Developing a Sense of Belonging for Commuter Students: A Mixed Methods Study

Eric S. Bloomquist
University of Nebraska-Lincoln, eric.s.bloomquist@gmail.com

Follow this and additional works at: http://digitalcommons.unl.edu/cehsedaddiss
Part of the Higher Education Administration Commons

http://digitalcommons.unl.edu/cehsedaddiss/177

This Article is brought to you for free and open access by the Educational Administration, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Educational Administration: Theses, Dissertations, and Student Research by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
Developing a Sense of Belonging for Commuter Students:

A Mixed Methods Study

by

Eric S. Bloomquist

A THESIS

Presented to the Faculty of
The Graduate College at the University of Nebraska
In Partial Fulfillment of Requirements
For the Degree of Master of Arts

Major: Educational Administration

Under the Supervision of Professor James Griesen

Lincoln, Nebraska

May 2014
Developing a Sense of Belonging for Commuter Students:
A Mixed Methods Study

Eric S. Bloomquist, M.A.
University of Nebraska, 2014

Advisor: James V. Griesen

In this mixed methods study, the researcher explored the experiences of commuter freshmen at the University of Nebraska-Lincoln—a large, four-year, public institution. Specifically, he sought to better understand how commuter freshmen feel that they belong on their residential campus and what they report as their greatest needs in order to succeed. Using a quantitative survey returned from a sample of 92 students \((n = 92)\), he found that a majority of the commuter freshmen did report feelings of belonging. Additionally, responses relating to feelings of not belonging were correlated with lower first-semester self-reported GPAs. In a follow-up Nominal Group Technique session, the researcher asked participants about their greatest challenges and suggestions for the university to help them meet their needs. The results of this session echoed much of the existing literature in that commuter students need reliable parking and transportation, natural avenues to make connections outside of their classes, and better and more frequent communications from the university. This document provides information from existing literature on the topic, explains the methods utilized in the present study, reports relevant findings from the survey and Nominal Group Technique session, and discusses the implications from these findings as they relate to higher education practice.
Acknowledgements

This project could not have been completed by my own strength and will alone. I am grateful for those in my life who helped me through this project from start to finish.

I thank God for His continual presence during this project and throughout my life.

I thank my research participants—out of the hundreds of ways they could have spent their time, they agreed to spend a moment with me to participate in my study.

I thank Dr. Jim Griesen. Even with several other advisees (and the freedoms of retirement just around the corner), he never dropped me from his long list of priorities. He has an incredible wealth of experience and wisdom from which I can learn and grow, and I am grateful to have had the opportunity to work with him during this process.

I thank my cohort and the many faculty and practitioners at UNL who have been inspirational to me during my research and in my journey so far in Student Affairs. Particularly, Dr. Tim Alvarez who guided me to his graduate program and has since provided personal and professional mentorship. His warm-heartedness and his dedication to students are refreshing and encouraging, and are characteristics we all should aspire to develop. Also, Ann Koopmann has been an encouragement and mentor to me along my entire journey through higher education. As we are both completing significant chapters in our educational lives, I am both proud and incredibly humbled to call her a colleague.

I thank my family. Emily and I have sacrificed time with our families at the expense of our education, and our families have been continually supportive of us.

Lastly, I thank my wife Emily. She has been my partner and teammate through my journey in graduate school and I am an incredibly lucky man to have her by my side for our adventures to come.
# Table of Contents

Chapter 1—Introduction ........................................................................................................... 1  
Purpose Statement .................................................................................................................. 1  
Research Questions ............................................................................................................... 2  
Mattering Matters .................................................................................................................. 2  
Research Design .................................................................................................................... 3  
Definition of Terms ............................................................................................................... 4  
Significance ............................................................................................................................. 4  
Delimiting Variables ............................................................................................................... 5  
Limitations .............................................................................................................................. 6  
Assumptions ............................................................................................................................ 7  
Conclusion ............................................................................................................................... 7  

Chapter 2—Literature Review .................................................................................................. 8  
Purpose Statement .................................................................................................................. 8  
Introduction ........................................................................................................................... 8  
Commuter Students Defined ................................................................................................... 9  
Literature on Commuter Student Characteristics .................................................................. 10  
Commuter Student Needs ....................................................................................................... 13  
Distinguishing Dependent Commuters .................................................................................. 14  
Sense of Belonging and Marginality and Mattering ................................................................. 16  
Mattering and Commuter Students ......................................................................................... 18  
Nominal Group Technique ...................................................................................................... 20
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Group Technique data analysis</td>
<td>40</td>
</tr>
<tr>
<td>Validation strategies</td>
<td>41</td>
</tr>
<tr>
<td>Chapter 4—Findings</td>
<td>42</td>
</tr>
<tr>
<td>Research Question 1: Characteristics of Commuter Freshmen</td>
<td>43</td>
</tr>
<tr>
<td>Research Question 2: Feelings of Belonging among Commuter Freshmen</td>
<td>45</td>
</tr>
<tr>
<td>Research Question 3: Needs of Commuter Students</td>
<td>50</td>
</tr>
<tr>
<td>Conclusion</td>
<td>53</td>
</tr>
<tr>
<td>Chapter 5—Discussion</td>
<td>55</td>
</tr>
<tr>
<td>First-Year Seminar Courses</td>
<td>55</td>
</tr>
<tr>
<td>Learning Communities</td>
<td>56</td>
</tr>
<tr>
<td>Other Programmatic Suggestions</td>
<td>57</td>
</tr>
<tr>
<td>Areas for Future Research</td>
<td>58</td>
</tr>
<tr>
<td>Conclusion</td>
<td>60</td>
</tr>
<tr>
<td>References</td>
<td>61</td>
</tr>
<tr>
<td>Appendices</td>
<td></td>
</tr>
<tr>
<td>Appendix A—IRB Approval Letter</td>
<td>69</td>
</tr>
<tr>
<td>Appendix B—Institutional Agreement Letter</td>
<td>72</td>
</tr>
<tr>
<td>Appendix C—Recruitment Messages</td>
<td>74</td>
</tr>
<tr>
<td>Appendix D—Informed Consent Documents</td>
<td>77</td>
</tr>
<tr>
<td>Appendix E—Quantitative Survey</td>
<td>81</td>
</tr>
</tbody>
</table>
List of Tables

Table 1  Gender, Race, and Living Status of Freshmen Commuter Students........ 44
Table 2  Per Week Employment among Freshmen Commuter Students............... 45
Table 3  Percent Distributions of Sense of Belonging Inventory Items............. 46
Table 4  Correlations between Sense of Belonging Items and Self-Reported GPA, Hours Worked (n = 84)........................................................................................................ 49
Table 5  Primary Challenges of Commuter Freshmen..................................... 52
Table 6  Suggestions to Help Meet the Needs of Commuter Freshmen.............. 53
List of Figures

Figure 1  Index card utilized during stage 4 of Nominal Group Technique for participants to rank listed items in terms of significance.......................... 37

Figure 2  Half-sheet provided to participants to complete stage 6 of the Nominal Group Technique ................................................................. 38
List of Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>IRB Approval Letter</td>
<td>69</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Institutional Agreement Letter</td>
<td>72</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Recruitment Email Messages</td>
<td>74</td>
</tr>
<tr>
<td>Appendix D</td>
<td>Informed Consent Documents</td>
<td>77</td>
</tr>
<tr>
<td>Appendix E</td>
<td>Quantitative Survey</td>
<td>81</td>
</tr>
</tbody>
</table>
Chapter 1

Introduction

In their extensive review of higher education research, Pascarella and Terenzini (2005) determined that “living on campus (versus living off campus or commuting) was the single most consistent within-college determinant of the impact of college” (p. 603). Pascarella and Terenzini (2005) are not alone in their claim that a student’s residential status plays a large role in his/her growth, development, and overall success in college. Much of the earliest literature on the commuter student population portrays residential students as the “haves” and commuter students as the “have nots” in higher education environments (Chickering, 1974). A residential tradition has persisted to be the benchmark of the typical higher education experience throughout the literature and in the minds of higher education professionals (Likins, 1991; Jacoby, 1989; Student Affairs Leader, 2006). While the author of the present study is certainly a product of an on-campus undergraduate experience and believes in the value of residing on campus, this study aims to better understand the experience of commuter students. This study does not ignore the traditional residential systems that have been established. Rather, it aims to find out what works for commuter students who succeed in their first semester of college, despite the fact that they do not fit within the “residential standard” of a collegian.

Purpose Statement

The purpose of this study is to reveal information about the experiences of commuter freshmen at the University of Nebraska-Lincoln. In comparison to their
residential peers, commuter students are an overlooked population on college campuses (Baum, 2005). Research has shown that one predictor of persistence in college is feeling a sense of mattering and belonging (Hoffman, Richmond, Morrow, & Salomone, 2002; Jacoby, 1989). This mixed methods research will shed light on commuter students’ feelings of mattering and belonging on their college campus, and identify some of the needs of commuter students.

**Research Questions**

1. What are the characteristics of commuter freshmen at the University of Nebraska-Lincoln?
2. To what degree do commuter freshmen feel that they matter to others on their residential campus (to faculty/staff, to peers)?
3. What are the most important needs of the commuter student population at the University of Nebraska-Lincoln?

**Mattering Matters**

As further discussed within Chapter 2, the concept of mattering is important to the success of a student in higher education. In short, a person feels that they matter when they feel as if they are an object of attention and importance to others (Schlossberg, 1989). Feelings of mattering are important to a college student’s sense of belonging, which has been shown to lead to positive outcomes including greater motivation and persistence in college (Hausman, Ye, Schofield, & Woods, 2009; Morrow & Ackerman, 2012). The concepts of mattering and sense of belonging are key constructs in the
present study, and provide the foundation on which the researcher structured his research questions and process.

**Research Design**

A mixed methods approach was utilized to execute this study. Creswell (2014) described mixed methods research as being somewhere in the middle of the continuum of quantitative and qualitative approaches (p. 4). Mixed methods research is a rather new approach which began out of the premise that using both quantitative and qualitative data “provides a stronger understanding of the problem or question than either by itself” (Creswell, 2014, p. 215).

The study was conducted at the University of Nebraska-Lincoln, a four-year, public institution in the Midwest with a fall 2013 enrollment of 19,376 undergraduate students (University of Nebraska, 2013). Of the total student body, 33.5% live on campus in residence halls or fraternity/sorority houses. The researcher obtained contact information for a population of 328 commuting first-time, full-time freshmen who filed on-campus residence exemption forms from the University Housing office to whom he distributed a quantitative survey. In addition to completing the survey, six students provided input for follow-up 50 minute Nominal Group Technique session with the researcher regarding their experiences as commuter students. Two of these students provided discussion items via email prior to the meeting, and the other four students participated fully in the 50 minute session.
Definition of Terms

*Commuter student*—a college student who does not live in an on-campus institutionally-owned/approved housing, such as a residence hall or a fraternity or sorority house (Jacoby, 1989)

*Dependent commuter student*—a commuter student who lives “in the home of a parent, guardian, or other relative” (Dugan, Garland, Jacoby, & Gasiorski, 2008, p. 282-283)

*First-time, full-time freshmen*—a first-year undergraduate student enrolled in at least 12 credit hours who has not previously attended an institution of higher education full-time

*Mattering*—the feeling one has when he/she feels that he/she is noticed, cared about, needed, and valued by another person (Schlossberg, 1989)

*Residential student*—a college-enrolled student who lives in an on-campus institutionally-owned/approved housing, such as a residence hall or fraternity or sorority house

*Sense of belonging*—the perception of peer and faculty support, classroom comfort, and isolation (Tovar, Simon, & Lee, 2009)

*Nominal Group Technique*—a group processing method by which individual opinions are aggregated into group consensus (Delbecq, Van de Ven, & Gustafson, 1975)

Significance

Because much of the existing literature portrays commuter students as being disadvantaged in comparison to their residential peers, this study is significant through its
attempt to understand commuter students’ experiences outside of the residential standard of the college experience. This study aims to better comprehend what commuter students at the University of Nebraska-Lincoln need in order to succeed into their second semester of college and beyond—particularly, how they establish support systems which make them feel that they belong and matter. Research has shown that a student’s first year of college is their most vulnerable time for attrition (ACT, 2013; Tinto, 1975), and that commuter students are particularly at risk of not persisting (Jacoby, 1989). Further, Morrow and Ackerman (2012) indicated that 65% of students who leave their university depart for non-academic reasons and that academic progress and achievement are closely related to sense of belonging. Better understanding about commuter students will help higher education professionals, students, and families to more successfully retain this overlooked population. As further discussed in Chapter 5, many higher education institutions have built programs and established resources for the sake of enhancing the success of students who do not live on campus. This study will contribute to the knowledge surrounding commuter students’ experiences and may inform such programmatic efforts at higher education institutions.

**Delimiting Variables**

Delimiting variables—or specifications to the scope of the study based on participants’ demographic characteristics—are unavoidable in this study (McMillan, 2012). Data were only collected at one institution in the Midwest. The experiences of the commuter students at this particular large research university cannot necessarily be generalized to the experiences of commuter students of other demographic backgrounds.
and/or commuter students from other types of institutions in other parts of the country and world. Additionally, only six students participated in the qualitative component of this study. Their experiences may or may not be similar to the experiences of other commuter students at the same institution, and cannot necessarily be used to generalize wider assumptions. The qualitative data collected and analyzed for this study create unique pictures of these students’ realities as commuters. Their realities cannot be assumed true for other students, even with similar characteristics (Maxwell, 2013).

**Limitations**

Creswell (2014) wrote that mixed methods research can be advantageous because it maximizes the strengths and minimizes the limitations of quantitative and qualitative approaches (p. 218). Even so, there are limitations with this research project—limitations existed within the quantitative instrument utilized for the study and within the qualitative technique. For example, the sampling procedures for the quantitative survey in this study resulted in a 26.3% response rate. While the researcher was pleased with this response and used it to generalize results in this study, a greater response would have provided a more accurate portrayal of the larger population of commuter freshmen.

Another limitation of this study lies in its intentional exclusion of the residential student population. The researcher’s goal in this study was to gain an understanding of the commuter freshmen population, and data were not collected from other groups of students for comparative analysis. Therefore, the data from this study can only be used to understand the situation and experience of the population in question and not be used presumptuously to understand residential students or the student body at large.
Additionally, specific limitations which arose from within the wording of survey items and within the Nominal Group Technique will be discussed in greater detail in Chapter 3.

**Assumptions**

Based upon findings within the literature, the researcher approached this study with a set of assumptions regarding the commuter student population. He assumed that commuter students indeed face challenges within higher education, and may have unmet needs in the university setting.

**Conclusion**

As the face of the college student body changes across the nation and world, a better understanding is needed about how students of diverse backgrounds succeed. Dependent commuter students are one population of students which is often overlooked on residential campuses (Baum, 2005; Clark, 2006). Through quantitative and qualitative methods, this study examines the experiences of commuter students at the University of Nebraska-Lincoln to better understand how they feel that they matter within their university support systems. Chapter 2 provides a review of existing literature on commuter students, the construct of mattering, and the Nominal Group Technique. Chapter 3 describes the methodological approaches the researcher utilized in this study, including both the quantitative survey and the Nominal Group Technique. Chapter 4 details the findings from the research activities, and, lastly, Chapter 5 discusses some implications of this research and its relevance in higher education environments.
Chapter 2

Literature Review

Purpose Statement

The purpose of this study is to reveal information about the experiences of commuter freshmen at the University of Nebraska-Lincoln. In comparison to their residential peers, commuter students are an overlooked population on college campuses (Baum, 2005). Research has shown that one predictor of persistence in college is feeling a sense of mattering and belonging (Hoffman et al., 2002; Jacoby, 1989). This mixed methods research will shed light on commuter students’ feelings of mattering and belonging on their college campus, and identify some of the needs of commuter students.

Introduction

In this literature review, the researcher examined writings about commuter students in higher education, and about the research methods utilized in this study. A significant amount of literature exists on commuter students, so the researcher narrowed the scope of his review as it relates to the present study—specifically regarding commuter students at large, four-year residential institutions. Within this body of literature, the researcher specifically focused his search on readings regarding commuter students’ levels of engagement and connectedness to their campus. In addition to literature on commuter students, the researcher examined readings about mattering and belonging, especially as it relates to student success in higher education.

The author’s search consisted primarily of searches on the Academic Search Premier database and collections of previous theses and dissertations at his university.
Some of the key terms that were searched include “commuter student success,”
“dependent commuter student,” “mattering in higher education,” “mattering in college,”
and “sense of belonging.” Many of the reviewed writings came from peer-reviewed
academic journals; however, books, periodicals, and other sources are also cited within
this review. While this review certainly does not provide an exhaustive synthesis of the
existing body of literature on commuter students and mattering in college, the review
provides a strong foundation and framework for the current study.

**Commuter Students Defined**

Throughout the literature, commuter students are generally defined as any student
who lives off campus (Alfano & Eduljee, 2013; Hintz, 2011; Johnson, 1997; Likins,
1991; Ortman, 1995; Skahill, 2003) or as any student who does not live within
institutionally-owned housing on-campus (Krause, 2007; Jacoby, 1989, 2000; Jacoby &
Garland, 2004). In a publication by the Student Affairs Leader (2006), John Garland, the
coordinator for the National Clearinghouse for Commuter Programs (NCCP), defined a
“commuter student as one for whom ‘home and campus are not synonymous’” (p. 1).
Such an overarching definition is inclusive of a wide variety of commuter students
including first-time, full-time traditionally-aged students living with their parents,
upperclassmen who live in rental housing off-campus, non-traditionally aged adult
students with full-time careers, and other sub-sets of off-campus students (Jacoby &
Garland, 2004). According to many sources, over 80% of the national college student
body fits this definition and does not live on campus (Hintz, 2011; Horn & Berktold,
1998; Horn & Nevill, 2006; Kuh, Gonyea, & Palmer, 2001; Wilson, 2003). This
proportion varies by institution type. For four-year public schools, Horn and Nevill (2006) reported that 25.4% of students live on campus, 55.1% of students live off campus without family, and 19.6% of students live off campus with family. For doctorate-granting public institutions like the University where this study was completed, those percentages were 28.0%, 55.2% and 16.8% respectively, indicating a slightly higher residential tradition (Horn & Nevill, 2006).

**Literature on Commuter Student Characteristics**

Early literature about the commuter student experience portrayed commuter students in a negative light (Jacoby, 1989). Jacoby (1989) synthesized research prior to Chickering (1974) and concluded the research was limited and generally inconclusive. Writings from the mid-sixties noted that students living at home dropped out more frequently than those living on campus, and students who commuted to campus expressed more financial and familial difficulties (Alfert, 1966 as cited in Jacoby 1989; Stark, 1965 as cited in Jacoby 1989). The negative characterization attributed to commuter students has compounded as subsequent authors cited these early documents (Jacoby, 1989).

Throughout much of the literature, commuter students have reportedly faced many deficits in comparison to their residential peers. Few authors have written about the commuter student experience independently—common practice has been to benchmark the commuter student experience against the traditional residential experience (Jacoby, 1989; Likins, 1991; Ortman, 1995). Beginning with Chickering (1974), the literature has widely presented residential students as the “haves” and commuter students
as the “have-nots” (p. 49) concerning the collegiate experience. Specifically, Chickering (1974) wrote that residential students entered college with greater high school credentials, were more active with leadership roles in high school clubs, engaged in more intellectual activities, more often applied to at least two other colleges, and had higher educational goals than did commuter students (pp. 48-49). Chickering also wrote that the gap in high school achievement and opportunity is widened in college as residential students take advantage of more educational and co-curricular activities than commuters (p. 52).

Chickering (1974) and Astin (1993) argued that commuter students’ environments play a large role in the disadvantages of this population. The traditional on-campus environment of residential institutions has been heralded as an atmosphere which welcomes and facilitates growth and change and is rich with co-curricular involvement opportunities (Alford, 1998; Curley, 2003; Jacoby, 1989, 2000). Because commuter students do not live within this environment, they have been regarded as disadvantaged in comparison to residential peers (Chickering, 1974). Astin (1993) echoed this notion with regard to his theory of student involvement leading to greater “learning, academic performance, and retention” (p. 394) for students. Commuting to campus impedes on involvement opportunities and has a negative impact on degree attainment (Astin 1993, 1999). Astin’s (1999) work was supported by a more recent study of 108 students at a private, primarily residential college in the Northeast indicating that over 66% of commuter students engaged in zero school-sponsored activities compared to 21% of the students who lived on campus (Alfano & Eduljee, 2013).
Literature after Chickering (1974) continued to represent commuter students as “have-nots” in comparison to residential students. Curley (2003) reported that commuter students miss out on benefits of the residential experience including greater degrees of collaborative learning, interaction with diverse faculty and students, and easier access to campus programs. In Pascarella and Terenzini’s (2005) review of higher education literature, the authors concluded:

residential students (versus commuters), participate[d] in more extracurricular activities, report[ed] more positive perceptions of the campus social climate, tend[ed] to be more satisfied with their college experience, report[ed] more personal growth and development, and engage[d] in more frequent interactions with peers and faculty members…these involvements and changes have a positive influence on persistence. (Pascarella & Terenzini, 2005, p. 421)

Ultimately, they found that “living on campus (versus living off campus or commuting) was the single most consistent within-college determinant of the impact of college” (Pascarella & Terenzini, 2005, p. 603).

Some authors have indicated that commuting in itself does not necessarily lead to negative impacts for students. Rather, it compounds on top of previous disadvantages commuting students already face. For example, commuter students usually fall into other at-risk populations in that they are often first-generation students, low-income students, and/or racial or ethnic minority students who are already marginalized and face unique challenges in higher education environments (Jacoby, 2000; Ortman, 1995). Even so, Pascarella and Terenzini (2005) reported that even after considering many precollege attributes, “students living on campus are more likely to persist and graduate than students who commute” (p. 421).
Commuter Student Needs

Although commuter students are not a homogenous group, researchers have presented several common needs among the commuter student population. Students who commute to campus typically face additional pressures, responsibilities, and stressors in their lives than do residential students. For example, commuter students need to find reliable parking and transportation, which can be more complicated in times of inclement weather or after dark (A.M., 2009; Jacoby 2000; Johnson, 1997; Student Affairs Leader, 2006). Commuter students are often employed in addition to being a student. Further, they tend work off campus and for longer hours than residential students (Alfano & Edulijee, 2013; Jacoby, 1989, 2000; Jacoby & Garland, 2004; Johnson, 1997; Student Affairs Leader, 2006). A pressure that is often cited among commuter student literature is that commuters must negotiate multiple life roles and familial responsibilities (Jacoby, 2000; Johnson, 1997; Student Affairs Leader, 2006). As such, commuter students’ support networks are typically located off campus (Bryant, 2001; Jacoby, 2000; Jacoby & Garland, 2004; Ortman, 1995; Student Affairs Leader, 2006).

Even though the deficits of commuter students are discussed pervasively within much of the early commuter student literature, more recent writings on the commuter student experience have begun to reduce the negative characterization of this group of students. Recognizing that the traditional residential experience which has become the standard for college life does not fit for students who commute, authors have begun refuting early generalizations about commuter students (Jacoby, 2000; Jacoby & Garland, 2004; Kuh et al., 2001; Likins, 1991; Student Affairs Leader, 2006). As stated by Jacoby
(2000), commuter students “seek to be involved in the campus community and in their learning. However, their lives consist of balancing many competing commitments… They are not less committed to their education; they simply cannot always make education their primary focus” (p. 5). Analyzing student engagement data from 105,000 first-year students at 470 four-year schools around the United States, Kuh et al. (2001) confirmed that although “students who live on campus are more engaged overall compared with students who commute” (p. 9), commuter students did put forth just as much effort in the classroom and were just as academically engaged as their residential peers.

**Distinguishing Dependent Commuters**

As previously indicated, commuter students are not a homogenous population (Clark, 2006; Dugan et al., 2008; Jacoby, 1989, 2000; Jacoby & Garland, 2004); even so, early literature has often combined commuter students into one group, separate from their residential peers (Astin, 1993; Chickering, 1974; Jacoby, 1989). Authors have urged for further research to distinguish among subsets of the commuter student population (Jacoby & Garland, 2004). Commuter students who live dependently (with their parents or family) fall into one such subset of the commuter student population (Clark, 2006; Dugan et al., 2008; Hays & Oxley, 1986). Although he did not write in depth on the distinction, Chickering (1974) recognized that commuters who live at home with family face more challenges than commuters who do not live at home. For instance, commuters who live with their parents less frequently collaborate with peers and faculty outside of class and less often participate in cultural and extracurricular activities. Put simply, “the students
who live at home with their parents appear to be less fully engaged in academic activities than their dormitory peers” (Chickering, 1974, p. 61).

Dugan et al. (2008) supported the observations made by Chickering (1974). Defining dependent commuter students as those who live “in the home of a parent, guardian, or other relative” (Dugan et al., 2008, pp. 282-283), and independent commuter students as those “who live on their own or with others” (p. 283), Dugan et al. (2008) utilized survey data from 11,864 students from 50 different institutions to better understand leadership efficacy—or one’s general capacity to lead others—among dependent and independent commuter students. Their study concluded that “independent commuter students indicated a greater sense of leadership efficacy than their dependent commuter peers” (p. 296). The researcher found little other existing literature which specifically considered the experiences of dependent commuter students.

Other researchers have considered various other subsets of the commuter population in order to understand more about the commuter experience. For instance, a study by Kuh et al. (2001) used data from the National Survey of Student Engagement (NSSE) and distinguished commuter students by the distance they lived from campus—separating students who lived within walking distance to the campus from those who live within driving distance (p. 4). Kuh et al. (2001) determined that among the commuter student population, proximity to campus made a difference in overall level of engagement. Students who commuted from driving distance had less contact with faculty and less frequently utilized co-curricular opportunities including community service, study abroad, and internships than did commuters within walking distance (p. 8).
Sense of Belonging and Marginality and Mattering

The concept of marginality and mattering has been used as a dichotomous theoretical construct in a number of psychological studies (Alford, 1998; Baumeister & Leary, 1995; Ortman, 1995; Rosenberg & McCullough, 1981; Schlossberg, 1989; Tovar et al., 2009). Citing earlier research of Rosenberg and McCullough (1981), Schlossberg (1989) employed the following definitions for marginality and mattering, which have been widely accepted and repeated within subsequent writings (Alford, 1998; Ortman, 1995). In short, marginality is the feeling of not fitting in. Marginalization is expected to occur temporarily among people in transition (e.g., new college freshmen, or people starting a new job or relocating to a new city), or may be a more permanent phenomenon among people in non-dominant societal groups. People who feel marginalized may be susceptible to negative psychological consequences including self-consciousness, anxiety, or depression (Evans, Forney, Guido, Patton, & Renn, 2010; Freeman, Anderman, & Jensen, 2007; Rosenberg & McCullough, 1981; Schlossberg, 1989). Mattering, conversely, is “our belief, whether right or wrong, that we matter to someone else” (Schlossberg, 1989, p. 9). Through analyzing qualitative data from a group of twenty-four people of varying ages, Schlossberg (1989) determined five aspects of mattering: attention (being noticed), importance (being cared about), ego-extension (the feeling that someone else will be proud of or sympathize with an individual’s accomplishments and failures), dependence (being needed), and appreciation (being valued).
Sense of belonging is a construct very closely related to mattering (Tovar et al., 2009). An early explanation for the notion of belongingness can be explained as a person’s third-level need in Maslow’s (1954) hierarchy of needs (Jacoby, 1989). Maslow (1954) stated that humans have five general categories of needs including (a) physiological needs for survival and sustenance; (b) safety needs for general security; (c) needs to feel that they belong; (d) esteem needs for confidence; and (e) self-actualization needs to realize their best self. Maslow contended that in order to meet upper level needs, the lower level needs must first be met (Maslow, 1954; Lester, 2013). Maslow’s (1954) hierarchy has been cited within psychological and motivational literature (Baumeister & Leary, 1995) and has been validated within the college student population (Jacoby, 1989; Lester, 2013). As the following section in will further elaborate, Maslow’s theory relates to commuter students in the sense that commuters often face difficulties meeting lower level needs (i.e., because of working additional hours, familial obligations, and travelling to and from campus) that they don’t have as much time to focus on meeting their need to belong at the University (Jacoby, 1989, 2000; Student Affairs Leader, 2006).

Several researchers (Furrer & Skinner, 2003; Goodenow, 1993; Osterman, 2000; Rosenberg & McCullough, 1981; Wells, Seifert, Padgett, Park, & Umbach, 2011) have written how a sense of mattering is an important determinant of motivation in school among children and adolescents. Similarly, the concepts of mattering and sense of belonging have been explored within higher education settings. Chickering (1977, as cited in Evans et al., 2010) proffered that mattering is an essential component for
desirable student development outcomes. Other authors have agreed that feelings of belonging and mattering are important contributing factors to college student adjustment (Baum, 2005; Hays & Oxley, 1986; Hoffman et al., 2002; Johnson, 1997) and persistence (Baum, 2005; Freeman et al., 2007; Hausman et al., 2009; Morrow & Ackerman, 2012; Osterman, 2000; Skahill, 2003; Willms, 2003). Even so, sense of belonging as a construct has been ignored in widely understood retention models (Baum, 2005; Hausman, et al., 2009; Hoffman, et al., 2002; Tovar et al., 2009). The following section will further explore the literature relating to mattering and sense of belonging in higher education settings—particularly regarding the commuter student population.

**Mattering and Commuter Students**

Ortman (1995) wrote that “perhaps the theory of mattering and marginality is most directly related to the commuter students” (p. 14). A direct link between mattering and student success can be found in Astin’s (1993) involvement theory. Astin (1993, 1999) indicated that as a student becomes more integrated within the campus community, he/she will be more likely to realize success, and that a student’s relationships greatly influence his/her decision to persist in college. Commuter students often face disadvantages when making peer connections in college in comparison to residential peers (Alfano & Eduljee, 2013; Baum, 2005; Buote et al., 2007; Clark, 2006; Hays & Oxley, 1986; Jacoby, 2000; Jacoby & Garland, 2004; Krause, 2007; Skahill, 2003; Student Affairs Leader, 2006). Commuter students typically remain connected to their previous home environment, which inhibits relationship development at school (Alford, 1998; Astin, 1993, 1999; Schlossberg, 1989).
Commuters often face additional responsibilities and time constraints outside of school in comparison to residential students (Jacoby, 1989, 2000; Jacoby & Garland, 2004; Student Affairs Leader, 2006), and therefore may only come to campus for classes (Chickering, 2000; Ortman, 1995). Consequently, the only natural venue for commuter students to form relationships with their peers is often in the classroom (Baum, 2005). Not only is the classroom a difficult place to make friends (Krause, 2007), but Clark (2006) also explained that because maintaining “classroom-based friendships” is difficult from one semester to the next, commuter students must “start over” with friendship development each semester (Clark, 2006, p. 5). Additionally, feeling a sense of belonging in a particular class is not necessarily an indication of feelings of mattering at an institutional level (Freeman et al., 2007). A student’s institutional sense of belonging is largely related to their community and network of friends at the institution. In the quantitative study by Alfano and Eduljee (2013), a larger percentage (78%) of the residential student population reported feeling like a part of the college community than the percentage of commuter students (43%). Previous research by Likins (1991) also reported that a majority (65%) of commuter students desired to feel more belongingness to their campus community (p. 71).

More recently, Skahill (2003) reported from a mixed methods study that commuters were less likely to persist in college than residential students in part because of each group’s social support networks. The residential students in Skahill’s (2003) study indicated making more friends at school and subsequently reported higher
attainment of personal and academic goals. Students who reported more friendships from school were also more likely to report feelings of success at school (Skahill, 2003).

In a similar large scale mixed methods study of over 700 students, Buote et al. (2007) found that the “quality of new friendships formed in the first year [of college] was a significant predictor of adjustment” (p. 685). Having friends helps a student to feel like they belong and provides sources of support and enjoyment. In comparison to commuter students, the residential students in the Buote et al. (2007) study had developed over twice the number of new friendships—and over twice the number of “close” friendships—by November of their first year (p. 676).

Hays and Oxley (1986) also reported implications of commuting on friend development from a 12-week longitudinal study of 89 first-year students who lived either in residence halls or at home with their parents. The authors found that the social networks of residential students consisted of 84% fellow students, and the social networks of commuter students mainly consisted of relatives and only 48% fellow students. Further, the “number of new acquaintances and fellow students in the freshmen’s network were the most strongly related variables with college adaptation” (p. 310).

**Nominal Group Technique**

In addition to a review of literature on commuter students and on mattering, an understanding of the research methods is important for this study. The specific methodological decisions for this study will be discussed more thoroughly in Chapter 3,
but the following section will provide a general guide for Nominal Group Technique—the qualitative method utilized in the present study.

Nominal Group Technique is an approach to problem solving and consensus building in group planning which was developed in the late 1960s (Delbecq et al., 1975). The technique is a structured group meeting in which individuals brainstorm their own ideas in response to a common question. After being given a few minutes to generate ideas, each individual shares their ideas one at a time for a facilitator to record. Once all unique ideas have been recorded, a discussion session occurs for the individuals to provide additional details about the items which have been recorded. Following the discussion, each individual privately ranks the items. The rankings are then collected by the facilitator and added to the written list of items. The rankings are added by the facilitator to create a shorter list of the most significant items. Participants are given another opportunity to openly discuss the rankings of the items (why some items have more rankings than others, or vice versa), and then a final ranking takes place. This final ranking serves to collectively identify the most significant items from the list (Delbecq et al., 1975). Chapter 3 discusses guidelines for each step of the Nominal Group Technique as provided by Delbecq et al. (1975). Other research has demonstrated that the Nominal Group Technique provides a structured procedure for collecting qualitative data from a group and allows for individual voices to be heard while coming to a group consensus of priorities (Harvey & Holmes, 2012).
Conclusion

This brief review of the literature has shown that although commuter students have been defined generally as those who do not live on campus, they are certainly not a homogenous group (Dugan et al., 2008; Jacoby & Garland, 2004). However, studies have generally found that students who commute to campus face additional challenges which inhibit their ability to make social connections at school (Alfano & Eduljee, 2013; Baum, 2005; Jacoby & Garland, 2004; Krause, 2007; Likins, 1991; Student Affairs Leader, 2006). Forming social connections with peers in college has been shown to be an important indicator of a student’s feelings of mattering and belongingness (Alford, 1998; Astin, 1999), and literature has shown that mattering is important for a student to achieve desirable student development outcomes and persist in college (Buote et al., 2007; Freeman et al., 2007; Hausman et al., 2009; Morrow & Ackermann, 2012).
Chapter 3
Methodology

Following a restatement of the research purpose and questions, this chapter will discuss the methodology of the present study. A mixed methods approach was utilized in order to attain both quantitative and qualitative data about the experiences of commuter students. This chapter will provide a rationalization for mixed methods research practices and will describe in detail the quantitative and qualitative practices utilized in this study.

Purpose Statement

The purpose of this study is to reveal information about the experiences of commuter freshmen at the University of Nebraska-Lincoln. In comparison to their residential peers, commuter students are an overlooked population on college campuses (Baum, 2005). Research has shown that one predictor of persistence in college is feeling a sense of mattering and belonging (Hoffman et al., 2002; Jacoby, 1989). This mixed methods research will shed light on commuter students’ feelings of mattering and belonging on their college campus, and identify some of the needs of commuter students.

Research Questions

This study set out to help the researcher understand more about the experiences of commuter students at the University of Nebraska-Lincoln, a large, four-year, public, university where a great majority of the freshmen live on campus. Specifically, the author was curious to know about how dependent commuter students—those who live at home with their families while attending the university (Dugan et al., 2008)—feel that
they matter and belong. Significant amounts of previous literature existed on the experiences of commuter students, but less was found which addressed the following research questions.

1. What are the characteristics of commuter freshmen at the University of Nebraska-Lincoln?

2. To what degree do commuter freshmen feel that they matter to others on their residential campus (to faculty/staff, to peers)?

3. What are the most important needs of the commuter student population at the University of Nebraska-Lincoln?

**Rationalization for Mixed Methods Research**

“Qualitative and quantitative methods are not simply different ways of doing the same thing” (Maxwell, 2013, p. 29). They have distinctly different strengths and are used for separate types of questions. The present study sought to gain a better understanding of the characteristics of the commuter student population (research question one), how commuter students feel that they matter (research question two), and what commuter students feel that they need to succeed (research question three). Quantitative analysis could address questions one and two through statistical tests which the researcher could attempt to generalize among the wider commuter student population (Gravetter & Wallnau, 2009). However, qualitative data would be better suited for answering research question three about students’ needs. One goal of qualitative research according to Maxwell (2013) is to further understand the meaning of an experience in the participant’s life (p. 30). Qualitative data gathered from the participants’ perspectives create a unique
reality for themselves as individuals. This reality is not attainable through quantitative methods (Maxwell, 2013).

Creswell (2014) described mixed methods research as being somewhere in the middle of the continuum of quantitative and qualitative approaches (p. 4). Mixed methods research is a rather new approach which began out of the premise that using both quantitative and qualitative data “provides a stronger understanding of the problem or question than either by itself” (Creswell, 2014, p. 215). Creswell (2014) also indicated that through combining quantitative and qualitative data, a mixed methods approach can be helpful in obtaining a more complete understanding of the needs of a marginalized group (p. 218). For these reasons, the author elected to design a study in which both quantitative and qualitative data were collected and analyzed to better understand the research questions regarding commuter students.

**Research Population**

The population considered in this study is all of the first-time, full-time freshmen 19 years of age or younger at the University of Nebraska-Lincoln who sought exemption from the University’s Housing requirement ($N = 328$). The University of Nebraska-Lincoln requires first-time, full-time students who are under 19 to live on campus during their first year. If the location of a student’s permanent address is within 30 miles of the campus, he/she may send a form to the University’s Housing department in order to be exempt from the residence requirement. The Housing department from the researcher’s university shared contact information for this group of students from the fall 2013 cohort ($N = 328$) with the researcher’s advisor in order for him to send a study recruitment
message with a link to an online survey. The author decided to study the experiences of commuter students while in their first year of college because research has shown that this is the most likely time for students to drop out (Berger, Ramírez, & Lyons, 2012; Hoffman et al., 2002; Tinto, 1975). More specifically, over 22% of first-year college students at public Ph.D. granting institutions—like the setting of the present study—do not return for their second year (ACT, 2013).

Complete demographic information for the population of 328 freshmen commuters was unavailable, but the demographic breakdown of the 92 survey respondents is reported in Chapter 4 alongside the findings for research question 1 regarding the characteristics of commuter students.

**Research Site**

This study was conducted at the University of Nebraska-Lincoln. According to the institution’s Office of Research and Planning (University of Nebraska, 2013), total fall enrollment in 2013 was 24,445 students. Undergraduate enrollment was 19,376, with 4,396 students being first-time, full-time freshmen. The sample of 328 students represents 7.46% of the first-time, full-time freshmen population at the University, suggesting that over 90% of first-time, full-time freshmen live on campus at the University of Nebraska-Lincoln. This is significantly higher than the national percentage (38.1%) of students 18 years of age or younger who live on campus for all institution types and the national percentage (28%) of the entire undergraduate on-campus residence for four-year doctorate-granting public institutions (Horn & Nevill, 2006, pp. 103-104).
Counter to national trends (Horn & Nevill, 2006), the University where the current study took place consisted of majority male freshmen population (53%). The campus is predominantly comprised of White students with about 20% of the student population who does not identify as White/Caucasian (University of Nebraska, 2013).

**Institutional Review Board Approval**

Before participants were recruited or data were collected, the researcher completed the web-based tutorial from the Consortium for IRB Training Initiative in Human Subjects Protections (CITI). Upon completion of CITI training, complete IRB approval was requested by the author and granted by the institution. In addition, institutional agreement to provide student information was required in order to gain IRB approval. A copy of the IRB approval letter is provided in Appendix A, and the institutional agreement letter from the office of the Registrar is provided in Appendix B.

**Research Process**

Following IRB approval for this study, email addresses of all first-time, full-time freshmen aged 19 years or younger who did not live on campus were provided to the researcher’s thesis advisor by the University Housing department. The researcher’s advisor used this list to recruit study participants. An initial recruitment email was sent to potential participants during the third week of classes of the spring semester. Participation in the study was incentivized with a chance to win one of two $20 cash prizes. A copy of the initial recruitment message is included in Appendix C. Participants who completed the survey and wished to be entered into the cash prize lottery were asked to email the researcher’s advisor indicating their completion of the survey. Students who
sent this memo were removed from the recruitment list before a second-request recruitment message was sent to the same population of students during the fourth week of classes in the spring semester. A hyperlink to an electronic survey was provided within the recruitment message. Informed consent for participation in the quantitative portion of the study was provided by participants on the first page of survey (see Appendix D). Following the completion of the survey, the researcher began initial analysis of the quantitative data before the time he conducted the Nominal Group Technique research component. The researcher compiled distributions of the data and ran correlations between the sense of belonging items and self-reported GPA and hours worked per week.

The second part of this study consisted of a Nominal Group Technique session among volunteers who had completed the survey. Upon completion of the quantitative survey, participants submitted their name for entry into the cash prize lottery. A second recruitment message was sent to this group of students to solicit willingness to provide additional information about their experience as a commuter freshman. Participation in this portion was incentivized with the provision of free lunch during the group process event. A copy of the recruitment message for this segment of the study is provided in Appendix C. The group processing event took place during the sixth week of the spring semester over the lunch hour in a private room within the student union on campus. Prior to the start of the group processing events, participants signed an informed consent document to participate in this portion of the research (see Appendix D). The Nominal Group Technique session lasted approximately 50 minutes. The following sections
provide further description of the quantitative instrument and the qualitative process as well as information about data analysis procedures.

**Quantitative Instrument**

To gather data about commuter students’ experiences, the researcher developed a 24-item survey on Qualtrics, an online platform for creating, distributing, and analyzing surveys. The first five items gathered demographic information from participants. Question one verified the participant’s residence status and specified whether they were dependent or independent commuters (living with or apart from their parents; Dugan et al., 2008). Items two and three asked participant’s for the student’s gender and racial identification.

Items four and five were drawn from various sources within the commuter student literature. Some studies have indicated that commuter students typically work greater hours and experience more on-the-job stress than their residential peers (Alfano & Eduljee, 2013). Item four asked the participants how many hours they worked each week. Additionally, some literature has indicated that because of additional pressures and responsibilities, commuter students’ face difficulties academically (Hoffman et al., 2002; Jacoby, 2000). To get a snapshot of the academic standing of the commuter student population, question five asked for a self-reported fall semester GPA. Rather than reveal the identities of surveyed students by accessing GPA data from the Registrar’s office, the researcher decided to rely on self-reported data. The results of a study on the accuracy of self-reported SAT and ACT scores indicated a correlation of between .80 and .95 for the
accuracy of students’ self-reported scores (Cole & Gonyea, 2010), so the researcher felt comfortable relying on self-reported GPA data.

The remaining 19 items served as the researcher’s Sense of Belonging inventory—each of these items asked for participant’s agreement on a five point Likert scale ranging from Strongly Disagree to Strongly Agree. The nineteen items were adapted from two sense of belonging inventories the researcher found in his review of the literature (Hoffman et al., 2002; Tovar et al., 2009).

Tovar et al. (2009) noted that the construct of mattering had been explored only limitedly among the college student population, so their study further developed and validated a useful inventory for use among a diverse college student population. Tovar et al. (2009) developed a 55-item mattering inventory based on definitions of mattering from Rosenberg and McCullough (1981) and Schlossberg (1989). Of these 55 items, three were adapted for use in the present study (item numbers listed below correspond to their order in the present study, not their order within Tovar et al.’s study):

Item 6: There are people at UNL who seem determined to see me succeed.
Item 9: There are enough social and academic opportunities for me to get connected with others at UNL.
Item 11: If I had a personal problem, I believe that there is someone at UNL who would discuss it with me.

Hoffman et al. (2002) developed an inventory to assess students’ sense of belonging within the university community. Hoffman et al. (2002) began with an 85 item scale they developed from existing literature as well as the results of several focus groups.
with first-year students. Fifty of these items asked about a student’s sense of belonging among other students and 35 items asked about a student’s sense of belonging among faculty (p. 231). These 85 items were distributed in a questionnaire among a group of first-year students, and 205 completed surveys were returned and used in analysis. This analysis led Hoffman et al. (2002) to conclude four dimensions of the sense of belonging construct among peers including “perceived classroom comfort, perceived isolation, perceived academic support, and perceived social support” (p. 239). Additionally, three dimensions of sense of belonging among faculty were identified: “empathetic understanding, perceived faculty academic support/comfort, and perceived faculty social support/comfort” (p. 243). Using these dimensions, the 85-item sense of belonging instrument was refined to 26 items comprising both sense of belonging among students and sense of belonging among faculty (p. 243). Seven items from the Hoffman et al. (2002) inventory were adapted for use in the present study (again, the item numbers listed below correspond to their order in the present study but not necessarily to their order within Hoffman et al.’s study):

Item 15: It was difficult for me to meet other students in classes last semester.

Item 16: I have invited people I know from a class to do things socially.

Item 17: People I know from a class have invited me to do things socially.

Item 18: I have joined a campus club or organization because of someone I have met in a class.

Item 19: I have developed personal relationships with other students in class.
Item 21: If I missed class last semester, I knew students who I could get notes from.

Item 22: I could call or text another student from class if I had a question about an assignment last semester.

Items 17 and 18 above were not included in the 26-item refined instrument by Hoffman et al. (2002), but similar items were included within their initial 85-item instrument.

The additional items in the present study (items 7, 8, 9, 12, 13, 14, 23, and 24) were developed from the author’s own review of the literature. Items 23 and 24 were not related to sense of belonging, but were asked to gauge the student’s plans for attending the university.

Additionally, while the items in the instruments developed by Tovar et al. (2009) and Hoffman et al. (2002) were all written in the present tense, the items within the sense of belonging inventory in the present study were asked in the past tense because surveys were distributed early in the student’s second semester of classes. Students likely would not have had time to develop relationships with peers and faculty in their new classes by this time, so participants were asked about their experience in the previous semester.

The full quantitative survey is provided in Appendix E. Following completion of the sense of belonging inventory, the researcher asked for participants to send a “survey completed” memo to the author’s thesis advisor in order to be entered into the cash prize lottery. These students were sent another recruitment message to participate in the second portion of the study. To maintain each participant’s anonymity, their identities
were not linked to their survey responses when they opted to participate in the Nominal Group Technique portion of the research.

**Limitations with Quantitative instrument**

While the author believes this quantitative instrument was appropriate for the design of the present study, it is not without limitations.

One limitation of survey research is the response rate—even though a sample is used to generalize to a larger population, the sample is not truly representative of the entire population (Gravetter & Wallnau, 2009). The author’s goal was to obtain at least a 20% response rate. Although the actual response rate (26.2%) exceeded the researcher’s target, this still does not provide a complete representation of the commuter student population at the University, nor does the sample provide information which can be accurately generalized to commuters at other institutions.

This survey asked participants to think back on previous experiences, and not necessarily to report on their current experience in the present semester. The researcher recognizes that this decision may have tainted participants’ perceptions, which may have had an impact on the participants’ responses about their feelings of belonging in the quantitative survey.

Additionally, some items within the sense of belonging inventory in the present study have been validated by previous studies (Hoffman et al., 2002; Tovar et al., 2009). However, not all of the items in the present study have been validated in previous research and this combination of items has not been tested among other populations. While the items in the present study aimed to address the three research questions posed,
there may have been other questions to ask which could have provided a more thorough understanding of the participants’ sense of belonging. For instance, the wording of some of the items may have been misleading or confusing. A respondent brought one such example to the researcher’s attention. Item number 24 read “I plan to graduate in four years.” One respondent responded “Strongly Disagree” to this item because he planned to graduate in three years, exposing a flaw in the wording of the question (rather than “in four years,” the researcher meant “within four years”). Data from this particular question were not used in the study, but there may have been other similarly confusing or misleading questions which were not brought to the researcher’s attention.

**Nominal Group Technique**

Of the 328 surveys sent out, 86 surveys were completed (26.2% response), and 40 participants sent the “survey completed” memo to the author’s advisor to be entered into the cash prize lottery. A second recruitment message was sent to this group of students (see Appendix C) asking them to sign up to participate in a follow-up group processing event to further discuss their experience as a commuter student. Of the 40 students who were contacted, seven students (17.5%) indicated willingness to participate in the second portion of the study. Two of these seven students were unable to attend the Nominal Group Technique session due to class conflicts, and notified the researcher in advance. These participants were able to send responses to the discussion questions below to the researcher via e-mail so their input was still received and utilized in the first round of the session. One participant signed up to attend the Nominal Group Technique but was not present at the time of the meeting. This left four students who attended and fully
participated in the Nominal Group Technique session, which occurred as described in the following paragraphs. The approach taken for the process was consistent with the Nominal Group Technique guidelines suggested by Delbecq et al. (1975). Each of the six steps was executed twice—one time for both of the following questions:

1. What are the primary challenges you face as a commuter student at UNL?
2. What could the University do to help meet your needs as a commuter student?

**Introductions and informed consent.** Upon arrival at the Nominal Group Technique session, the researcher introduced himself and the purpose of the meeting. Food was provided by the researcher and participants were encouraged to eat as they arrived and as the initial instructions were given by the researcher. After a warm welcome to build rapport with the participants and a brief description of the process, each participant was asked to sign an informed consent document (Appendix D), which was then collected by the researcher.

**Step 1: Silent generation of ideas.** In order to allow each participant adequate time to think individually, the initial stage of the Nominal Group Technique is to have every member “write key ideas silently and independently” (Delbecq et al., 1975). To facilitate this individual thinking, the researcher presented the first of the aforementioned questions to the group, and encouraged them to write their own ideas down without discussing with other group members. A lined sheet of paper was provided to each participant in order for them to notate ideas. About three minutes were devoted to this individual brainstorming time.
Step 2: Recording of ideas. During the second stage of the Nominal Group Technique, the researcher facilitated a structured session to share each individual’s ideas. This allowed for equal participation among group members (Delbecq et al., 1975). Beginning with one participant and moving orderly around the group, each participant shared one of their ideas, which was then written down on a flip-chart by an assistant to the researcher. This process continued until all of the unique ideas had been notated. The items contributed by email from the two students who could not attend the session were included in this round. This structured sharing session took about eight minutes.

Step 3: Discussion of ideas for clarification. After all of the unique ideas were notated on the flip-chart for everyone to see, the researcher allowed about five minutes for individuals in the group to further discuss the ideas they contributed in order to add clarification to ideas that may have been unclear to other participants. This step allowed for the group to avoid misunderstandings and provide arguments to support their responses to the questions (Delbecq et al., 1975). The researcher facilitated this discussion by providing structure to the conversation—he pointed to Item 1 in the list, asked the group if there were questions or areas of clarification regarding the item. If necessary, a short period was allowed for discussion before the researcher moved on to the next item on the flip-chart.

Step 4: Preliminary vote on item importance. After each item had been discussed and clarified to the point deemed adequate by the group, the researcher asked each participant to rank their top five items on the list by significance (the rankings for question one were “Most Challenging” through “5th Most Challenging” and the rankings
for question two were “Most Important” through “5th Most Important”). To do so, each
participant was given a set of 3x5” index cards with a space on the top left corner to
notate the item number from the list on the flip-chart, a blank space in the center to
provide a brief description of the item, and the indicated rank on the bottom right corner.
A visual example of this card is shown in Figure 1.

![Index card](image)

*Item #: ________

*(Item Description)*

*(2nd, etc.) Most Important*

*Figure 1.* Index card utilized during stage 4 of Nominal Group Technique for
participants to rank listed items in terms of significance.

After each participant had completed their rankings for each question, the
researcher gathered the index cards and read the rankings aloud for his assistant to notate
on the flip-chart. The ranking served as a score by which list items were tallied (each #1
ranking scored five points, each #2 ranking scored four points, etc.) so that higher-scoring
items were seen as more challenging or more important than the lower-scoring items or
unranked items. The score value of each item served as a means of visualizing individual
judgments and the beginning stages of group consensus (Delbecq et al., 1975). The
process for step four took around two minutes.
Step 5: Discussion of preliminary vote. Once all of the ranking votes were tallied on the flip-chart, a brief period of time was allowed for participants to discuss the preliminary votes. This discussion period allowed for the researcher and the participants to examine any inconsistencies in how the group voted and to further discuss items which received several votes (Delbecq et al., 1975). About five minutes were spent on this discussion.

Step 6: Final vote. After the brief discussion in stage 5, the participants were again asked to rank the items on the flip-chart, this time giving their top three. This vote would determine which items were seen as the most challenging or the most important items, provided a sense of closure to the discussion, and documented the consensus of the group (Delbecq et al., 1975). In order to vote, each participant was given a half sheet of paper on which to notate the item numbers and description for their top three items from each of the lists of responses. This final stage took about two minutes. Figure 2 below provides a visual of the half-sheet voting page.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item Description</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>______</td>
<td>___________________________</td>
<td>#1</td>
</tr>
<tr>
<td>______</td>
<td>___________________________</td>
<td>#2</td>
</tr>
<tr>
<td>______</td>
<td>___________________________</td>
<td>#3</td>
</tr>
</tbody>
</table>

Figure 1. Half-sheet provided to participants to complete stage 6 of the Nominal Group Technique.
The six steps of the Nominal Group Technique took about 25 minutes in total, and the process was completed twice—once for each question—for a total of about 50 minutes. After the final votes were tallied for the second question, the group was thanked and dismissed by the researcher. The data collected from the Nominal Group Technique supplemented the quantitative findings from the survey results. Responses and implications from the Nominal Group Technique are discussed further in Chapters 4 and 5.

**Limitations with Nominal Group Technique**

Throughout the Nominal Group Technique session, the researcher identified a number of limitations. First, fewer people participated than the researcher had hoped. Delbecq et al. (1975) indicated that an ideal group size for the Nominal Group Technique is between five and seven participants. While six students provided responses to the questions, only four students were able to fully participate in the discussion and ranking stages. Further, all of these participants identified as female, which was not proportionate to the distribution of males and females who responded to the survey. Having only females in the Nominal Group Technique may have impacted the discussion and the data that were collected. Finally, the Nominal Group Technique as described by Delbecq et al. (1975) does not call for participants to send ideas to the group to be discussed. Participants who submitted ideas prior to the discussion were not able to provide clarification about their idea or advocate for their suggestions during the group discussion and voting. If all participants were able to fully engage in the entire Nominal Group Technique, the results of the final vote may have been different.
Data Analysis

In this study, quantitative data were analyzed first, followed by the Nominal Group Technique data. The following sections describe the data analysis processes from both stages of the study. Specific findings of these analyses as they relate to the research questions are reported in Chapter 4.

Quantitative data analysis. Although the quantitative data did not necessarily inform the qualitative methods of the present study, the researcher began the quantitative analysis before the Nominal Group Technique session had been completed. Using the Qualtrics reporting features, SPSS, and Microsoft Excel, the researcher analyzed and reported frequencies of the demographic survey items. In addition to mere frequency reports, the researcher ran correlational analyses to examine the relationship between items on the sense of belonging inventory and participants’ reported GPA or hours worked per week.

Nominal Group Technique data analysis. Following the Nominal Group Technique session, the researcher compiled and analyzed the data that were gathered from the group. The researcher compiled all of the initial ideas from stage one of the process into a single table (one table for each question). Votes for each item were then counted from the participants’ 3x5 cards and the items in the tables were reordered to reflect the vote count. In a separate table, the researcher noted the items which the participants had indicated as being one of the top three challenges or suggestions after they had discussed and initially ranked the items.
Validation strategies. In order to verify accuracy of the mixed method data gathered from the Nominal Group Technique, the researcher utilized a form of member checking (Creswell, 2005). During the Nominal Group Technique session, the researcher would occasionally ask for clarification or verification from participants when their ideas were notated. After each round of voting, the researcher reported the tallies to the participants and asked for confirmation before moving forward.

The following chapter reports the findings from both the quantitative survey and the Nominal Group Technique.
Chapter 4

Findings

This chapter reports the findings of the research as they relate to the overall purpose and specific research questions of this study. Findings for both the quantitative survey and the Nominal Group Technique session are reported within this chapter.

The purpose of this study is to reveal information about the experiences of commuter freshmen at the University of Nebraska-Lincoln. In comparison to their residential peers, commuter students are an overlooked population on college campuses (Baum, 2005). Research has shown that one predictor of persistence in college is feeling a sense of mattering and belonging (Hoffman et al., 2002; Jacoby, 1989). This mixed methods research will shed light on commuter students’ feelings of mattering and belonging on their college campus, and identify some of the needs of commuter students.

The following research questions guide the present study and serve as a framework for reporting the findings in this chapter.

1. What are the characteristics of commuter freshmen at the University of Nebraska-Lincoln?

2. To what degree do commuter freshmen feel that they matter to others on their residential campus (to faculty/staff, to peers)?

3. What are the most important needs of the commuter student population at the University of Nebraska-Lincoln?
Research Question 1: Characteristics of Commuter Freshmen

A quantitative survey was utilized to answer the first research question about the characteristics of commuter students at the University of Nebraska-Lincoln. The survey was sent electronically to the population of 328 students who identified as first-time, full-time freshmen under the age of 19 who had submitted the University’s on-campus living exemption form. Of these, 92 surveys were started and 86 surveys were completed through the sense of belonging inventory (26.2%). Gender, race, and living status information for this group is provided below in Table 1. As evident in the table, one respondent reported living on campus, but this student did not complete the sense of belonging inventory in the survey.

Data for the entire commuter freshmen population (N = 328) were not available for comparison to the sample (n = 92), but the demographic information of the survey respondents was nearly proportionate to the total undergraduate population at the institution with a few notable exceptions. According to the Office of Institutional Research and Planning (University of Nebraska, 2013), 80% of the total undergraduate population identifies as White/Caucasian, a slightly higher proportion than indicated by the sample in this study. In addition, the proportion of women in the present study’s sample (59%) is greater than the female percentage of the entire freshmen population (47%) at the institution (University of Nebraska, 2013).
Table 1

*Gender, Race, and Living Status of Freshmen Commuter Students*

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man</td>
<td>38</td>
<td>41</td>
</tr>
<tr>
<td>Woman</td>
<td>54</td>
<td>59</td>
</tr>
<tr>
<td>Prefer not to disclose</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Biracial or Multiracial</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Black</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Native American</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>White</td>
<td>67</td>
<td>73</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Prefer not to disclose</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Living Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I live off campus with one or more parents</td>
<td>77</td>
<td>82</td>
</tr>
<tr>
<td>I live off campus with one or more siblings (but not with my parents)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>I live off campus with one or more family members other than parents or siblings</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>I live off campus with non-family roommate(s)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>I live off campus alone</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>I live on campus</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

In addition to the racial and gender demographic information, the survey also collected data on employment and academic success. Table 2 summarizes the employment data of the 92 respondents who filled out the demographic portion of the survey. The sample data indicates a mean item value of 3.66 (between 5-10 and 10-15
Table 2

*Per Week Employment among Freshmen Commuter Students*

<table>
<thead>
<tr>
<th>#</th>
<th>Response</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not employed</td>
<td>26</td>
<td>28</td>
</tr>
<tr>
<td>2</td>
<td>0-5 hours/week</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>5-10 hours/week</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>10-15 hours/week</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>15-20 hours/week</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>6</td>
<td>20-25 hours/week</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>7</td>
<td>25-30 hours/week</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>30-35 hours/week</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>35-40 hours/week</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>40+ hours/week</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

hours per week) with an item standard deviation of 2.23. In addition, 88 respondents reported their fall semester GPA—these data revealed a median GPA of 3.48 points and an average GPA of 3.22 with a standard deviation of 0.73 points. Again, comparison data were not available for the entire population of commuter students or for the entire undergraduate population for these particular metrics.

**Research Question 2: Feelings of Mattering among Commuter Freshmen**

The same quantitative survey was used to gather data for the second research question about the sense of belonging and mattering among commuter freshmen on their residential campus. In order to collect this information, the researcher developed a sense of belonging inventory (which is described in greater detail in Chapter 3). Percent distributions, means, and standard deviations for this inventory are reported in Table 3.
## Table 3

### Percent Distributions of Sense of Belonging Inventory Items

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>N</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree/Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>( \bar{x} )</th>
<th>( \sigma )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There are people at UNL who seem determined to see me succeed.</td>
<td>85</td>
<td>4.7</td>
<td>7.1</td>
<td>24.7</td>
<td>42.4</td>
<td>21.2</td>
<td>3.7</td>
<td>1.038</td>
</tr>
<tr>
<td>2</td>
<td>I feel that I belong at UNL.</td>
<td>85</td>
<td>5.9</td>
<td>8.2</td>
<td>24.7</td>
<td>42.4</td>
<td>18.8</td>
<td>3.6</td>
<td>1.071</td>
</tr>
<tr>
<td>3</td>
<td>I am satisfied with my social life as a UNL student.</td>
<td>85</td>
<td>11.8</td>
<td>17.7</td>
<td>18.8</td>
<td>31.8</td>
<td>20.0</td>
<td>3.3</td>
<td>1.300</td>
</tr>
<tr>
<td>4</td>
<td>There are enough social and academic opportunities for me to get connected with others at UNL.</td>
<td>85</td>
<td>9.4</td>
<td>7.1</td>
<td>10.6</td>
<td>45.9</td>
<td>27.1</td>
<td>3.7</td>
<td>1.207</td>
</tr>
<tr>
<td>5</td>
<td>It is important for me to have friends at UNL.</td>
<td>85</td>
<td>2.4</td>
<td>7.1</td>
<td>14.1</td>
<td>31.8</td>
<td>44.7</td>
<td>4.1</td>
<td>1.042</td>
</tr>
<tr>
<td>6</td>
<td>If I had a personal problem, I believe that there is someone at UNL who would discuss it with me.</td>
<td>85</td>
<td>10.6</td>
<td>22.4</td>
<td>11.8</td>
<td>38.8</td>
<td>16.5</td>
<td>3.3</td>
<td>1.278</td>
</tr>
<tr>
<td>7</td>
<td>Last semester, I sometimes felt left out because I didn’t live on campus.</td>
<td>85</td>
<td>8.2</td>
<td>21.2</td>
<td>9.4</td>
<td>30.6</td>
<td>30.6</td>
<td>3.5</td>
<td>1.341</td>
</tr>
<tr>
<td>8</td>
<td>I am missing out on the college experience because I live off campus.</td>
<td>85</td>
<td>3.5</td>
<td>40.0</td>
<td>17.7</td>
<td>21.9</td>
<td>17.7</td>
<td>3.1</td>
<td>1.211</td>
</tr>
<tr>
<td>9</td>
<td>I have a satisfactory support network at UNL.</td>
<td>84</td>
<td>3.6</td>
<td>15.5</td>
<td>28.6</td>
<td>36.9</td>
<td>15.5</td>
<td>3.5</td>
<td>1.046</td>
</tr>
<tr>
<td>10</td>
<td>It was difficult to meet other students in classes last semester.</td>
<td>84</td>
<td>14.3</td>
<td>34.5</td>
<td>15.5</td>
<td>25.0</td>
<td>10.7</td>
<td>2.8</td>
<td>1.260</td>
</tr>
<tr>
<td>11</td>
<td>I have invited people I know from a class to do things socially.</td>
<td>84</td>
<td>11.9</td>
<td>32.1</td>
<td>15.5</td>
<td>32.1</td>
<td>8.3</td>
<td>2.9</td>
<td>1.210</td>
</tr>
<tr>
<td>12</td>
<td>People I know from a class have invited me to do things socially.</td>
<td>84</td>
<td>10.7</td>
<td>26.2</td>
<td>16.7</td>
<td>35.7</td>
<td>10.7</td>
<td>3.1</td>
<td>1.219</td>
</tr>
<tr>
<td>13</td>
<td>I have joined a campus club or organization because of someone I have met in a class.</td>
<td>84</td>
<td>23.8</td>
<td>41.7</td>
<td>10.7</td>
<td>16.7</td>
<td>7.1</td>
<td>2.4</td>
<td>1.224</td>
</tr>
<tr>
<td>14</td>
<td>I have developed personal relationships with other students in class.</td>
<td>84</td>
<td>8.3</td>
<td>14.3</td>
<td>19.1</td>
<td>41.7</td>
<td>16.7</td>
<td>3.4</td>
<td>1.176</td>
</tr>
<tr>
<td>15</td>
<td>I expect to continue my relationships I established with fellow students last semester.</td>
<td>85</td>
<td>4.7</td>
<td>15.3</td>
<td>17.7</td>
<td>41.2</td>
<td>21.2</td>
<td>3.6</td>
<td>1.126</td>
</tr>
<tr>
<td>16</td>
<td>If I missed class last semester, I knew students who I could get notes from.</td>
<td>85</td>
<td>8.2</td>
<td>11.8</td>
<td>8.2</td>
<td>49.4</td>
<td>22.4</td>
<td>3.7</td>
<td>1.191</td>
</tr>
<tr>
<td>17</td>
<td>I could call or text another student from class if I had a question about an assignment last semester.</td>
<td>85</td>
<td>8.2</td>
<td>9.4</td>
<td>11.8</td>
<td>47.1</td>
<td>23.5</td>
<td>3.7</td>
<td>1.277</td>
</tr>
</tbody>
</table>
The inventory was completed fully by 84 participants. As noted in Table 3, a majority of the participants responded positively to the inventory items (indicating that they do feel a sense of belonging among their peers and faculty/staff at their institution). For example, 63% either agreed or strongly agreed to the statement “There are people at UNL who seem determined to see me succeed” (Item 1) and over 70% either agreed or strongly agreed to the statements “If I missed class last semester, I knew students who I could get notes from” (Item 16) and “I could call or text another student from class if I had a question about an assignment last semester” (Item 17). These responses indicate that commuter freshmen do feel a sense of belonging among their peers within a classroom setting. Further, a majority of participants also indicated that they would expect to continue the relationships they established with fellow students during their first semester—62% either agreed or strongly agreed to this statement (Item 15).

Although still positive, the responses regarding belongingness outside of the classroom are not as strong as the responses regarding belongingness in the classroom. For instance, just over half (51%) of the participants either agreed or strongly agreed to the statement “I am satisfied with my social life as a UNL student” (Item 3), and a slightly larger percentage (55%) responded similarly to the statement “If I had a personal problem, I believe that there is someone at UNL who would discuss it with me” (Item 6). This study confirms some of the literature on friend development and belongingness in class (Krause, 2007) indicating that classroom based relationships do not often extend outside of the classroom. In the present study, just over 40% of the respondents agreed or strongly agreed to the statements “People I know from a class have invited me to do
things socially” (Item 11) and “I have invited people I know from class to do things socially” (Item 12).

Responses regarding an institutional sense of belonging were mixed. Although 61% of the participants either agreed or strongly agreed to the statement “I feel that I belong at UNL” (Item 2), the same percentage of students also either agreed or strongly agreed to the statement “Last semester, I sometimes felt left out because I didn’t live on campus” (Item 7).

In addition to reporting mere distributions and frequencies, the researcher also ran correlations between the sense of belonging inventory items and participant’s self-reported GPAs and employment information. The researcher also desired to run correlations between living status and GPA as well as living status and various sense of belonging items. This would show, for example, if living off campus alone versus living off campus with one or more parents—i.e., being an independent or dependent commuter (Clark, 2006; Dugan et al., 2008)—was significantly related to a student’s sense of belonging or academic success. However, no individual group of students classified by living status options was large enough to run correlations for these variables. Table 4 presents the correlations of each survey item with self-reported GPA and hours worked per week.

No significant correlations were found between the number of hours worked by commuter students and any of the sense of belonging inventory items. Significant relationships were found between a few of the inventory items and commuter students’ self-reported fall semester GPAs. For example, a correlation for the data revealed a
### Table 4

*Correlations between Sense of Belonging Items and Self-Reported GPA, Hours Worked*

\( (n = 84) \)

<table>
<thead>
<tr>
<th>Variable</th>
<th>GPA</th>
<th>Hours Worked</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are people at UNL who seem determined to see me succeed</td>
<td>0.138</td>
<td>-0.113</td>
</tr>
<tr>
<td>I feel that I belong at UNL.</td>
<td>0.213</td>
<td>-0.099</td>
</tr>
<tr>
<td>I am satisfied with my social life as a UNL student.</td>
<td>0.207</td>
<td>-0.071</td>
</tr>
<tr>
<td>There are enough social and academic opportunities for me to get connected with others at UNL.</td>
<td>0.034</td>
<td>-0.087</td>
</tr>
<tr>
<td>It is important for me to have friends at UNL.</td>
<td>0.046</td>
<td>0.000</td>
</tr>
<tr>
<td>If I had a personal problem, I believe that there is someone at UNL who would discuss it with me.</td>
<td>0.138</td>
<td>-0.012</td>
</tr>
<tr>
<td>Last semester, I sometimes felt left out because I didn’t live on campus.</td>
<td>-0.234*</td>
<td>0.004</td>
</tr>
<tr>
<td>I am missing out on the college experience because I live off campus.</td>
<td>-0.336**</td>
<td>-0.004</td>
</tr>
<tr>
<td>I have a satisfactory support network at UNL.</td>
<td>0.109</td>
<td>0.008</td>
</tr>
<tr>
<td>It was difficult to meet other students in classes last semester.</td>
<td>-0.269*</td>
<td>-0.087</td>
</tr>
<tr>
<td>I have invited people I know from a class to do things socially.</td>
<td>0.140</td>
<td>0.055</td>
</tr>
<tr>
<td>People I know from a class have invited me to do things socially.</td>
<td>0.147</td>
<td>0.084</td>
</tr>
<tr>
<td>I have joined a campus club or organization because of someone I have met in a class.</td>
<td>-0.113</td>
<td>0.047</td>
</tr>
<tr>
<td>I have developed personal relationships with other students in class.</td>
<td>0.212</td>
<td>0.001</td>
</tr>
<tr>
<td>I expect to continue my relationships I established with fellow students last semester.</td>
<td>0.272*</td>
<td>0.075</td>
</tr>
<tr>
<td>If I missed class last semester, I knew students who I could get notes from.</td>
<td>0.165</td>
<td>0.002</td>
</tr>
<tr>
<td>I could call or text another student from class if I had a question about an assignment last semester.</td>
<td>0.306**</td>
<td>0.041</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
significant relationship between the sense of belonging variable “I could call or text another student from class if I had a question about an assignment last semester” and GPA, $r = +.31$, $n = 85$, $p < .01$, two tails. Similarly, students’ GPAs were positively correlated with the sense of belonging variable “I expect to continue my relationships I established with fellow students last semester” (Item 15), $r = +.27$, $n = 85$, $p < .05$, two tails. A few inventory items which were negatively worded also correlated with commuter students’ GPA. There was a significant negative relationship between the item “Last semester, I sometimes felt left out because I didn’t live on campus” (Item 7) and GPA, $r = -.23$, $n = 85$, $p < .05$. An even more significant relationship was found between the item “I am missing out on the college experience because I live off campus” (Item 8) and a student’s GPA, $r = -.34$, $n = 85$, $p < .01$. These correlations indicate that although a majority of students expressed positive feelings of belonging, those who did not significantly reported lower GPAs.

**Research Question 3: Needs of Commuter Students**

The process for Nominal Group Technique was described in greater detail in Chapter 3. This section presents the findings from this process. The Nominal Group Technique set out to address the third research question in the present study: What are the most important needs of the commuter student population at the University of Nebraska-Lincoln? To answer this question, each of the participants was asked the following sub-questions:

1. What are the primary challenges you face as a commuter student at UNL?
2. What could the University do to help meet your needs as a commuter student?
Six students provided responses to these questions (four in person, and two via email) for the Nominal Group Technique discussion. Because the two students who submitted responses via e-mail were not present during the Nominal Group Technique discussion, only the four students in attendance were able to provide discussion and rankings for the items. The responses and ranking scores for both questions are presented below in Tables 5 and 6 in order of voted rank.

After the initial ranking, further discussion ensued and participants consolidated items and voted on their top three items in each question. Items which received a top three priority ranking by a student are listed below.

Q1: What are the primary challenges?

- Connecting with others/finding common interests
- Managing time (particularly gaps in time between classes)
- On-campus parking
- Lack of involvement/feeling out of the loop

Q2: What could the University do to help meet your needs?

- Greater (and continual) communication for events/services
- Closer parking to buildings/better inform about parking rules and options
- Consideration for commuters during inclement weather
- Implement a buddy/mentor system or have a freshmen seminar class to provide opportunities to build relationships and assist in making friends
- Reasonably-priced lunchtime meal plan
Table 5

*Primary Challenges of Commuter Freshmen*

<table>
<thead>
<tr>
<th>Q1: What are the primary challenges you face as a commuter student?</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Description</td>
<td></td>
</tr>
<tr>
<td>On-campus parking</td>
<td>9</td>
</tr>
<tr>
<td>Uncertainty around gaps in time (to go back home or not?)</td>
<td>8</td>
</tr>
<tr>
<td>Lack of involvement</td>
<td>7</td>
</tr>
<tr>
<td>Difficult timing of study sessions/RSO meetings (late night rather than right after class)</td>
<td>5</td>
</tr>
<tr>
<td>Lack of motivational peers (There isn’t anyone around them in their home-life who also needs to study, so they themselves lose motivation to study)</td>
<td>5</td>
</tr>
<tr>
<td>Connecting with others/Finding others with common interests</td>
<td>5</td>
</tr>
<tr>
<td>Time management</td>
<td>5</td>
</tr>
<tr>
<td>Using student services (unable to attend professor office hours and utilize academic help resources)</td>
<td>4</td>
</tr>
<tr>
<td>Inclement weather</td>
<td>4</td>
</tr>
<tr>
<td>Feeling “out of the loop” regarding campus programs and activities</td>
<td>4</td>
</tr>
<tr>
<td>Traffic—being late to class</td>
<td>3</td>
</tr>
<tr>
<td>Lack of reasonably priced food options</td>
<td>3</td>
</tr>
</tbody>
</table>
Table 6

*Suggestions to Help Meet the Needs of Commuter Freshmen*

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continual communication for events, services, and opportunities</td>
<td>11</td>
</tr>
<tr>
<td>Closer parking to buildings</td>
<td>10</td>
</tr>
<tr>
<td>Consideration for commuter students during inclement weather</td>
<td>10</td>
</tr>
<tr>
<td>Opportunities to build relationships &amp; connect (like a freshmen seminar or a commuter student orientation)</td>
<td>8</td>
</tr>
<tr>
<td>Buddy system or Mentor program</td>
<td>7</td>
</tr>
<tr>
<td>Reasonably priced meal plan (for lunch)</td>
<td>5</td>
</tr>
<tr>
<td>Communicate the rules and options for parking</td>
<td>5</td>
</tr>
<tr>
<td>Reschedule group/meeting times directly after classes or be more flexible for those who work or have already gone home from campus</td>
<td>3</td>
</tr>
<tr>
<td>Extended hours for study services and academic resources</td>
<td>2</td>
</tr>
<tr>
<td>Access to residence halls</td>
<td>0</td>
</tr>
</tbody>
</table>

**Conclusion**

The findings reported in this chapter discuss how the survey and Nominal Group Technique results answer the three research questions posed for this study. In summary, the survey found that a majority of the commuter freshmen population does indicate feelings of belongingness. A correlation showed that some items of belongingness were positively related to student success as measured by self-reported fall semester GPA. Finally, the Nominal Group Technique revealed that commuter students face challenges
relating to making peer connections, managing time, and finding parking. The implications of these findings will be discussed further in Chapter 5.
Chapter 5

Discussion

Student development literature has been heavily focused on residential students, and the experience of dependent commuter students is often overlooked in the on-campus traditions of residential institutions (Baum, 2005). While the results from the sense of belonging inventory in this study revealed that many commuter students do feel a sense of belonging, there were still a number of participants who responded negatively to the sense of belonging inventory items. This goes to show that there is still work to be done to help these students feel that they belong and ultimately succeed in college.

Higher education professionals have begun to recognize that commuter students do not always have the same needs as their residential peers, and have therefore implemented programs and interventions to increase commuter students’ sense of belonging, which can improve overall levels of commuter student success and retention (Baum, 2005; Jacoby & Garland, 2004). Some of these programmatic efforts—including first-year seminar courses, commuter student learning communities, and creative ways of making connections and dispensing information—came up in the results of this study and are described in the following sections. In addition, this chapter will suggest areas of further research in order to better understand the commuter student population.

First-Year Seminar Courses

One common approach to boost commuter students’ integration to their university communities is through first-year seminar courses. These courses are built into the first semester of a student’s undergraduate career and have been core components of many
institutions’ curricula since the 1980s. Through first-year seminars, students not only gain a set of knowledge and skills to be successful with collegiate academics, but first-year seminars also provide an avenue for students to develop a network of friends on campus (Jessup-Anger, 2011). One participant in the Nominal Group Technique session in the present study participated in a first-year seminar course through a scholarship program, and vouched for similar seminars for the commuter freshmen population to aid in the formation of social connections to the campus. Previous research suggests that strategies which boost social connections among students have helped first-year students persist (Astin, 1999; Jessup-Anger, 2011; Skahill, 2003).

**Learning Communities**

Similarly, commuter students have been included within first-year learning communities. The premise of a learning community is to enroll groups of students into multiple courses simultaneously and provide opportunities for out-of-class faculty involvement and activities in an effort to boost retention through academic and social engagement (Levine & Shapiro, 2000). While residential learning communities are common and have been shown to improve retention, the focus on commuter-based communities has been more limited. However, learning communities for commuter students have been successful in providing commuters with natural avenues to make friends on campus and dispensing resources for commuters to be academically engaged (National On-Campus Report, 2004).
Other Programmatic Suggestions

Even without first-year seminar courses or commuter student learning communities, techniques can be used within individual courses in order to help increase commuter students’ sense of belonging. Chickering (2000) offered suggestions for building community within individual courses by maximizing peer interactions during class time, encouraging interaction outside of class, and creating learning teams for class activities (p. 29). Faculty and administrators can also integrate commuter students into the university community electronically. Technology provides convenience to commuter students who might otherwise face difficulties being physically present in the university community (Kruger, 2000). Likewise, listserv e-mails and web resources can also be helpful electronic initiatives to help develop community among commuter students (Wilson, 2003). A resonating theme from the Nominal Group Technique session in the present study was to improve and increase the communication lines between the institution and commuter freshmen. Technology could be the means of meeting this need.

Another way in which institutions have catered to the needs of commuter students is by being creative with programs and services in order to provide convenience to students as they negotiate their various life roles. Many institutions offer a lounge space on campus for commuter students to spend time between classes (A.M., 2009; Santovec, 2007). Some institutions have hosted off-campus programs in order to alleviate the need for commuters to come to campus for certain activities. Further, institutions have hired off-campus peer educators to serve as a resource for commuter students similar to a
Resident Assistant would in a traditional residence hall (Hintz, 2011; Wilson, 2003). Such programs could help commuter students feel a sense of belonging to the institution without needing to always be physically present in the campus environment.

Finally, parking and transportation are commonly cited issues among the commuter student population (Baum, 2005; Jacoby & Garland, 2004; Student Affairs Leader, 2006). The participants in the present study validated the findings of previous research in this area by stressing the importance of reliable parking and transportation options. Changing parking and transportation infrastructure may not be feasible for many college campuses, but these consistent findings call for institutions to get creative with how they accommodate commuter students who face challenges getting to and from campus.

Areas for Future Research

The researcher found that some of the participants in this study were independent commuters (not living with parents or guardians), even though they were freshmen. At the University of Nebraska-Lincoln, freshmen under 19 are required to live on campus unless they live with a parent/guardian within 30 miles of campus (University Housing, 2014). Some students try to evade this requirement and live with non-family roommates while falsely reporting to the University that they live with their parents. The present study did not investigate this population specifically, but further research on commuter freshmen could seek to understand more about how these students experience college.

A goal of this research was to better understand the commuter student experience outside of the context of the residential standard. However, the researcher recognizes
that even within the literature review of the present study, the residential tradition is evident throughout the general understanding of a collegiate experience. There may be value in conducting this same study among residential students as well. Commuter students are commonly compared to residential peers (Ortman, 1995), and this comparison may be valuable in order to help administrators understand the unique needs of students who do not live on campus by framing their experiences against those who do live on campus.

Authors have previously suggested mattering and marginality as a theoretical construct for commuter student studies (Baum, 2005; Jacoby, 2000). The scope of the present study’s sense of belonging inventory was limited—a better understanding of how commuter students feel that they belong could be gained through distributing this survey to a larger sample of students and completing a factor analysis to validate the items. In addition, future studies might consider how a student’s sense of belonging impacts other aspects of their success. Sense of belonging could play a role in a student’s mental health, plans to pursue further education beyond a bachelor’s degree, or other educational outcomes.

Future studies could also consider how commuter students experience higher education over the course of their entire undergraduate education. The present study only considered the experience of first-year students because research has indicated that this is the most vulnerable time for a student to depart from higher education (Tinto, 1975). However, a longitudinal study could follow commuter students from their first semester
to graduation and shed light on how commuter students find long-term success at schools with residential traditions.

**Conclusion**

This study set out to better understand the experiences of commuter freshmen on a residential campus. By investigating the feelings of belonging and the needs among this population through a mixed methods approach, this study found that a majority of the commuter students did report belongingness. Feelings of not belonging, however, were correlated with lower self-reported first-semester GPAs, demonstrating the importance of belonging among first-year students. Through a Nominal Group Technique, commuter freshmen reinforced their desire to make connections with peers on campus, and expressed their need for reliable parking, increased communication from the institution, and natural avenues to connect with their peers outside of classes.

Even on campuses with residential traditions, commuter students make up a large proportion of the students within higher education environments (Horn & Nevill, 2006). The importance of helping these students feel that they belong has been acknowledged within higher education literature (Jacoby & Garland, 2004). Research has shown that students are most vulnerable for attrition during their first year of college (ACT, 2013; Tinto, 1975). Freshmen students who commute to campus from home are even more vulnerable (Astin, 1999; Chickering, 1974). By understanding the experiences and the needs of this population of students, higher education professionals can be better equipped to serve these students and help them not only to form friendships and connections at school, but also help them to achieve their collegiate aspirations.
References


Curley, P. (2003, August). Making campus a home: Transforming a campus from commuter to residential can enrich learning. *American School & University, 75*(12), 146-149


University Housing. (2014). *Residency requirements*. Retrieved February 7, 2014, from housing.unl.edu/residency-requirements


Appendix A

IRB Approval Letter
January 3, 2014

Eric Bloomquist
Department of Educational Administration

James Griesen
Department of Educational Administration

IRB Number: 20140113730EP
Project ID: 13730
Project Title: Developing a sense of belonging for commuter students

Dear Eric:

This letter is to officially notify you of the approval of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. It is the Board's opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study based on the information provided. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46). Your project was approved as an Expedited protocol, category 6 & 7.

Date of EP Review: 12/17/2013

You are authorized to implement this study as of the Date of Final Approval: 01/03/2014. This approval is Valid Until: 01/02/2015.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:
* Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
* Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
* Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
* Any breach in confidentiality or compromise in data privacy related to the subject or others; or
* Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

For projects which continue beyond one year from the starting date, the IRB will request continuing review and update of the research project. Your study will be due for continuing review as indicated above. The investigator must also advise the Board when this study is finished or discontinued by completing the enclosed Protocol Final Report form and returning it to the Institutional Review Board.

If you have any questions, please contact the IRB office at 472-6965.
Sincerely,

Julia Torquati, Ph.D.
Chair for the IRB
Appendix B

Institutional Agreement Letter
December 4, 2013

Internal Review Board
ALEX West
312 N 14th
Lincoln, NE 68588-0415

Dear Committee Members,

The Office of the Registrar has agreed to provide support to Eric Bloomquist in his research project regarding developing a sense of belonging for commuter students under the general direction of advisor Dr. James Griesen within the Department of Educational Administration.

Based on the request and plan forwarded to my office we will provide a list of student e-mail addresses that match the population target of the study. Students will be invited to voluntarily participate in the study by filling out an on-line survey. We will provide a file of unattributed e-mail addresses that will be used to invite students to participate in the survey.

If you have any further questions, please contact me at 402-472-2082.
Sincerely,

Juan Carlos Gutierrez
Assistant Registrar, Systems & Research
Appendix C

Recruitment Email Messages
Initial Recruitment Message for Quantitative Survey Participation

Subject Line: Complete 5-Min UNL Survey – Chance to Win $20

This message is being sent on behalf of Eric Bloomquist – a graduate student in the Educational Administration Department. As a part of his degree program he is completing a research project on students’ sense of belonging and feelings of mattering at UNL. Because you are a commuter student at UNL, he is interested in hearing about your experience.

Would you please take a few moments of your time to complete this survey for his study? The survey should take approximately 5 minutes, and your response will be greatly appreciated! After completing the survey you will have the opportunity to win one of two $20 cash prizes.

Please follow the following survey link:

https://unleducation.qualtrics.com/SE/?SID=SV_3q6QWCxW8PauWVv

Questions about the survey can be directed to Eric at eric.bloomquist@unl.edu or by replying to this e-mail message.

Thank you!

James V. Griesen

Professor of Educational Administration

University of Nebraska - Lincoln
Second Recruitment Message for Nominal Group Technique Participation

Subject Line: Follow-up discussion for commuter student study – Free Lunch

Thank you for completing Eric Bloomquist’s survey regarding your experience as a commuter student. Also a part of Eric’s project, he is hoping to speak with a smaller sample of his survey respondents to gather more in-depth information about the experiences of UNL students who live off campus.

A one-hour discussion will be held on Monday, February 17, 2014 from 12:30-1:20pm. Lunch will be provided to participants. If you would be willing to participate in a discussion, please sign up at the following link: http://doodle.com/c3c5x8ak4rrdr368

Questions about the study can be directed to Eric at eric.bloomquist@unl.edu or by replying to this e-mail message.

Thank you!

James V. Griesen

Professor of Educational Administration

University of Nebraska – Lincoln
Appendix D

Informed Consent Documents
Survey Informed Consent

The purpose of this study is to further understand the experiences of commuter students at the University of Nebraska-Lincoln. Participation in this study will require you to complete an online survey (approximately 5 minutes).

As a benefit of this research, you will have the opportunity to have your student experience be heard and validated. You will also have the opportunity to win one of two $20 cash prizes. The study will contribute to the knowledge of commuter student's sense of belonging and may aid in programmatic efforts at the University.

There are no known risks or discomforts associated with this research.

The survey responses will be completely anonymous and your name will not be linked to your responses. The information gathered in this study will be submitted as a master's thesis and may be presented in journals or at professional conferences; however, data will be unidentifiable.

You may ask any questions concerning this research by contacting Eric Bloomquist at eric.bloomquist@unl.edu or 402-472-5605. You may also contact the Research Compliance Services Office at irb@unl.edu or 402-472-6965 with questions or concerns about the research.

Participation in this study is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the researcher or the University of Nebraska-Lincoln.
You are voluntarily making a decision whether or not to participate in this research study. By completing and submitting your survey responses, you are providing your consent to participate in this research.

Nominal Group Technique Informed Consent

**Title:** Meeting the needs of dependent commuter students

**IRB# 13730**

**Purpose:**

The purpose of this study is to further understand the experiences of commuter students at the University of Nebraska-Lincoln. In comparison to their residential peers, commuter students are an overlooked population on college campuses. Research has shown that one predictor of persistence in college is feeling a sense of mattering and belonging. This mixed methods study will shed light on commuter students’ feelings of mattering and belonging on their college campus and identify the areas of need among this population.

**Procedures:**

Participation in this portion of the study will require you to complete Nominal Group Technique focus group session about your experience as a commuter student. You will be asked to independently list responses to two questions and then discuss these responses as a group. Following the discussion, you will be asked to rank each item by significance. The session will last approximately 45-60 minutes.

**Benefits:**

This research will give you the opportunity to have your student experience be heard and validated. The study will contribute to the knowledge of commuter student’s sense of belonging and will be shared with UNL administrators.

**Risks and/or Discomforts:**

There are no known risks or discomforts associated with this research.

**Confidentiality:**

Any information obtained during this study which could identify you will be kept confidential. The data will be stored in a password protected computer and in a password protected storage database. The data will only be seen by the principal investigator during the study, and will be discarded after the completion of the study. The information obtained in this study will be submitted as a master’s thesis and may be published in scientific journals or presented at professional conferences but the data will be unidentifiable.

**Opportunity to Ask Questions:**

You may ask any questions concerning this research by contacting the investigator listed below. If you would like to speak to someone else, please contact Research Compliance Services Office at (402) 472-6965 or irb@unl.edu.
Freedom to Withdraw:

Participation in this study is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the researcher or the University of Nebraska-Lincoln, or in any other way receive a penalty or loss of benefits to which you are otherwise entitled.

Consent, Right to Receive a Copy:

You are voluntarily making a decision whether or not to participate in this research study. Your signature certifies that you have decided to participate having read and understood the information presented.

Signature of Participant:

_________________________________________  ________________________________
Signature of Research Participant                        Date

Name and Phone number of investigator

Eric Bloomquist, Graduate Assistant, Principal Investigator. eric.bloomquist@unl.edu or Office: (402) 472-5605

Dr. James Griesen, Educational Administration Professor, Thesis Advisor. jgriesen1@unl.edu or Office: (402) 472-3725
Appendix E

Quantitative Survey
1. Which describes your current living status?
   a. I live off campus with one or more parents
   b. I live off campus with one or more siblings (but not with my parents)
   c. I live off campus with one or more family members other than parents or siblings
   d. I live off campus with non-family roommate(s)
   e. I live off campus alone
   f. I live on campus

(End of survey for those who responded “I live on campus”)

2. What is your gender?
   a. Man
   b. Woman
   c. Prefer not to disclose

3. What is your racial identity?
   a. Asian/Pacific Islander
   b. Biracial or Multiracial
   c. Black
   d. Hispanic/Latino
   e. Native American
   f. White/Caucasian
   g. Other
   h. Prefer not to disclose

4. How many hours per week do you work?
   a. Not employed
   b. 0-5 hours per week
   c. 5-10 hours per week
   d. 10-15 hours per week
   e. 15-20 hours per week
   f. 20-25 hours per week
   g. 25-30 hours per week
   h. 30-35 hours per week
   i. 35-40 hours per week
   j. 40+ hours per week
5. What was your first-semester GPA at UNL? Please round to two decimal points.

6. Specify your agreement to each of the following items (5-point Likert scale from Strongly Disagree to Strongly Agree).
   a. There are people at UNL who seem determined to see me succeed.
   b. I feel that I belong at UNL.
   c. I am satisfied with my social life as a UNL student.
   d. There are enough social and academic opportunities for me to get connected with others at UNL.
   e. It is important for me to have friends at UNL.
   f. If I had a personal problem, I believe that there is someone at UNL who would discuss it with me.
   g. Last semester, I sometimes felt left out because I didn't live on campus.
   h. I am missing out on the college experience because I live off campus.
   i. I have a satisfactory support network at UNL.
   j. It was difficult to meet other students in classes last semester.
   k. I have invited people I know from a class to do things socially.
   l. People I know from a class have invited me to do things socially.
   m. I have joined a campus club or organization because of someone I have met in a class.
   n. I have developed personal relationships with other students in class.
   o. I expect to continue my relationships I established with fellow students last semester.
   p. If I missed class last semester, I knew students who I could get notes from.
   q. I could call or text another student from class if I had a question about an assignment last semester.
   r. I plan to graduate from UNL.
   s. I plan to graduate in four years.
Thank you for your time in completing this survey. Your responses have been recorded and will be helpful in my Master’s thesis, which may contribute to the knowledge of the commuter student experience at UNL.

To be entered for one of two $20 cash prizes, please email my advisor at jgriesen1@unl.edu with the following in the subject line: Bloomquist survey completed. If you have additional questions or concerns about the research you may contact me at eric.bloomquist@unl.edu, or my advisor, Dr. Jim Griesen at jgriesen1@unl.edu.

Thanks again, and best of luck with your semester!

Eric Bloomquist