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**UNSEEN, UNHEARD, UNKNOWN: UNCOVERING CAMPUS ENVIRONMENT  
MESSAGING FOR STUDENTS WITH DISABILITIES**

by

Cassandra Maria Colfer

A Thesis

Submitted to the  
Department of Education 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 12, 2021

Thesis Chair: Raquel Wright- Mair, Ph.D.

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## Dedications

This thesis is dedicated to my husband who was by my side through it all. Always supporting me and my dreams and reminding me that I can achieve anything I put my mind to. I would not be here today if it was not for your love and support.

## Acknowledgments

I would like to start by saying thank you to my friends and family for their support these last past two years. It has been a tough journey and I am glad to have had all of you by my side. I would also like to acknowledge my fellow graduate students who were on this journey with me. I will never forget our moments together and how you reminded me daily of the importance our work does. You all will be amazing professionals one day.

To the participants, thank you for participating in this important study and sharing your perspective with all of us. Thank you for allowing me to learn more about your population and your community.

To my thesis chair, Dr. Raquel Wright Mair I truly appreciate your guidance and support throughout this process. I cannot thank you enough.

To Joe Lizza, thank you for our weekly meetings and encouraging me to continue my career in Higher Education. Your advice was crucial to my success in this program.

## Abstract

Cassandra Maria Colfer  
UNSEEN, UNHEARD, UNKNOWN: UNCOVERING CAMPUS ENVIRONMENT  
MESSAGING FOR STUDENTS WITH DISABILITIES  
2020-2021  
Raquel Wright-Mair, Ph.D.  
Master of Arts in Higher Education

While there is research detailing the perceptions of the campus environment and their implications on student development, there is limited research that looks at the perceptions of students with disabilities. The purpose of this qualitative study was to understand what the perceptions of students with disabilities were of Rowan University's campus environment. This study was completed through semi-structured interviews of students with disabilities which included questioning as well as photo elicitation.

Following the collection data, a thematic analysis was conducted.

In order to better understand the answer to this question, four themes were created out of a thematic analysis of coded participant interview data. These themes were, in order of determined importance to students with disabilities: a) design of structures, b) a sense of community, c) relationship with authority, and d) natural settings. These findings support the claim that students with disabilities expect their campus environments to provide safety and comfort, but have a different experience

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## Chapter I

### Introduction

Over the course of their lifetime everyone has the decision to make of whether or not they will attend college. Those who choose to attend college later find out the array of different colleges/universities they have to choose from. Even though their choices are endless, they may end up picking the college/university on the basis of whether it suits their needs such as a major or program or whether they feel more comfortable within the environment. The most interaction they may have with the university before attending, unless they have personal ties, would be college tours. This is why perception of an environment is important for any college or university. It could dictate whether a student will be going to that university or not. But it could also affect if a student stays. Students on a college campus may perceive different aspects of their campus differently, because perception is individualized. This affects colleges because prospective students may have differing opinions on the same space. They could want it to look or feel one way compared to another student. Colleges have the challenge of ensuring their environment feels welcoming to all students that attend. This is why research has been done about the importance of campus ecology which focuses on the interactions students have with their environment while attending college (Renn & Patton, 2011; Bronfenbrenner, 1979; Cabrera et al., 2016).

Deliberately or not, institutions constantly send out messaging within their environments that has a direct effect on individuals within those environments (Banning & Bartels, 1997; Hormuth, 1990; Kuh & Whitt, 1988; Whitt, 1993). This messaging can

be through direct verbal communication, or a result of the way people interpret the artifacts within the environment around them (Banning & Bartels, 1997; Adler & Towne, 1987; Rapoport, 1982). Given the fact that this messaging is interpreted from the environment, it can change from person to person. One group that receives different messaging from their campus environment are those with disabilities. Their personal circumstances and the way that they have to interact with their environment leads to their differing interpretation of these messages. This can lead to challenges specific to this population that may hamper the ability of students to learn, develop, and succeed at their institution.

### **Statement of the Problem**

While research exists on the effects a campus environment has on students (Banning & Bartels, 1997), there are gaps in literature in relation to the effects on the individual student or specific student groups (Vaccaro & Kimball, 2019; Peña, 2014). There is limited research done to see the ways that institutional messaging, often put forth through aspects of the physical campus environment, is received and how it makes individuals feel. This is especially true with regards to students with disabilities. Research that centers on students with disabilities and focuses on the impacts of institutional messaging on them, especially as it relates to their perceptions of the overall campus climate, is crucial as the powerful perspectives of this unique student population would enable higher education stakeholders to better understand and serve.

## **Significance of the Problem**

Students with disabilities are a growing population within higher education (Myers et al., 2013). Research on this population has increased concurrently, however, this research is far from complete or being well rounded (Myers et al., 2013). Specifically, the research conducted focuses solely on resources that those with disabilities need and the discrimination that they may face. Research into how campus environments are constructed is needed in order to better serve people with disabilities. This study will also serve to highlight the population of students with disabilities who are frequently overlooked, opening the door for their voices to be heard in future research.

## **Purpose of the Study**

This study aims to analyze students with disabilities' perceptions of campus messaging and examine the impact this messaging has on them. Part of this will be to bring awareness to the different kinds of disabilities, rather than just thinking about the visually obvious physical disabilities many think of first. This includes more awareness of neurodiversity. This is a philosophy that views those with neurological disabilities as just another layer of diversity (Cascio, 2012; Kapp et al., 2013). This means that they are not seeking cures for their disabilities, they are only seeking to be accepted for who they are (Cascio, 2012; Kapp et al., 2013). For example, this research can uncover how messaging affects individuals with varying disabilities. It is necessary to bring awareness to all of these individuals and understand their perspectives to better serve them.

This study will focus on Rowan University and the effect their messaging has on students with disabilities. Specifically, using photo elicitation to show certain artifacts

within buildings on campus to determine what this built environment is saying to those with disabilities. The study will examine the specific reactions of participating students with disabilities to these campus artifacts. This could be as simple as an emotion that they connect with this artifact, or as complex as a feeling of discrimination that needs to be fully realized. It is also important to contextualize the analyses within the idea of campus ecology. Assessing it this way will lead to a greater understanding of strategies that can be used within the campus ecology and environment to ensure institutional messaging is for everyone.

### **Assumptions**

This study assumes that people with disabilities will have different feelings about and towards their environments. This study also assumes that those with disabilities will have different perspectives as well as different interpretations of their environments based on their individual lived experiences.

### **Operational Definition of Important Terms**

1. People with disabilities: People with physical, social, or mental conditions that limit them in some way, be it through their senses or actions (Myers et al., 2013)
2. Equity: fairness and impartiality (Dictionary, n.d.)
3. Ecology: The study of the relationships and interactions between multiple organisms as well as organisms and their environment (Banning, 1978)
4. ADA: The Americans with Disabilities Act of 1990. It is a law that prevents discrimination based upon whether or not someone is disabled (Myers et al., 2013).

5. Artifacts: These can be any physical objects in one's environment (Banning, 2008).
6. Messaging: Communication that is either deliberate or coincidental that then can have an impact of individuals (Banning, 2008).
  - a. Belonging: Messages of belonging evoke the feeling that an individual is an accepted part of a group (Banning, 2008).
  - b. Safety: Messages about safety often show up in ways that make people feel unsafe (Banning, 2008).
  - c. Equality: Messages of equality are often shown by placing men superior to women (Banning, 2008).
  - d. Role: Messaging of roles tends to be stereotypical, oftentimes regarding gender roles and careers (Banning, 2008).

### **Research Question**

The following research question guides this study: How do students with disabilities perceive Rowan University's campus environment?

## Chapter II

### Literature Review

Campus ecology is a topic that is utilized to describe the ways in which students in higher education interact with everything around them (Renn & Patton, 2011; Bronfenbrenner, 1979; Banning, 1978). Students are attending higher education institutions to further develop themselves, however that does not necessarily capture the whole picture. While the central goal can be development, be it academic, social, or professional, students must be properly set up with other goals in mind. In order to achieve this, students must meet other criteria that starts with a feeling of connection to their environment. This comes through institutional programs, classes, and social gatherings. If a student is able to achieve this then they will be better equipped to develop themselves. Achieving this connection within a campus environment comes more easily to some than others. Student perception of the environment plays a key role in this, but so too does the environment itself. The environment must be constructed to include everyone. One could argue that those students that need more from their environment will have a tougher time finding acceptance. One such group that needs more are those with disabilities. This thought process illustrates the need to analyze the impact of campus environments on those with disabilities. Research must be done to see if this logical thought process is true or if those with disabilities do not experience campus environments any differently. The following review of existing literature will analyze campus ecology and its impact on students with disabilities.

## **Campus Ecology**

The origins for campus ecology are rooted in the study of human ecology which looks at interactions between a person and their environment (Renn & Patton, 2011; Bronfenbrenner, 1979; Cabrera et al., 2016). In the 1970s, Bronfenbrenner (1979) saw the lack of research developed within the psychological aspects of human ecology, and developed the ecological system theory. This theory filled in the gaps between human ecology and human development by focusing on human development as interactions between individuals and their environment (Renn & Patton, 2011; Cabrera et al., 2016). The model analyzes five interrelated systems which include: microsystem, mesosystem, exosystem, macrosystem, and chronosystem (Bronfenbrenner, 1979). Each system is a representation of environments humans will come into contact with and interact with throughout their lives. The easy application of this theory allows it to be used in many different environments, which is why this theory became the catalyst for research in the area of campus ecology.

## **The Campus Environment**

Campus ecology applies principles of human development to campus environments while also distinguishing between physical and social environments. Banning and Kaiser (1974) discussed three crucial perspectives that characterize the ways that different students will interact with a campus environment (Strange & Banning, 2001). They detail different types of students that may not be suited for the college environment as well as other students that need more help with transitioning. Overall, it is important to recognize where students fall to be able to get them the proper assistance



they need to succeed. However, these frameworks are based around the students only, which leave institutions themselves out of the equation even though they must also be considered in this relationship. These institutions have campus environments that have both a social and a physical part. Both of these fall under each individual's microsystem, as described in Bronfenbrenner's book called *The Ecology of Human Development: Experiments by Nature and Design* (1979), which is a system they will interact with directly. The social environment is considered to be the group of interactions between students, groups, faculty, staff and other members of the campus environment. While the physical environment is the tangible surroundings of the students with which they interact.

### ***Social Environment***

Much research has been done regarding the impact of campus environments on student growth and development (Myers et al., 2013). Some examples of that would be marginality and mattering theory (Schlossberg, 1989), student involvement theory (Astin, 1999), and the student integration model (Tinto, 1993). Each of these theories look at environments as social constructs. For example, mattering and marginality focuses on the relationship between these concepts to the campus environment and how they choose to react. If a student feels like they matter they will believe that they are important to others increasing their participation on campus. If they lack this feeling then they will, in turn, feel marginalized, separate from the environment, isolate, and in turn refuse to integrate into the environment.

Student Involvement theory emphasizes that students will have a higher likelihood of success in college when they are more involved in the campus community (Astin, 1999). It demonstrates how they will have a higher sense of belonging and commitment if they have become more involved which leads to their increased commitment (Astin, 1999). Tinto (1993) argued the importance of integration into the social and academic areas of a university which can lead to retention. In order for a campus environment to succeed within transition theory, it must be able to provide impactful resources to their students (Moos, 1986). These theories all demonstrate the importance of cultivating the proper social environment to set students up for success. However, success will only truly be achieved if both the social and physical environments are optimized.

### ***Physical Environment***

Campus environments have the unique ability to be able to impact students' lives during their time at the institution (Sturner, 1973; Thelin & Yankovich, 1987). The influence that these institutions have on student behavior can be immense which is why arranging these environments properly is of the utmost importance (Moos, 1986). From layouts (Griffith, 1994; Boyer, 1987) to weather (Stern, 1986), research looks into different ways the campus environment can be impacted and how those are perceived by students. This point is emphasized by a quote made by Winston Churchill that read “We shape our buildings; thereafter they shape us” (Strange & Banning, 2001). Based on that quote one could infer that space is more than just a tangible thing. Instead, it allows for interactions between itself and students. One aspect of the built environment researched in great deal

is the concept of messaging. This comes in a variety of forms from deliberate verbal communications to the non-verbal ways the environment is constructed.

### **The Equity Climate Framework**

The goal of any university is to promote equity among all students within an environment. This is why Banning and Bartels (1997) presented a conceptual framework plan of assessing the communication of multiculturalism within physical artifacts on campuses. This framework was later updated in 2008 by Banning et al. (2008) to take into account different research that came out after the initial framework. The updated framework argued four dimensions, similar to the one made in 1997, including (Banning et al., 2008):

1. Type of Physical Artifact
2. Equity Parameters
3. Content of the Message
4. Equity Approach Level

Each of these dimensions allow an easy approach to analyze and assess physical artifacts found in a campus environment. The first dimension looks at the type of artifact including art, signs, graffiti, and architecture (Banning & Bartel, 1997; Banning, 1997; Banning et al., 2008; Johnson, 1980). The second dimension identifies different groups that interact with campus environments related to equity (Banning et al., 2008; Peterson & Spencer, 1990; Ziesel, 1975). This dimension includes gender, race, ethnicity, religion, sexual orientation, and physical (Banning et al., 2008). The third dimension discusses the different messages that students receive from artifacts which include: belonging, safety,

equality, and roles (Banning et al., 2008; Johnson, 1980). The last dimension is the equity approach level which deals with addressing issues of equity (Banning et al., 2008).

Within this area there are 4 sections: negative, null, contribution/additive, and transformational/social action (Banning et al., 2008; Banks, 1999; Freeman, 1979; Betz, 1989; McIntosh, 1988). The versatility of this model is evident in the application of different equity groups. Its versatility allows for the creation of both physical and social change that could positively impact people with disabilities.

### **Individuals with Disabilities**

To fully understand the inequity individuals with disabilities have faced, we must understand the history of discrimination within this group. In history it is clear that individuals with disabilities were treated differently and unfairly based on their disability (Myers et al., 2013; Griffon & McClintock, 1997; Linton, 1998). From the moral model which labeled them as misfits (Mackelprang & Salsgiver, 1999) and the medical model which labeled them as “needing a cure” (Hughes, 2002; Michalko, 2002; Fine & Ash, 2000), it is easy to identify some of the attitudes society has had regarding people with disabilities.

In *Allies of Inclusion*, it is mentioned that the attitudes of society demonstrate towards people with disabilities are worse than the disabilities themselves (Myers et al., 2013; Kalivoda, 2009; Castenda & Peters, 2000; Connor & Baglieri, 2009; Chard & Couch, 1998). This idea reigns true when looking at research about ableism, the discrimination of people with disability, or the functional limitation model (Myers et al., 2013). This model considers people with disabilities needing rehabilitation or to get

“fixed” (Hahn, 1991). Both of these imply that students with disabilities are deemed lower than able individuals (Hahn, 1991; Longmore, 2003; Fine & Ash, 1988). These attitudes, whether positive or negative, impact all students with disabilities regardless of their specific disability. This demonstrates the importance of watching out for specific messaging that artifacts can convey to those with disabilities.

### ***Cultivating Spaces***

Within Higher Education, as mentioned above, we should be cultivating inclusive spaces by ensuring that specific people, such as those with disabilities, feel as though they matter to the institution. The Americans with Disabilities Act of the 1990s (ADA) was created as a push for renovations and improvements to campus environments (Myers et al., 2013). However, even though the ADA was imperative to the equity movement for people with disabilities, it has some limitations. The most relevant ADA limitation is the impact of culture on campuses around the world. Campus environments as mentioned above have the ability to send messages to students of all different backgrounds including people with disabilities, which may deter a student from a space or affect a student’s comfort level within those spaces.

### ***Benefits***

The overall benefit of the equity climate framework is its ability to allow equal representation across the board. Regarding messaging from physical artifacts, all underrepresented groups within the campus environment must be represented. This framework allows for assessment of campus environments to ensure that they are properly promoting positivity throughout campus through four key messages: belonging,

safety, equality, and roles (Banning et al., 2008; Banning & Bartels, 1997). Within the population of people with disabilities it is important to make sure that not only are the buildings accessible for this population, but also proper respect is shown for the individuals. This includes proper respect within every aspect of a campus environment from layouts and advertisements to art. Applying this model to any campus environment will allow for more opportunities to assess spaces and to open discussions of possible inclusivity.

### **Summary of Literature Review**

Throughout this literature review, campus ecology has been thoroughly researched and provides solid support for application through the lens of students with disability. Breaking down campus environments lead to the exhibition of this link, specifically how an environment can be constructed in ways that communicate to individuals. Institutions must recognize this and work to ensure their messaging, both verbal and non-verbal are inclusive to all. People with disabilities are a growing population that need to be further researched in order to understand them more accurately. After a thorough literature search and analysis, there is currently a gap in research that has been established. More research must be done on how campus environments affect those individuals with disabilities. This study will analyze the institutional messaging in campus environments to determine their effect on people with disabilities.

## **Chapter III**

### **Methodology**

Qualitative methods were utilized in this study in order to begin exploring the impact that messaging can have on students' perceptions of campus environments (Creswell & Creswell, 2018). Specifically, to gather information about the messaging that students with disabilities receive from their campus environment. Within these methods, we were able to collect more in-depth opinions regarding messaging from our participants, which would have been more restricted within a quantitative study (Creswell & Creswell, 2018). Those in-depth answers only came as a result of focusing on one case, Rowan University. Case studies look to draw conclusions about a particular topic by looking at one example. In this instance, the case to be analyzed is Rowan University (Creswell & Creswell, 2018). This study looks to draw conclusions about the perceptions of students with disabilities about their campus environments.

### **Research Question**

How do students with disabilities perceive Rowan University's campus environment?

### **Population and Sampling**

Conducted at Rowan University, this study seeks to fill the knowledge gap regarding students with disabilities' perceptions of their campus environment. With a population of 15,963 undergraduate students, Rowan University is a four-year public institution, which was originally built within the borough of Glassboro in 1923 (Office of

the President, n.d.). The original name of the university was Glassboro State College, but by receiving a donation from Henry Rowan of 100 million dollars in 1992, it created what is now known as Rowan University (Rowan University, n.d.a). As the 4th fastest growing research university for the second year in the U.S., Rowan continues to elevate itself within the research sector (University Research, n.d.a). With a current undergraduate population consisting of 886 Asian, 1630 African American, 1929 Hispanic, and 10432 White (Rowan University, 2020). The rest of the population consists of American Indian, International, Native Hawaiian, race and ethnicity unknown, and two or more races (Rowan University, 2020).

With the underrepresented student population increasing every year, universities are making the decision to start funding areas that will allow more support and easier distribution of resources for specific populations. One example of that would be Rowan University's Office of Disability Resources which provides resources to individuals with an array of disabilities. This office currently has 2,600 students registered for accommodations as of spring 2020 (J. Woodruff, personal communication, October 21, 2020). They help students with disabilities ranging from food accommodations to physical disabilities, as well as the neurodiverse population. The overall purpose of the Office of Disability Resources is to assist these students in their transition into college, in addition to helping them build their networks and achieve their academic and career goals (Rowan University, n.d.). The resources that this office utilizes are specific to each student and their needs to achieve success during their time at Rowan.

By utilizing purposeful sampling, we were able to ensure that our results are reflective of the students with disabilities population on Rowan University's main campus



(Creswell & Creswell, 2018). Our study population consists of undergraduate students registered with the Office of Disability Resources at Rowan University and this includes all regardless of age, sex, gender, race, ethnicity, class rank, and type of disability. This student population was chosen because of the interest in providing more information on how these students perceive their college environments. As previously mentioned, this population is roughly 2,600 students (J. Woodruff, personal communication, October 21, 2020).

Given our population, we partnered with the Office of Disability Resources to identify individuals to participate in this study and distribute the recruitment email invitation (see Appendix B). Following Internal Review Board approval (see Appendix A), all of these students were sent the recruitment email to determine whether or not they were interested in participating. After signing up for an interview time, each participant received a confirmation email to complete a brief participation survey, and a consent form prior to the interview.

### **Instrument of Data Collection**

Within this case study, multiple interview types were utilized to gather varied information, including traditional questioning and photo elicitation, which was most notable. Photo elicitation is typically unutilized in the fields of business within the marketing sector but will work well to elicit observations from each individual participant with disabilities participating (Glaw et al., 2017). The photo elicitation was completed through images taken around campus. This looked to form a clearer picture of exactly the messages that students with disabilities at Rowan University receive.

## **Procedures of Gathering Data**

Using an interview method, we conducted semi-structured interviews to determine the way students with disabilities view the campus environment around them. The interview, completed after participants reviewed and signed a consent form, consisted of questions created by the researcher as well as pictures taken of Rowan University spaces by the researcher. There were eight demographic questions in addition to 10 questions posed within the interview (see Appendix C). Ten out of 80 total pictures of Rowan University were selected by a random number generator to be utilized during the interviews. The pictures were shown to the participants to get their reaction and feedback on how they interpret the image. These participants' responses enabled us to identify perceptions students have about their campus environment and will assist in developing future strategies to enhance the students' experience in campus spaces.

These students had the ability to pick their interview times through a scheduling tool. Once completed, all participants were provided with a consent form detailing the protections in place as well as a participation survey. All interviews were recorded and transcribed. Participants could have chosen to skip any questions asked during the interview. All participants were provided with their full transcript, to add any comments or to make any changes. All participants were also provided with a preliminary summary of the generated themes and were asked for any edits.

**Figure 1**

*Campus Environment at Rowan University*



*Note.* The photos above are the 10 randomly generated for the interview process. 2021.

## **Data Analysis**

Following the recording of the interviews with participants, the data was transcribed to facilitate the analysis. The data analysis chosen for this study is thematic analysis. This analysis requires six different phases: familiarizing yourself with the data, generating initial codes, searching themes, reviewing themes, defining and naming themes, and producing the report (HoltzBraun & Clarke, 2006). Thematic analysis was chosen because of its flexibility. Allowing the ability to summarize large amounts of data through coding line by line and being able to highlight similarities and differences between those that participated in the study (HoltzBraun & Clarke, 2006).

## **Quality Criteria**

Assuring the credibility and trustworthiness of this study was accomplished by adding specific processes to the methods. Firstly, all participants had an opportunity to make edits or comments to their transcripts that were generated after their interviews. Secondly, iterative questioning was used in the interviews to solicit the answers. This involved repeating the same set of questions for each image shown to the participants. In addition to this, the questions were also repeated across all participants. Lastly, debriefing sessions took place between the researcher and multiple supervisors to ensure the quality of this study. These extra steps taken, to expand the validity of this study, ensure the credibility of the results (Shenton 2004).

## **Limitations**

While multiple limitations exist, the major limitation is the generalizability of the findings of this study. The generalizability is limited by design of the study since it only

occurred at one institution, Rowan University. This means that the findings can only truly be applied to the population of students with disabilities at Rowan University. The generalizability is also hindered by the small sample size utilized for this study with only ten participants. Since the participants were asked to volunteer, instead of being randomly selected, there could be some sample bias away from students less likely to volunteer themselves for a new experience. In order to try and avoid these limitations in the future, studies on this topic should be conducted across multiple centers with a much larger sample size. In addition to this, a form of random selection, such as random selection from a larger pool of volunteers, should be done to avoid sample or selection bias.

## Chapter IV

### Findings

This research was completed to determine the perceptions that students with disabilities have regarding campus messaging within their own campus environments. After an extensive literature search it was found that a gap is present concerning the perceptions that students with disabilities have of artifacts around them. In order to gather information on this topic, semi-structured interviews were conducted with students with disabilities at Rowan University. This study contributes findings to this topic through the generation of themes that represent students with disabilities' perceptions of the Rowan University campus environment.

#### Profile of the Sample

The participants of this study were chosen through purposeful sampling through outreach specifically to students with disabilities with the assistance of the Office of Disability Resources. Aside from being registered with this office, there were no other qualifications for participation in this study. The age of the participants ranged from nineteen to twenty-eight, with a median age of 21.5 years old. The gender and sex of the participants were split evenly with five males and five females. In relation to race, eight of the participants listed themselves as Caucasian, one identified racially as Puerto Rican, and one identified as two unidentified races. Ethnically, eight participants identified as European, with one identifying as Hispanic and one declining to identify their ethnicity. Class rank was asked for demographic purposes, but only five participants answered. Two participants were juniors and two were seniors, with the final reporting as a 5th year

“super senior.” Finally, one participant identified themselves as a transfer student. In order to protect the identities of study participants, names will not be utilized in the discussion of these findings.

### **Analysis of the Data**

The process of thematic analysis included multiple steps that involved the analysis of data from participants to develop themes that best represent the ideals of the group as a whole. Following the interviews with participants, their transcripts were confirmed and then combed through for typos as well as to best organize the data found within each transcript.

In other words, it was more important to look at messages given to students in general rather than matching each message to an image. This allowed for an easier analysis of the whole university instead of looking at each image individually. Each image was randomly selected for this purpose allowing for an unbiased view of the campus through the images taken. Answers were also analyzed by the researcher to determine the true relevance to the research question. In order to keep the analysis standardized, the questions were asked in the same way to each participant. Their responses were taken without contest, in other words, some answers were not relevant to the questions asked. In these cases, the researcher were able to disregard these responses. This allowed for the researcher to take the meaningful answers and code them.

To code them, the researcher would take the quote of their response and extract a simplified version. In other words, the researcher would summarize the responses in a few words to generate a code. The codes utilized for this study were generated based

upon the responses given. This differs from the other option where codes could have been predetermined, but trying to force codes could have limited the accuracy of these findings. This showcases the flexibility advantage that thematic analyses possess. Following the generation of codes, they were merged to determine which ones were the most prevalent. This allowed for easier determinations of themes. In order to merge the themes, repeated themes were combined and marked with the number of participants that spoke to this theme. This is what determined the magnitude of the codes, the number of participants that spoke to the code, not the number of times the code was determined. For example, there was one participant that generated four codes pertaining to the impact on the environment. This was only counted as one because only one person generated this code. Now on the converse, eight participants generated a code implicating the importance of cleanliness. Even though participants may have generated this code more than eight times total, it is counted only as eight because that many participants generated the code.

Now, to determine the themes of this analysis, the merged codes were utilized and combined further. Multiple codes would be taken and summarized in order to create common themes. The importance of these themes came from the scores they were given previously concerning the number of participants that generated them. Once these themes were discovered by the researcher they were ranked to finalize the findings of this study. In order to complete this whole process there were specific assumptions and decisions made about how the process would be accomplished. One such example has already been discussed where it was determined that codes would be generated from the response, rather than having predetermined codes with which the responses would need to be



matched (Braun & Clarke, 2006). To be specific, this research completed an inductive approach, rather than a theoretical analysis (Braun & Clarke, 2006).

Next, the qualifications for what would be determined to be a theme were outlined. This was based upon the codes generated and was decided to be generated by the researcher and ranked. The process of ranking them was by number of participants, rather than number of codes generated, this determined to be more accurate to prevent an outlier-like effect. What is meant by this is that if just the number of generations was utilized one participant could influence the whole study. In order to increase the validity of this analysis, the researcher chose to eliminate this potential bias. Another important decision that was made was to construct latent themes. This means that the themes were determined through researcher interpretation (Braun & Clarke, 2006). Meaning that the researcher analyzed responses to generate codes then interpreted what those codes meant in order to craft the final themes (Braun & Clarke, 2006). This approach was chosen over the use of semantic themes, similarly to how codes were generated, to allow the themes to match the data more accurately. This also allowed for better information generation to answer the research question. All of these decisions point to the chosen epistemology of this analysis. This was a constructionist thematic analysis. This is the case because the researcher are looking to comment on the population of students with disabilities as a whole. This is the constructionist approach where findings are about the community or cultural context rather than about specific individuals (Braun & Clarke, 2006).

Finally, to go back to the beginning of the process, the data set was chosen by the researcher as it fit the epistemological mold of allowing participants to express themselves. Utilizing a qualitative approach allowed the participants to fully explain their

perspective before researcher were then tasked with analysis. The data set explicitly included the transcripts from each interview with the study participants. This qualitative data was best analyzed with thematic analysis in order to condense the participants' thoughts to specific themes about the messaging they see around them in their campus environment.

### ***Themes***

The task of analyzing and presenting qualitative data is much more subjective when compared to quantitative data. In order to validate this data, the previously described process was completed to try and come as close to objective as possible. After analysis of the interviews with the ten study participants, one hundred thirty-five codes were generated to start to form the answer to the research question: How do students with disabilities perceive Rowan University's campus environment?

From these one hundred thirty-five codes, sixty-five were unique codes that were utilized in the creation of themes. The most commonly generated unique codes were cleanliness, modern architecture, and safety with police. These codes were generated by eight, six and five participants respectively. The goal when analyzing these codes was to create a combination of themes and sub-themes. Determining where each theme fell was a byproduct of the incidence of the codes among the study participants. This means that themes are driven more from codes with high incidences, such as the ones mentioned previously. Out of the data set, four themes, each with two sub-themes, were produced. The themes found include design of structures, a sense of community, relationship with authority, and natural settings.

**Design of Structures.** The first theme arose from many thoughts concerning the presentation of the physical structures that were shown in the semi-structured interviews. The most common reactions from participants would be as a result of the simple design of the building or area about which they were asked. This design included both the original structural design of the buildings as well as the state that it was currently in when the photographs were taken. These interpretations laid the groundwork for the discussion of each part of the photo elicitation step of the semi-structured interviews. When first shown the picture and asked for initial reactions, more often than not comments were about the design of the structures.

One key example for this theme comes from the code generated, uneasy by construction. One participant commented, “if I kept walking towards the road work I'd probably feel pretty unsafe because I don't know, maybe some construction thing will drop on my head.” This quote highlights the uncertainty that many may feel when around construction sites. There is a level of unknown that many have regarding construction given there is not any education on what exactly happens at these locations. While these sites have explicit signs to mark where the construction is occurring, there is no information pertaining to the actual activities happening within the site. The most publicity they get is the safety steps they utilize for themselves such as hard hats. In addition to this code, other generated codes contributed to two sub themes that highlight the importance of design of structures.

***Clean, Open and Bright.*** The first subtheme, clean, open and bright, encompasses the ideas put forth by the participants that comfort is found more in spaces that are clean and/or open. The most prevalent code across participants was cleanliness. One participant

spoke to the feeling they have when seeing a breach of this cleanliness on campus when saying, “This is very uncomfortable because you have, like all the trash here, so it could represent something like filthy.” The second part of this quote agrees with another participant that noted, “I don't want people to think Rowan people, the community and like look at the students and the staff like that are not like taking care of my campus.” These quotes do two things. First, they show the assigning of imagery to Rowan University. This is seen when one participant talks about the reflection the trash would have on the image of Rowan or Rowan members. Secondly, they acknowledge the desire for clean spaces, to show that the university cares about its students as well as giving them an environment in which to be comfortable.

Along these same lines, participants often mentioned that the openness of spaces was also important when allowing them to feel comfortable. This came in different ways ranging from personal preference to feelings of uneasiness. One participant commented simply, “It makes me feel a little safe uh you know, with the open areas.” Another participant dove into the idea of brightness as a way to feel comfortable saying, “I think it’s just natural to feel unsafe when you’re in the woods in the dark.” This idea of brightness also comes up often along the same lines of openness where generally it is easier to see with what you are dealing with.

***Modern Look.*** One aspect of structural design that was a little more nuanced involved participants actually addressing the architectural design of the structures on which they were commenting. While the modern design of many buildings were mentioned and preferred, one must look at the specific quotes to see the importance of this design to the study participants. “Modern just looks safer, it might not be, but it looks

safer, because it looks like you know sleeker,” one participant said. There is recognition of potential unconscious bias here, but nonetheless the idea is still there that this participant feels safer in modern architecture.

The code modern is preferred was shared among six of the participants supporting the previously stated sentiment. However, one common discussion was around the opposite thought. This was the thought that older design on buildings came with a negative connotation. One such example came with a participant giving their initial reaction to a picture of Holly Bush Mansion, an old manor house from the mid-1800s on Rowan University’s campus. They said, “because it's like a haunted place so I'm not gonna walk near that place like I said, between twelve or three in the morning, let alone go inside.” Multiple participants shared this notion of a negative stigma surrounding older architecture, also contributing to the sub theme of modern look.

**A Sense of Community.** When discussing various buildings around campus, participants would mention that they felt comfortable in certain buildings over other buildings. When they continued to describe their feelings and the experiences that led to them, the theme of sense of community was clear. The areas they would describe as more comfortable would come down to a number of reasons, but one of the most often would be the way in which their time is spent in these places.

This is true in both the positive and negative with some spaces being attached to pleasant memories and others being attached to difficult or traumatic memories. One participant gave a negative example in the following, “I feel like the wellness center has had some rough stigmas around it recently, especially because I think it was a year ago

now, with all of the suicides that went through that year.” This noting of stigmas is a common undertone in negative examples such as, “that is where all the money goes to, the engineering students.” These negative associations based upon participant experiences point to the importance of personal community impact on campus messaging.

***Time with Community.*** More specifically, the time spent within one’s own personal community can have a massive impact on one’s interpretation of the environment around them. One participant commented, “safe because I’m familiar with the location,” highlighting the idea of comfort in places where time is spent. Comfort within a community comes in various forms, with one participant noting, “if I’m with a group of people are like in class or something like that, then you know I feel like totally safe totally comfortable, everyone’s in the same boat.” In addition to this comfort due to being in similar situations, there is also comfort with those one have spent more time. In general this boils down to two ways that time in a community makes one comfortable, safety among crowds as well as time spent with certain individuals. Such as what one participant commented, “feels safe because usually here’s a place where I can go with my friends.”

***Members of the Community.*** This idea of comfort around friends translates well into the second sub theme under a sense of community, members of the community. The last quote referencing safety among friends nails this idea that participants have a large sense of safety and confidence when they have been around friends. Another important aspect of this sub theme is inclusion. Common responses during photo elicitation would typically not include discussion of inclusion. However, when brought up, it was

important for accessibility and inclusivity to be considered. Comments would be about the lack of handicap accessibility to buildings or areas when photos were shown.

There was also discussion of open-mindedness in general in addition to one insightful allegory regarding Holly Bush Mansion. Instead of the usual stigma associated with the mansion, one participant chose to relate themselves to the building with the following response, “I guess since it's kind of different in a way, like how like from the entire campus all the buildings and stuff it looks kind of different um and I can relate to that like being different.” While these last few opinions were in the minority of codes, they highlight the importance that representation holds among these participants. These ideas show the impact that members of a community can have on campus messaging.

**Relationship with Authority.** The third theme has conflicting ideals within it. There are participants on both sides of this coin and their thoughts are represented that way. Overall, these responses point to a relationship with authority, be that the university itself or specific organizations, such as the wellness center. More participants fall under the first sub theme of respecting authority, but the gap between is not vast. The main culprit for fostering discussion on this topic was a photo that included a police car. Along with this, a photo including an emergency button box, spread around campus to allow for easy access to emergency help, sparked conversations about first responders.

**Respecting Authority.** Participants showed their respect for authority mainly by expressing the safety they would feel in the presence of a police officer or the vehicle belonging to a police officer. Six participants shared this idea with comments similar to, “so the police car makes you feel a little safe, there's possibly a policeman right there.” In

addition to these discussions, discussions of access to other first responders, such as emergency buttons on campus agreed with the ideal of respecting authority as they are there to help. One final example of respecting authority came from a comment from one participant saying, “I feel like it would be cool if any President of the United States came to speak at Rowan.” While this does not exactly fit the mold of other comments respecting those in power that could lend support, it continues to show that respect for those in higher positions.

***Distrust of Authority.*** Distrusting authority was presented in three examples. The first was regarding a general distrust of others while the second detailed a distrust of the Wellness Center specifically. This stemmed from a participant’s personal experience within healthcare settings. This further shows the effects that certain events can have on one’s own perception.

Regarding the police vehicle, the majority of participants did not have an issue with it. The one participant that did comment negatively on it said, “I haven’t had any problems with them, but I just I’m also just not too fond of cops either. But that’s mainly because I’m just not too fond of like any type of authority.” While this was only one participant, it cannot be excluded and fits with comments made by other participants about being wary of authority figures. These all compound to show what unconscious bias, caused by certain stigmas, can do to one’s perception of another.

**Natural Settings.** The final theme derived from the data collected is natural settings. This is somewhat of a seldom mentioned set of ideas, however the message was clear and was included to best represent the views of the participants. This theme comes



from codes that involved the discussion of certain settings throughout campus that brought about positive emotions from the participants. This further breaks down into the two sub themes, water and woods and solo tranquility.

***Water and Woods.*** Most of these codes come from one photo within the elicitation aspect of the interview that showcased a view of a pond on campus from its more wooded side. This led to discussion on both the positives and negatives of the surrounding area. The only negative comments centered on some unfriendly geese that spend time by the lake. However, most comments were positive about the nice scenery as well as the feelings people have around these types of areas. One participant said, “I mean I love walking through the woods and just listening to like the sounds of the animals and all that just watching the water, listening to that flow.” A couple of other comments agreed with the idea of time spent near nature, specifically in the woods or near running water, was calming and comfortable.

***Solo Tranquility.*** Along with this idea of time in natural settings or enjoying the calmness of water flowing, the idea of spending time alone arose. While this specifically was a minority viewpoint, the idea of calming settings in which one can enjoy tranquility appeared throughout the data set. This idea was commented on by one participant saying, “this is somewhere that I would be by myself, like in a quiet area.” While this is the final sub theme, there is one comment about nature that expresses what this could mean to someone. “Worries me about the planet that we should be taking care of it more, then then then just seen trash everywhere”.

## Chapter V

### Summary, Discussion, Conclusions, and Recommendations

This chapter will summarize the analysis of findings, and present implications from the study. Finally, recommendations will be made based on the analysis of themes. There will be recommendations for further research in addition to recommendations on how practices within higher education should be changed. Therefore, the qualitative findings presented in the previous chapter will lay the foundation for future applications and commitment to further service of students with disabilities.

#### Summary of the Study

Students with disabilities are often underserved and underrepresented among students attending colleges and universities. It is important to consider the effects that different aspects of college and university environments have on these students with disabilities in order to close the gap and better service these students. In order to accomplish this, research is needed in order to better understand this population. This study looked to start this search by looking specifically at the artifacts on college and university campuses and their impact on students with disabilities.

Before conducting this study, and even before designing this study, a thorough literature review was completed in order to understand the current available information regarding these topics. First, the current knowledge of campus messaging needed to be explored as well as analysis of what literature there may be on the perceptions of college students with disabilities about this messaging. Along with this information, there was

also a need for an understanding of the best way to conduct the methods of this study to properly, and efficiently answer the research question.

Once the methodology of this study was developed and approved through the Internal Review Board, students were purposefully sampled with the help from the Office of Disability Resources. Once properly enrolled, the study participants completed a semi-structured interview, conducted by the researcher. This interview process included questions that lead to discussions about their experiences with Rowan's campus environment as well as photo elicitation utilizing various pictures from around campus. When completed, the participants were given a chance to review their interview transcripts to confirm their answers or offer clarification. These finalized transcripts were then utilized to analyze the data, the answers given, and completed a thematic analysis. This thematic analysis included a process of creating themes following generating codes from the participant responses.

### **Discussion of the Findings**

The four themes developed to answer the question of how students with disabilities perceive Rowan University's campus environment are design of structures, a sense of community, relationship with authority, and natural settings. Each of these themes represents the perceptions that this group of students with disabilities has about the Rowan University campus environment. While these themes were developed to be and sound more generalized, there are specific implications of each. These themes were listed in order of importance according to the thematic analysis which was determined by the number of participants that this theme represented.

First, the theme of design of structures was the only to be strongly expressed by all participants involved. When proceeding through each interview the most dominant response would always be their interpretation of what the buildings or various structures in each picture meant to them. Whether that be expressing simple preference of one design style over another or expressing how the design of certain structures affected their feeling of comfort.

To begin, the largest takeaway from this study was the importance of designing structures to ensure the comfort of all students possible. Specifically, this study found that students with disabilities find more comfort in buildings with modern design. This is highlighted by feeling safer in buildings such as Holly Point, which is designed as one of the more modern-looking buildings on campus. Going to the other extreme, the Hollybush Mansion, built in the mid-1800s, was met with unease and stories of the building being haunted. This is not a coincidence that the oldest building on campus has this rumor and perception. In order to ensure students with disabilities comfort on campus it is important to keep buildings up to date and modernized in order to avoid more buildings being underutilized like Hollybush.

The concept of cleanliness was the most prevalent single idea from these students with disabilities. This may seem like an obvious thought, but students with disabilities do not enjoy parts of campus that are unclean. This is especially important given the thoughts some had about the specific messaging that this gives off from the university. The comments from the participants expressed that this lack of cleanliness on the part of the university conveyed a lack of effort and care for the image of Rowan University as well as the students and staff. These comments support the claim that students with

disabilities perceive more safety and care from the university when campus is kept modernized, up to date, and clean.

The study participants also expressed many ideals that align with the importance of having a sense of community on campus. This included things like having loyalty to one's institution, feeling more comfort in spaces frequented, and relationships cultivated with others. This expresses the need for Rowan University, as well as other institutions, to cultivate an environment that allows students with disabilities to truly engage with the community and continue to build upon the established community. While there are many ways to engage students in a campus environment and social structures, there may be unique challenges to creating this community with students with disabilities. The findings of this study support the idea that students with disabilities crave this sense of community and universities and colleges must act accordingly.

The ways in which students with disabilities in this study perceived their relationship with authority were mostly consistent with some dissented from the other participants. However, the frequency of students that referenced a relationship with authority-eight out of ten participants- the importance of this perceived relationship is clear. Six of the eight participants that reference some authority spoke positively of their perceptions of them. The two negative perceptions included one distrust of the wellness center and another with distrust of authority in general. Both of these perceptions appeared to be because of personal history with certain authorities. Therefore, these findings show the perceived importance of this positive relationship with authorities such as police and university organizations and offices. Therefore, it is important for the

university to be consistent across their offices to foster a truly positive relationship with their students with disabilities.

Finally, the last theme of natural settings highlights the role that certain settings can have on perceptions. While this was the least mentioned theme- only supported by five of ten participants- it still reinforces the previously mentioned concepts of wanting the university to show their care for students through design and upkeep. The images of natural settings on campus would prompt comments on the cleanliness of the university and the tranquility that comes along with them. Generally, this shows that students with disabilities want their university to offer them places to still enjoy nature around them.

## **Conclusion**

Students with disabilities are an understudied population that are not understood well enough in order to properly address their wants and needs while at a college or university. This study has been able to support claims about these students with disabilities that are contrarian to much of the published information on their population. These participants, representing the population of students with disabilities, demonstrated many perceptions that align with other students, as described in various student development theory, especially when considering their want for a sense of community (Astin, 1999; Tinto, 1993; Schlossberg, 1989).

This study was able to show that students with disabilities perceive Rowan University's campus environment in two basic ways. The first being how does this environment make me feel regarding my safety and comfort level. In addition to this, they also expressed how their perceptions are of how the university comes across. This

means that they are perceiving the environment as a direct reflection of the university and their commitment to their students.

It is important for Rowan University, as well as other colleges and universities to understand what will comfort their students and keep them feeling safe. This is something that institutions already do through campus police departments and access to emergency personnel among other things. However, it is important for institutions to spend time getting to know their students, especially among their various populations, to be able to adjust with other measures that convey safety and comfort.

Institutions should also recognize that their messaging is being perceived as how they care for their students and be able to act accordingly. This means that they should constantly want to improve their campus environment to ensure proper messaging is being sent to students with disabilities. In conclusion, students with disabilities perceive Rowan University' campus environment as a reflection of how much they care for their students.

### **Implications for the Enhancement of Campus Life**

The following recommendations for practice changes are a result of the findings of this study:

1. Rowan University should set up a committee to work with students to better understand their perceptions of their campus environment. This includes all populations, especially those underserved, such as students with disabilities, and minoritized groups.

2. Ensure the cleanliness of the Rowan University campus environment to ensure the positive feelings of safety and comfort in students with disabilities. This is also important to having these students with disabilities perceiving the institution to care for them, increasing their sense of community.
3. Rowan University should work with the students with disabilities to ensure their access to the environment expressed as positive in the findings of this study, such as modernly designed buildings, and natural settings.
4. Rowan University should work to ensure the preservation of the relationship between students with disabilities and campus authorities. These authorities include, but are not limited to police officers, emergency medical technicians, other first responders, faculty, especially in service settings such as the wellness center, and administration.

### **Recommendations for Further Research**

The following recommendations for further research are a result of the findings of this study:

1. Further study of students with disabilities involving larger samples sizes as well as sub analyses according to other common factors within this underserved population. These sub analyses can be based on factors such as disability, area of study, and demographics.
2. Studies of other underserved populations and their perceptions of their campus environments.



3. Studies to further analyze and clarify what a sense of community is for a student with disabilities.
4. Studies that analyze time as a factor in this question as well. For example, see the perceptions of prospective students with disabilities of the campus environment and how this may affect their decision of what institution to attend.

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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:** December 18, 2020

#### Notice of Approval - Initial

**Study ID:** PRO-2020-141

**Title:** Unseen, Unheard, Unknown: Uncovering Campus Environment Messaging for Students with Disabilities

**Principal Investigator:** Raquel Wright-Mair

**Study Coordinator:** Cassandra Colfer

**Submission Type:** Initial

**Submission Status:** Exempt

**Approval Date:** December 18, 2020

**Review Type:** Exempt

**Exempt Category:** Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.

**Pregnancy Code:** N/A

**Pediatric/Minor Code:** N/A

**Prisoner Code:** N/A

#### 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.

**CONFIDENTIALITY NOTICE:** This email communication may contain private, confidential, or legally privileged information intended for the sole use of the designated and/or duly authorized recipients(s). If you are not the intended recipient or have received this email in error, please notify the sender immediately by email and permanently delete all copies of this email including all attachments without reading them. If you are the intended recipient, secure the contents in a manner that conforms to all applicable state and/or federal requirements related to privacy and confidentiality of such information.



## Appendix B

### Recruitment Email

Title: Uncovering Campus Environment Messaging for Students with Disabilities  
Principal Investigator: Dr. Raquel Wright-Mair



#### **Unseen, Unheard, Unknown: Uncovering Campus Environment Messaging for Students with Disabilities**

Recruitment email:

Dear Scholar,

We write to you today as researchers interested in better understanding how you think and talk about your experiences as an undergraduate student registered with the Office of Disability Resources. The purpose of this study is to evaluate how students with disabilities perceive artifacts (an object made by a human being) within campus environments.

Please consider being part of our study. We hope to learn more about the perceptions students registered with the Office of Disability Resources have about their campus environment to be able to analyze the need for more inclusive environments. To this end, we'd very much like to speak with you about your perspective on campus spaces at Rowan University.

Our plan is to ensure a thorough participant feedback process, including opportunities to review drafts (as desired) and to both review and contribute to the recommendations for practice that the study generates. Our consent form is attached to this email so you are aware of what this study requires as a participant. We hope to complete interviews by the end of [insert month] 2021.

If you are interested, please feel free to sign up for an interview time below. After that is completed, you will then be sent a short pre-participation survey for the study. If you have any questions please feel free to email [colfer21@rowan.edu](mailto:colfer21@rowan.edu) for more information.

[Link for scheduling tool]

Sincerely,

Raquel Wright-Mair and Cassandra M. Colfer

Version #: 1  
Version Date: 11/21.2020

## Appendix C

### Pre-participation Survey/ Interview Questions

Title: Uncovering Campus Environment Messaging for Students with Disabilities  
Principal Investigator: Dr. Raquel Wright-Mair



#### Unseen, Unheard, Unknown: Uncovering Campus Environment Messaging for Students with Disabilities

##### Survey Protocol

##### Participation Survey Questions:

##### *Basic demographic information (Fill in the blink):*

1. Name
2. Age
3. Gender
4. Sex
5. Race
6. Ethnicity
7. Class Rank
8. Email

##### Interview Protocol

##### Semi Structured Interview Questions

##### *Questions with images:*

1. What is your initial reaction/ perspective on this image?
2. Do you feel represented as an individual or a community in this image?
3. What would you change about this image?
4. What about this image makes you feel comfortable or uncomfortable?
5. Does this image make you feel unsafe or safe? And Why?
6. Does this image portray any stereotypical/traditional messaging?

##### *General Questions:*

1. Do you have a place on campus you feel the most comfortable at?
2. Are there any spaces or areas on campus you avoid?
3. How do you feel based on the images shown today?
4. How has your overall experience been at Rowan University?

Version #: 1  
Version Date: 11/21.2020