)
- Participant 2 is a 23-year-old male. He is in his junior year at Rowan University and identifies as African American/Black.
- Participant 3 is a 22-year-old female. She is in her senior year at Rowan University and identifies as Hispanic.

- Participant 4 is a 21-year-old male. He is in his junior year at Rowan University and identifies as Asian.

## **Analysis of the Data**

### ***Research Question 1***

What is the relationship between word value and number of items recalled by undergraduate students at Rowan University?

In order to between understand a relationship between the participant's assigned work value and the frequency of word recall, the Statistical Package for Social Sciences (SPSS) software was utilized to run Pearson's Correlation. Table 1 highlights the accompanying results. No correlation was found between word value and frequency of word recall,  $r = .10$ ,  $p = 0.72$ . Because the sample size in this study was small, results may be impacted. Findings are not generalizable and may not be valid. It is the recommendation of the researcher, that future studies should replicate procedure in order to confirm results.

**Table 2**

*Correlation Between Word Value and Frequency of Word Recall*

	Average Word Value Rank	Frequency of World Recall
Average Word Value Rank	1	0.10
Frequency of Word Recall	0.10	1

### ***Research Question 2***

What is the relationship between identity and recall?

A one-way ANOVA was used to assess differences in number of words recalled based on identity group affiliation. 4.3 shows the results of this test. A one-way ANOVA demonstrated that there was no significant effect for identity on words recalled,  $F_{(3, 8)} = 0.47, p = 0.71$ . As mentioned earlier, the sample size in this study was small, results may be impacted. Findings are not generalizable and may not be valid. It is the recommendation of the researcher, that future studies should replicate procedure in order to confirm results.

### ***Research Question 3***

How do undergraduate students at Rowan University explain what they believe value means in relation to the recall task?

Following completion of the free recall task, participants interested in the second part of the study were given one week to write a letter, addressed to the researcher. Four participants were given the following prompts that were preapproved by Rowan University's IRB:

“Using as much detail and as many words as you wish, please write a letter to researchers that addresses some of the following:

- What do you believe the word ‘value’ means and what experiences have you had with the word ‘value?’
- Your top ranked word from the first part of this study was (INSERT TOP RANKED WORD FROM RANKING TASK). What does this word mean to you?

- Did any other words in the ranking task stand out to you and why?”

Letters were returned electronically via email. The researcher then proceeded to combine the methods of In Vivo Coding (Charmaz, 2006; Corbin & Strauss, 2008; Glaser, 1978; Glaser & Straus, 1967; Saldana, 2009; Strauss 1987; Strauss & Corbin, 1998) in addition to Values Coding (Gable & Wolf, 1993; LeCompte & Preissle, 1993; Saldana, 2009) to uncover similarities and differences in student values. Each letter was coded individually and compared across the four completed letters. Values that emerged among all four letters included: enjoyment, celebration, community, and self. The following sections analyzes data by participant to assess differences among letters and participant value.

**Participant 1.** Participant 1 described an association with experience and value. He explained his belief that value, in his eyes, is measured by what can be gained and how he can be incentivized to participate in an experience to gain value. Participant 1 said for something to be valuable it has to be “worth my while.” He discussed choosing activities, such as an on-campus gameshow, that could result in free money. Such an experience would be considered of value to him because he would “gain something I didn’t have before or would not have access to normally.”

Participant 1’s top rated word was “play.” He defined play as “getting to have fun and interacting with others.” He describes play as “enjoyable” and explained that opportunities that are typically available to him that can also be enjoyed with others (“friends or other students”) are what he considers play. Participant 1 continued to answer the final prompt by saying the word “celebrate” also stood out to him in the ranking task.

He discussed enjoying celebrating concepts like parties or family as well as celebrating “different cultures, ideas, people, etc. ... especially when it’s done creatively.”

**Participant 2.** Participant 2 defined value as what he can “offer to give to someone or to something.” He explained that in his undergraduate major, Journalism, he is often faced with the question “What value can you give to your job, and/or organization?” An alternative definition he provided for value was “that you need and should value YOURSELF before you are ever able to do something for others.” He went on to discuss self-value explaining “You need to be confident in everything you do, so that you know when it is time to display your ‘value’ there is no doubt in who you are or what you bring to the table.”

Participant 2’s top ranked word from the task was “enjoy.” To him, enjoy meant “to take advantage of everything that makes you happy.” He expresses feelings of enjoyment in “the little things,” because of the fragile nature of life and how quick it can be altered. He then expresses the “need to be able to enjoy yourself in life.” Like Participant 1, Participant 2 also chose “celebrate” as another word that stood out to him during the ranking task. He felt it stuck out because he believed that “people tend to look at only the negatives...but not the good.” He expressed that because of negative views on life and self, individuals “search for validation and ‘celebration’ from others.” He ends his letter by encouraging people to “celebrate the good you do in your life because it is all about a balance.”

**Participant 3.** Participant 3 defined value as “a person or community’s collection of morals and things that they deem important.” She described personal experiences with



the concept of value in terms of customer service. She used an example of company values that align with mission in an effort to satisfy their customers. She then connected this with her experiences with Rowan University. She believes that Rowan is “always striving to uphold their community values and to implement them in all areas.”

Participant 3’s top ranked word from the task was “create.” She explained that “being creative is necessary to be able enjoy whatever it is that you do, whether that be your job or your schoolwork or anything in life.” She went on to explain that she believes people often do not recognize personal creativity despite the fact “we are constantly creating new ways to make ourselves happier, or more comfortable, or better challenged.” Another word that stood out to Participant 3 in the ranking task was “join.” This was not a high-ranking word in her task, however, she felt it had importance in describing community. She explained that events on campus foster community and the word join is a catalyst to invite in new individuals. She believed join is a “small, often looked-over word,” but whose presence can be seen throughout campus. The inclusion of the word “allows people to feel welcome, and even worthy of going to and enjoying whatever event they are asking you to join.”

**Participant 4.** Participant 4 explained that when “an individual bestows a value to a subject, then that subject remains tautly attached to the individual.” Subjects that are deemed valuable by a person will then be held in “the highest regard” and therefore be prioritized “over everything else.” He explained that he believed a person values what they lack. He then gave a handful of examples to elaborate on this belief. For example, he explained, “an individual in despair will value hope; an individual far away from their home will value family or to make it simpler, students stressed by academics will value

enjoyment.” Along with denoting value to any area that is lacking, he explains that value is connected to “attraction” and this attraction will also result in someone prioritizing the concept they find attractive. Using a more personal example, Participant 4 explained he viewed music as valuable so if he sees anything that is related to or including music it is sure to hold his attention.

Like Participants 1 and 2, Participant 4 also felt the word “celebrate” stood out to him in the ranking task. He explained that it elicited “the sense of togetherness, enjoyment and something that drives away prejudice.” To him, “Celebrating always brings forth the idea of positivity among any social group and if the participants of that celebration focus entirely on love and positivity, then each individual feel that they are accepted and have a place to belong at that interval of time.” Another word that stood out to him in the ranking task was “free.” He described the “sheer joy” he feels for getting anything for free, especially as a student.” He continued by explaining that because money is such an important concept in society, the word free “holds a lot of strength,” as it provided unique feelings of happiness. The following sections continue analyzing letters by emergent values to assess commonalities in participant views.

**Enjoyment/Happiness.** The first value that emerged from the students’ letters was enjoyment or happiness. Participant 2 was direct in his recommendation to find enjoyment in life. He describes how important it is for an individual to find happiness in “the little things,” and enjoy each day because life is so “fragile.” Many of the participants explained a similar sense of pleasure or enjoyment associated with things they valued. Participant 1 discussed this feeling of enjoyment when celebrating those around him, whether family or friends. Participant 3 talked about how organization can

utilize value to provide positive experience to consumers. She connects this utilization of value to Rowan and how important it has been to her enjoying Rowan and the community it offers. She also explained how, like Participant 2, people should “enjoy whatever it is that [they] do.” She believes that creativity, one of her higher rated words, is a necessary key to finding this sense of enjoyment. This echoed Participant 1’s finding enjoyment in “creatively” celebrating other groups.

**Celebration.** Another value that was common among participants was celebration. Three out of four participants mentioned “celebrate” as a second important word to them from the ranking task. All three of these participants talked about the positive effects that result from celebration of oneself or others. Participant 1 pointed out how he valued “celebrating different cultures, ideas, [and] people.” Participant 4 also discussed the importance of celebrating others. He explained how he felt it caused a “sense of togetherness, enjoyment, and something that drives away prejudice.” Similarly, to the shared enjoyment value, celebration brings forth an intangible feeling of positivity and some participants were able to share that such a space creates the opportunity for someone to feel included or accepted.

**Community.** The sense of community was another value that emerged throughout the letters. Some participants described the idea of creating community for others. Participant 4’s thoughts about celebration reflect building a place where people belong and feel a “sense of togetherness.” Participant 3 alluded to the importance in campus community building. She described the importance of encouraging students to join events and activities so that they may foster a community while on campus. Like Participant 3, she also describes the feelings of community, and explained how it would

make someone feel “welcome,” and “worthy.” On the other hand, Participant 1 details how he creates a personal community through interactions with others at events. It is clearly an important concept to him. He also referred to connecting with other communities through celebration by highlighting “different cultures, ideas, and people.”

**Self.** All of the participants at some point in their letters attributed value to have a direct importance or benefit to themselves. Participant 1 demonstrated this in his reflection of value being something that had to be “worth [his] while.” He would need to find some sort of incentive or benefit in order for him to find something valuable and worthy of his participation. He explained this in terms of monetary gain, however, also explored how positive interactions with those he cares about result in a gain. Participant 4 also touched upon the idea of self-benefit when he discussed the importance of the word “free.” Because money holds such strength in society, he believed gaining or having money directly benefited his personal value. Self-value was a major theme of participant 2’s letter. He encouraged people to celebrate “the good that you do,” and explained that one must put self-value first. He felt as if you need to value yourself before you can offer value to others.

## Chapter 5

### Summary, Discussion, and Recommendations

#### Summary of the Study

This research examined the possible influence value-directed memory could have on a campus's ability to market their activities. One of the goals of the study was to demonstrate a relationship between a student's ability to remember a word and how much they value the word. Prior, this connection was demonstrated in psychological science research (Stefanidi et al., 2017; Jantz, 2019) but has not been explored in the context of how the phenomenon could be employed intentionally to benefit the success of marketing for campus activities. This thesis also sought to explore how current undergraduate students defined value and how their personal identities could influence their ability to remember and how sensitive they are to value. It sought to add to existing psychological science research, while also closing the gap between three different fields: psychological science, higher education, and marketing.

This thesis applied a convergent mixed methodology, combining techniques of free recall memory tasks and narrative letter writing. Based on the four categories for racial/ethnic identity Rowan University uses to describe the campus community, participants were split into four strata. The four strata were: Hispanic, African American/Black, Asian, White (Non-Hispanic). 12 students participated in the first portion of this study involving a free recall memory task and word value ranking task. Four of those students (one from each strata) went on to participate in the narrative letter writing portion of the study that explored the concept of value. SPSS was used to determine demographic statistics as well as run Pearson's Correlation and ANOVA tests

on the free recall and word ranking tasks. Narrative letters were analyzed through In Vivo and Values Coding to explore what a student believed value was and uncovered emergent values.

## **Discussion of the Findings**

### ***Research Question 1***

What is the relationship between word value and number of items recalled by undergraduate students at Rowan University?

No significant relationship between word value and frequency was found in this study. Value-directed memory has been demonstrated in previous research (Castel et al., 2011; Elliot & Brewer, 2019; Jantz, 2019; Stefanidi et al., 2017); however, in this study this was not salient. Findings from this study can contribute to future research across different campuses.

### ***Research Question 2***

What is the relationship between identity and recall?

There were no significant differences in the number of words recalled based on a participant's affiliation with a specific identity group. It has already been demonstrated that specific demographic characteristics such as age are more sensitive to value (Castel et al., 2011), but identity-based characteristics like racial/ethnic identity has been much less explored. Despite this study's inability to demonstrate a correlation between the two variables, future researchers could consider the relationship between identity and recall.

### ***Research Question 3***

How do undergraduate students at Rowan University explain what they believe value means in relation to the recall task?

Analysis of personal definitions and experiences with value and valuable concepts highlighted common importance among these four participants in their life as undergraduate students. Emergent values from the letters included: enjoyment/happiness, celebration, community, and self.

The emergent value, self, demonstrated much support for the Munoz et al. (2016) and Vroom (1965) with expectancy theory and experiential learning theory. At least once in all the participant letter value was attributed with a direct importance or benefit to themselves. To these participants, value is connected with incentive. Munoz et al. (2016) demonstrates increased reward led to increased participation, so it makes sense for marketers to highlight potential gains when describing activities. Participant 1's letter specifically describes choosing experiences that allow him to "gain something [he] didn't have before or would not have access to normally." Participant 4 also discusses gain in terms of money as he explains that because of its strength in society, he believed gaining or having money is a direct personal benefit and influences value. Tangible benefit was not the only type of gain discussed in the letters that aligns with expectancy and experiential learning theory. Increased self-worth was a major theme of participant 2's letter. He encouraged people to celebrate "the good that you do," and explained that one must gain self-worth in order to offer values later. Therefore, highlighting both tangible and experiential gain could have benefit in describing campus activities to students.

Quantitative techniques yielded no significant results. However, because of preexisting research and based on these findings, there are still recommendations can be made to campus marketers in regard to the intention use of value. Exploration of value proved successful in producing a snapshot of what is important to current students. After analysis of the emergent values, it appears that students seem to be missing what campuses often provided them prior to the pandemic. It would be wise for campus marketers to target efforts to highlight some of these concepts, like community building or celebration as it may appear more attractive and memorable to a student.

The limited significant quantitative findings from this thesis also open a door for future directions of research. There was no significant difference in word recall among identity. Therefore, it would be beneficial to test the difference between groups regarding word ranked value to explore how identity can influence value. As research has shown, values change over time (Park et al., 2016) so it would also be interesting to see this study replicated at a later time or even modified into a longitudinal study to follow the evolution of value in a student as they experience undergrad.

### **Recommendations for Practice**

The following are proposed recommendations for practice based on the findings of this study:

1. Engage in continued formal assessment on campus climate, such as surveying the campus population to learn more about specific values they hold.
2. Explore ways to promote or highlight community building within campus activities.



3. Engage in verbal or virtual conversation with current students to understand what is important to them and design programs and marketing based on those concepts.

### **Recommendations for Further Research**

The following are proposed recommendations for further research based on the findings of this study:

1. Test for significant difference in ranked word value among identity groups.
2. Possible qualitative follow-up with letter writers to explore more regarding the prioritization of values and its potential relation to the pandemic.
3. Replicate this study in another semester to obtain more participants to reevaluate relationship between recall and value.
4. Continue this study as longitudinal research and follow students through undergraduate to evaluate how values evolve from freshman year to senior year.
5. Retest students post COVID-19 pandemic to assess how values have changed following national crisis.

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## Appendix A

### Institutional Review Board Approval



DHHS Federal Wide Assurance Identifier: FWA00007111

IRB Chair Person: Dr. Ane Johnson

IRB Director:

Effective Date: January 11, 2021

#### Notice of Approval - Initial

Study ID: PRO-2020-243

Title: The Value in Marketing: The Influence of Memory on Marketing Campus Activities

Principal Investigator: Raquel Wright-Mair

Study Coordinator: Melissa Banuelos

Submission Type: Initial

Submission Status: Approved

Approval Date: January 11, 2021

Expiration Date: January 10, 2022

Approval Cycle: 12 months

Continuation Review Required: Yes - Progress Report

Review Type: Expedited

Expedited Category: 6. Collection of data from voice, video, digital, or image recordings made for research purposes.

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Subjects: 100

Pregnancy Code: N/A

Pediatric/Minor Code: N/A

Prisoner Code: N/A

Protocol: [Banuelos\\_ValueinMarketingProtocol.docx](#)

Recruitment Materials: [Banuelos\\_ValueRecruitmentEmail.docx](#)

Study Instruments: [Banuelos\\_InitialTaskDemographicQuestionnaire.pdf](#), [Banuelos\\_ValuePostTaskQuestionnaire.pdf](#),

**Study Performance Sites:**

Rowan University, 201 Mullica Hill Road, Glassboro, NJ 08028

**ALL APPROVED INVESTIGATOR(S) MUST COMPLY WITH THE FOLLOWING:**

1. Conduct the research in accordance with the protocol, applicable laws and regulations, and the principles of research ethics as set forth in the Belmont Report.
- 2a. Continuing Review: Approval is valid until the protocol expiration date shown above. To avoid lapses in approval, submit a continuation application at least eight weeks before the study expiration date.
- 2b. Progress Report: Approval is valid until the protocol expiration date shown above. To avoid lapses, an annual progress report is required at least 21 days prior to the expiration date.
3. Expiration of IRB Approval: If IRB approval expires, effective the date of expiration and until the continuing review approval is issued: All research activities must stop unless the IRB finds that it is in the best interest of individual subjects to continue. (This determination shall be based on a separate written request from the PI to the IRB.) No new subjects may be enrolled and no samples/charts/surveys may be collected, reviewed, and/or analyzed.
4. Amendments/Modifications/Revisions: If you wish to change any aspect of this study after the approval date mentioned in this letter, including but not limited to, study procedures, consent form(s), investigators, advertisements, the protocol document, investigator drug brochure, or accrual goals, you are required to obtain IRB review and approval prior to implementation of these changes unless necessary to eliminate apparent immediate hazards to subjects. This policy is also applicable to progress reports.
5. Unanticipated Problems: Unanticipated problems involving risk to subjects or others must be reported to the IRB Office (45 CFR 46, 21 CFR 312, 812) as required, in the appropriate time as specified in the attachment online at: <https://research.rowan.edu/officeofresearch/compliance/irb/index.html>
6. Protocol Deviations and Violations: Deviations from/violations of the approved study protocol must be reported to the IRB Office (45 CFR 46, 21 CFR 312, 812) as required, in the appropriate time as specified in the attachment online at: <https://research.rowan.edu/officeofresearch/compliance/irb/index.html>
7. Consent/Assent: The IRB has reviewed and approved the consent and/or assent process, waiver and/or alteration described in this protocol as required by 45 CFR 46 and 21 CFR 50, 56, (if FDA regulated research). Only the versions of the documents included in the approved process may be used to document informed consent and/or assent of study subjects; each subject must receive a copy of the approved form(s); and a copy of each signed form must be filed in a secure place in the subject's medical/patient/research record.
8. Completion of Study: Notify the IRB when your study has been completed or stopped for any reason. Neither study closure by the sponsor nor the investigator removes the obligation for submission of timely continuing review application, progress report or final report.
9. The Investigator(s) did not participate in the review, discussion, or vote of this protocol.
10. Letter Comments: There are no additional comments.

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## Appendix B

### Demographic Questionnaire

1. Age: \_\_\_\_\_
2. Class Year: \_\_\_\_\_
3. To Which Gender Do You Most Identify:
  - Female
  - Male
  - Transgender Female
  - Transgender Male
  - Gender Variant/Gender Non-Conforming
  - Not Listed
  - Prefer Not to Answer
4. To Which Group Do You Most Identify? (Select all that apply)
  - Hispanic
  - African American
  - Asian
  - White (non-Hispanic)
5. Email: \_\_\_\_\_

## Appendix C

### Word Ranking Task

**Directions:** Please rank the following words based on how important they are to you in your life as an undergraduate student. Use 1 as *most important* and 15 as *least important*.

\_\_\_\_ Make

\_\_\_\_ Celebrate

\_\_\_\_ Come

\_\_\_\_ Enjoy

\_\_\_\_ Food

\_\_\_\_ Learn

\_\_\_\_ Free

\_\_\_\_ Create

\_\_\_\_ Play

\_\_\_\_ More

\_\_\_\_ Join

\_\_\_\_ Your

\_\_\_\_ Include

\_\_\_\_ You

\_\_\_\_ Prize