

Rowan University

Rowan Digital Works

Theses and Dissertations

4-30-2019

Perceptions of mattering and marginality: A study of international students at Rowan University

Katelyn Sullivan
Rowan University

Follow this and additional works at: <https://rdw.rowan.edu/etd>



Part of the [Higher Education Commons](#)

Recommended Citation

Sullivan, Katelyn, "Perceptions of mattering and marginality: A study of international students at Rowan University" (2019). *Theses and Dissertations*. 2654.
<https://rdw.rowan.edu/etd/2654>

This Thesis is brought to you for free and open access by Rowan Digital Works. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Rowan Digital Works. For more information, please contact graduateresearch@rowan.edu.

**PERCEPTIONS OF MATTERING AND MARGINALITY:
A STUDY OF INTERNATIONAL STUDENTS AT ROWAN UNIVERSITY**

by
Katelyn Sullivan

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
March 26, 2019

Thesis Chair: Andrew Tinnin, Ed.D.

© 2019 Katelyn Sullivan

Dedications

This thesis is dedicated to all international students who courageously leave their homes to further their education in an unfamiliar place. All of you matter.

Acknowledgments

I want to thank Dr. Sisco for helping me start this journey and Dr. Tinnin for helping me complete it. I also want to thank the International Center staff for being so supportive of my continuing education. I am additionally grateful to my family and friends who have given me encouraging words along the way. Finally, I want to acknowledge my husband, Isaac. I love you more than words can say.

Abstract

Katelyn Sullivan
PERCEPTIONS OF MATTERING AND MARGINALITY:
A STUDY OF INTERNATIONAL STUDENTS AT ROWAN UNIVERSITY
2018-2019
Andrew Tinnin, Ed.D.
Master of Arts in Higher Education

This study explores the theory of mattering first developed by Rosenberg and McCullough (1981) that was later adapted to a higher education setting by Schlossberg (1989) and applies it to an international student context. More specifically, this study aims to measure the degree to which international students feel as though they matter to Rowan University across six subscales: general college mattering, mattering versus marginality, mattering to counselors, mattering to instructors, mattering to students, and perception of value.

Using the College Mattering Inventory (CMI) instrument developed by Tovar, Simon, and Lee (2008), 132 international students at Rowan University were surveyed on their perception of mattering. Forty-five students responded, yielding a response rate of 34%. Tentative findings suggest that international students generally feel a relatively high level of mattering. Comparisons with undergraduate, residential students in a previous study (McGuire 2012) indicate that internationals actually had higher levels of mattering across four of the six subscales. However, they scored lower in the mattering to students and general college mattering subscales and on specific questions related to loneliness in the mattering versus marginality subscale. Suggestions for further practice related to these areas are recommended.

Table of Contents

Abstract	v
List of Tables	viii
Chapter I: Introduction.....	1
Statement of the Problem.....	1
Significance of the Study	2
Purpose of the Study	3
Assumptions and Limitations	3
Operational Definitions.....	4
Research Questions	4
Overview of the Study	5
Chapter II: Literature Review	6
What is Mattering?.....	6
Validation.....	7
Measuring Mattering.....	8
Implications of Mattering	9
Mattering and American Students	10
Mattering and International Students.....	12
Mattering at Rowan University.....	13
Summary of the Literature Review.....	16
Chapter III: Methodology	17
Context of the Study	17
Quantitative Instrument	18

Table of Contents (Continued)

Population	19
Data Collection Procedures.....	20
Data Analysis	20
Chapter IV: Findings.....	21
Profile of the Sample	21
Analysis of the Data.....	21
Chapter V: Summary, Discussion, Conclusions, and Recommendations	31
Summary of the Study	31
Purpose of the Study	31
Methodology	32
Data Analysis	32
Discussion of the Findings.....	32
Conclusions.....	33
Recommendations for Practice	34
Recommendations for Further Research.....	35
References.....	37

List of Tables

Table	Page
Table 4.1. Subject Demographics	21
Table 4.2. General College Mattering.....	22
Table 4.3. Mattering Versus Marginality.....	24
Table 4.4. Mattering to Counselors or Advisors.....	25
Table 4.5. Mattering to Professors	27
Table 4.6. Mattering to Students.....	28
Table 4.7. Perception of Value	29
Table 4.8. Descriptive Statistics for 6 Subscales for Research and Normative Sample.....	30

Chapter I

Introduction

Before it was formally theorized by Rosenberg and McCullough in their 1981 study of adolescents and later applied to the higher educational setting by Schlossberg (1989), mattering was arguably an intuitive desire among most students. Most people want to feel that someone else cares about them, regardless of what their backgrounds may be. Indeed, it may be more important to feel as though one matters when one is from a marginalized or underserved background. The many studies of mattering at Rowan University have often focused on these populations, including African American students (Durham, 2008), Latino/a students (Diaz, 2017), students with disabilities (Blazie, 2013), commuter students (Cattell, 2017), and transfer students (Johnston, 2014). These students come from diverse (and potentially overlapping) backgrounds, with various reasons as to why they may experience marginality, the antithesis of mattering (Schlossberg, 1989). Another group of students who may also be at risk of experiencing marginality are international students, who are often isolated from the social support structures they have relied on their entire lives. For this reason, I have chosen to explore the extent to which international students feel as though they matter at Rowan University.

Statement of the Problem

International students matter greatly to many institutions across the United States. This can be inferred from the value that many colleges and universities place on international students for both cultural and monetary reasons (Lewin, 2012). One estimate suggests that international students contributed \$9 billion in tuition and fees to public universities during 2015 (Loudenback, 2016). Indeed, institutions across the U.S.

invest valuable resources every year into recruitment efforts abroad (Roy & Lu, 2016). However, how international students perceive their mattering is a separate question that has hitherto remained largely unexplored by researchers, both at Rowan University and throughout U.S. institutions as a whole. Given that international students often face difficulties such as culture shock, homesickness, racial prejudice, language barriers, and adjusting to the American education system in addition to all of the challenges that college brings for most students in general (Almurideef, 2016; Chen, 1999; Onabule & Boes, 2013; Zhou & Cole, 2017), it is imperative that international students feel as though they matter to their institutions.

Significance of the Study

Mattering has potential implications for student involvement and persistence. There has been some speculation among researchers that there may be a connection between mattering, involvement on-campus, academic success, and retention (France & Finney, 2010; Kent, 2004; Schlossberg, 1989). Unfortunately, research in this area remains limited, but preliminary findings suggest some connections, specifically between mattering and involvement and, to a lesser degree, retention (Kent, 2004; Tovar, 2013). The theory of mattering has warranted a fair number of studies, as evidenced by the literature reviewed in Chapter II. However, as will be further discussed, aside from an unpublished paper by Tovar, Simon, and Fujimaki in 2008, there appears to be no studies that have examined mattering perceptions among international students. This study will attempt to help fill that gap in the knowledge base.

Purpose of the Study

The purpose of this study is to evaluate international students' perceptions of their mattering and marginality and to compare these perceptions to their domestic student peers, using the data available from McGuire's (2012) study of undergraduate residential students. The study used quantitative analysis and employed a survey instrument, Tovar, Simon, and Lee's (2009) College Mattering Inventory (CMI), to measure students' perceptions of mattering in the following areas: general college mattering, mattering versus marginality, mattering to counselors, mattering to instructors, mattering to students, and perception of value.

Assumptions and Limitations

I assume that the students surveyed fully understood and honestly answered all questions on the survey instrument. One of the limitations of this study is that it was limited to F-1 international students attending Rowan University, which make up a small population of 132 students. International students who were studying at Rowan University on other visa classifications that allow legal study incidental to status, such as H-4 or L-2, were not included since Rowan University's International Center does not track these students. The sample size was therefore limited. Additionally, graduate and commuter students were included in the sample, two populations that were not included in McGuire's (2012) study of domestic students, so comparisons between the two studies are somewhat limited and should be read with caution. Another limitation is possible researcher bias. I am an undergraduate alumna, graduate student, and full-time employee of Rowan University who works with international students on a daily basis, so this may impact my view of mattering and international students at Rowan University.

Operational Definitions

1. **Mattering** - “To believe that the other person cares about what we want, think, and do, or is concerned with our fate, is to matter” (Rosenberg & McCullough 1981, p. 164).
2. **Marginality** – the antithesis of mattering, where one feels that they are not cared about.
3. **Validation** - “[A]n enabling, confirming and supportive process initiated by in- and out-of-class agents that foster academic and interpersonal development” (Rendón 1994, p. 44).
4. **Attention** - how one perceives others to notice them.
5. **Importance** - how one perceives others to care for them.
6. **Ego-Extension** - how one perceives others to share in the emotions attached to their successes or failures.
7. **Dependence** - how one perceives others’ reliance upon them.
8. **Appreciation** - how one perceives others’ gratitude and validation of their actions.
9. **International Student** - A student attending Rowan University on a nonimmigrant F-1 visa who is not a U.S. citizen or permanent resident.
10. **Domestic Student** – A student attending Rowan University who is a U.S. citizen, permanent resident, or undocumented.

Research Questions

The following research questions informed this study:

1. Using Tovar, Simon, and Lee’s (2009) CMI instrument, do international students feel like they matter at Rowan University in the instrument’s six subscales of

general college mattering, mattering versus marginality, mattering to counselors, mattering to instructors, mattering to students, and perception of value?

2. How do international students' perceptions of mattering compare to residential undergraduate students' perceptions of mattering in McGuire's (2012) study of Rowan students?

Overview of the Study

Chapter II reviews the seminal literature concerning mattering and marginality as well as the history of the instruments used to measure these phenomena. The review additionally offers an overview of relevant studies conducted both here at Rowan University and other U.S. institutions.

Chapter III covers the methodology that was used to complete this study, including a brief description of the instrument, Tovar, Simon, and Lee's (2009) CMI. The context of the study, selection process for the population sample, data collection methods, and data analysis are also discussed.

Chapter IV presents the study's findings using both statistics and narrative descriptions.

Chapter V provides a summary and further discussion of the findings outlined in Chapter IV and additionally offers conclusions and recommendations for further research and best practice going forward.

Chapter II

Literature Review

As this study deals with mattering, marginality, and validation, I will review those concepts in more detail here. Mattering is a concept that is central to this study and has largely been unexplored with international students. I have defined its meaning as well as its related “sub-concepts” for this study below. The concept of marginality, which is essentially the antithesis of mattering, will also be explored. Additionally, a lesser known, but nevertheless important concept, validation, will be discussed for its acknowledgment of cultural diversity. Finally, this review will synthesize the literature for future application in the Discussion portion of this study.

What is Mattering?

The concept of mattering was first introduced by Rosenberg and McCullough (1981) who described it in the following manner: “To believe that the other person cares about what we want, think, and do, or is concerned with our fate, is to matter” (p. 164). Rosenberg and McCullough (1981) identified four subcomponents of mattering: a) attention, which refers to how one perceives others to notice them; b) importance, which refers to how one perceives others to care for them; c) ego-extension, which refers to how one perceives others to share in the emotions attached to their successes or failures; and d) dependence, which refers to how one perceives others’ reliance upon them. Schlossberg (1989) later adapted the concept of mattering specifically to the field of higher education. Her seminal work also introduced marginality, the antithetical concept to mattering as well as a new, fifth subcomponent of mattering, appreciation, which refers to how one perceives others’ gratitude and validation of their actions.

Mattering as a concept is distinct from, but related to other constructs commonly found in the literature surrounding higher education, including involvement, engagement, and integration (also sometimes referred to as sense of belonging). While mattering is not explicitly mentioned in their article, Wolf-Wendel, Ward, and Kinzie (2009) have delineated the subtle differences between the theories of involvement, engagement, and integration and have argued that researchers should be careful when using these terms to avoid muddying the waters. Therefore, while there have been some studies that have explored international students and these related concepts of involvement, engagement, and integration, these have been intentionally omitted from the literature review for the reason described above.

Validation

While it is generally beyond the scope of this review to look at concepts separate from but related to mattering as noted above, Rendón's (1994) validation theory will be briefly touched upon due to its emphasis on diversity, which is of course important in the context of any discussion of international students. Indeed, Tovar (2013) has argued that Rendón's theory possibly "compliments and extends Schlossberg's propositions significantly, particularly in that they speak to the experiences of traditionally underrepresented college students and those that feel marginalized from higher education communities" (p. 51).

Rendón (1994) describes validation as "an enabling, confirming and supportive process initiated by in- and out-of-class agents that foster academic and interpersonal development" (p. 44). Notably, she does not cite Schlossberg (1989) as an influence, even though there are many similarities between mattering and validation theory. Rendón

(1994) identifies both in-class and out-of-class sources for validation, including faculty and peers (in-class) and significant others, family members, friends, and staff (out-of-class). Among her recommendations for future practice, Rendón (1994) suggests making faculty aware of “the needs and strengths of culturally diverse student populations” through “a yearly demographic profile of the institution’s student population” (p. 46). Rendón’s (1994) acknowledgment of cultural diversity and the need for it to be validated when combined with Schlossberg’s (1994) theory of mattering could potentially provide a strong conceptual framework when exploring questions of international student mattering in higher education.

Measuring Mattering

Schlossberg, Lassalle, and Golec (1990) developed one of the first instruments for measuring mattering, the *Mattering Scales for Adult Students in Higher Education (MHE)*. The instrument examined students’ perceptions of mattering as they related to faculty, staff, administration, and peers (Schlossberg, Lassalle, & Golec, 1990). It was specifically designed with adult learners in mind and became one of the earliest models for mattering instruments that were developed for other student populations (Tovar, Simon, & Lee, 2009). However, Schlossberg, Lassalle, and Golec’s (1990) instrument has come under scrutiny from other researchers. Tovar, Simon, and Lee (2009) note that some of the items may no longer be relevant in today’s college environment and that more work needs to be done to verify the instrument, since Schlossberg, Lassalle, and Golec (1990) failed to include their factor analysis results in the publication.

Furthermore, France and Finney (2010) argue that the *MHE* does not demonstrate

sufficient validity, nor does it accurately reflect what was posited in Rosenberg and McCullough's original theory.

Seeing a perceived gap in quality measures for university mattering, France and Finney (2010) developed the *University Mattering Scale (UMS)*. Interestingly, France and Finney do not address Tovar, Simon, and Lee's (2009) *College Mattering Inventory (CMI)*; this may be due to the close proximity of publication. The *CMI* was developed to address the lack of mattering measurements that could be used with diverse college student populations and consists of 29 items based around six subscales: a) General College Mattering, b) Mattering Versus Marginality, c) Mattering to Counselors, d) Mattering to Instructors, Mattering to Students, and Perception of Value (Tovar, Simon, and Lee, 2009). Unlike Schlossberg, Lassalle, and Golec (1990), Tovar, Simon, and Lee (2009) published analyses that suggest both the validity and the reliability of their instrument.

Implications of Mattering

Theoretically, mattering is conceived of as a motivating factor in student behavior that facilitates persistence and academic success (Schlossberg, 1989). Some researchers theorize that when students feel like they matter, they are more likely to be involved on-campus (France & Finney, 2010; Schlossberg, 1989). Conversely, when students do not feel like they matter to their institution, they are less likely to become involved (France, Finney, & Swerdzewski as cited in France & Finney, 2010). Several researchers have speculated that this is significant since greater involvement has been shown to have a positive relationship with academic success and retention (France & Finney, 2010; Kent, 2004; Schlossberg, 1989). However, little empirical research has been undertaken on the

subject. Kent (2004) examined the possible connection between mattering and persistence in the adult student population and found some tentative evidence for it, but did not specifically explore involvement's role. Tovar's (2013) findings suggested that there was a strong connection between higher levels of perceived mattering and engagement/involvement; however there was only indirect evidence for mattering's positive impact on persistence.

Dixon and Kurpius (2008) found that mattering was a predictor of depression and perceived college stress. When students felt like they mattered, they were less likely to experience these negative emotional states. It should be noted that the researchers used a modified version of the *General Mattering Scale* developed by Marcus for the general population which may have impacted the results (Marcus, 2001, as cited in Dixon & Kurpius, 2008).

Mattering and American Students

A number of studies on mattering have been conducted on different populations of American students. Butcher (1997) undertook one of the earliest exploratory studies on mattering. Using Schlossberg, Lassalle, and Golec's (1990) *MHE*, Butcher (1997) examined the relationships between perceived mattering and involvement and persistence for nontraditional students attending a four-year institution. Contrary to his hypothesis, Butcher (1997) found little to suggest that higher levels of mattering were related to higher levels of involvement and persistence. Butcher (1997) speculates that this may be due to problems with the instrument, a possibly unrepresentative sample, or unique institutional characteristics that skewed the results. Given the lack of evidence for

reliability and validity in Schlossberg, Lassalle, and Golec's (1990) instrument, this may have very well affected Butcher's (1997) study.

Dixon Rayle and Chung (2007) studied mattering and first-year students. They used the *Interpersonal and General Mattering Assessment (IGMA)* which was developed by Dixon Rayle in 2005 for use with the general population. This was one of three instruments that was used during the course of the 2007 study. The study found that "only social support from college friends was a significant predictor of students' mattering to the college environment" (Dixon Rayle & Chung 2007, p. 30). Dixon Rayle and Chung's (2007) work also suggests that gender is a salient factor for students' perceptions of mattering, with female students more likely than their male counterparts to indicate feelings of mattering. Interestingly, Schieferecke and Card's (2013) qualitative study on males' perceptions of mattering and marginality found that the most salient predictor of mattering for males was inter-personal relationships with faculty, possibly indicating additional gender differences in this area.

Klug (2008) conducted a qualitative study on the actions that affect students' perceptions of mattering at a comprehensive, public university in the Midwest. Klug (2008) selected 11 senior students for her study in a purposive sample. Each of the students were identified and recommended to Klug (2008) by administrative personnel as having experienced feelings of mattering. Based on her interviews, Klug (2008) identified five themes related to mattering: nurturing, recognition of the little things, involvement, a campus environment where students felt valued as more than just a number, and mattering as a cyclical process. She asserts that each of these themes relate to Schlossberg's (1989) identification of the five subsets of mattering, attention,

importance, ego-extension, dependence, and appreciation (Klug, 2008). Sumner (2012) performed a replication study at a faith-based Midwestern institution and found mostly the same results as Klug (2008), with the addition of students' articulation that they felt like they mattered in a spiritual sense.

Tovar's (2013) dissertation explored how mattering, in addition to many other factors, impacted student retention at community colleges. He found that "mattering exerted a moderate to strong direct influence on community college student engagement/involvement, socio-academic integrative experiences, sense of belonging, and indirect effect on intent to persist" (Tovar 2013, p. 252). Tovar's study is one of the few to empirically explore Schlossberg's (1989) original theoretical assertions concerning mattering and its effect on student involvement and retention.

Mattering and International Students

After reviewing the literature available in Rowan University's library holdings, I was unable to locate a single study that explored the concept of mattering and international students, with the exception of an unpublished paper that was presented at the Annual Forum of the Association for Institutional Research by Tovar, Simon, and Fujimaki in 2008. This paper was cited in Tovar's (2013) dissertation. However, the original source was unfortunately not available in any holdings, including ERIC, and when I contacted the lead researcher for access, he was unable to provide me with a copy. Tovar (2013), however, did offer a brief summary of the findings in the unpublished Tovar, Simon, and Fujimaki (2008) study in his dissertation. The study explored how different factors, including "pre-college student characteristics, transition to college experiences, academic factors, and socio-academic integrative experiences," affected

international and American students' perceptions of mattering at their institution (Tovar 2013, p. 55). Compared with their American counterparts, international students only had three statistically significant predictors of mattering: "degree of relatedness to diverse students, the number of hours engaged on campus activities, and the degree of relatedness to instructors" (Tovar 2013, pp. 55-56). Unfortunately, it is unclear from Tovar's (2013) overview of the study whether international students experienced significantly different levels of mattering when compared to their American counterparts.

While I came across several studies on involvement and sense of belonging that involved international students, there was none that specifically incorporated mattering, which is a distinct concept. Since involvement and sense of belonging are beyond the scope of this paper, I have chosen to omit these sources. I used Academic Search Complete, ERIC, JSTOR, ProQuest Dissertations and Theses, Rowan Digital Works, and Rowan University Library's general Profsearch, which pulls from all available databases in the course of my search. Key terms included "mattering," "international students," and "foreign students."

Mattering at Rowan University

There have been a number of studies conducted at Rowan University on mattering. The first study was conducted by Durham in 2008 on African American undergraduate students using a modified version of Cuyjet's *Perceptions on Community/Environment (PCE)* instrument (Cuyjet, 1996 as cited in Durham, 2008). Durham (2008) found that African American students generally perceived that they mattered, particularly in the advising and academic subscales. However, this population experienced higher rates of marginality in the classroom climate and when interacting

with administration (Durham, 2008). Among Durham's (2008) recommendations were a call for administrative personnel to address African American students' and other minority students' concerns directly rather than referring these populations to multicultural affairs officers and organizations as well as to provide greater support for increased diversity on campus. Interestingly, D'Angelo's (2010) study on mattering and graduate students uncovered different results, with the advising subscale ranking lowest for feelings of mattering and the administration subscale scoring highly. This may be due to the difference in demographics since D'Angelo (2010) did not focus on African American students and was looking at the graduate population, which utilizes a different form of advisement. The results may also have been impacted by D'Angelo's (2010) use of an entirely different instrument, the *MHE*.

In 2012, McGuire researched mattering and undergraduate students. Significantly, she was the first researcher to use Tovar, Simon, and Lee's (2009) *CMI* instrument in a study at Rowan University. Her study became a model for many other research projects at Rowan that explored mattering and marginality. McGuire (2012) found that generally, undergraduate students felt as though they mattered, with results mostly comparable to that of Tovar, Simon, and Lee's (2009) normative study. The only area where students did not feel as though they mattered was in the counselors and advisors subscale (McGuire, 2012).

Since McGuire (2012), several other studies at Rowan have used the *CMI* to explore mattering and Rowan University students. Blazie's research (2013) explored whether students with known disabilities felt like they mattered at Rowan University. The results suggested that this population felt as if they mattered in each of the subscales;

however, the lowest and highest feelings of mattering were indicated in the administrative and peer interaction subscales respectively (Blazie, 2013). Notably, there was a significant difference in the levels of mattering between students with invisible versus visible disabilities, with the former scoring lower in all mattering subscales than the latter.

Johnston's (2014) study focused on undergraduate transfer students in the Rohrer College of Business, using Tovar, Simon, and Lee's (2009) work as a normative model. Similar to McGuire (2012), she found that students scored highly in most of the mattering subscales. The only areas where Rohrer College of Business transfer students did not feel as though they mattered were in the counselors and advisors and general college mattering subscales, suggesting that improvement was needed in these contexts (Johnston, 2014)

In 2017, Cattell studied commuter and residential honor students' mattering perceptions using the *CMI*. She found that overall, students enrolled in the Thomas N. Bantivoglio Honors Concentration felt a higher sense of mattering than those sampled by both Tovar, Simon, and Lee (2009) and McGuire (2012); however, when commuter and residential honors students were compared against each other, commuter students' feelings of mattering were lower in every subscale and they additionally experienced greater rates of marginality.

Diaz's (2017) study on Latina/o students' perceptions of mattering at Rowan University found generally comparable results to McGuire (2012) and Johnston (2014) with the exception of the mattering to other students subscale on the *CMI*, where Latina/o students scored significantly worse.

While it appears that most students overall feel as though they matter at Rowan University, there are differences between sub-populations, with some groups experiencing lower degrees of mattering or even downright marginality in different subscales of the *CMI*. This clearly demonstrates a need to examine the concept of mattering with international students as this population has yet to be studied.

Summary of the Literature Review

In conclusion, many studies have been conducted since Rosenberg and McCullough (1981) first formulated their theory of mattering and Schlossberg (1989) applied it to the field of higher education. The results for how mattering has impacted student success and persistence have been mixed; this is arguably due to the lack of a valid and reliable mattering instrument for the better part of nearly two decades. With the development of new instrumentation, such as Tovar, Simon, and Lee's (2009) *CMI*, researchers have had more effective tools at their disposal when conducting studies on mattering. Of note, nearly all of the mattering studies, conducted both before and after the development of more reliable and valid instruments, have been focused on different populations of American students. Only one unpublished study was identified as specifically examining mattering and international students and the researcher was unable to access this document. Clearly more studies are needed to address this gap in the knowledge base and it is hoped that the present study will help in this endeavor.

Chapter III

Methodology

Context of the Study

As noted previously, few studies have been conducted on international students' perceptions of mattering in higher educational settings overall. While several studies on mattering have been undertaken with various Rowan University student populations, no study has specifically focused on international students. I will be exploring this gap in the knowledge base using Tovar, Simon, and Lee's (2009) *CMI* instrument to measure the degree to which international students feel like they matter at Rowan University in the instrument's six subscales of general college mattering, mattering versus marginality, mattering to counselors, mattering to instructors, mattering to students, and perception of value. I will also be exploring how international students' perceptions of mattering compare to residential undergraduate students' perceptions of mattering in McGuire's (2012) study of Rowan students.

To provide further context for the study, it is necessary to outline a brief overview of the institutional site. Rowan University is a public, mid-size, research university located in southern New Jersey. The university's main campus is in Glassboro, NJ, but the school also has two additional campuses in Camden, NJ and Stratford, NJ, which house the institution's two medical schools. The university has experienced rapid growth over the last decade and at the time this study was conducted, served approximately 18,500 students across all three campuses (Cardona, 2017). Of these students, 15,401 were undergraduates, 2,045 were graduates, and 1,038 were professionals (Cardona,

2017). The majority of Rowan University's student body at all three levels were domestic students.

At the time of this study, Rowan University's extreme expansion had not yet extended to the international student population. Only 132 students studying at Rowan's Glassboro campus were international ("Master List Fall 2018 with charts," 2018).

Quantitative Instrument

In quantitative research, variables are assigned numerical values for the purposes of measurement (Springer 2010). As is suggested by the name, quantitative research seeks to "quantify" or give numerical representation to what is being researched (Springer 2010). Quantitative research depends on measurement scales, which are built into survey or questionnaire instruments (Springer 2010). The *CMI*, the instrument used in this study, is one such questionnaire. It measures students' perceptions of mattering using a Likert scale, where participants read a statement and indicate their agreement or disagreement selecting from a gradient of responses: "strongly agree," "agree," "neither agree nor disagree," "disagree," and "strongly disagree" (Springer 2010; Tovar, Simon, & Lee (2009). Most of the previous research on mattering, including McGuire's (2012) study on undergraduate students at Rowan, has used quantitative methodology. Since I am interested in comparing international students' perceptions of mattering to domestic students' perceptions, I need to use the same research methodology as those used in previous studies.

As noted previously, this study utilized Tovar, Simon, and Lee's (2009) *CMI* instrument, which measures mattering over the following subscales: general college mattering, mattering versus marginality, mattering to counselors, mattering to instructors,

matter to students, and perception of value. While there are several instruments that have been developed to measure mattering over the past few decades, I chose Tovar, Simon, and Lee's instrument for its high validity and reliability. As noted in the literature review, the *CMI* avoids some of the pitfalls of prior instruments, which often failed to accurately capture the spirit of Rosenberg and McCullough's (1981) theory and/or lacked external validation (France & Finney, 2010; Tovar, Simon, & Lee, 2009).

Population

The target population for this study was 132 international students on F-1 status studying at Rowan University's Glassboro campus. Given the small size of this demographic, the survey was administered to the total population and no sampling method was used ("Master List Fall 2018 with charts," 2018; Springer 2010). As an international student advisor, I had access to this information through the International Center's "master list," an Excel spreadsheet that contains the names and contact information of every F-1 international student ("Master List Fall 2018 with charts," 2018). Before conducting the study, students known to be under 18 years of age were removed from the list as an extra level of safety for eIRB compliance. The master list included both graduate and undergraduate students pursuing a variety of majors, with all class levels represented.

It is important to note that McGuire's (2012) study, to which this data will be compared, only included undergraduate students. Due to the overall low numbers of international students, I felt it was important to capture the perceptions of both undergraduate and graduate students, especially since graduates outnumber undergraduates in the population ("Master List Fall 2018 with charts," 2018). I will be

directly comparing the findings between undergraduate international students and the students surveyed in McGuire's (2012) study. Comparisons between graduate international students and the undergraduate students McGuire (2012) studied will be undertaken with great caution. Unfortunately, while a previous study by D'Angelo (2010) examined mattering and graduate students, direct comparisons are not possible since D'Angelo (2010) used an entirely different instrument, the *MHE*, which lacks the validity and reliability of the *CFI* (France & Finney, 2010; Tovar, Simon, & Lee, 2009).

Data Collection Procedures

Before engaging in data collection procedures, I completed the electronic Institutional Review Board process. Upon approval, I distributed the survey adapted from the *CFI* to the total population, with the exception of students under the age of 18 as noted above, using Qualtrics survey software. The survey was sent via email and remained open for two weeks. Two follow-up emails were sent to the students to remind them of the survey opportunity. The first follow-up email was sent one week after the survey was initially distributed. The second follow-up email was sent two days before the end of the survey. The survey was anonymous and no personal data were collected in the course of the survey distribution.

Data Analysis

I entered the data collected from the Qualtrics survey into the Statistical Package for the Social Sciences (SPSS) software. This data was compared against the domestic student data available from McGuire's (2012) study of undergraduate domestic students at Rowan University. I used frequency tables and descriptive statistics during the data analysis.

Chapter IV

Findings

Profile of the Sample

The participants in this study were international students studying on Rowan University's Glassboro campus who were registered for classes during Fall 2018. Surveys were disseminated via Qualtrics to 132 international students, representing the total population. Of the 132 students, 45 responded to the survey in its entirety, yielding a response rate of 34%. As illustrated in Table 4.1, 25 of these respondents were undergraduate students and 20 were graduate students. An additional 23 partial responses were recorded; these responses were incomplete as the respondents either did not adequately complete the consent process, which took them to the end of the survey, or they did not respond to any of the *CMI* questions.

Table 4.1

Subject Demographics (N=45)

Variable	<i>f</i>	%
Undergraduate	25	55.6
Graduate	20	44.4
Total	45	100

Analysis of the Data

Research Question 1: Using Tovar, Simon, and Lee's (2009) *CMI* instrument, do international students feel like they matter at Rowan University in the instrument's six

subscales of general college mattering, mattering versus marginality, mattering to counselors, mattering to instructors, mattering to students, and perception of value?

The General College Mattering subscale measures how much students feel as though they matter to the university as a whole. Questions posed in this subscale are nonspecific and ask how students matter to people on campus without explicitly identifying who these people are. Students' perceptions of mattering in this subscale are illustrated in Table 4.2. More than 50% of the students surveyed agreed "Very Much," "Mostly," or "Somewhat" with all but one of the statements, generally indicating that they feel positive interest, concern, shared success, and support from other parties on campus. The statement, "Some people on campus are disappointed in me when I do not accomplish all I should," was the exception, with 28.9% of students only slightly agreeing with the statement and a further 28.9% of students agreeing not at all.

Table 4.2

General College Mattering

Statement	Very Much		Mostly		Somewhat		Slightly		Not at all	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
There are people at the university who are genuinely interested in me as a person. n=45, M=3.36, SD=1.21, missing=0	10	22.2	10	22.2	14	31.1	8	17.8	3	6.7
There are people at the university who are concerned about my future. n=45, M=3.31, SD=1.33, missing=0	11	24.4	11	24.4	8	17.8	11	24.4	4	8.9

Table 4.2 (continued)

Statement	Very Much		Mostly		Somewhat		Slightly		Not at all	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Other students are happy for me when I do well in exams or projects. n=45, M=3.80, SD=1.14, missing=0	13	28.9	12	26.7	12	26.7	5	11.1	3	6.7
People on campus are generally supportive of my individual needs. n=45, M=3.4, SD=1.05, missing=0	7	15.6	15	33.3	15	33.3	6	13.3	2	4.4
I sometimes feel pressured to do better because people at the university would be disappointed if I did not. n=45, M=2.89, SD=1.17, missing=0	2	4.4	15	33.3	11	24.4	10	22.2	7	15.6
Some people on campus are disappointed in me when I do not accomplish all I should. n=45, M=2.26, SD=1.03, missing=0	0	0	6	13.3	13	28.9	13	28.9	13	28.9

The Mattering Versus Marginality subscale measures whether a student perceives that they matter to the university or if they feel marginalized. Marginality is the antithesis of mattering. The results of this subscale were reverse scored and are indicated below in Table 4.3. Results generally appear to indicate high levels of mattering and low levels of marginality with over 50% of participants answering that they were “Slightly” or “Not at all” marginalized for all but one of the statements. Approximately 24.5% of respondents said they agreed “Slightly” or “Not at all” with the statement, “I feel socially inadequate at school.” A large number of the respondents, 35.6%, answered that they “Somewhat”

agreed with this statement, followed by 6.7% who “Mostly” agreed and 8.9% who agreed “Very Much.”

Table 4.3

Mattering Versus Marginality

Statement	Very Much		Mostly		Somewhat		Slightly		Not at all	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
I often feel isolated when involved in student activities (e.g. clubs, events). ^a <i>n</i> =45, <i>M</i> =4.02, <i>SD</i> =1.18, missing=0	1	2.2	6	13.3	6	13.3	10	22.2	22	48.9
Sometimes I feel that no one at the university notices me. ^a <i>n</i> =45, <i>M</i> =3.8, <i>SD</i> =1.18, missing=0	1	2.2	7	15.6	9	20	11	24.4	17	37.8
I often feel socially inadequate at school. ^a <i>n</i> =45, <i>M</i> =3.56, <i>SD</i> =1.25, missing=0	4	8.9	3	6.7	16	35.6	8	17.8	3	6.7
Sometimes I feel alone at the university. ^a <i>n</i> =45, <i>M</i> =3.5, <i>SD</i> =1.3, missing=0	4	8.9	7	15.6	9	20	13	28.9	12	26.7
Sometimes I get so wrapped up in my personal problems that I isolate myself from others at the university. ^a <i>n</i> =45, <i>M</i> =3.64, <i>SD</i> =1.32, missing=0	4	8.9	6	13.3	7	15.6	13	28.9	15	33.3
Sometimes I feel that I am not interesting to anyone at the university. ^a <i>n</i> =44, <i>M</i> =4, <i>SD</i> =1.23, missing=1	2	4.4	4	8.9	9	20	7	15.6	22	48.9

^a Item reverse scored.

The *Mattering to Counselors or Advisors* subscale measures students' perceptions of how much they matter to advisors and advisors. It should be noted that the meaning of counselor and advisor may be different to each student. Each international student has an academic or faculty advisor as well as an international student advisor. Students may also have seen a psychological counselor or a career counselor and have these personnel in mind. The results for this subscale are demonstrated in Table 4.4. Over 50% of participants agreed "Very Much" or "Mostly" with all but one of the statements, indicating a general sense of mattering to counselors and/or advisors. The only statement with less than a 50% response rate of "Very Much" or "Mostly" was, "I believe that my counselor(s)/advisor(s) would miss me if I suddenly stopped attending the university." Around 20% of students agreed with this statement somewhat, 11.1% agreed slightly, and 26.7% agreed with this statement not at all.

Table 4.4

Mattering to Counselors or Advisors

Statement	Very Much		Mostly		Somewhat		Slightly		Not at all	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
If I had a personal problem, I believe that counselors/advisors would be willing to discuss it with me. <i>n</i> =45, <i>M</i> =3.38, <i>SD</i> =1.33, missing=0	11	24.4	13	28.9	8	17.8	8	17.8	5	11.1
Counselors/advisors at the university generally show their concern for students' well-being. <i>n</i> =45, <i>M</i> =3.51, <i>SD</i> =1.25, missing=0	13	28.9	10	22.2	12	26.7	7	15.6	3	6.7

Table 4.4 (continued)

Statement	Very Much		Mostly		Somewhat		Slightly		Not at all	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
My counselor/advisor is generally receptive to what I have to say. <i>n</i> =45, <i>M</i> =3.87, <i>SD</i> =1.14, missing=0	15	33.3	18	40	5	11.1	5	11.1	2	4.4
If I stopped attending the university, my counselor(s)/advisor(s) would be disappointed. <i>n</i> =45, <i>M</i> =3.42, <i>SD</i> =1.25, missing=0	11	24.4	12	26.7	10	22.2	9	20	3	6.7
I believe that my counselor(s)/advisor(s) would miss me if I suddenly stopped attending the university. <i>n</i> =45, <i>M</i> =3, <i>SD</i> =1.48, missing=0	8	17.8	11	24.4	9	20	5	11.1	12	26.7

The Mattering to Professors subscale measures the degree to which students feel as though they matter to their professors. Items in this subscale were reverse scored and can be found in Table 4.5. Students generally reported feelings of mattering to their professors, especially in regard to speaking up in class.

Table 4.5

Mattering to Professors

Statement	Very Much		Mostly		Somewhat		Slightly		Not at all	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
My professors sometimes ignore my comments or questions. ^a <i>n</i> =45, <i>M</i> =4.38, <i>SD</i> =1.09, missing=0	1	2.2	4	8.9	3	6.7	6	13.3	31	68.9
Sometimes my professors simply do not listen to what I have to say. ^a <i>n</i> =45, <i>M</i> =4.18, <i>SD</i> =1.12, missing=0	2	4.4	3	6.7	7	15.6	6	13.3	27	60
I sometimes feel my professor(s) want me to hurry up and finishing speaking. ^a <i>n</i> =45, <i>M</i> =4.13, <i>SD</i> =1.24, missing=0	2	4.4	3	6.7	10	22.2	2	4.4	28	62.2
I often feel my professor(s) care more about other things than me as a student. ^a <i>n</i> =45, <i>M</i> =3.87, <i>SD</i> =1.34, missing=0	4	8.9	3	6.7	10	22.2	6	13.3	22	48.9

^a Item reverse scored.

The Mattering to Students subscale examines the level of mattering that students feel toward their peers. The results of this subscale are indicated in Table 4.6.

International students' feelings of mattering to their peers appear to be middling. The answer of "Somewhat" accounted for the largest percentage for each statement in the subscale.

Table 4.6

Mattering to Students

Statement	Very Much		Mostly		Somewhat		Slightly		Not at all	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
When in groups, other students tend to rely on my contributions. <i>n</i> =45, <i>M</i> =3.22, <i>SD</i> =1.02, missing=0	5	11.1	11	24.4	21	46.7	5	11.1	3	6.7
Other students rely on me for support. <i>n</i> =45, <i>M</i> =3.15, <i>SD</i> =1, missing=0	5	11.1	8	17.8	24	53.3	5	11.1	3	6.7
Some students are dependent on my guidance or assistance to help them succeed. <i>n</i> =45, <i>M</i> =2.98, <i>SD</i> =1.1, missing=0	2	4.4	13	28.9	19	42.2	4	8.9	7	15.6

The Perception of Value subscale examines students' perceptions of mattering at the university. The results are listed in Table 4.7. In general, students reported high levels of mattering. Between 66.7% and 71.2% of participants reported agreeing "Very Much" or "Mostly" with each of the statements in the subscale.

Table 4.7

Perception of Value

Statement	Very Much		Mostly		Somewhat		Slightly		Not at all	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Knowing that other people at the university care for me motivates me to do better. <i>n</i> =45, <i>M</i> =3.8, <i>SD</i> =1.12, missing=0	14	31.1	16	35.6	9	20	4	8.9	2	4.4
It is comforting to know that my contributions are valued by my professors. <i>n</i> =45, <i>M</i> =4.24, <i>SD</i> =1, missing=0	22	48.9	15	33.3	6	13.3	1	2.2	1	2.2
There are people at the university that sincerely appreciate my involvement as a student. <i>n</i> =45, <i>M</i> =3.91, <i>SD</i> =1.1, missing=0	16	35.6	16	35.6	8	17.8	3	6.7	2	4.4

Research Question 2: How do international students' perceptions of mattering compare to residential undergraduate students' perceptions?

Table 4.8 offers a comparison of the research sample and the normative sample taken from McGuire's (2012) study. With the exception of the General College Mattering and Mattering to Students subscales, international students scored higher than the residential undergraduates that McGuire (2012) sampled.

Table 4.8

Descriptive Statistics for 6 Subscales for Research and Normative Sample

Subscale	International Student Sample (n=45)		Residential Undergraduate Sample (n=386)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
General College Mattering	3.30	1.14	3.32	1.16
Mattering v. Marginality ^a	3.75	1.24	2.15	1.21
Mattering to Counselors/Advisors	3.44	1.29	2.90	1.28
Mattering to Instructors ^a	4.14	1.20	2.03	1.08
Mattering to Students	3.12	1.04	3.33	1.07
Perception of Value	3.98	1.07	3.79	1.11

^a Item reverse scored.

Chapter V

Summary, Discussion, Conclusions, and Recommendations

Summary of the Study

This study used Rosenberg and McCullough's (1981) theory of mattering and applied it to an international student context. The total population, 132 international students studying on Rowan University's Glassboro campus, were administered a survey via Qualtrics. The survey utilized Tovar, Simon, and Lee's (2009) *CMI* instrument. Of the 132 students surveyed, 45 completed the survey in its entirety, yielding a 34% response rate.

Purpose of the Study

The purpose of this study was to ascertain whether international students feel as though they matter at Rowan University and to compare their perceptions of mattering with those of undergraduate, residential domestic students surveyed in McGuire's (2012) study. Since international students often face a variety of challenges above and beyond those encountered by their domestic peers, such as homesickness, language barriers, and discrimination (Almurideef, 2016; Chen, 1999; Onabule & Boes, 2013; Zhou & Cole, 2017), it is important to examine their perceptions of how much they matter to the university, their professors, counselors, advisors, and peers. Additionally, after a review of the literature, it was determined that there was a large gap in the knowledge base in this area since no study on mattering and international students had hitherto been published in the U.S.

Methodology

The total population of 132 international students studying on Rowan University's Glassboro campus were surveyed using Tovar, Simon, and Lee's (2009) *CMI* instrument. This instrument was selected for its high reliability and validity. The instrument consisted of 29 questions across six different subscales: general college mattering, mattering versus marginality, mattering to counselors/advisors, mattering to professors, mattering to students, and perceived value. An additional demographic question asking students whether they were undergraduate or graduate students was also posed at the beginning of the survey. The survey instrument was administered using the software, Qualtrics. All 132 international students received three instructional emails with information about the optional survey over a period of two weeks.

Data Analysis

The data were manually entered from Qualtrics into SPSS and then analyzed using descriptive statistics. Each subscale was analyzed separately. Items in the Mattering Versus Marginality and Mattering to Professors subscales were reverse scored. Overall means were calculated for each subscale and compared with the means in McGuire's (2012) study of undergraduate residential students.

Discussion of the Findings

Overall, international students scored higher than the undergraduate residential students in McGuire's (2012) study in all subscales except for General College Mattering and Student Mattering. In the Mattering Versus Marginality subscale, international students overall scored more positively than the students in McGuire's (2012) study, but certain items stood out as potentially problematic. For instance, students scored

particularly low in response to the statement, “I often feel socially inadequate in school” with 35.6% agreeing “Somewhat,” 6.7% agreeing “Mostly,” and 8.9% agreeing “Very Much.” Students additionally expressed general agreement with the statement, “Sometimes I feel alone at the university,” with 20% agreeing “Somewhat,” 15.6% agreeing “Mostly,” and 8.9% agreeing “Very Much.”

However, international students appeared to feel a strong sense of mattering to their professors. This may be due to the presence of graduate students in the survey, who often have more face-to-face instruction and advisement time with their professors when compared with undergraduate students, but more research would need to be undertaken to confirm this possible connection.

Conclusions

This study suggests that international students generally feel a sense of mattering on Rowan University’s Glassboro campus. When comparing the mean scores against McGuire’s (2012) data on domestic, undergraduate, residential students, international students scored 1.6 points higher on the Mattering Versus Marginality subscale, 0.54 points higher on the Mattering to Counselors/Advisors subscale, 2.11 points higher on the Mattering to Professors subscale, and 0.19 points higher on the Perception of Value subscale. International students scored lower on the General College Mattering and Mattering to Students subscales, by 0.02 and 0.21 points respectively. This may indicate that international students have a higher sense of mattering in most areas, particularly in relation to mattering to professors, than their domestic peers. However, caution should be taken with these findings as the sample size was small and close to seven years have passed since McGuire (2012) surveyed the undergraduate students. Rowan University

had undergone many changes in that period, so the sense of mattering among undergraduate students may very well be different today than it was in 2012.

Additionally, graduate students were included in this study and were not included in McGuire's study, allowing for limited direct comparisons.

Recommendations for Practice

Since international students scored lowest on the Mattering to Students subscale both generally and in comparison to the residential undergraduates in McGuire's (2012) study, this suggests that more work is needed to help connect international students with their fellow domestic students. International students also scored low on questions in the Mattering Versus Marginality subscale that dealt with socialization and loneliness. Based on these results, I offer the following recommendations for practice:

1. Develop programming, such as international-domestic study groups, that bring international students and domestic students together.
2. Offer an expanded American social skills informational session during the International Student Orientations, held at the beginning of every fall and spring semester.
3. Hold a cross-cultural panel discussion every semester where international and domestic students can talk about their cultural norms and ask questions in a safe space.
4. Partner with Social Justice, Inclusion, and Conflict Resolution and the International Studies program to offer cross-cultural communication and sensitivity training for both students and faculty/staff.

5. Partner with International Club, Sigma Iota Rho, the International Studies Honor Society, and other interested clubs on campus to offer increased socialization opportunities for international and domestic students.

Recommendations for Further Research

This study was limited in its scope and did not examine other variables such as gender or nationality. Since the international student population is so small, I never considered asking students their nationality since this question could potentially identify certain students and damage the anonymity of the study, especially since I know all of the students who were sent the study and which countries they are all from. However, if the international student population grows significantly in the future and is studied by a researcher who does not have as much direct contact with the students as I have had, this could be an interesting question to examine since there is obviously a wealth of diversity among international students. Based on this and other observations I had during this study, I make the following recommendations:

1. Further research could examine whether there are differences in international students' perceptions of mattering based on gender.
2. A study comparing international students' senses of mattering by nationality should be conducted if the population reaches a critical mass.
3. A qualitative or mixed methods study of international students' attitudes toward mattering could be undertaken to more deeply ascertain their perceptions.
4. A future study could explore whether there is a difference between residential and off-campus international students' perceptions of mattering.

5. More research should be done to directly compare international graduate students' and domestic undergraduate students' perceptions of mattering.
6. A replication study should be developed to see if there are any changes in the population's mattering perceptions in the future.

References

- Almurideef, R. (2016). *The challenges that international students face when integrating into higher education in the United States*. Glassboro, N.J: Rowan University.
- Blazie, A. (2013). Mattering and marginality: students with disabilities at Rowan University. *Theses and Dissertations*. 375. <https://rdw.rowan.edu/etd/375>
- Butcher, J. L. (1997). *Involvement and persistence: Nontraditional student perceptions of the student-college relationship*. Available from ProQuest Dissertations & Theses Global. (304377518). Retrieved from <http://ezproxy.rowan.edu/login?url=https://search.proquest.com/docview/304377518?accountid=13605>
- Cardona, Joseph. (2017). Rowan University Fast Facts. *Rowan University*. Retrieved from <https://sites.rowan.edu/fastfacts/>
- Cattell, J. (2017). *Commuter student and residential student mattering in an honors concentration* (M.A.). Available from ProQuest Dissertations & Theses Global. (2007550948). Retrieved from <http://ezproxy.rowan.edu/login?url=https://search.proquest.com/docview/2007550948?accountid=13605>
- Chen, C. P. (1999). Common stressors among international college students: Research and counseling implications. *Journal of College Counseling*, 2(1), 49-65. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ589111&site=ehost-live>
- D'Angelo, C. (2010). *An evaluation of graduate students' perceptions of mattering at Rowan University* (2010). *Theses and Dissertations*. 8. <https://rdw.rowan.edu/etd/8>
- Diaz, A. (2017). *Yo importo: The Latina/o students' experience at rowan university* (M.A.). Available from ProQuest Dissertations & Theses Global. (1946186313). Retrieved from <http://ezproxy.rowan.edu/login?url=https://search.proquest.com/docview/1946186313?accountid=13605>

- Dixon Rayle, A., & Chung, K. (2007). Revisiting first-year college students' mattering: Social support, academic stress, and the mattering experience. *Journal of College Student Retention*, 9(1), 21-37. Retrieved from <http://ezproxy.rowan.edu/login?url=https://search.proquest.com/docview/196731208?accountid=13605>
- Dixon, S. K., & Kurpius, S. E. R. (2008). Depression and college stress among university undergraduates: Do mattering and self-esteem make a difference? *Journal of College Student Development*, 49(5), 412-424. doi:10.1353/csd.0.0024
- Durham, L., *Mattering and marginality among African American students at Rowan University* (2008). *Theses and Dissertations*. 719. <https://rdw.rowan.edu/etd/719>
- France, M. K., & Finney, S. J. (2009). What matters in the measurement of mattering?: A construct validity study. *Measurement and Evaluation in Counseling and Development*, 42(2), 104-120. doi:10.1177/0748175609336863
- Johnston, K. E. (2014). *An evaluation of Rohrer College of Business transfer students' attitudes of mattering at Rowan University* (Master's Thesis). Retrieved from Rowan University.
- Kent, S. E. (2004). *Persistence of adult undergraduate students and their perceptions of how they matter to a public institution* (Order No. 3130530). Available from ProQuest Dissertations & Theses Global. (305134854). Retrieved from <http://ezproxy.rowan.edu/login?url=https://search.proquest.com/docview/305134854?accountid=13605>
- Klug, J. M. (2008). *A phenomenological study on students' perceptions of mattering at a selected midwestern public institution*. Available from ProQuest Dissertations & Theses Global. (304487386). Retrieved from <http://ezproxy.rowan.edu/login?url=https://search.proquest.com/docview/304487386?accountid=13605>
- Lewin, T. (2012, February 04). Taking more seats on campus, foreigners also pay the freight. *The New York Times*. Retrieved from <https://www.nytimes.com/2012/02/05/education/international-students-pay-top-dollar-at-us-colleges.html>

- Loudenback, T. (2016, September 16). International students are now 'subsidizing' public American universities to the tune of \$9 billion a year. *Business Insider*. Retrieved from <http://www.businessinsider.com/foreign-students-pay-up-to-three-times-as-much-for-tuition-at-us-public-colleges-2016-9>
- “Master List Fall 2018 with charts.” (2018). Retrieved from O:\Openarea\International Center\Master List of All F-1 Students
- McGuire, S. (2012). *Mattering and marginality: Attitudes of Rowan University students* (Master’s Thesis). Retrieved from Rowan University.
- Onabule, A. I., & Boes, S. R. (2013). International students' likelihood to seek counseling while studying abroad. *Journal of International Students*, 3(1), 52-59. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1056444&site=ehost-live>
- Rendón, L. I. (1994). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education*, 19(1), 33-51.
- Rosenberg, M., & McCullough, C.B. (1981). Mattering: Inferred signification and mental health among adolescents. *Research in Community and Mental Health*, 2, 163-182.
- Roy, M., & Lu, Z. (2017, April 05). The next frontier: ROI evaluation in international student recruitment. *World Education News & Reviews*. Retrieved from <https://wenr.wes.org/2016/02/the-next-frontier-roi-evaluation-in-international-student-recruitment>
- Schieferecke, R.W., & Card, K.A. (2013). Helping males succeed in college: Male’s experiences of mattering and marginalization. *College Student Affairs Journal*, 31(2), 87.
- Schlossberg, N.K. (1989). Marginality and mattering: Key issues in building community. *New Directions for Student Services*, 1989(48), 5-15. doi:10.1002/ss.37119894803
- Schlossberg, N.K., Lassalle, A.D., & Golec., R. R. (1990). The mattering scales for adult students in higher education. *Center for Adult Learning and Educational Credentials, The American Council on Education*. Retrieved from <https://files.eric.ed.gov/fulltext/ED341772.pdf>
- Springer, K. (2010). *Educational research: A contextual approach*. Hoboken, NJ: Wiley.

- Sumner, K. J. (2012). *A phenomenological study of students' perceptions of mattering at a selected midwestern private faith-based institution* (Order No. 3507948). Available from ProQuest Dissertations & Theses Global. (1017537417). Retrieved from <http://ezproxy.rowan.edu/login?url=https://search.proquest.com/docview/1017537417?accountid=13605>
- Tovar, E. (2013). *A conceptual model on the impact of mattering, sense of belonging, engagement/involvement, and socio-academic integrative experiences on community college students' intent to persist* (Order No. 3557773). Available from ProQuest Dissertations & Theses Global. (1346677788). Retrieved from <http://ezproxy.rowan.edu/login?url=https://search.proquest.com/docview/1346677788?accountid=13605>
- Tovar, E., Simon, M. A., & Lee, H. B. (2009). Development and validation of the college mattering inventory with diverse urban college students. *Measurement and Evaluation in Counseling and Development*, 42(3), 154-178.
doi:10.1177/0748175609344091
- Wolf-Wendel, L, Ward, K. & Kinzie, J. (2009). A tangled web of terms: The overlap and unique contribution of involvement, engagement, and integration to understanding college student success, *Journal of College Student Development*, 50(4), 407-428.
- Zhou, J. & Cole, D. (2016). Comparing international and American students: Involvement in college life and overall satisfaction. *Higher Education*, 73(5), 655-672.