

A Descriptive Study of Undergraduate Mentoring at a Mid-Western Research University

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Submitted to the graduate degree program in Educational Leadership and Policy Studies and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Doctor of Education.

Date Defended: 22 August 2019

The dissertation committee for Paul Trana certifies that this is the approved version of
the following dissertation:

**A Descriptive Study of Undergraduate Mentoring at a Mid-Western
Research University**

Chair: Dr. Susan Twombly

Date Approved: 5 September 2019

Abstract

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This study explored undergraduate mentoring programs at a midwestern research university. The purpose of this study was to describe mentoring programs and to gain a better understanding of how mentoring is defined and implemented by program administrators. The sample for this study consisted of administrators of mentoring programs at a mid-western research university, who were interviewed about how they define mentoring. Specifically, the study used qualitative research methods to address research questions related to the definition of mentoring, the components of each program, how mentoring programs were evaluated, and any recommendations administrators had. Results showed that the definition of mentoring is vague among administrators of mentoring programs, the quality and quantity of components such as office support staff and funds for food are important, objectives are important in guiding which population of students each program's mentors serve, and everything in a mentoring program should be focused on building close relationships between mentors (faculty or peer) and students. Online platforms such as PeopleGrove and BrazenCareers have become more popular and prevalent among administrators of mentoring programs. While not able to fully replace long-term, in-depth relationships between a mentor and student, platforms offer efficient tools to match potential mentors with students and convenient ways of communicating electronically, like video chat features. Such tools allow programs to save time and to focus on crucial components such as face-to-face meetings, seminars, conferences, etc. In the future administrators of mentoring programs should use a combination of new, timesaving, technologies and traditional, time-intensive, practices for building relationships between mentors and students.

Acknowledgments

I would like to thank my dissertation committee chair Dr. Susan Twombly, as well as my committee members Dr. Lisa Wolf-Wendel, Dr. Marlesa Roney, Dr. Zak Foste, and Dr. David Hansen. I greatly appreciate their help and support in completing this study, as well as in completing the entire doctoral process.

I wish to thank Dr. Claire McMurray in the University of Kansas Writing Center. I am quite certain I would not have completed this dissertation without her assistance. Thank you!

I would also like to thank my family, especially my parents Ken and Dale, my siblings Grace, Chris, and Allen, and my amazingly supportive wife Tanya and my two children Ben and Ruby. They have been extremely supportive and patient while I've taken classes, prepared for comprehensive exams, and written this dissertation. Thank you so much! I love you!

Finally, I want to dedicate this dissertation to Kirk Packwood my dear friend from Fargo, ND and Moorhead, MN, who ties me to this field of higher education in ways only recently known. A previous generation of educators, administrators, researchers, and practitioners paved the way for my achievements, and he was a part of that heritage. While he left us too soon to accept this dedication in person, I think of him often and will warmly remember his infectious laugh as I celebrate completion of this dissertation.

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Chapter 1

Introduction

According to a number of researchers (Daloz, 1983; Gershenfeld, 2014; Hengrenes, 2014; Levinson, et al., 1978) mentoring has assumed national importance as a vital component in the personal, educational, and professional experiences of college students. Hengrenes (2014) asserts that mentoring is an intervention, along with many others used by student affairs professionals, that effectively contributes to college students' success, particularly that of first-generation students (FGS). Mentoring programs have been designed for a range of purposes, including career development, leadership development, and retention (p. 37).

Mentoring programs have become an important intervention to increase retention and graduation rates in college (Crisp & Cruz, 2012; Gershenfeld, 2014; Jacobi, 1991). They have been found to be particularly important for first-generation, low income, and minority students (Hengrenes, 2014). How might the activity of mentoring achieve these outcomes? First, mentors, with their varied, complimentary roles and functions, aid in setting expectations for students and guiding them through challenging academic and social situations (Anderson & Shannon, 1988; Girves et al., 2005). Mentors also assist students in learning by creating a supportive environment and strengthening students' professional behavior by guiding them and providing opportunities to develop competence as a new professional (Johnson, 2003). The goal of an undergraduate mentoring program is to guide, support, and help students feel connected to a college or university by matching them with faculty, peers, or staff members to better involve them in social activities, as well as assist them to develop and achieve their academic goals (Jacobi, 1991).

Mentors provide information as well as emotional support that either prevents stress or

buffers students from the negative effects of stress. As a result, stress interferes less with a student's academic activities and they are better able to cope with the demands of college (Hengrenes, 2010, p. 42). Mentors typically encourage and motivate their students to deepen their level of effort in learning while providing opportunities for particular kinds of involvement (e.g., research assistantships). Faculty mentors also promote involvement by providing their mentees or protégés with challenging assignments, coaching support, or advice about career opportunities (Crisp & Cruz, 2009, p. 539). Faculty-student mentoring programs have been found to increase GPAs and lower dropout rates (Campbell & Campbell, 1997) while peer mentors promote involvement through role modeling or by demonstrating the benefits of involvement through their own activities (Hengrenes, p. 41).

Although mentoring is important throughout the lifespan (Knowles, 1975; Levinson, 1978), mentoring is especially important in early and mid-adulthood, such as during the time a student attends college (Rose, 1999). Levinson et al. (1978) suggest that mentoring is a complex phenomenon that includes many nuanced roles and activities. Terms such as “counselor” or “guru” (p. 511) suggest more subtle meanings but the term “mentor” is generally used in a much broader sense, to mean teacher, adviser, or sponsor. Further, mentoring is often defined “not in terms of formal roles but in terms of the character of the relationship and the functions it serves” (Levinson et al., p. 97-98).

Statement of the Problem

A number of quantitative and qualitative studies (Anderson & Shannon, 1988; Cohen, 1995; Kram, 1985) were done in the period between the 1970s and the 1990s. However, relatively few studies have been done since then (Hengrenes, 2014). Much of the prior research on mentoring has focused on the transfer of knowledge and expectations (i.e. succession planning) between

experienced managers and younger staff members in large businesses or corporations (Jacobi, 1991). However, relatively little research has been done on mentoring for students in higher education since the 1980s and 1990s, especially for low income and first-generation students, even *high-achieving* first-generation students or those with the academic ability and potential to succeed in college (Hengrenes, p. 1).

Mentoring programs can be particularly important for first-generation students (FGS) who may lack support (Gershenfeld, 2014). Mentoring, due to its role modeling function and emphasis on developing deep, sustained relationships between students and faculty or more experienced peers can play an effective part in increasing the success of all students but may be important for FGS success. Indeed, mentoring appears to be one of the many “educationally purposeful” (Chickering, 1967) activities or services which has proven effective in improving retention and completion rates for first-generation college students (Cruz et al., 2017; Gershenfeld, 2014; Jacobi, 1991).

Despite the important role mentoring can play, Mid-Western Research University (MRU) knows little about the collective mentoring programs it offers and what services are offered through these programs. A difference may exist between how mentoring programs define and implement mentoring and how it is defined and effectively practiced in the national literature or by other institutions. If administrators do not define, implement, and evaluate their mentoring programs effectively, then they may not know what they need in order to improve their programs. Thus, mentoring must be studied more to improve the definition of mentoring, as well as service delivery and evaluation.

Purpose of the Study

The purpose of this study is to describe mentoring programs at a single institution and to gain a better understanding of how mentoring is defined and implemented by program administrators at Mid-Western Research University, a major research university. I was particularly interested in programs serving first-generation college students. As results will show, however, this was not a focus of most of the interviews. Thus, this is a descriptive qualitative study based on interviews with administrators of multiple mentoring programs. An important goal of this study for the university will be to understand how administrators define mentoring and to identify the key components of their mentoring programs. With the information gathered from this study, perhaps readers will gain insight that will help improve the preparation, implementation, and evaluation of mentoring programs in the future.

Research Questions

The research questions guiding this study are stated below.

1. How do the administrators of mentoring programs at a large, public Midwestern research university define mentoring?
2. What are the components of the selected mentoring programs?
 - a. Who participates? Who are programs for?
 - b. What are the mentoring activities, interventions, and services?
 - a. Do services exist which are particularly targeted at first-generation, low-income, or minority students?
 - c. How are they staffed?
3. How are the programs evaluated?

- a. How do they define and measure success?
 - b. What works?
 - c. What needs improvement?
4. What recommendations do program administrators have to best serve first-generation, low income, and minority students through mentoring?

Context of the Study: Midwestern Research University

This study took place at Midwestern Research University (MRU). According to U.S. News and World Report, Mid-Western Research University has an acceptance rate in the Fall of 2017 of 93%. A high number of first-time freshman at Mid-Western Research University come from the two highest tiers of ACT scores (27-31, 32-36) and the number of students admitted to MRU with these ACT scores has increased by 7.1% and 28.6%, respectively, within the past five years (Board of Regents). The student-faculty ratio is 17:1 and the school has 47% of classes with fewer than 20 students (www.usnews.com, 2018-19). The most popular majors include Business, Engineering, and Biology. The freshman retention rate is 81% and the four year graduation rate is 42%. MRU has a total undergraduate enrollment of slightly under 20,000 students (www.usnews.com, 2018-19), with a gender distribution of 49% male students and 51% female students. Twenty-six percent of students live in college-owned or operated housing while 74% of students live off campus.

Mid-Western Research University is a member of the prestigious Association of American Universities (“AAU By the Numbers,” 2019), which was founded in 1900 and is composed of 62 of the country’s leading research universities. MRU's mission (“MRU Mission Statement,” 2019) is “to lift students and society by educating leaders, building healthy communities, and making discoveries that change the world to foster excellent teaching, research, and service.”

First-generation students typically have lower ACT scores and, at MRU, students with an ACT score of less than 21 had retention rates after their first year of 68.6% whereas students with an ACT score above 30 had a retention rate of 88.6%. For the last 10 years 1st year retention rates for students with lower ACT scores have varied between 54.9% and 68.4%, whereas for the higher scoring ACT group 1st year retention rates were much better, varying between 88.6% and 92.4% (MRU Office of Institutional Research and Planning). At Mid-Western Research University, from 2017 to 2018, minority students of all ethnicities had first year retention rates after their first year of 74.7%, compared with an overall first year retention rate of 83.9% and a retention rate of 85.0% for White students. For the last 10 years, 1st year retention rates for minority students have varied between 67.7% and 74.4%, whereas for White or Caucasian students 1st year retention rates were much better, varying between 78.4% and 82.8% (MRU Office of Institutional Research and Planning).

According to MRU's strategic plan, improving the retention and graduation rates of under-represented undergraduate students is important (<http://provost.MRU.edu/strategic-plan/metrics>). At universities similar to MRU (<http://carnegieclassifications.iu.edu>) mentoring has proven beneficial in increasing retention and graduation rates. However, while much research (Gershenfeld, 2014; Pike & Kuh, 2003) has been done on undergraduate mentoring for first-generation and low-income students at other post-secondary institutions, little is known about mentoring at MRU.

MRU's budget plays a role in its' level of support for mentoring programs. According to MRU's annual Board of Regents Institutional Profile funding from the state of Kansas' general fund also decreased by 2-3% between the years of 2014-2018. For fiscal year 2018, the most recent year data was available, the state of KS appropriated funds for 14.9% of MRU's budget

(<https://www.kansasregents.org>). The university spent \$1,963 per full-time student on institutional support, a decrease of 14.5% between 2014-2018. In order to meet their operating costs, this has meant that a larger share of MRU's budget has been met during this same period by raising tuition and fees.

In such an environment, as state appropriations have decreased for the last decade and the burden of tuition has shifted to families, ensuring that first-generation, low-income, and minority students have access to higher education and then stay in college and graduate with a degree has become an increasing concern. Also, MRU's budget for student services, which includes admissions, the registrar's office, the financial aid office, and counseling services, decreased by \$195 (10.9%) per full-time student. With regard to first-generation, low-income, and minority students, MRU has budgeted more money during the past five years for student services, which include many of the activities most important to FGLI and minority students. In FY 2018, MRU also spent \$12,570 per full-time student of its budget on instruction (KS BOR 2018), an increase of 6.9% between 2014 and 2018. This is the context in which this study takes place.

Mentoring – An Overview

In this study, I define mentoring as an important relationship intended for the purpose of providing academic assistance, career guidance, and personal support for a student. According to many researchers (Hengrenes, 2013; Jacobi, 1991; Levinson, 1978; Rose, 1999; Schlossberg, 1985) mentoring, at its most basic level, is defined as fulfilling a student's need to belong. According to Jacobi (1991), mentoring can be described as the highest point "on a continuum of helping relationships" (p. 45), with mentors standing above teachers, advisors, and peers. According to Nora and Crisp (2007) mentoring can be defined as "any relationship that teaches an individual or allows him or her to grow" (p. 178).

A number of researchers (Anderson & Shannon, 1988; Blackwell, 1989; Hengrenes, 2014) describe mentoring as a process in which a skilled person serves as a role model, teacher, sponsor, counselor, and friend for a less skilled or experienced person. Rather than just advising or teaching, mentoring is often seen as a more in-depth, personal investment of time and effort in a (mostly) younger person by an older person. The purpose of such a relationship is to promote the less experienced person's professional and personal development. Cohen (1995) asserts that mentoring is a process of intellectual, psychological, and affective development based on frequent meetings over a relatively extended period of time. Mentors accept personal responsibility as competent and trustworthy non-parental figures for the significant growth of other individuals. Thus, a comprehensive definition of mentoring would be that it is a relationship between a more and a less experienced person with a goal of nurturing or providing for the growth of the mentee in an in-depth way over a sustained or relatively long period of time.

A number of researchers (Anderson & Shannon, 1988, Cohen, 1995; Johnson, 2002, Kram, 1985) also state that mentoring comes in two basic types: career and psycho-social. The first area relates to aiding students in building professional skills, abilities, and competencies. This includes sponsoring students' efforts within a program or department, making sure their efforts are visible to other faculty, coaching, protecting a student from undue or unreasonable criticism, providing challenging but appropriate assignments, and teaching the professional ethics of the field. The second is more of a nurturing role, includes more affective factors, and involves building a relationship with a student and ensuring that they have the mental and emotional resources to build an identity as a FGS graduate. This includes enhancing the mentee's confidence, helping their identity formation, and building a sense of professional effectiveness.

Significance of the Study

This study is significant for a number of reasons. First, an important goal of this study is to help clarify administrators' definition of mentoring and describe the goals and practices of their programs. Even if administrators of mentoring programs define mentoring consistently with national definitions, we do not know if they currently implement and evaluate their programs in a way that is consistent with these definitions. Owen (2007) suggests that studies like this are valuable "when the purpose of the study is to collect or synthesize information to assist in developing programs, to clarify program elements and goals, or to improve implementation of a program" (p. 95).

A second reason this study is important is that a clarification of goals, processes, and definitions could help to identify and see the gaps in mentoring programs at the university. In this case, then, limited institutional money can be distributed more effectively between programs in order to better serve FGLI and minority students. This study could also help administrators identify overlaps in mentoring program and areas where mentoring services can be scaled back to avoid duplication of services between programs that offer mentoring services. This study will assist similar programs on campus in identifying the gaps and overlaps in services.

Finally, a number of mentoring programs at MRU, such as the McNair Scholars Program and Emerging Scholars, claim to serve first-generation students and this study will examine whether they do so and what kinds of activities are being done on campus to serve this population.

Organization of the Study

First, I stated the problem and purpose of this study above. Then I provided the research questions and briefly discussed the significance of the study. Next, I will review the literature, describing the main concepts and theories related to mentoring. Then I will

summarize the methods used to collect, sort, code and analyze data, focusing on quotations obtained from interviews. Finally, I will present results from the interviews, especially common concepts and themes found among the interviews, while interpreting the meaning of these results.

Chapter 2 - Literature Review

Introduction

This literature review begins with an exploration of the scholarly definitions of mentoring, followed by a description of the types, functions, and effects of mentoring. Next, a brief discussion about common characteristics of students who are first-generation will be discussed, followed by a brief summary of the literature review.

Scholarly Definitions of Mentoring

According to Campbell (2007) “various definitions of academic mentoring are present in the literature” (p. 108), which complicates our understanding of mentoring relationships and processes. A number of researchers (Crisp & Cruz, 2007; Cruz et al., 2017; Rose, 1999; Shannon & Anderson, 1988) assert that definitions of mentoring typically are too general, lack agreement about mentoring’s functions (teaching, personal support, etc.), or lack a framework for organizing and understanding the way that mentoring’s goals, benefits, and characteristics overlap with each other. Despite being studied in business and higher education for a long time, clear, concise, and widely accepted definitions of mentoring have not been easy to find. According to Rose (1999), mentoring is a concept that has a well-known general meaning but a great deal of confusion exists regarding what it is specifically. In addition, scholars tend to include *definitions* of mentoring with a discussion of other elements related to mentoring, such as characteristics, functions, and processes. These overlaps will, therefore, be present in this discussion as well.

Jacobi’s (1991) review of the literature identified two primary ways—career and psycho-social—that researchers and practitioners define mentoring. Rose (1999) reported that, after an exhaustive review of the literature, she found 24 unique definitions of mentoring. Shannon and

Anderson (1988) acknowledge that many definitions do not provide an essential or key meaning of mentoring. Further, Shannon and Anderson (1988) assert that most researchers define mentoring in three ways (p. 10). First, many writers state *their own* definition of mentoring, which is often too general and lacks specificity about what mentoring really is or what it does for students. Second, researchers assume that something is lacking in existing definitions of mentoring and introduce or use an “integrated” definition, or one which combines or incorporates parts from multiple other definitions proposed by other people. Third, some writers use an existing definition on the basis of its relevance to their own studies and research purposes. All of these approaches have value. However, they do not provide us with a definite understanding of the word mentoring.

Even so, Crisp et al. (2017) suggest that although mentoring definitions vary across studies and programs, as well as by their degree of specificity, at least four points of consensus appear in the mentoring literature:

1. Mentoring relationships are focused on the growth and development of students and can be constructed in various forms.
2. Mentoring experiences may include broad forms of support that include professional, career, and emotional support.
3. Mentoring relationships are personal and reciprocal.
4. Relative to their students, mentors have more experience, influence, or achievement within the educational environment. (p. 19)

According to Zachary (2002), “learning is the fundamental process, purpose, and product of mentoring” (p. 212). Mentoring is best described as a reciprocal and collaborative learning relationship between two or more individuals who share mutual responsibility and accountability

for helping a mentee work toward achieving clear and mutually defined learning goals. Commitment by and engagement of mentoring partners is necessary for establishing, maintaining, and experiencing successful mentoring relationships. Successful mentoring rests on building and maintaining a relationship.

Johnson (2002) provides another, possibly more pragmatic and applicable, description of mentoring. First, Johnson's definition of mentoring is that it is a personal relationship in which an experienced faculty member or professional acts as a “guide, role model, teacher, and sponsor” for a less experienced graduate student or junior professional (p. 90). Next, the concept of mutuality, or the idea that the mentor and mentee benefit mutually in a sort of reciprocal relationship, is important. Rhodes (2002b, 2005) asserts that mutuality, trust, and empathy are crucial in developing meaningful mentoring relationships between faculty and students. Further, high-quality mentoring relationships are those that include feelings of “vitality and aliveness, positive regard, and mutuality” (p. 399).

However, the way in which mentoring is distinguished from other nurturing activities such as teaching and guiding is reciprocity, or the reciprocal nature of a mentoring relationship. This means that both the mentor and mentee benefit from the relationship. This also often means that peer mentoring, where individuals are relatively equal, becomes important. Indeed, according to Torres and Hernandez (2009) mentoring is distinct from other helping relationships in that “to distinguish mentoring from other helping relationships, such as teaching, the aspect of *reciprocity* between the mentor and the protégé is highlighted to acknowledge the benefits of a mentoring relationship for both” (p. 4). Thus, mentoring relationships can contain roles and activities such as role modeling, but reciprocity, at some level, is a key feature of mentoring.

The mentor-mentee relationship often takes on a nurturing tone. Indeed, Anderson and

Shannon (1988) assert that the definition of mentoring includes the process of nurturing students, the act of role modeling, a focus on students' professional and personal development, and an ongoing caring relationship. A number of researchers (Cohen, 1995; Rose, 1999) also propose the notion of an “ideal mentor” or a “complete mentor.” An "ideal mentor" is defined as an experienced person who is curious, reliable, has good research ethics and effective communication skills (Rose, p. 19). An ideal mentor also makes themselves available to students, provides constructive criticism, and conveys a sense of belief in the student's abilities. Rose developed an Ideal Mentor Scale (IMS) containing 76 items (later shortened to 38 items) that measured ideal mentor characteristics. Three factors--integrity, guidance, and relationship--were seen as most important. Integrity represented the befriending and encouragement functions of mentoring (Anderson & Shannon, 1988) and included personality traits like agreeability and conscientiousness. Guidance involved the counseling, sponsoring, and teaching functions of a mentor-mentee relationship. Finally, personality and relationship-building characteristics were important, such as good-naturedness and the ability to have fun, along with a sense of openness on the mentor's part to share their views on social problems and the world in general. Although the aforementioned studies are about mentoring as a personal relationship, it is easy to see that mentoring programs should also attend to the personal relationship aspect of mentoring.

Types of Mentoring

Mentoring comes in a number of types. Faculty, peer, flash, and multiple (from multiple sources) mentoring are described in this study. The traditional mentoring model in higher education is that of a faculty mentor and a student mentee, often called a protégé. According to a number of researchers (Eby et al., 2007; Pascarella, 1980), student-faculty mentoring is important to a student’s educational experience because it strongly supports a student’s learning

beyond the classroom. Faculty members provide knowledge and offer guidance on academic as well as nonacademic issues. Such interaction helps students develop a sense of belonging in their institution and profession. However, due to a number of factors, including declining resources for higher education, the rise of new technologies, and emerging job market forces, the traditional faculty mentor-student mentee relationship is undergoing changes. Throughout the last few decades, mentoring has shifted to a more inter-dependent model, with multiple people contributing to a student's development (Gershenfeld, 2014).

In fact, a number of researchers (Jacobi, 1991; Kram, 1983; Shandley, 1989; Shannon & Anderson, 1988) assert that mentoring from a number of sources, or multiple mentoring, is of crucial importance to students, especially first-generation students. Multiple mentoring—or mentoring derived from a number of sources such as faculty members, peers, colleagues, family members, friends, supervisors, etc. has risen in importance (Gershenfeld, 2014). In multiple mentoring situations, academic, social, and emotional support comes from a number of sources, including from peers, colleagues, faculty members, supportive employers, and family members. Sometimes mentoring occurs simultaneously from all of these sources, with mentors providing aid at different points in a student's life.

Peer mentoring has arisen partly as a response to this situation, with peers increasingly serving as an important source of support for college students (Adams, 2012). Peers are important because they often hold different skills—in research methods, statistics, technology, time management, etc.—that they can share with each other. In peer mentoring relationships students also typically pick peer mentors who they already know or whose skills they have seen firsthand that they seek to grow and develop within themselves. Relative equality, shared interests in completing a degree, and a strong sense of mutuality is important in these

relationships. According to White (2012), faculty mentor-protégé relationships and peer-to-peer or quasi-mentoring relationships can be distinguished based on the degree of mutuality a relationship has and the strength of the mentor's influence on a protégé. For instance, peer mentoring involves more mutuality but less comprehensiveness than in faculty-student mentoring.

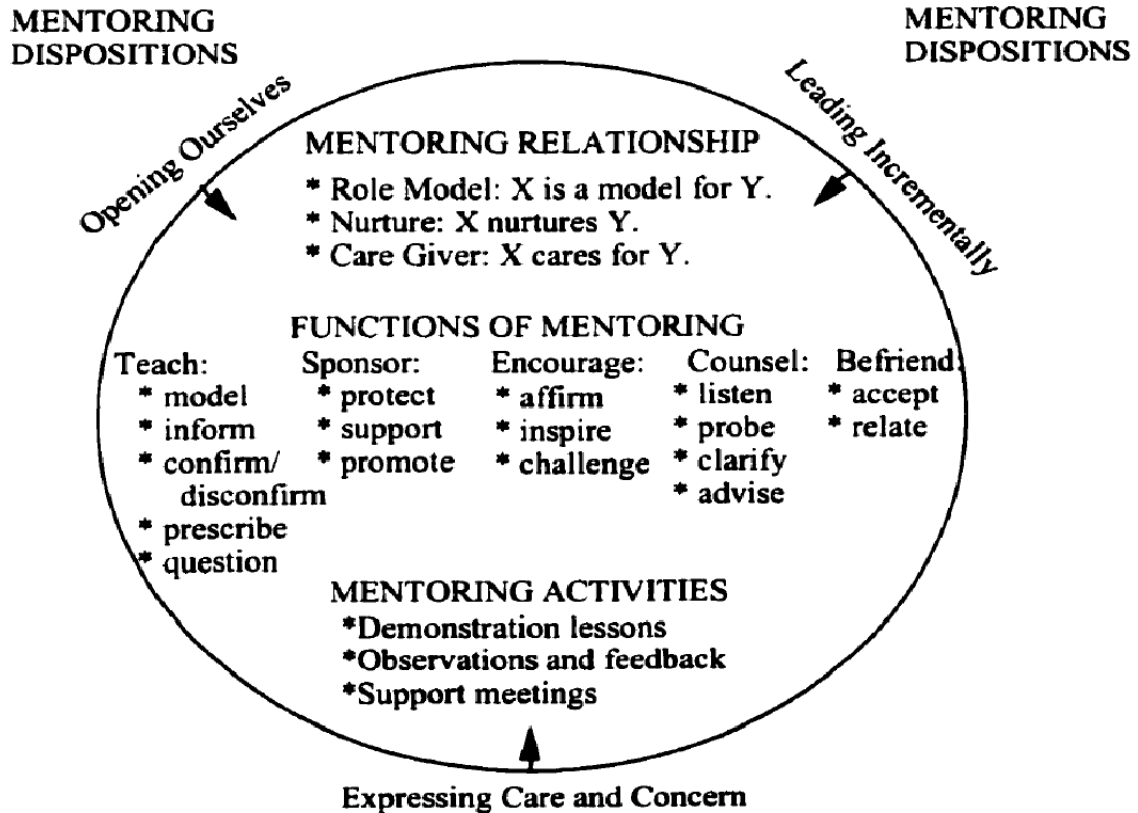
Such a situation may mean not all of the needs of a mentee--sharing information, emotional support, etc.--are met but many of the basic needs are (Hengrenes, 2016). Because less hierarchy exists between most peers, students are available to each other and can be accessed in situations (at social events, in the classroom, etc.) and at times (late at night, on weekends) when faculty and staff mentors may not be available (White, 2009, p. 191). Thus, a number of programs have placed students in the mentor role, hoping that the peer-mentoring experience will promote their development and reinforce their commitment to higher education (Hengrenes, 2016, p. 37). In fact, an interest in peer mentoring has coincided with decreasing resources for many institutions, as such programs can improve student retention and success with little to no cost (Crisp and Cruz, 2017).

Functions of Mentoring

Rose (1999) proposed a number of ideal mentoring functions, namely providing challenges, offering constructive criticism, and holding a sense of belief in a student's abilities (p. iii). Even if a mentor doesn't provide ideal mentoring, Shannon and Anderson (2002) state that effective mentoring focuses on five essential functions: teaching, sponsoring, encouraging, counseling, and befriending (p. 11). Shannon and Anderson's model is found below.

Table 1

Mentoring Dispositions, Relationships, Functions, and Activities



Note. This table provides a summary of Shannon and Anderson’s (2002) Mentoring Model.

According to Shannon and Anderson (2002), teaching is defined as modeling appropriate behavior, informing students about relevant topics and procedures, confirming or disconfirming students’ assumptions or decisions, prescribing certain courses of action, or questioning students’ decisions (Shannon & Anderson, p. 4). Sponsoring means guarding a student’s position within a department or program and involves three essential behaviors: “protecting, supporting, and promoting” (p. 4) a mentee’s work and efforts in front of other people. The process of encouraging includes affirming, inspiring, and challenging students whereas “counseling is a problem-solving process that includes behaviors such as listening, probing, clarifying and

advising” (p. 5). Finally, good mentoring requires “befriending” which is associated with two behaviors: accepting or relating to students. As a friend, mentors convey to their students that they understand and support them (p. 5). Taken together, all of these behaviors entail what can be expected of good mentors and show the types of behavior expected to be seen in the activities and services provided in an effective mentoring program.

According to a number of other researchers (Eby et al., 2007; Hengrenes, 2017; Pascarella, 1980) mentors serve at least nine functions. They give information, provide political information (typically at a departmental or organizational level), offer challenging or especially rewarding assignments, counsel students about personal matters, help students with career decisions, highlight mentees’ achievements in front of other people, protect students from unfair criticism, and develop friendships (Eby et al., 2007, p. 39). According to Eby et al. (2007), a faculty mentor imparts knowledge, “provides support, and offers guidance on academic (e.g., classroom performance, academic skill-building) as well as nonacademic (e.g., personal problems, identity issues) issues” (p. 40).

Hengrenes (2013) found that the role-modeling function was of greatest importance to student development followed by emotional support and direct assistance. However, many researchers (Anderson & Shannon, 1988; Hengrenes, 2013; Jacobi, 1991) assert that what makes mentoring programs so unique and effective is that they combine an *academic* component with *social* support. Academic guidance includes, but is not limited to, assessing coursework, reviewing time to degree requirements, and discussing career goals (Hengrenes, p. 40). Social support includes behaviors that can be described as encouraging, validating, goal-setting, and a whole host of interactions which support the motivation of a student in a way that complements their academic and career needs. Whatever the case, the benefit of a mentoring program is that,

by guiding, supporting, and helping students feel connected to the university through matching them with faculty and peers, students will better develop and achieve their academic goals. Faculty-student mentoring programs have been found to increase GPAs and lower dropout rates (Campbell & Campbell, 1997).

Effects of Mentoring

Mentoring can contribute to the personal, educational, and professional experiences of college students (Daloz, 1983; Gershenfeld, 2014; Hengrenes, 2014; Levinson, et al., 1978). Benefits of mentoring include quicker development of professional skills, enhanced confidence and sense of identity, increased scholarly productivity, improved networking opportunities, better dissertation progress, and greater satisfaction with one's college (Torres & Hernandez, 2010). Students also see increased benefits after graduation, including increased income, more rapid promotion, higher career satisfaction and achievement, and a greater willingness to mentor others. Fox, Stevenson, Connelly, Duff, and Dunlop (2010) found that first-year students who participated in a peer-mentoring program demonstrated better academic performance when compared to a similar group of nonparticipants (p. 378). Mentors also describe receiving rewards from mentoring their students that include greater networking, accelerated research productivity, enhanced professional recognition when mentees perform well, greater career satisfaction, and a sense of rejuvenation from collaborative efforts with a good mentee.

According to Allen and Eby (p. 400) “one of the key questions being asked in the mentoring literature at this time...is why mentoring relationships have positive effects.” Karcher, Davis, and Powell (2004) suggest that fulfillment of the need to belong serves as a mechanism for positive outcomes. When protégés have this basic need met, they can develop self-esteem and feelings of personal competence, achieve in school, master work-related tasks, etc. Similarly,

mentors can meet needs for belonging through mentoring others by experiencing “growth-in-connection” (Fletcher & Ragins). This refers to the process by which basic human needs for affiliation are fulfilled by connecting with others through close relationships (Miller, 1976).

According to Gardner (2003), the most common effect of mentoring in academia, at both the undergraduate and graduate levels, is increased success in the educational program (p. 325-326). This means the ultimate outcome of collegiate mentoring is increased academic success, whether measured by higher graduation or retention rates or other measures, and this is a measurable benefit to students and post-secondary institutions. Rather than just advising or teaching, mentoring is often seen as a more in-depth, personal investment of time and effort in a (often) younger person by an older person. Further, at the graduate level “mentors are a primary mechanism for indoctrinating students into a professional identity and the relationship can have profound effects on students’ professional identity and career plans” (Austin, 2002, p. 99).

The potential effects of mentoring can be the result of different program components. For example, Gershenfeld (2014) asserts that mentoring programs with a mentor to mentee ratio of 1:1 are more successful than programs with larger ratios, some which have ratios up to 1:30 (p. 372). As the number of students increases for each faculty mentor, the positive effects of mentoring decrease. Crisp et al. (2017) describe these components by separating mentoring programs into four overlapping but somewhat distinct categories, based on context and purpose (p. 45): helping students transition to college, focusing on social justice and equality, providing support for students at the same career level, and improving research skills and providing advanced opportunities. Whatever specific components a mentoring program has, it should combine the academic skills, duties, and activities of teaching and tutoring with the social, affective, and non-cognitive activities of advising, sponsoring, and helping students in order to

benefit students. Because first-generation college students often struggle to transition to college and typically have fewer research skills than their peers (Pike & Kuh, 2003), mentoring can potentially affect their college experience and career trajectory in a significant way. Common characteristics of first-generation students are discussed below.

Characteristics of First-Generation Students

This study began with the intent to focus on mentoring for first-generation students. The exact percentage of undergraduate students who are first-generation students is debatable. Pryor (2012) reports that about 15.9% of students fit into FGS status. A number of other scholars (Engle & Tinto, 2008; Pike & Kuh, 2003) report that FGS constitute about 25% of U.S. undergraduate students. Whatever the case, a sizable number of students attending college today are first-generation college students. Because first-generation students are the first in their family to graduate from college, they face many disadvantages in obtaining a college degree, compared to continuing generation students. In fact, a number of researchers (Adams, 2012; Pascarella, 2004) point to distinct disadvantages for first-generation college students in multiple areas, including a lack of basic knowledge about postsecondary education, level of family income and support, educational degree expectations and plans, and academic preparation. Adams (2012) and Pascarella (2004) also determined that first-generation college students were likely to be less prepared to make informed decisions about post-secondary institutions' academic and social environment, especially programs and services that could contribute to their educational development. Being a first-generation college student was also negatively related to social involvement and indirectly associated with lower levels of integration and academic gains in college (Pike & Kuh, 2003). In short, the experiences of many first-generation students have been described as "a constant battle" (Weichman, 2010, p. 27).

Pike and Kuh (2005) report that, because first-generation students also tend to come from low income families, they are not regularly exposed to people with knowledge about college. Because of this, first-generation college students are entering new situations with limited knowledge of the jargon, traditions, and expected behaviors of college, with little-to-no family connection to the collegiate lifestyle (Adams, 2012). Thus, they lack specific types of information about college including many of the procedures, processes, experiences, and the larger culture of college. In a sense, first-generation students are attempting to weld together two separate worlds—their home life and their academic world (Adams, 2012).

A number of researchers (Pascarella & Terenzini, 2005; Tinto, 1993) suggest that the college success of FGS, especially retention until graduation, depends on a number of factors. Financial support, family backing, and full or part-time employment status all contribute to the success of FGS students. Specifically, FGS retention is related to a first-generation student's level of involvement (Astin, 1989), engagement in educationally purposeful activities (Chickering, 1974; Kuh, 2001), or integration into a specific program or department (Tinto, 1993). Further, according to a number of researchers (Kuh, 2001; Jacobi, 1993) certain services are crucial for FGS. Mentoring is among the behaviors that contribute to student success, particularly the success of FGS, who face additional barriers to college completion, compared to continuing generation students.

A number of researchers (Kuh, 2001; Rendon, 1992) report that individuals in certain roles, such as student affairs workers, are important to the process of helping first-generation college students acclimate to and ultimately succeed in college. Although this claim is not surprising, it does underscore the need for faculty members, student affairs staff, and peers to be as intentional as possible in finding opportunities for students to connect with campus culture through formal

academic and extracurricular processes (Pike & Kuh, p. 18). This is where mentoring becomes important.

Because of a lack of academic role models in first-generation college student homes the staff of college support programs often become mentors, even surrogate family members Hengrenes (2014); Mekolichick & Gibbs (2012). First-generation students shared that taking the time to become academically prepared for college, by taking transitional classes or participating in a summer bridge program, helped them transition more successfully to college (Hengrenes, p. 12).

Rendon (1992) emphasizes the importance of “validating” (p. 57) experiences, such as mentoring, or any activity in which students interact with administrators, professors, advisors, and other students. This is what mentoring does. During these activities, first-generation students receive overt and covert messages that they are welcome at the institution and will be able to succeed there. She stresses that it is not enough for faculty and staff members to make themselves available to students throughout the year. Instead, college staff must actively reach out to students to ensure they feel validated. This activity sounds much like what Muraskin (1999) calls “intrusive advising.” Such advising is similar to mentoring because it involves many components that go “beyond typical advising on courses and requirements” (p. 52) and can include multiple meetings between advisors and students throughout the semester, regular tracking of student performance by advisors, and referrals to other university departments such as personal and career counselors.

Mentoring, with all of its functions and purposes, could provide what is most important in student success, or retaining and graduating students, namely activities which promote students’ sense of belonging. Mentoring also provides the services necessary to improve students’ sense of belonging (Jacobi, 1991). One specific benefit of mentoring is that mentors help students

connect all of their experiences—academic and social—into a coherent sense of purpose or belonging in college. One reason for this is that mentoring focuses on reciprocal relationships (Crisp & Cruz, 2017). We should expect mentoring programs to contribute to social and cultural capital through providing such experiences as career development skills, connections, etc.

Concepts and Frameworks Related to Mentoring

In this section I briefly describe concepts often used in mentoring studies. According to Gershenfeld (2014), a number of theories and conceptual frameworks have been used to study mentoring with undergraduate students, especially first-generation college students. Researchers have used theories based on social capital (Bozionelos, 2006; Gannon & Maher, 2012; Singh, Ragins, & Tharenaou, 2009), cultural capital, academic and social integration (Hu & Ma, 2010; Mekolichick & Gibbs, 2012), involvement, and engagement. Even with many competing theories, a number of researchers (Crisp & Cruz, 2009; Cruz et al., 2017; Gershenfeld, 2014; Gwathney et al., 2006; Jacobi, 1991) report that student departure theory, with its concept of integration, is the theory most used in higher education mentoring studies. Tinto (1993) proposed a model in which retention and attrition, or staying in or leaving college, were viewed as outcomes of integration into the academic and social environment of an institution.

According to Tinto (1993), a student's level of integration can be shown by how much they feel accepted into the institution's culture.

The primary reason for this is that integration appears to effectively describe and provide support for students' need to fulfill a sense of belonging on campus. Indeed, according to Wolf-Wendel, Ward, and Kinzie (2009), Tinto suggests that a "sense of belonging" is a good substitute for the term integration (p. 424). Hurtado (2007) also suggests that a student's sense of belonging is an important part of Tinto's theory, namely that a student gains a sense of belonging

as they integrate into a college's culture by learning the expectations and assumptions of faculty, staff, and other students.

Integration – Academic and Social.

How integration and mentoring connect is of great importance and interest in this study. Jacobi (1991) suggests that Tinto (1975) proposed a model in which retention and attrition, or staying in or leaving college, were viewed as outcomes of integration into the academic and social environment of an institution. According to Tinto (1993), a student's level of integration can be shown by how much they feel accepted into the institution's culture. Integration comes in two forms—social and academic (p. 101). According to Wolf-Wendel et al. (2009) social integration refers to students' perceptions of their interaction “with the peer group, faculty, and staff at the institution as well as involvement in extra and co-curricular activities” (p. 415). Academic integration refers to students' perceptions of their experience in formal and informal academic roles (p. 415).

Successful integration results in retention—students staying in college—and unsuccessful integration contributes to student departure. Further, integration is most important for students during their first year in college. If this is the case, then integration meets the demands of what Levinson et al. (1978) suggest is the greatest challenge for students making the transition to college, the development of “a sense of belonging.” Indeed, Tinto's (1993) theory of student departure highlights the positive influence that a sense of belonging has on undergraduate college student persistence (Torres & Hernandez, 2010, p. 4).

Using the concept of integration, Tinto (1975, 1993) proposed that students who are connected to the culture of campus, both within and outside of the classroom, are more likely to persist and not depart from a college or university without graduating (Gershenfeld, 2014).

Mentoring programs are included to facilitate academic and social integration. As described above, mentoring fosters a sense of belonging, or integration, on the part of a student (Gershenfeld, 2014, p. 524).

A number of researchers (Cruz et al., 2017; Gershenfeld, 2014) assert that mentors play an important role in integrating students into an institution's culture. Mentoring supports the socialization of students by helping them understand the expectations and culture of college. Mentoring is typically delivered as an extra or co-curricular activity which has the effect of helping students feel integrated, or a sense of belonging, to campus. Mentoring, through the functions of role-modeling, sponsoring, providing information, and teaching--fulfills a student's need to belong and helps them to "feel that someone cares" (Levinson et al., 1978).

Because a sense of belonging as a good student and a competent individual is so important for first-generation students, faculty and peer mentoring can be an important intervention to help students improve their integration into campus culture, especially first-generation students. According to Jacobi (1991), of the three broad mentoring functions (psycho-social and vocational being the other functions), emotional support is a likely strong contributor to integration, and thereby to student success.

Mentoring can contribute to students' sense of belonging. Mentoring, with all of its functions and purposes, provides what is most important in student success, or retaining and graduating students, namely activities which promote students' integration or sense of belonging. Indeed, according to Jacobi (1991), who wrote the first literature review about mentoring, studies of mentoring programs using Tinto's (1993) theory (p. 524) should assess the impact of mentoring programs and services on a student's sense of belonging or integration, which then contributes to their retention. According to Jacobi (1991), a student's level of integration can be

shown by how much they feel part of the institutional community, to what degree they understand and share the institution's mission or core values, and how close they feel to their faculty and fellow students (p. 98).

Cultural Capital.

Mentoring programs can also contribute to cultural and social capital acquisition so we would expect good programs to have structures and programs to do so. Cultural capital comes in three main forms: embodied, or one's perception of culture, values, norms, etc.; objectified (the things that a person owns), and institutionalized, or how social structures such as colleges recognize and reward or punish particular tastes, norms, or values (Winkle-Wagner, 2010). However, many first-generation students lack the type of cultural resources that many continuing generation students take for granted. Such disadvantages are described by Pascarella and Terenzini (2004) as a lack of knowledge about college costs and application procedures, a lower level of family support, lower degree expectations, and less academic preparation. For many first-generation students, instead of offering a way to earn more "capital" and better their lives, education often "reinforces" the cultural capital associated with their family background (Winkle-Wagner, 2010, p. 6). This describes a situation often seen in schools, where first-generation students start the "game" of education at a disadvantage (p. 5). The skills first-generation students lack on campus and then gain with the help of a mentor can be considered cultural capital.

With the concept of cultural capital, I am potentially able to examine inequality and the transfer of power without relying on physical or monetary resources. According to a number of researchers (Bourdieu & Passeron, 1990; Winkle-Wagner, 2010) cultural capital provides a way to study symbolic power, of which grades and college degrees are examples, and its use in

education environments. Career counseling and discussion of job prospects, first-generation student application procedures, academic performance expectations, knowledge of relevant deadlines, and many other things constitute information that continuing generation students typically have access to through their families, but which first-generation college students lack. Individuals such as faculty and support staff who work in first-generation college student programs then are crucial in providing advising, mentoring, and retention services that are crucial in helping first-generation college students acquire the necessary types of cultural capital and graduate with a degree.

Summary

According to many researchers mentoring, with its complimentary academic and social functions, is a way to support undergraduate students, especially first-generation college students. Because first-generation college students could face a lack of knowledge about college resources and sources of support, mentors can serve an important function in aiding students during their college years.

Chapter 3 – Methods

Introduction

This was a descriptive qualitative study of mentoring programs at Mid-Western Research University, which operates multiple mentoring programs, as seen through the eyes of program administrators. The purpose of this study was to describe mentoring programs within a single institutional context to gain a better understanding of how mentoring is defined and implemented by administrators. Detailed definitions of mentoring, based on previous research, guide this study and results of interviews of mentoring program administrators contribute to the body of knowledge about mentoring for undergraduates. My primary research questions were:

1. How do mentoring program administrators define mentoring?
2. What are the main components of mentoring programs?
3. How are mentoring programs evaluated?
4. What recommendations do administrators of mentoring programs have?

Design of the Study and Guiding Conceptual Framework

To answer the research questions, an interpretive qualitative research design was appropriate. This approach allowed me to collect perspectives from the individuals who conceptualize, organize, and deliver mentoring programs at a midwestern research university. A number of researchers (Cruz et al., 2017; Gershenfeld, 2014) assert that mentors play an important role in socializing students into an institution's culture. Mentoring supports the socialization of students by helping them understand the expectations and culture of college. Mentoring, through the functions of role-modeling, sponsoring, providing information, and teaching--fulfills a student's need to belong and helps them to "feel that someone cares" (Levinson et al., 1978). This conception of the role of mentoring guided this study.

Sample Selection

I used purposeful sampling in this study. Merriam (2009) defines purposeful sampling as intentionally selecting “people, activities, or documents...according to pre-established criteria” (p. 295). Subjects or cases selected with this type of sampling were selected on purpose because they lead a mentoring program at the institution in question. Any director of a mentoring program at the university was included in the sample because I wanted to understand mentoring directors’ definitions of mentoring, how they implemented these definitions, and how a better understanding of these definitions might improve their programs. To gain access to interview participants I first identified a number of mentoring programs on campus. I asked the administrators of the following programs to help identify additional interview participants:

- a. The Undergraduate Research Office
- b. The Multicultural Scholars Program
- c. The Office of Multicultural Affairs

Based on the response, I made a list of potential participants and selected individuals from that list to contact. I emailed each potential participant to inquire whether they would be interested in participating in the study and stated explicitly that participation was voluntary (please see a copy of the email template in Appendix 1). If no response was received within three to four days, I sent a follow up email, and then a third email a week later. Out of 15 program directors that were emailed, one declined an interview as not interested and another one declined after it was decided their mentoring program didn’t serve undergraduates and, therefore, wasn’t relevant to the study. In total, 13 directors of mentoring programs agreed to be interviewed. All interviews were conducted between January 25th and April 20th.

Data Collection

Interviews.

I conducted one-on-one, in-person semi-structured interviews with directors of mentoring programs at Mid-Western Research University who agreed to participate lasting approximately 45 minutes to one hour each. I developed interview questions to answer the research questions focusing on mentoring program directors' definition of mentoring, the components in their programs such as participants and activities, and how they assess their programs (see a copy of the interview protocol in Appendix 2). I completed Human Subjects/IRB tutorials, submitted an application and received approval by the MRU Internal Review Board (IRB). I planned to use pseudonyms for each interview participant, with the actual names of the programs used in the study. I asked and received permission to do this. The interviews took place in meeting and conference rooms in the two primary library buildings, as well as in the offices of some of the subjects, and included questions approved by the dissertation committee. In these interviews, I provided a semi-structured interview protocol for each respondent and asked a set of pre-determined questions. Participants were encouraged to respond freely and to ask clarifying or confirming questions to ensure that they understood the purpose of the study and the meaning of each question. In general, I attempted to let participants speak in a relatively relaxed, informal manner. I recorded the interviews using the Audio Memos voice recording application on an iPhone. Then I synchronized files with iTunes. Synchronization was done with a secure password to guard participants' confidentiality and to ensure that no data was lost. After the interviews, all 13 interviewees agreed to allow the use of program names in this study.

Data Analysis

Transcribing and Coding.

After conducting the interviews, I began analyzing the data by listening to the interviews. Next, I transcribed them. Based on Foss and Waters' (2007) suggestion, I made two copies of each transcript, one to work with while reading, sorting, and coding passages and the other as a backup or reference. According to Ryan and Bernard (2003) analyzing text starts by "proofreading the material and simply underlining key phrases" (p. 88) then looking closely at individual words or small phrases and sentences. Then the researcher moves onto other words and, eventually, to larger phrases and sentences. Based on this suggestion, I read the transcripts; observed words, phrases, or passages; underlined them; and then moved onto other passages and paragraphs.

After reading the interview questions and responses I coded the text. I coded excerpts by coming up with a term or phrase that captured what I was seeing, marked these passages on the transcript, and gave them a code in the margin. After coding, I cut out each excerpt and made multiple copies of these excerpts, one for each code. One by one, I sorted each quote into piles based on which codes seemed to go together, using the codes, not the quotes themselves, to decide how to categorize each excerpt. I did this approximately 10-20 times.

After three or four excerpts were sorted into each pile, I labeled the piles with terms that succinctly expressed "what all the codes in that one pile have in common" (Foss & Waters, 2007, p. 193). Each label described "what characteristic, attribute, or mechanism the codes in the pile share" (p. 194). Next I checked the codes to make sure all of the codes were relevant to the label I had given it. Throughout the process I continually refined the pile until I was satisfied that the codes on the excerpts in each pile shared relevant characteristics. According to Foss and Waters

(2007), “40 to 50 piles is typical for coding data for a dissertation” (p. 195). I finished this process with 76 piles.

Finding Themes.

Next, I put all piles containing excerpts with the same code into an envelope and labeled each with the category of code they contained. I typed the category shown on each label onto a separate line in large font in a blank Word document, printed them, and cut each label. I sorted labels into piles to find relationships among the piles of coded excerpts inside the envelopes. Next I marked the back of each label with a red, green, or blue “X” and mixed them together. According to Foss and Waters (2007), the goal of this step “is to find completely different piles for the labels and entirely new relationships among labels from what you found the first time” (p. 199). I completed this process approximately 20 times then began to make notes about the relationships I was seeing among the labels.

I rearranged the relationships between the codes, took pictures (8-10) of the arrangement of labels to review the pattern of codes later, multiple times. Over the course of 4-6 weeks in the Summer of 2018, I returned to the photographs of my codes and themes, rearranging and sorting to continuously connect or isolate them. By doing so I sought to move past the most easily recognizable or obvious themes. I also looked for “a clear and plausible fit” between the themes and data (Foss & Waters, 2007, p. 206) and sought to validate each theme as meaning what the respondents really meant.

From here I drafted an explanatory schema by talking out loud about the labels, piles, and relationships while trying to articulate the key ideas in the labels and explain what they mean. I made notes and took 7-10 photographs of the labels and piles during this process. I focused on articulating ideas and stating definitions; comparing and contrasting phrases; attempting to

explain cause and effect; exploring opposite contexts for each quote; and relating parts of ideas to larger concepts (p. 201).

Validity and Reliability

To ensure validity, throughout each interview I repeated questions for which I was unsure that a response really meant what the interviewee stated. I also used follow-up questions to clarify points made by each speaker. I did this to verify the meaning of statements made during the interviews and to ensure that each response was credible and accurate from each respondent's point of view. I also asked numerous graduate writing consultants to review the themes and to read multiple drafts of the final document, providing a check on whether the themes were valid.

Bernard (1994) has also argued that ultimately, the validity of a concept depends on the utility of a concept or theme (p. 104). The descriptions of mentoring by administrators in this study, which focus on relationships and trust, indeed provide utility in describing mentoring programs at the institution. Thus, using Bernard's definition, they are valid.

Researcher Bias and Assumptions - Role of the Researcher

My role as a researcher is primarily based on my own educational and career experiences. I grew up across from a dairy farm five miles outside a small town of 900 people on the Fort Berthold Reservation in central North Dakota. My family had limited resources, as I qualified for free or reduced lunch at school, and I had relatively limited opportunity to advance my career or economic, social, and life chances, except for what was provided by education. Almost by necessity, I have viewed education as a path to a better life throughout my entire life. With hard work, I earned good grades and applied to college, which led to other opportunities like a teaching assistantship in graduate school.

I believe that a rural upbringing led to my career choice of advising first-generation and low-income students because I have a deep understanding of what it means to survive on very little (I survived 2-3 days on a jar of peanut butter during my Master's program). I am also a first-generation doctor student and I feel as though I have faced many parallel challenges that first-generation college students meet on their path toward a college degree. Many students appear to realize my sincerity and authenticity in attempting to help them graduate from college as I have “walked a mile in their shoes” and am able to empathize with their struggles. My personal history and perspective has helped me create very rewarding and beneficial relationships with students, for both them and me.

Based on my background I wanted to better understand how higher education staff in administrative and support roles—directors, faculty, peers, advisors, counselors, and specifically mentors—define, cultivate, and implement mentoring activities to build relationships with students and exhibit a sincere, authentic perspective aimed at helping students finish college. Thus, a desire to define mentoring better, or in a more authentic way in which the academic and social needs of students are acknowledged, was the perspective with which I approached this study, conducted the interviews, and analyzed data. Overall, this is my primary goal as I become better in the role of educational administrator and scholarly practitioner—to demonstrate authenticity in my interaction with students and colleagues and to elicit authentic responses from interview participants in this study.

Limitations of the Study

A limitation of this study is that this is a study of mentoring programs at one university. Generalizability to other programs at other institutions will be very low and creating a framework of best practices for mentoring services that will work across different campuses,

modes of delivery, and institutional types isn't possible with this study. Further, I only interviewed directors of mentoring programs. In the future, interviewing faculty would be helpful in understanding how faculty, who play an important role in delivering mentoring services, think about what they do and describe how they provide mentoring services. Also, interviewing other staff members who are in support roles and who would be able to discuss more of the challenges related to recruiting and matching students; scheduling activities; paying bills; and providing administrative support for a program would be important.

Finally, even though I discussed program resources and budgets with interviewees, I did not specifically ask questions about funding. Because a program's access to resources affects its ability to provide services and to effectively implement mentoring goals and activities, asking more detailed questions about budgets and funding levels would likely be beneficial in the future. Even so, in this study a definition of mentoring has been summarized from the literature and directors of mentoring programs have stated their definitions and described how they understand and implement mentoring programs, hopefully adding clarity to the field. As it turned out first-generation and under-represented students weren't really a focus of the interviews, thus limiting my ability to speak to how mentoring specifically serves these populations.

Chapter 4 – Results

Introduction

This was a descriptive qualitative study of administrators of mentoring programs at Midwestern Research University (MRU), which operates multiple mentoring programs. This study focused on the definition and components of mentoring programs, especially for first-generation students. The purpose of this study was to describe mentoring programs, by using interviews, and to gain a better understanding of how administrators of mentoring programs in a selective mid-western research university define, implement, and evaluate their programs. In this chapter I will highlight the results of the study, present themes and components, and draw connections between the literature review and responses from the interviews. I will begin by restating this study's research questions guiding then provide descriptions of each of the programs in which the directors I interviewed work. As with the scholarly definitions of mentoring, the respondents in my study defined mentoring in a complex, interwoven way. Each respondent's definition varied based on the goals of their program and the amount of resources available.

I want to note at the outset of this chapter that while I started out focusing on first-generation students, relatively few interviewees focused on this population, in large part because their mentoring programs did not focus on this particular population. Instead, they focused on the value of building relationships for all students or for the specific students served in their individual programs. The results and discussion sections reflect this. In addition, not many respondents offered answers for my fourth research question what recommendations they had to improve mentoring for first-generation students. As such, the data available to answer this

research question is limited. The limited data is reflected by a brief section on interviewees' recommendations in the results section below.

A Description of Mentoring Programs

Descriptions of the programs follow.

Emerging Scholars.

The Emerging Scholars program, which is housed within the Office of Undergraduate Research, serves first-generation, low-income, and minority students. Since 2015, this program has provided faculty and peer mentoring for students with federal work-study awards, which is financial aid available to students for whom the cost of attendance in college exceeds their expected family contribution (U.S. Department of Education). The goal of the program "is to involve students in the research and creative process early on in their time" at the university (Emerging Scholars). According to Charlotte (a pseudonym, as are all interviewee names), the program's director "our first year...was a pilot year...and we had 158 applicants for what we thought were going to be 20 spots. And so we looked at financial need. And we gave priority to Pell eligible students." Since its pilot year, the program has expanded to serve approximately 60 students.

A secondary goal of Emerging Scholars, in addition to research, is to build college success skills, such as knowing about financial aid, budgets, and personal finances. As Charlotte said during her interview, "we have some goals related to financial aid or financial education...which is that they would understand their financial aid package, including how a federal work study award works." She also states that her program covers other topic areas, "whatever things are going on that are really critical for the students to be aware of...and we ask the peer mentors just to check in on how research is going...and how their classes are going."

Charlotte's program's goals are often flexible, as staff members implement specific activities then evaluate them at the end of each semester or academic year, and finally revise the goals so the program will work more effectively in the future. As Charlotte stated, "we had some learning outcomes for the first year. And then, after running the program for a year, we had to revise those significantly. Because, I think, we just had a much better idea of where our students were at and what they needed." Finally, Charlotte states that,

a big reason this program...has the support that it does is that it's a research program, but it's also a retention program. That's one of the big goals for it. In part because we know it's been successful at the University of Michigan which has a similar type of program that was extensively evaluated over 20 some years.

The University of Michigan's Undergraduate Research Opportunity Program (UROP) served as a model on which to base, and against which to compare, the Emerging Scholars program. According to Charlotte, "what they [UROP] found was that the students taking part in these programs were retained at much higher rates. So we knew this program had that potential...we said, 'What do we need to build into the program to help it reach that potential?'"

Initiative for Maximizing Student Development.

The Initiative for Maximizing Student Development (IMSD) provides support for 30 undergraduate students who are interested in pursuing a career in biomedical research. The primary components of the program include classroom and laboratory activities in which students are partnered with faculty mentors to improve students' academic progress in introductory science and math courses. According to Toni, the Director, "our focus is to develop [students] professionally and gain knowledge about particular career areas." Social enrichment

experiences such as group seminars, peer mentoring meetings, and paid trips to attend and present at professional conferences are also provided.

As far as outcomes, the program's director Toni stated "our success is really simple. We want...students to go to graduate school; that's counted as our success." Such success relates to the program's goals, which are specified in a grant from an external funding agency. Toni described her goals as "we have to give totals on how many of our students go to graduate school. So, we kind of get credit when they go to graduate school." Graduation and enrollment in Ph. D programs are her program's ultimate goals, as Toni states, "when [students] graduate, we can say 'we have this many graduates—we've had 50% of our students go into Ph.D. programs.'"

Toni's program also has an online guide that helps students set their mentoring goals. Specifically, the online platform PeopleGrove "has default mentoring goals so after about a week...of being matched the student will get an email to set up a phone call with their mentor." Another component of her program's communication process using PeopleGrove is "all of that is default automated and I don't really have to think about those [emails]."

Women in Science, Technology, Engineering, Mathematics, and Medicine.

The third program described in this study is the WiSTEMM or Women in Science, Technology, Engineering, Mathematics, and Medicine Program. This program is an interdisciplinary program open to all undergraduate and graduate women in STEMM careers and provides resources, guidance, and support to improve personal, educational, and professional skills. According to Jillian, the WiSTEMM Mentor Coordinator, "there are about 60 women in the program." Program activities include one-on-one meetings for students and their mentors (at least 2 hours each month), as well as professional development seminars and personal wellness

workshops. The program started in the spring of 2018 as the result of a partnership between two separate offices on campus.

According to Jillian, the Director, “we have a lot of students interested in the program” and each undergraduate student in the program is matched with a graduate student or faculty member in their major who serves as their mentor. The mentoring process starts by completing an on-line application where a number of items like first-generation status and ethnicity are reported in order to effectively match students with mentors. Jillian stated “in the application process and the questionnaires they fill out, we have people identify that they would like to be matched with a FG or minority mentor...so we look at that when making matches.”

Hawk Link.

The fourth program described here is the Hawk Link Program, which is administered by the Office of Multicultural Affairs. According to the website (Hawk Link & Transitions), the Hawk Link program provides support services for students while they navigate their first two years of college. In his interview, Mark, the Hawk Link Director, described that until the 2017-18 academic year Hawk Link served 30-35 first-generation and low-income students. However, since the beginning of the 2018-19 academic year, the mission of the program has changed to support students with very few alternative avenues of support on campus, specifically “students of color, queer students and undocumented students.”

According to Mark, “we recruit [students] pretty heavily at orientation and at events like Destination MRU, the Chancellor’s achievement banquets in Kansas City and Wichita, and campus visits.” Mark also stated that his program recruits students “in conjunction with the undergraduate advising center and the Office of First Year Experience...so I think it is a collaborative effort.” One of the primary services provided by Hawk Link is a living learning

community within a residence hall, in which students have the opportunity to build, and participate in, a cohort that fosters a strong sense of belonging with peers, faculty and staff. Other types of assistance include advising, academic coursework support, tutoring, and service learning activities (Hawk Link & Transitions).

College of Liberal Arts and Sciences Mentoring Program.

According to the College of Liberal Arts and Sciences (CLAS) Faculty Mentoring Program website, “our goal is to provide undergraduate students who are currently experiencing academic challenges with an enhanced level of attention and resources so that they can progress in their academic goals and see them through to graduation” (college-faculty-mentorship-program). The program does this by connecting students “to a faculty member who is particularly concerned about their academic and personal well-being and can help with navigating some of the academic obstacles that impact your success” (college-advising website). According to Evelyn, the program’s director, 200+ students participate in the program.

According to the MRU CLAS Student Program Guide, the goal of the program is to serve students who have received a MRU Cumulative GPA of 2.0 or below, with the intent that the program’s services will help students facing academic probation to remedy their grades and return to good academic standing ([CLAS Mentoring Student Program Guide](#)). Evelyn supports this description by stating “the students that we have in the program, they're students that have received an academic dismissal [for dropping below 2.0 CGPA] and have had a reinstatement approved. Which means that even though they've been dismissed, they don't have to sit the timeout from MRU. They're allowed to continue on due to some extenuating circumstance.” For students in the mentoring program, Evelyn states that “we also have our students who have been

dismissed, who have attended elsewhere, completed readmission requirements, and are readmitted. So, those are the students right now that we have in the [mentoring] program.”

The university’s college of liberal arts and sciences (CLAS) mentoring program supplements the College’s other programs. According to the Student Guide, the program requires that students “meet with your faculty mentor at least twice each semester, fall 2018 and spring 2019.” In the program students are expected to “actively participate in the mentor program, communicate with your faculty mentor, return emails, and attend scheduled meetings” (Student Guide). In addition to attending required meetings with their faculty mentor, students “are also required to meet with their advisor to complete academic action plans and set academic goals for the semester and the action steps needed to achieve it” (Student Handbook).

School of Business Mentoring Program.

The university’s School of Business Mentoring Program brings together students and professionals that share common professional interests (School of Business website). According to Margaret, the program’s director, “we have about 97 students in our program right now.” Building connections between current and former students is intended to support students as they explore career opportunities and navigate the early years of their professional life. School of Business students can expand their career network in two ways, by using the business alumni network individually or by participating in a guided, formal mentoring program facilitated by a staff person in a coordinator role. Services provided include help searching for professionals with experience in each student’s field of interest, scheduling meetings, and setting effective goals (business-mentorship-program website).

Students apply to the program by setting up a profile at the school’s mentoring website and joining the business student network. According to the university’s School of Business

mentoring program website, “most individuals can think of people in their lives, more experienced than themselves, who taught them something new or simply expressed an interest in their development as a person and professional” (business-mentoring-website). Regarding mentors in her program, Margaret, the Director, said mentors play “an important role in facilitating career growth.” When working with students in the program Margaret also related that students have told her their mentors “helped them find an entirely new path to a goal in their academic, career or personal lives or pointed out talents that they hadn't noticed in themselves.”

IHAWKe.

The university’s School of Engineering’s Diversity and Women's Program has developed IHAWKe (Indigenous, Hispanic, African-American, Women Engineering). The program’s goals are to recruit, retain and graduate engineers that will “change the world, connect with others and conquer their classes” (engineering mentoring website). The university’s school of engineering does this by facilitating “the IHAWKe Bigs and Littles” Mentoring Program between upper and lower level engineering students. A primary goal of the program is to provide an avenue for collaboration on issues such as increasing the diversity of the engineering student pool, helping members network, and building professional skills.

The Bigs and Littles Mentoring Program is still in its early stages of operation and Cheryl, the program’s director suggested that, initially, “our main goal is to get up and running with our new PeopleGrove platform and [start] trying to connect our various advisory board members and alum to our students through that platform.” After that, Cheryl says

we’re trying to pilot something this summer and we’re very brand new. We’ve got a dream-load of ideas but no actual plans for it yet. So, at our meeting in a couple of weeks with our

advisory board we're actually going to do some thinking around actually hammering out what the details could look like, and what our pilot of the summer will look like.

Because the program is so new, they have been able to keep approximately 30-40 students involved in activities, a number they hope to build upon each semester.

Alumni Mentoring Program.

The university's Alumni Mentoring Program has a goal to connect current students with an alumni mentor who volunteers to provide professional and personal guidance. According to Dante, the program's director, "we have some 3,000 members." Students find mentors with common backgrounds and interests by using the Alumni Mentoring hub (Mentoring Program website). Something which sets the alumni mentoring program apart from a lot of other programs is that it brings together mentors from multiple disciplines and fields of study. For example, mentors come from the College of Liberal Arts and Sciences, as well as from the Schools of Journalism, Medicine, Education, and Law to participate in the program (Mentoring Program).

Another feature of the Alumni Mentoring Program is that mentoring relationships can either be short-term ("flash") or long term, using online platforms such as PeopleGrove. According to Dante, the program's director, "we have flash mentorships and...is just like LinkedIn." Dante stated that in either short or long-term mentorships, students are provided with "a programmed relationship that can include multiple meetings. We can go so far as to design a curriculum so that [for a student] your first meeting you're going to cover this topic [and] your second meeting you're going to cover this topic." According to Dante "PeopleGrove refers to these [subject based meetings] as programs. We can create a program that meets very specific needs...the school of engineering, for instance, is creating one." Another unique component of the alumni

mentoring program is that students receive free membership with the intent to connect currently enrolled students with members of their network early in their collegiate and professional careers. According to Dante, students hear that they need to start building their network throughout their college experience “because you'll want it to be there when you need it, when it's time to graduate.”

McNair Scholars.

The next mentoring program described here is the McNair Scholars Program. This program assists 50 “low-income, first-generation college-going and underrepresented minority undergraduates prepare for doctoral study. Students who participate in this program are provided with paid research opportunities, faculty mentors, a GRE preparation course and tutoring” (McNair Program website). This is consistent with Tamisha, the program’s director, who states “our students are low income, first-generation, and underrepresented minority students.” Tamisha states that the McNair program “has a specific target [or goal] to ensure that students are prepared for graduate studies.” According to Tamisha this is done by

providing an intensive research experience throughout [students’] academic time once they join our program. We help them refine their academic writing, we get them networked with faculty and professionals in their field, we also provide academic interventions in the form of tutoring, writing coaching...graduate school applications...and funding applications for graduate studies.

Tamisha states that the program also provides services related to “professional development, from how to make presentations, how to network, the etiquette of being an audience at a conference, and...host of other services that translate into students being successful in graduate

school.” Also, “we have combinations [of services] to teach and model to students how to approach a faculty relationship.” More specifically, Tamisha says that when guiding and talking with students, “what we do is coach them and show them how to initiate a relationship and what that looks like...so it's kind of shopping around for a mentor in that way.” In her role, Tamisha does “program management, all the programming...all the different activities and services students receive... oversight over the budget, as well as staff management.”

Another important feature of the program is that “we do a mentor scholar contract, where students and faculty meet together and lay out expectations from both [sides] of their relationship.” Tamisha and her staff work closely with faculty mentors and students to build connections. In her words, “we work with them on...non-tangible pieces, which is making sure they respond to emails promptly, making sure they show up to meetings promptly and stay focused, and also appreciating their faculty for the time they're giving them, so the small little things that are not necessarily tangible things.” A final feature is that “if students are not able to find someone, because...mentors or faculty are not responding to emails, or they're saying they're not available to mentor [students], then we go into the pool of faculty mentors who have been mentoring students for us in the past.” Faculty members in such a pool have a longer history of establishing mentoring relationships with students, especially those from first-generation or low-income backgrounds, and serve as an additional line of resources in supporting the mentoring program.

Office of First Year Experience.

The next program description provided here is for the Office of First Year Experience, which hires, trains, and supervises Orientation Peer Mentors. The goal of this program’s mentors is to help 300-350 students succeed, especially by assisting in adjusting and acclimating to the

university during their first year (Orientation website). Their efforts include “guiding students through the process of writing college research papers and sharing resources with them for finding on-campus employment opportunities” (First Year Experience website). In the last few years, the program has expanded from solely assisting with orientation to providing peer support in the fall and spring semesters, mostly for Learning Community Staff and UNIV 101 Instructors. According to Janet, “the OA role has developed over the past several years. They formerly were just assigned to work orientation and now their role has expanded to include Hawk Week as well as the Fall Peer-Mentor Program, which works with the first-year seminars and learning community program.”

According to Janet “there are something like 16 to 18 learning communities this fall and those OA’s who are assigned to that will go to class with those students.” In class, their role “is to support the faculty or instructor” and “if it's a residential learning community, they will go to the seminar with them and then organize social activities within the residence halls linked to the community.” Janet states that after summer orientation students “have a lot more time to get to know those people [to] build those elongated relationships versus the one-day relationship that might carry over from summer orientation but also it might not.” She also relates that peer mentors “lead the students through their day but they are [also] responsible for introducing resources through their own experiences.”

Finally, the importance of connecting with students is included in the training goals of the program. According to Janet, “[in training] we talk a lot about sharing personal experiences and how to share what was potentially a negative experience and make it a learning experience for others.” As Janet tells her Orientation Assistants, ““maybe you've felt detached socially your

first semester, how do you tell [students] that and tell them how to prevent that in their own experience?”

Multicultural Scholars Program.

The Multicultural Scholars Program (MSP) is the eleventh program described here. It provides mentoring to support 35 “academically well-prepared undergraduate students” (Multicultural Scholars website). The program’s mission “is to recruit undergraduate students from under-represented backgrounds into various academic majors as a means of increasing the diversity of the student body” (MSP Program). Overall, MSP provides support and opportunities that will assist student scholars in their academic success and career planning. According to Stephanie, director of the MSP Program, “as an MSP scholar, you would join a community whose primary goal is to ensure your academic and career success.” Such an idea of creating a community aimed at contributing to a students’ academic and career success is a common theme, as we have seen (and will continue to see) in other directors’ definitions or conceptions of mentoring. Stephanie stated that the Multicultural Scholars Program does this by planning their activities so that “each academic program within MSP addresses academic, social, personal, and career aspects of your university experience and prepares you to receive the maximum benefit of your education during your program of study.”

According to Stephanie, “I work with students in Liberal Arts and Sciences and I work with them in their freshman and sophomore year.” The processes supporting students’ entrance into, and success in the program are important. As Stephanie describes, “[students] fill out an application and Admissions really communicates with them.” Then, “they [Admissions] sends out all of our communications as far as letting them know about the program and also sending them the application link.” Next, “we have an application on our website, and so that's where

students go to apply.” Once students apply for the program, “then myself and the other directors meet, evaluate applications, and then decide on finalists.” Next, “after we decide on finalists, then we have Skype chats with everyone.”

According to Stephanie, Skype chats have been helpful “because you really get a sense of why the student is interested and what their goals are.” Then, “after we meet [students] through Skype, then we make final decisions...and reach out to students in February to let them know [they’ve been accepted into the program].” Next, Stephanie says that, “I’ll meet with [students] in May, and we’ll do what we call a pre-orientation meeting.” In these meetings Stephanie describes that “we basically just discuss ‘here's what's going to happen at orientation,’ and we discuss all of the check boxes of ‘here's what needs to be done’.” Once students are admitted to her program, Stephanie said “we meet once a month and talk about academics [and] all of the other things that are sort of happening, especially in those first two years.” Stephanie’s past experience helps with her mentoring relationships. She stated “since I was an advisor in math for about eight years, I know the hiccups that have come up” with students. Finally, “I’ll meet with them in May before orientation, then I’ll meet with them at orientation just to kind of introduce myself in person and say hi. They meet with their primary advisor, but I just kind of pop in sometime during the day to just check in.”

Regarding her meetings and conversations with students, she says “I feel like most conversations I have with students, I’m trying to connect them with their advisor and really trying to get them to reach out to them, instead of just trying to figure it out on their own and not knowing what they don't know.” Also, Stephanie states that “there's definitely a significant number of students who don't use the resources for a number of reasons, and so [we] try to convince them or just reiterate why those are there and why they can be helpful.”

Honors Mentoring Program.

The next program described here is the Honors Mentoring Program. According to the program's website, "with over 1,400 students participating in the Honors Program, mentors are paired with students whose interests and career goals are similar to their own." According to William, the program's director, about 350 of these students are freshman in his "incoming class." In the Honors Mentoring Program, mentors "help students better visualize both their career path and different career options, practice the skills needed to develop a large network of professional contacts, prepare for the rigors and realities of the professional world, and expand their network of advisors" (Honors website).

Program staff provide advising while faculty members provide mentoring services. The difference is usually based on whether the relationships are shorter-term and transitory, with a goal of providing information, or if the relationship is longer-term, with a comprehensive career development focus that both teaches specific skills and improves students' ability to apply those skills across a broader range of career experiences. As William states, "although we expect a lot of mentoring and big picture advising to take place at the staff level, we expect those [faculty relationships] to be a really strong relationship."

According to William, the program's director, describes "our mentoring or advising is provided in kind of a layered fashion." William describes that "a mentor can certainly speak to some of those...bigger picture issues." Also, "the faculty mentoring is more focused on longer-term...trying to help the student think beyond their time here at [the university] and then reflect on how they can use their MRU experience to really reach their longer-term goals." Conversely, "advising is...more focused on shorter-term questions such as What courses do I need to be taking in the coming semester? How do I get this double major to work in a four-year

timeframe? How do I find resources, whether it's tutoring or mental health resources or clubs and activities? What study abroad trips might I be looking into?"

Student mentoring takes place in a couple of key places—within seminar classes provided by the program and at individual meetings. William states that “all of our incoming first year students take a small one-credit-hour seminar.” Further, “the seminar classes are predominantly faculty taught [and there’s] eight to ten students per course, so it's a small cohort.” According to William, these seminars are “intended to build community and connection to each other...for those students to really get to know a small group of fellow students and to really build a relationship with the instructor of the seminar, who in the vast majority of cases then becomes the students’ faculty advisor or staff advisor.”

Finally, William states “I’ll mention the Ambassadors...they play more of a role in recruiting.” The Ambassadors also “help students understand what their opportunities and options are at MRU before they commit and enroll.” According to William, “the Ambassadors are selected by our advising staff...and we’re looking for strong communication skills, a good understanding of MRU, and then of course we're looking for a diverse group of students in terms of discipline, geography, race, ethnicity, gender.”

Academic Access and Achievement Center Mentoring Program.

The last program is the university’s Academic Access and Achievement Center (AAAC), which does not have a mentoring program of its own. However, they collaborate with the Undergraduate Studies Office and assist in coordinating the Adidas Scholars Program. According to the program’s website “the Adidas Leadership Scholars program is designed for incoming students who are Pell-grant eligible or first-generation...and are involved in

accelerated coursework, leadership training, experiential learning opportunities, and mentoring.” Daniel, the AAAC’s Mentor Coordinator, states that “we have about 120-150 students.” Also, the program employs approximately 25 coaches, which is their title for fellow students or peer mentors, who meet regularly with mentees. According to Daniel, “each coach will be assigned from anywhere between 4-6 or students...[and] they are required to meet with their students on a one-on-one basis...anywhere from 30 minutes to an hour” multiple times each semester. In the peer mentor meetings a number of topics are discussed. Specifically, Daniel reports “we’re learning skills here...time management, study habits...those sorts of things.” Daniel also suggests that supporting students both academically and socially is important. He states that “we really want to emphasize with the coaches that they have a relational aspect to their interaction with the students, to where they’re involved and they know about what’s going on in the [student’s] family and with the student socially on campus, because that plays into how they do academically.” The following table summarizes salient features of the mentoring programs studied.

Table 2

MRU Mentoring Program Summary Table

	No. of Students	Target Audience	FGS/LI focus Yes/no	Faculty mentors yes/no	Peer Mentors yes/no	Alumni Mentors yes/no	Online Mentoring Platform yes/no
Emerging Scholars	40-60	Work-study eligible students	No (but Work-Study students often Low-Income)	Yes	Yes	No	No
Initiative for Maximizing Student Development (IMSD)	30	Ethnic minority from groups under-represented in biology and chemistry, especially Native American.	No	Yes	Yes	No	No (but some application and matching processes done online)
WiSTEMM	60	Women in STEMM Fields	No	Yes	Yes	No	No
Hawk Link	30-35	First-generation and Low-Income	Yes	Yes	Yes	No	No
College of Liberal Arts and Sciences (CLAS) Mentoring Program	200	Students in College of Liberal Arts and Sciences Academic Probation (<2.0 CGPA)	No	Yes	No	No	No
School of Business Mentoring Program	97	School of Business Students	No	Yes	Yes	Yes	Yes (PeopleGrove, in collaboration with Alumni Association)

IHAWKe	30-40	School of Engineering Ethnic Minority Students	No	Yes	Yes	Yes	Yes (PeopleGrove, in collaboration with Alumni Association)
Alumni Mentoring Program	3,000+	Past and current students (current through the Student Alumni Network)	No	Yes	Yes	Yes	Yes (PeopleGrove)
McNair Scholars	50	First-Generation, Low-Income, and Students with Disabilities (TRIO)	Yes	Yes	Yes	No	No
Office of First Year Experience	300-350	First year students	No	Yes	Yes	No	No
Multicultural Scholars Program	35	Ethnic minority students or students from “under-represented backgrounds” in certain majors	No	Yes	Yes	No	No
Honors Mentoring Program	1,400	Honors students	No	Yes	Yes	No	No
Academic Access & Achievement Center (AAAC) Mentoring Program	120-150	Pell-eligible or first-generation students	Yes	Yes	Yes	No	No

How do the Administrators of Mentoring Programs at MRU Define Mentoring?

Now that I've described the 13 programs, I will use the interview data to answer each of the study's research questions. Each of the research questions are restated and discussed, using responses from the interviews to support discussion.

Mentoring as Building Relationships

Interviewees responded to the question of how they define mentoring in a number of ways. According to Tamisha "I think the key piece of mentoring is just relationship, because information could be shared, and it is shared in the academic setting, skill is taught in the academic setting, but mentoring, what makes it really distinct is there's an actual caring relationship, that's my view of mentoring." Similarly, Jillian described mentoring as "a relationship that helps both people grow in whatever capacity they're trying to improve or gain knowledge from." Cheryl agreed when she states that "mentoring can be as simple as...building a relationship. Really, that's how I'm looking at it for our students because I think building relationships just can break down some of the trust barriers that our students are facing. It can help with some of the trust issues our students have." Margaret stated that "above all, mentoring begins from a place of care, and it plays a crucial role in the career development of students."

Academic and Social Skills.

One of the ways participants defined mentoring was by contrasting mentoring with advising. An interesting way of defining mentoring is provided by Dante when, in describing the difference between advising and mentoring, he stated "advising [is] advice focused on an academic journey...but with mentoring we're talking about advice on a professional journey or a personal psychosocial, personal development journey." Essentially, mentoring combines academic and social support for a student to help them progress on their personal and career

path. The first area relates to aiding students in building professional skills, abilities, and competencies. The second is more of a nurturing role, includes more affective factors, and involves building a supportive relationship with a student. Regardless of academic, career, or personal development Dante suggested, “at the end of the day [mentoring] is all the same thing; it’s advice given at strategic times in relevant ways by relevant people. That would be the ideal mentoring program.” Guidance or advice must be given to a student at a time in their development when it will help them make progress, the “strategic time” Dante mentions. This mirrors what was described in the literature review, by a number of researchers (Anderson & Shannon, 1988, Cohen, 1995; Johnson, 2002, Kram, 1985), that mentoring supports students both academically and socially and comes in two basic types: career and psychosocial.

Dante followed up with “if we had a mentor program that aligned topical experts at the time that expertise is needed with students, that, I think, is the Holy Grail. This is an example of giving academic and social skills. And then what are those milestones, those checkpoints, those markers in a career?” Jillian suggested that mentoring is when “you give [students] the tools to be successful and then you let them practice that and sometimes that means you don’t land on your feet the first time and you take that as a learning experience and then you practice again.”

Because strong relationships help students build academic and social skills, which connect with the overall goals of the mentoring programs described. Like Charlotte said, these programs are retention programs, and as Tinto (1993) has stated, retention is aided by students feeling a sense of connection. According to Daniel, “there certainly seems to be this hierarchy within the mentoring relationship where the student is being mentored by someone who is knowledgeable in a specific area or who has rank over the student. But there’s also a relational component as well.” From these definitions and interview quotes we can see that good mentoring is a

combination of sharing personal experience and a mentor's authenticity, combined with tips and training on effective listening skills, interpersonal communication, and related topics.

Daniel provided another interesting way of defining mentoring, in that it is distinguished from tutoring, which supplements academic skills, and advising or counseling, which focuses on personal or social skills. He stated "what separates mentoring from tutoring is that tutoring is more subject based...we're learning skills here. With mentoring we're learning time management...study habits...those sorts of things." The idea that mentoring is different than advising is also supported by Tamisha who said "skill is taught in the academic setting, but mentoring, what makes it really distinct is there's an actual caring relationship, that's my view of mentoring." These interview quotes connect to the literature review, as Shannon and Anderson (2002) suggest, because mentoring is a combination of career and social, academic and personal skills.

Toni defined mentoring by suggesting "it has a lot to do with the student and what they need...you know some students are going to be really on track but then there are other students who struggle in certain areas, whether that be academic or social." This is consistent with what Mark has told his students. He suggested that a supportive academic and social function of mentoring can be complemented with a level of challenge provided by the mentor for the student. He said "sometimes I think it shows up in a supportive way, in a corrective way. Sometimes it's in a [way] perhaps...I don't know, you're being intentionally challenging of students, as opposed to supporting them. So, it's a balance between challenge and support...I would say." If, as discussed in the literature review, relationships affect feelings and feelings affect outcomes, then what contributes to a person's relationships is important. The people

involved, the duration of a relationship, and the format of the meeting which fosters the relationship—ex small group, face-to-face, online, etc.—is important.

Characteristics of Mentors

A number of characteristics of good mentors emerged in respondents' quotes, such as humility, patience, and good listening skills. For example, Mark said "I think [mentoring] comes with humility. If you're going to be a mentor, you have to be humble...you have to be able to own a shortcoming and be able to say 'this is not my specialty' but I'll support you through this...let's find out." A number of subthemes are discussed below. First, I describe the advocacy and guidance that mentors often provide to students and then describe the trust which often occurs between a mentor and a student as their relationship is built. Next is a discussion of factors which motivate faculty or peers to mentor students, followed by a description of the format of mentoring relationships.

Advocacy and Guidance.

Toni stated that an important characteristic of a mentor is "having someone advocate for you...I just think of it as something that allows the student to be able to connect with someone who advocates for them and who can challenge them and help them grow". Being an advocate for students is one characteristic of a mentor described by Shannon and Anderson (1988) in the literature review. Evelyn stated that "I would define it as a mentor being someone who has knowledge and experience and a willingness to help guide someone else along a similar journey, I guess." Mark also points to the theme of guidance, or a mentor as a guide, when he related that "I think mentoring is, in a way, guidance." According to Dante, for a student, mentoring "helps you process what you're experiencing. Just [provides] that perspective of 'Am I crazy for thinking this?' 'No, you're not crazy for thinking that...here's how I've dealt with it'."

Stephanie said “I never want to be telling them, ‘This is what you should do.’ [Rather] It’s just more like, ‘Well, have you thought about this? Or what about this?’ Again, just sort of asking questions to get them to come up with their own options and come up with the reasons why they might do one thing over the other.” Stephanie also suggested that “I really like to have students come to conclusions on their own and so...it’s really them talking to me about what they want to do and then me trying to ask leading questions to get them to think more.” Jillian asserted that mentoring is when “you give [students] the tools to be successful and then let them practice...and [for students] sometimes that means you don’t land on your feet the first time and you take that as a learning experience and then you practice again.”

Trust.

One of the hallmarks of an effective mentoring relationship is trust. Cheryl agreed when she stated that “mentoring can be as simple as...building a relationship. Really, that’s how I’m looking at it for our students because I think building relationships just can break down some of the trust barriers that our students are facing. It can help with some of the trust issues our students have.” According to Cheryl, in a mentoring relationship students “might not know the questions to ask...and if they can hear a little bit about the experiences of a mentor, then they can learn things they didn’t know they needed to know.” Cheryl stated that students will say “it’s nice to know there’s someone who understands where you’re coming from.”

When defining mentoring in her program, Cheryl stated “I’m hoping that mentors won’t just be good at listening and building trust with students but that they will open up a little bit of themselves...maybe a little farther than they would in a professional setting, just to get that comfort level with students.” According to Cheryl, “I think being a mentor means being able and open to do those things, being able to trust and being open to questions that, without making

a student feel silly about asking them [makes them feel comfortable].” Further, Cheryl indicated that it is important “really being a good listener, being ok with...sharing from yourself, because I think it’s not just about listening...it’s about being really interested” in their lives, interests, and career path. Cheryl stated that students will say “it’s nice to know there’s someone who understands where you’re coming from.” These quotes show that comfort and trust in a relationship, as well as a sense of authenticity on the part of the mentor is important. A sense of authenticity, of really being interested in what a student’s needs and concerns are, is also important. Stephanie defined mentoring as “I really like to have students come to conclusions on their own and so...it’s really them talking to me about what they want to do and then me trying to ask questions to get them to think more and maybe get to that point of making a decision.”

Mark suggested the importance of a positive relationship between a mentor and mentee when he related that a student once told him “it’s really cool, in their words, that you are just able to pause what you’re doing to listen to me complain.” Such quotes show the importance of a close relationship between for student and mentors. Further, as we shall see below, if relationships affect feelings, and then outcomes, then what contributes to those relationships—the people involved, the duration of a relationship, and the format of the meeting which fosters the relationship—ex small group, face-to-face, online, etc.—is important.

Mentor Motivation.

Many faculty, staff, and peers mentor students, at least partially, out of a sense of altruism. Charlotte stated “a lot of the mentors that have chosen to be part of this program do it out of, like, a pay-it-forward kind of mentality.” Margaret agreed by saying the following about faculty who want to mentor students, “so many of them want to be involved at whatever avenue makes sense...so many of them say, ‘Just use me when you need me’...just want to be able to help if it

makes sense.” Charlotte stated “it’s kind of a self-selecting group of people who are interested in this type of work.” Further, such a self-selecting group of faculty members have an interest specifically “in helping lower-income students succeed at the university.” According to Charlotte “I think a lot of mentors...are very excited to work with under-represented students...because they know that, in these fields, there are not a lot of under-represented students that make it to this [collegiate] level.” A reason for this, according to Charlotte, is that “many of them have told us their own stories of taking part in programs like this. Or, they told us, ‘Yeah, I had a work-study job or a Pell Grant...I really got my start because of a program like this’.” Charlotte stated that, for the faculty she works with, it’s important “knowing that they’re having a part in [bridging] that gap...they like that. It is encouraging to them.”

Toni indicated that other mentor incentives are effective too when she says “the other thing we do with the mentors is like some version of giving them an honor or an award to keep them engaged and just to say ‘Thank you for helping our students’.” Toni’s program has a specific program honoring faculty mentors. She suggested that “we have a mentor of the year award we give out annually...giving them notoriety for the things they do for our students because some of them do put a lot of time and effort into it.” In short, mentors at MRU want to help students succeed and have many motivations for doing so.

As seen above, because an important characteristic of a mentor is that they hold more experience than a mentee, mentors can be recruited from many sources, whether from pools of a post-secondary institutions’ faculty and staff or from among a student’s peers. As stated by a number of researchers (Gershenfeld, 2014; Hengrenes, 2014; Jacobi, 1991), characteristics of good mentors include patience, humility, and good listening skills. A sense of empathy may also be important, as Cheryl described when she stated that students will say “it’s nice to know

there's someone who understands where you're coming from." Mark also suggested that a balance between challenging and supporting a student should be found in the characteristics of a mentor, as well as in any mentoring relationship. He says "sometimes I think it shows up in a supportive way...in a corrective way. Sometimes...perhaps you're being intentionally challenging of students, as opposed to supporting them. So, it's a balance between challenge and support...I would say." According to Charlotte, her mentors "all seemed excited to be peer mentors. But some of them seemed a little nervous too. Like they had a little bit of hesitancy of, 'My mentees success is in my hands'." This is where programs, with their staff and training, can help new mentors feel comfortable in the role. As Charlottes stated "so you're going help guide them as they need help, but the results are in their hands." Charlotte concluded "peer mentors really create a network for them that they can use. And that's so important."

Relationship Format

The quality of a mentoring relationship, or how well it connects mentors and students, often depends on the format of the meetings in which mentors and students interact. Mentoring meetings can be in many different configurations: one-on-one, small group, or large group. The most common form of meetings at MRU are face-to-face and online. Whether meetings are conducted through face-to-face gatherings, group events, or on-line chats through a mentoring "platform" such as PeopleGrove or BrazenCareers affects the quality of a relationship. On-line interaction between mentors and mentees has increasingly become a feature of the university's mentoring programs is supported by electronic, web-based, mentoring platforms such as PeopleGrove or Brazen Careers.

Mark suggested the importance of a positive relationship between a mentor and mentee when he relates that a student once told him "it's really cool, in their words, that you are just able to

pause what you're doing to listen to me complain." Such quotes show the importance of a close connection or relationship for students. Cheryl states that students will say "it's nice to know there's someone who understands where you're coming from." Mark also suggests that a supportive aspect of mentoring can be complemented with a level of challenge provided by the mentor for the student. He says "Sometimes I think it shows up in a supportive way, in a corrective way. Sometimes it's in perhaps...I don't know, you're being intentionally challenging of students, as opposed to supporting them. So, it's a balance between challenge and support...I would say."

What Are the Components of Mentoring Programs at MRU?

The definition of mentoring is reflected, implemented, or put into action through a program's components. Primary components are a program's mission, goals, and objectives, or those written statements of values and aspirations, which are often aimed at helping a student reach their career goals or at aiding post-secondary institutions reach their goals. The goals of mentoring programs and the goals of its mentors often overlap. In describing the goals of mentoring programs and mentoring, how they define the activity and purpose of mentoring is important. A common goal of mentoring programs is to guide, support, and help students develop and achieve their academic goals by matching them with faculty, staff, and peers. Mentoring programs achieve this goal through a number of formal and informal roles, program and institutional processes, and incentives or penalties (such as removal from academic probation if a student participates in a department's mandatory mentoring program). An example is provided by Margaret who stated that successful completion of a faculty mentoring program will return students to good standing who are at risk of academic dismissal.

Mentoring programs use many components to build and maintain relationships between students and mentors. Examples of program components include the matching process by which a mentor and student are formally connected, based on career interests, personality types, or logistical factors such as weekly schedules or transportation barriers; the typical meeting format (small group or one-on-one, on-line or in-person, etc.); the duration of the intended mentoring relationship; or whether food is provided at meetings.

Based on interviews, goals are an important component of mentoring programs. They guide and direct a program's activities. Mentoring at the university's programs are guided by a number of goals, often revolving around serving and improving the academic outcomes of certain populations of students, such as first-generation college, Hispanic, or students from groups under-represented in certain career fields, such as biology or chemistry. A program's sense of mission is important as close mentoring relationships are supported in programs at the university in which mentors value a student's background or identity, population, ethnographic or socio-economic background, or other group with which that student identifies.

Mentoring programs achieve their objectives through a number of formal and informal processes, program and institutional goals, and incentives or penalties (such as removal from academic probation if a student participates in a department's mandatory mentoring program). When Margaret states that successful completion of a faculty mentoring program will return students who are at risk of academic dismissal to good standing, this is a good example of an incentive used by her program to promote a mentoring relationship between a student and mentor.

In the following sections I will describe how a mentoring program's goals constitute an important component of their efforts, along with the range of activities held and the resources

required to carry out their goals. While describing typical program components I will also discuss how a mentor's good intentions often overlap with program goals of helping students.

Intentionality of Goals.

When talking about a program's goals, what they intentionally set out to accomplish matters. In the context of her program's larger goals, meetings are described by Janet when she said "we're...just creating intentional spaces where women in the program can gather. So, that will be at all of the events...the team building events like game night...it's an opportunity for them to meet other people in the program, but at a closed [or safe] location." Mark stated that his program's definition, overall goal, and approach toward mentoring is to support "inclusive guidance in a way that we are seeing and addressing the individual in a way that they are wanting to be seen and addressed...which has a lot of benefits in establishing a connection, safety, and wholeness." Cheryl said "if over time we see more women attending those events, and...we're able to set goals for students of color, I would be very happy to see those groups grow as well." These quotes show the importance of creating an inclusive and welcoming environment for groups of students such as women in STEM fields, first-generation, or low-income students.

Goals.

Many goals relate back to the population or identity of the mentee (Ex. for first-generation students getting a college degree is the primary goal). According to Daniel, "our goals are tied to our population. We're working primarily with first gen, low SES or minority students." Sometimes a program's goal is to help students set personal goals. As Janet stated, "we're really encouraging our participants to set their own goals in those individual relationships, because I think those [relationships] look different for a lot of people." Janet's program attempts to set up mentor-mentee relationships in a way which acknowledges each person's needs and provides

flexibility in the application, matching, communication, and evaluation processes. As Janet said “on the application I have people who are just interested in people for personal support...and then want some academic support...with help applying to grad school, and things like that. So, something we’ve encouraged them to do...from the very beginning...in the relationship...is to set those goals for themselves.” When setting mentoring goals, Jillian said “I think it would really be working with the mentee to understand what they are looking for. And that’s kind of why we encourage them to talk about expectations with each other.” According to Jillian, “there are women I’ve talked to who are mentors who want to provide mentees with research experiences or to work in a lab with them. Which is really important but so is the social aspect of networking and that kind of thing. And I think that is what a lot of mentees are looking for especially the first year students...is more of the social support.” At other times, a program staff’s goals are just to get their program started or to implement a new component or service. As Cheryl suggested “our main goal is to get up and running with our new PeopleGrove platform and trying to connect our various advisory board members and alum to our students through that platform.” Sometimes a program’s goals have to do with time and money, as will be discussed later in the section on how a program’s resources affect the implementation of their goals.

According to Jacobi (1991) the personal goals of mentees are often career or skill development, or networking for professional development. In addition to helping students set goals, MRU mentoring programs set goals for their peer and faculty mentors. According to Crisp and Cruz (2017) a mentor’s goals often center around giving back to students who come from a population or demographic group they identify with (ex. low SES) or relate to. An incentive provided by some programs at MRU to encourage faculty to serve as mentors is that, each semester, they provide a research assistant to aid a faculty mentor. Training is another goal

many mentoring programs set for mentors in order to provide faculty and peer mentors with the skills needed to effectively mentor students. For example, Daniel said “actually, with the training pieces we’re hoping to have...and I would like to include basic counseling skills as part of our training, which is: So how do you ask questions, how do you listen? What type of questions can you ask? Open ended, closed ended, that type of thing?” Also, setting program and mentor goals such as training sessions is often an on-going process. As Daniel stated, “training is evolving.” Such fluidity of goals often occurs when programs want to intentionally improve their services or grow the program.

A Focus on First-Generation Students.

Some of the programs intentionally focus on serving first-generation students. Speaking about FGS, Stephanie stated that FGS are sometimes afraid to approach faculty with questions. She said, “I think [students] feel like, ‘Oh, this faculty member’s way up here. They don’t have time for me. They’re too busy. They might be rude’.” Further, Stephanie said “one of the things that I have challenges with is [that] students seem very afraid to go to office hours.” Also, according to Stephanie, often when students attempt to talk with faculty members “they’re just nervous...they feel like [faculty are] too important and they don’t have time to talk to students. That’s certainly how I felt when I was a student here.” Such discomfort affects students’ behavior and the likelihood they will approach faculty. Stephanie said “I never went to office hours...I just thought, ‘Oh, they’re too busy, they’re too important so with my mentees I say, ‘well just take baby steps [with] a professor you’re really comfortable with...what if you tried to go into their office?’” Stephanie’s guidance for students was beneficial, at least in this instance, as she reported that “I have one student in particular...this is her sophomore year and finally, for the first time she went in and talked to [an instructor]...and it was really good.”

According to Stephanie “I think faculty can kind of alleviate that...professors all the time would tell me how they were really bummed when no one came by during their office hours... they want students to come in, but students don’t feel or see that for some reason.” Program staff and administrators see it as their role to assist students and mentors communicate through activities such as group meetings, conferences, symposia, and lunch gatherings. As described in more detail below, such activities are scheduled and budgeted for in certain ways. When activities occur, students and faculty are able to come together and share career and personal experiences. Through this Stephanie said “I think [students] get to know their faculty mentor and they’re a person. They’re this regular person that they can have real conversations with...and maybe they don’t feel like all faculty are, I don’t know, above them.”

Processes That Make Programs Function

Application and Admittance.

A program’s goals are aided by various program processes like recruiting, applying, matching, and assessing by which students are accepted into a mentoring program, are partnered with a mentor, and are evaluated for the quality of their mentoring relationship. Many students and mentors conduct research projects together, which improve a student’s skill and increases their confidence in a career field. Meetings can be weekly, monthly, or quarterly in regularity (periodic meetings are an important part of programs, no matter how much time passes between contacts).

A number of processes like admitting students and matching mentors with students are important components of many mentoring programs. In describing her program’s application process Stephanie related that “myself and the directors meet, we evaluate applications, and then we decide on finalists.” Charlotte stated that “our first year...was a pilot year. And we

just...asked some basic questions. We tried not to be too intimidating. So, we asked things like, 'Tell us a time where you enjoyed learning. Tell us a time when you had to troubleshoot. Tell us about something you'd like to research'."

Stephanie stated that "after we decide on finalists then we have Skype chats with everyone...that's been extremely helpful because you really get a sense of why the student is interested and if they would take advantage of the resources." Further, similar to what Charlotte said about her applicant and interview process, Stephanie stated "we're not looking for some outstanding interview, it's really just to get a sense of who they [the student] are, why they're interested in the program, and what their goals are." Then, "after we meet through Skype, then we meet [in person]." Finally, "the other directors and I meet and make final decisions. Then we reach out to students, usually in about February to let them know [they've been accepted]." This leads to a discussion of the matching step of the process for most programs, in which students are paired with either faculty or peer mentors, depending on the program and who is available.

Matching Mentors and Mentees.

Effectively matching students with mentor candidates is important in creating a good mentor-mentee relationship. Matching a student with a mentor effectively is important. Dante stated that "one to one works best if it's a good match. If it is not a good match, then the whole thing crumbles. The whole experience crumbles, because now the one person I was matched with failed and there's nobody else for me. That's true on both sides." Further, according to Charlotte "we saw that students that didn't have a good match that first year were more likely to disengage from the program completely. And that wasn't beneficial to anyone. It led to a bad

experience for the student, for us, and for the faculty mentor. So, this year we were much more intentional about that.”

Supporting the theme mentioned above, Charlotte suggested that being intentional about the criteria used for matching a mentor and a student is important. College major, career field, or personality (ex. introvert or extravert) are important considerations. When matching mentors and students Evelyn does look at some things in each student and faculty member’s application before others. She said “first we assign them to a mentor in the department that they’re majoring in...then we look at what the student’s obstacles are and try to match mentors that are working on those specific topics.” Janet stated that a number of areas are examined to match students and mentors. Specifically, “content area. We also take personality into account. [Also] we obviously have to build around their class schedules.” In this case, area of interest, personality, and schedule are most important. However, according to Evelyn, sometimes “when we’re doing the assignments, it’s just kind of a shot in the dark. There are those expensive matching software programs [like PeopleGrove] out there for the matching, but we don’t do that.”

Scheduling Activities.

Programs consist of a number of activities, at which mentoring occurs and during which relationships are built and fostered. The most common activities found by this study are meetings, courses, projects, conferences, symposia, and on-line chat sessions. Thus, scheduling activities is very important for mentoring programs. In fact, scheduling activities at a time, location, and venue acceptable to mentors and students is a very important component of mentoring programs. Activities such as group meetings and professional conferences are where the business of mentoring—building and maintaining relationships for a protégé’s career and personal support—happens. Activities are how programs share knowledge and structure

behavior. Mentoring programs schedule and organize activities that invite and encourage a student to connect with other people—faculty, staff, and peers—and to feel comfortable. On-line mentoring activities are supported by platforms such as PeopleGrove or BrazenCareers, which has a career mentoring website and application. Online mentoring platforms are used for multiple mentoring processes. They are used by administrators of mentoring programs to recruit potential students, screen applicants, match students with mentors, and to communicate between faculty, staff, peer mentors, and students. Flash mentoring, which is a very brief on-line or face-to-face meeting, is especially encouraged by on-line mentoring platforms, which provides mentoring relationships that are often relatively transitory and may be of little value to students. Even so, flash mentoring may serve as a good introduction to mentoring and provide students with initial contacts in their career field.

Meetings, Projects, and Conferences.

Program meetings, conferences, and projects are activities which support a mentoring program's goals. Meetings are where a lot of mentee-mentor interaction occurs and are important components of a mentoring program, especially for fostering the process of communication and facilitating relationship building. According to Toni “we do monthly individual meetings for mentoring purposes and to make sure they're on track with their research mentor.” According to Daniel “we have weekly meetings with the coaches that each student has. We have monthly meetings with each student in the cohort. They meet with each other...and they meet with support staff.” Daniel said that mentors “see students once a week...so, each coach...[on] average...has 4 or 6 students...seeing them once a week, that would give them 4-6 hours each week.”

Tamisha agreed and said that mentors and students in her program meet at least once a week. Specifically, “for the summertime...it has been helpful in the recent past that the mentors [and students] meet regularly...at least once a week. When talking to her mentors Tamisha related that she tells them “‘if you’re not able to meet with the student every week, we strongly encourage you to make frequent contact. It could be virtual email, you could do regular updates, weekly updates.’” Further, Tamisha stated that “there’s regular contact...one of the primary ways is the weekly contact, the weekly meeting. The other is a weekly update from the student...so the student just does a check-in, and says, ‘This week, I did this’.” Cheryl stated “we had a workshop a few weeks ago where we had a few of our students who have done really well share what tips they use to study.” After that, “they helped [other] students build notebooks so they could have different ways of collecting and reviewing their notes...when they’re going through complex equations, which can be very difficult for somebody who’s not familiar with the level of math that they’ll be taking.”

Also, Janet stated “this past Friday there was an event where...[it was] like a little matching activity...it was sort of like speed dating where everyone got to meet everybody...and at that event I gave them a calendar with every single event in the [yearly] program on it.” Janet’s comparison with speed dating is important and was suggested by other interviewees like Stephanie and Dante, where technology is used to match students with mentors, to conduct meetings, and to build networks. According to Toni “we schedule a meeting and I will go with the student and sit down and talk to the faculty member about what they’re doing in the lab. The student will talk to them about their interests and research and that kind of thing.” Tamisha observed that “in my mentor meetings, I also kind of talk about what that specific student is

doing...so if they're involved on campus, if they have three jobs or two jobs or something, if they are helping family back home...I share that with the mentor.”

While meetings, conferences, and projects support program goals, they are in turn aided by various processes like recruiting, applying, matching, and evaluating by which students enter MRU mentoring programs and are partnered with a mentor. Many students and mentors conduct research projects together, which improve a student's skill and increases their confidence in a career field. Meetings can be weekly, monthly, or quarterly in regularity (periodic meetings are an important part of programs, no matter how much time passes between contacts).

Most meetings and events are scheduled for the benefit of students. However, in some programs at MRU, meetings or events are held periodically for mentors. Evelyn said “I organize a couple of mentoring events each semester. We usually have a kick-off in the fall where we just go over expectations of the program, the student population that we have in the program for that year, mentee and mentor expectations, and faculty panels.”

Meetings can be in many different configurations: one-on-one, small group, or large group. The most common form of meetings at MRU are face-to-face and online. On-line interaction between mentors and mentees has increasingly become a feature of MRU mentoring programs is supported by electronic, web-based, mentoring platforms such as PeopleGrove or Brazen Careers. Mentoring relationships can be either long-term and recurring in duration or short term (flash), which has grown in popularity along with electronic mentoring. The platforms and processes used in online mentoring will be described in greater detail below.

Mentoring Websites and Platforms.

Mentoring programs use a number of tools to achieve their goals and to complete processes such as matching mentors with students and scheduling activities. An increasing number of

programs are moving online amid the increasing popularity of electronic mentoring applications and software programs. A number of interviewees give examples of online mentoring programs. PeopleGrove and Brazen Careers are two of the most popular programs. A number of interviewees also suggest their students use the alumni function of Linked In, in which students are able to search for and network with professionals who also graduated from their institution.

PeopleGrove and Brazen Careers both have career mentoring websites and applications. Flash, or short-term, mentoring is especially encouraged by on-line mentoring platforms, which provides mentoring relationships that are relatively transitory and brief. Even so, flash mentoring may serve as a good introduction to mentoring and provide students with initial contacts in their career field. A number (3-4) of mentoring programs described in this study, such as business, engineering, and alumni, use PeopleGrove or Brazen to recruit mentors and mentees into their program, as well as to match participants while they're in the program. PeopleGrove's website describes its model as providing support for student success by connecting students with people in at least six roles—alumni mentor, major advisor, career advisor, peer mentor, T.A., and tutor “anytime, anywhere” (www.peoplegrove.com). A good description of the software is provided by Mark when he said “PeopleGrove is already being tested and the way this will work is that if you are an alum, you go to the homepage, and there is a link for the mentoring page. And on this mentoring page, alumni from all variety of fields can sign up to mentor students...and the platform will pair mentors with students.”

Online mentoring platforms are used for multiple mentoring processes, such as screening applicants or matching students with mentors. Also, they are used by administrators of mentoring programs to accept applicants, for the matching process between mentors and students, and to communicate between faculty, staff, peer mentors, and students. Flash

mentoring is especially encouraged by on-line mentoring platforms, which provides mentoring relationships that are often relatively transitory and may be of little value to students. Even so, flash mentoring may serve as a good introduction to mentoring and provide students with initial contacts in their career field.

One benefit of using a program is that most programs provide default or customizable mentoring goals. Another is that the software will provide reminders to students to reach out to their mentors periodically. The platform can also do a number of things—participant recruitment, matching, reporting—that has previously been done by staff members of mentoring programs. Because online mentoring platforms facilitate the mentoring processes described above such as screening applicants and matching students with mentors, these websites can be an important resource for mentoring programs. They do this by saving staff and mentors time which can be used for other components of the program like scheduling activities or meeting face-to-face with students. Of course, mentoring software costs money and program administrators have to make tradeoffs but a number of interviewees indicated that mentoring websites or platforms are an important resource in their program.

Cheryl suggested that program goals are guided by the platform’s requirements. As she said, “our main goal is to get up and running with our new PeopleGrove platform and trying to connect our various advisory board members and alum to our students through that platform.” Another feature of most online mentoring platforms is video chat, which means that students can hold face-to-face meetings with their mentor, even if it is through an electronic media. As Margaret said “Brazen Careers has a really good platform to allow you to have individual chat forums with folks.”

In programs which use an online mentoring platform, students are often able to select their own mentor. Some programs at MRU have developed a “hybrid” matching system in which they steer students toward certain mentors based on career field or professional expertise but allow students to choose a mentor based on their online profile. As Margaret stated “I do a hybrid matching system where students can look through our mentoring database of 300 mentors and narrow down their choices to three.” Further, “when I go through an orientation process with students and I show them how to use that database, I show them to concentrate on industries that they can talk about, or their expertise...[or] location if that matters.” Dante also uses a hybrid matching process. He described it as a mix of doing it “automatically” in which software conducts the match or “manually,” during which an administrator makes certain choices about the match. Regarding the software his program uses, Dante stated “it allows you to do it two ways. One is automatically. The other is manually, in which I just pick two people and match them up.” When matching students and mentors automatically, the platform’s algorithm uses a number of guidelines to complete a match. According to Dante, “let’s say I have 100 people signed up. I have all these parameters. I can use a scale to say here’s how much relative value I want or how much weight I want to add toward this criterion...so if I want the primary way I’m matching these people to be based on major...you’re more likely to be matched [by major] than if students have the same hometown.” According to Dante, “the program is very good, allowing you to set up a long-term match that weighs different criteria.”

Each platform usually allows a program director to select goals for each matched pair too. As Toni described “the platform we use, PeopleGrove, has default mentoring goals and so after about a week of being matched, the student will get an email saying ‘Hey, this is a good time to set up a phone call with your mentor’.” Charlotte stated “the peer mentors have all created these

GroupMe groups. And they chat on there all day long. All of them. And I'm glad I'm not on there because I'm sure I'd be getting texts at 2:00 AM."

Program Resources

The quality of mentoring relationships, or the way a program's activities can be implemented to achieve its goals, might be affected by the amount of time and money a program has access to. This availability of resources takes the form of a mentor-mentee ratio in which mentors have many students to guide and advise. In programs with a relatively high level of resources, mentors are easily recruited and meetings are held regularly by providing incentives such as food or raffle prizes. In programs with limited resources, the mentor-student ratio increases, thereby diminishing mentoring's effect.

Mentoring programs in this study gained resources through grants, private funding, or institutional funds. They expend resources such as time and money in recruiting mentors, scheduling activities, and reporting results. The resources a program has available in order to support mentoring activities and processes is important in building and maintaining good relationships. As measured by the amount of money, number of mentees, availability of mentors, or the amount of free time that mentors have (and thus, the likelihood that they will mentor students), some mentoring programs have a high level of resources while others have very little. The resource level of a program often manifests itself in the mentor/mentee ratio, where too many mentees burdens a mentor and contributes to burn-out.

Resources play a large role in the ability of programs to provide services to mentors and students. Programs with an abundance of resources often can purchase online mentoring platforms to support their matching, scheduling, and evaluation efforts. They can also provide more food at meetings, an important incentive in motivating students to attend and participate in

such meetings, as well as providing better training for faculty and peers and sending students to more beneficial conferences or seminars. The discrepancy between programs which have many resources and those that have little was evident in a number of interviews. Some programs have access to fewer resources like time and money. The level of need of each student in their program—financial, social, and emotional—is greater too. As reported in the discussion and recommendations, resources are important in supporting the components and activities of mentoring programs.

Budget - Time and Money.

The amount of time and money available to mentoring programs affects the services they are able to provide. Charlotte stated that “money also helps.” Janet said “we don’t have a budget...it’s just kind of laid out. I know we have money to use, like we had the first event catered. And I’m planning to have other events with snacks and stuff. But we don’t have a specific amount planned.” Programs prioritize their use of resources and what they’re able to accomplish on a day-to-day basis. Using efficient recruitment and matching methods (describe these methods more) and software, such as PeopleGrove can help. However, if the key to effective mentoring is, as we’ve discussed, creating close relationships between a student and mentor, more than just technology must be used in these processes.

As discussed in the literature review by Midkiff and Grinage (2006), the ratio of mentors to mentees is important, with the availability of more mentors an important consideration in the success of mentoring relationships and programs. The number of mentor-student relationships or “matches” in each program varies greatly. So does the ratio of mentors to mentees. Given their resources of time and money, for some programs at the university a very favorable ratio is possible.

In many of the mentoring programs interviewed approximately 30 students are served each year. According to Janet, “we have 31 mentors and 29 mentees.” This MRU program has a very good ratio of mentors to mentees. In others, about 100 students were served. Margaret stated “we have about 130 matches in our program right now. I looked up our stats yesterday. That does not mean 130 students, that just means 130 matches because students can have more than one mentor. So we have about 97 students in our program right now.” Of the administrators from MRU mentoring programs I interviewed, the largest served about 3,000 students, many of which were on-line mentoring relationships. The smallest program served about 30 students. Stephanie stated that “one of the goals of the program was to become self-sustaining by donors...but I think that has been difficult because I think they had hoped that, as students graduated, they would give back to [the program], but they’re just not seeing that as much because people are in debt, right? For a long amount of time.” A number of programs would like to provide certain components in their mentoring program but are often unable to do so because of a lack of funds. For instance, according to Tamisha “we try to do...a mentor training [but] we have not been able to really fully execute it in the past few years. With the change in funding in higher education, we have not really been able to afford the availability of faculty to do our [typical] eight-hour training.” Providing comprehensive training for their faculty mentors is something Tamisha calls an aspirational or “reach” goal, something they hope to achieve in the future but can’t currently afford.

Mentors

While mentors generally validate student and participant mentees’ feelings and sense of identity, while investing in and contributing to students’ skill improvement, how they do this differs largely based on their role as a faculty member, staff person, or peer. Tamisha said “the

mentees look at it from [the perspective of] ‘us, we’re going to do this together,’ so [they can succeed] when a mentor says, ‘Why don’t you read five articles and come up with a literature review, and then send it to me?’.” Such guidance in pointing students toward sources and in helping them practice what it takes to do scholarly or academic work is important. Further, when mentors suggest ways to practice doing things like writing a literature review, students’ confidence improves.

Faculty play an important role in many mentoring programs. Stephanie says “I definitely really like the role of faculty. I think that’s what makes [our program] a little bit unique is that it does have faculty...I think that’s really had a positive impact for students.” William stated “we’re looking for faculty with a strong record of teaching and advising and mentoring students...and at the same time looking for faculty who are leading scholars and who have active research programs. Stephanie thought the presence of faculty in mentoring programs was important “because I’ve been a staff, and I was a student here, and I certainly don’t understand necessarily the faculty world.” Thus, having faculty perspectives that students can experience is important. The CLAS Mentor program defined a mentor as “a faculty member interested in being a critical part of our community effort to create a more effective learning environment.” Finally, students and faculty “should meet early in the semester, and additionally at least three more time throughout the fall and spring semesters. You will be asked to provide feedback after your interactions and again at the end of the program.

Recruiting Mentors

An important process in mentoring programs at MRU is recruiting mentors. Regarding the recruitment of mentors, Margaret said “I think I’m a little lucky with that, because so many of them are based on referrals, so usually they’re good people who just want to be involved with

students and I have personal references from other people who have referred them.” Finally, according to Dante, “alumni from all variety of fields can sign up to mentor students.”

The background experiences of both a mentor and student are important when considering whether they would be a good match. PeopleGrove gathers a mentor and student’s background information. As Cheryl described, “I know...they will have to sign up through registration, with a little bit about background, their interests, questions they have experience with, questions they would like to answer and speak to students about.” This information helps programs in selecting mentors who will be good fits with their students, which is particularly important when pairing first-generation and low-income students with a mentor. Cheryl suggested

there may be [mentors] who have a lot of experience...with difficulties of being an under-represented person in [this field]. But if there’s somebody who says they’re not comfortable...we will see it on their application and decide whether or not they’d be a good fit.

Toni stated “I haven’t found a good way to bring in mentors, aside from connecting them individually with the students and having that mentoring relationship. I haven’t found a good way to connect with them. I try to keep them involved as much as possible, as to what’s going on campus. I tell them, this is what’s happening, we have a career fair.”

Administrative Staff

The number of staff available to do program activities is important. According to Charlotte, “staffing helps...If I’m able to meet with them [students]...before we have to have a scarier conversation...that’s good.” According to Toni, only four administrators work in her office. This is similar to what Cheryl reported, “this program for 35 years was run by a single person and...currently there are the two of us.” Stephanie stated, “I am really the only full-time person”

in the program. Similarly, Tamisha said “we are, during the academic year, at two and a half [staff], with a graduate student being not even half...less than half.” Also, “during the summertime, we have two writing coaches and a graduate student, so that’s three part time staff, plus a GRE/research mentor person.” According to Charlotte, “we probably need another full-time staff member right now...so we’re often in this triage mode.” But, according to Charlotte “there’s just not the ability to increase our base budget enough to hire another staff member. But we’ll see. Hopefully in the future we will be able to hire another full-time staff. Or replace the grad student with a full-time staff member...that would be adding another 20, 25 hours a week.” Toni said “when we have the right amount of staff I feel like we have time to spend with students.” Also, as Jillian observed “some of the roadblocks we’ve had were previously faculty were allowed to pick their own peer mentors who had been in their classes before. And because we wanted just an elongated relationship, we had a limited pool.”

Due to the vague definition of mentoring, program staff often serve in a number of roles or complete a number of daily tasks. Sometimes administrative staff serve as mentors, even if that just means they speak to students occasionally, help complete advising forms, or assist students find other campus resources. Mark stated that their mentors “have not been peers...the mentors have been professional staff...however, we do have peer advisors and they often turn into a mentorship capacity because they establish relationships with students.” As Cheryl said about her program’s staff, “just realizing that we ourselves are mentors, even when we don’t mean to be, because there’s students looking up to us...we need to be prepared for that. Janet reported that “we have workshops and events every month and I plan those...I book the rooms, get catering if we need it. I book the person who is gonna speak or whatever is gonna happen. And then I’m there to just make sure everything goes fine.”

Staff members also constitute important components of mentoring programs. Directors of mentoring programs recruit, admit, and match students and mentors. They also evaluate mentor-mentee relationships for the purpose of better connecting students and faculty and to ensure mentors and students are engaged in productive academic and social activities. The role of a mentor in these programs allows the concern of each mentor to emerge through the behaviors of listening, showing care, and investing in a student's skills. Mentors may have characteristics of good a good listener, empathetic counselor, etc. but their supportive behavior is reinforced by their mentor role in the program. Such a role, and such behavior, supports students' behavior in connecting to others on campus, staying in school, etc.

Peers

In the literature review, we saw that mutual mentoring, in which peers or colleagues mutually benefit from interaction, has been recognized by a number of people (Gershenfeld, 2014; Jacobi, 1991). Dante explained that mentoring relationship is a "relationship that is mutually beneficial" to both the mentor and student. Mutuality most often presents itself with peers, fellow students, and colleagues providing support, listening to concerns, giving "pep talks," and reviewing professional work in an equitable or reciprocal manner for mutual benefit and learning. Examples of this type of mentoring are peer study groups and on-line group chats.

According to William, peer mentoring plays an important role in his program. He stated, "each seminar has a seminar assistant that's a sophomore, junior, or senior student, and their role in the seminar is more focused on mentoring-type tasks [such as] to be there more as a facilitator to help students connect to activities and resources and help navigate MRU." Next, "we have another group of students called the Honors Peer Mentors. That group has been...there on move-in day to help students move into their rooms. They do campus tours the first Saturday of Hawk

Week. We have them at a couple of other events throughout the semester.” According to William, “the peer mentors and seminar assistants have been selected and trained by our curriculum and advising group ...doing a cultural competency training and safe zone training...there's some bystander intervention training as well.”

Emerging Scholars employs graduate assistants and students who have been invited back during their second year to serve as peer mentors to monitor students in the program. The peer mentors “really create a network for [students] that they can use. And that's so important.” Charlotte also related that “the [returning] peer mentors need to have been part of Emerging Scholars their first year...[because] we want them to have gone through the same research experience as a first year student...we want our peer mentors to be as close to being true peers as possible.” According to Charlotte, for peer mentors and students in a group “it's a one in five ratio, but each group is, like, ten students, and they have two peer mentors that work as a buddy pair.” During these activities Charlotte stated that “the peer mentors are working...maybe four or five hours a week [as] their peer mentor time.”

Peer mentors in the first year experience program, or orientation assistants (OA's) as they are called, assist with many parts of the program. The role of the OA is important during orientation in initially connecting students to campus resources and promoting their early involvement in campus groups and activities. Next, according to Janet, the program's director, each OA “is assigned to a learning community [one of 16-18] in the fall semester.” The role of each OA is to help the 19-20 students enrolled in the learning community “adapt to campus and find the resources that they are most interested in and most need to be successful.”

Peer mentors are also assigned to a faculty mentor who is teaching a UNIV 101 class. According to Janet, “the students in UNIV learning communities all take Strengths [Quest] in the

fall and so they're trained on their own strengths and how to use those to build their teams and work through difference...but then also how to help others understand their strengths.” Another role played by the Orientation Assistants is that “they hold office hours if people are struggling with content or just want a social connection.” According to Janet, “the feedback we got was all positive saying that [students] thought their peer mentor had a significant role in their class and that they felt that they benefited from having that peer contact throughout their first semester.”

According to William, the honors mentoring program employs upper class students as peer mentors. These mentors’ title is Seminar Assistant, and they help faculty mentors instruct and facilitate a mandatory seminar class for students. For this role and the contact it fosters with students, William describes that “with the seminar assistants, a lot of that contact comes in the class, and the relationship or how they build that relationship with a student is class dependent. So, each seminar assistant works with the seminar instructor, the faculty instructor to really kind of divide up the duties between the two.” Peer mentors “do some support for the instructor, but they’re not paid so we don’t expect them to grade papers or carry a heavy burden of the instruction, but to be there more as a facilitator to help students connect to activities and resources and help them navigate [the university].”

We see evidence of the importance of peers in this study’s interviews. For Dante, even tour guides and orientation assistants were described as mentors. Dante stated that “I’ve said to many people that the most important job...is the campus tour guide...and the orientation assistant. Those are the two most important jobs at MRU, because they represent all of MRU [to the outside world]. To me those are the roles that are in some ways, best described or characterized, or at least should, as mentors. They’re like guardians.” In addition to assistance with academic topics and campus resources, questions about social issues are often handled by peer mentors.

According to Cheryl “I think they rely more on peer mentors for social...interaction, more for social connectedness, for belonging purposes. But then they rely more on professional mentoring for guidance.”

the peer mentors and seminar assistants have been selected and trained by our curriculum and advising group, which I’ve had some flux in that group just in the past year, some restructuring there, but they will continue to be selected by our curriculum and advising staff.

These quotes show an important facet of mentoring, as discussed in the literature review, in that it combines academic with social or personal and emotional issues. However, by combining academic and social issues the definition of mentoring can become vague. As seen above, the interviewees define mentoring in a wide variety of ways, which often leads to confusion about what mentoring really means in this study. If mentoring is everything, then it is nothing.

The focus of a relationship, either academic or social, often affects the type and scope of training, as William also described here: “the training for those two, the peer mentors and the seminar assistants, has been lumped together. They alternate each year doing a cultural competency training and in alternate years a safe zone training.”

As seen in these interviewees’ quotes, peer mentoring is an important part of the definition of mentoring. According to Charlotte “our peer mentors are still sophomores. They’re in their second year.” Examples of this type of mentoring are peer study groups and on-line group chats. Stephanie stated that “the peer mentoring piece is just as important, really, as any of the other pieces.” One reason for this is the dedication of peers in helping fellow students in school. According to Stephanie, “I’m just really impressed with our older scholars and how much they want to give back and how they remember that someone helped them.”

Likewise, Stephanie describes a situation in which older students, peer mentors, provide tips on study skills. She states, “that’s something I’ve been doing a lot more of, is having older scholars visit our freshman and sophomore meetings for anything. We’ve had them come to talk about research, talk about those kinds of things. How to study for finals week, all different kinds of things like that.” According to Jillian, peer mentors in her program “are responsible for a student group every day...anywhere from 15 to 25 students depending on the day.” According to Jillian, her program’s peer leaders “lead the students through their day and are responsible for introducing resources through their own experiences.” This role affects the training Jillian’s program provides. She stated that “we talk a lot about sharing personal experiences and how to share what was potentially a negative experience and make it a learning experience.” This is an example of what was discussed in the literature review, that good listening skills often come from a mentor’s own experience. According to Charlotte, mentees “might talk to their peer mentors about questions, like, you know, ‘What did you like about this class?’ Or, you know, ‘What instructor did you like?’ Things like that.”

Advisory Board

Another common component of mentoring programs at MRU is an advisory board. Advisory board members often assist in setting a program’s goals or help in planning and implementing those goals. As Cheryl said “we’re trying to pilot new programming this summer...so at our meeting in a couple of weeks with our advisory board we’re actually going to do some thinking about what the details look like.” A mentoring program’s advisory board members can be crucial in supporting the activities and services provided by a mentoring program. As Cheryl said “our advisory board members are really invested...these are a small, tight knit, group of people...who went through the challenges together and who want to give back.” As William

said “it’s unrealistic to expect that any one advisor or mentor can answer all the questions that a student is going to have, so how do you build an advisory board or an advisor-mentor network for a student?”

Sometimes advisory board members directly mentor students. As Cheryl said “I’ve seen one particular person on our advisory board who’s been very helpful to one of our students.”

Cheryl stated that she also reaches out to her advisory board members occasionally. Regarding the new online mentoring platform they would like to use, Cheryl would like their advisory board members to take the lead in this initiative. As Cheryl stated,

we don’t have anyone signed up yet so, over the next few months we’re going to be reaching out to people within the alumni center, reaching out to our advisory board members, and just to anyone we know who is an alum and trying to get them on the platform to register.

Finally, advisory boards can also contribute to a program’s resources. As Janet said “there are people on our advisory board that are definitely interested in us doing mentoring programs of some kind...so, when I’ve asked for things that need money I’ve never really been turned down. It’s mostly like food...we’re also hoping to screen a movie that we’ll likely have to purchase rights to and I know that will be covered.”

This study revealed a great variety of types of programs, program components, and of mentoring definitions themselves. How relationships were created and maintained varied by each matched mentor and student. Specifically, students and mentors had many choices when it came to format, duration, content, and goals of a relationship. Based on what I heard in the interviews students and mentors often chose a combination of these options, as provided by the programs, activities, and services described above. For instance, they may have used online platforms to investigate potential matches based on their skills, personality, and career interests.

They also fully participated in face-to-face meetings, both individual and small group, organized by mentoring programs. Through these descriptions mentoring is seen as a fluid process and outcome defined by each separate mentee and mentor together in their relationship.

How Mentoring Programs at MRU are Evaluated

The success or failure of mentoring programs often depends on program, mentor, and mentee goals or expectations. These goals are measured or evaluated in a number of ways, such as by viewing reports, grades, probation status, etc. or by reviewing survey results or interview transcripts. Retaining students is considered a successful outcome for some programs.

However, most program directors interviewed for this study don't regularly evaluate their programs. Dante stated "we have gotten feedback from mentors and mentees that's been anecdotal. That's been a way to evaluate them...[but]...our program has not been so carefully managed in the past that I would say we've had formal training and evaluation." Further, William stated "No. We have not done a formal evaluation." According to Charlotte,

my squishy answer for this [question] is, like, I know we're successful if our students are happy and they're...excited about their work and developing this nice relationship with their mentor. But that's not easily assessable. So we assess our learning outcomes...we're successful if our students have met their learning outcomes.

Likewise, Toni said "when students go to graduate school, that's counted as our success." Such success is based on Toni's program goals, which are set by an external funding agency, and which are contained in her grant proposal. More specifically, Toni described her measures of success in the following way "we have to give totals on how many of our students went to graduate school...when they graduate, we can say 'we have this many graduates—we've had 50% of our students that went into Ph.D. programs.'"

According to Toni “our focus is to develop professionally and gain knowledge about particular career areas. So I would say if a student has a good experience with that, and knows more, and is able to connect with a mentor, that’s what I’d say success is.” Dante stated that his program is successful if students get “internships, job shadowing, externships.” Similarly, Cheryl defined the goals against which the success of her program is judged as

how quickly it is that they’re able to finish with a degree. How many of them move on to graduate studies, because that’s something we’re also very interested in. We’d also like to look at the pool of applicants who are diverse [as] increasing.

Conversely, failure to retain students negatively affects a program’s ability to meet their objectives. For instance, Toni stated “our biggest attrition is from people changing majors or deciding they don’t want to go to graduate school.”

A small number of directors evaluate their programs. One of the programs, IMSD, hires an external evaluator. As Toni stated “we have an external evaluator that the grant funds us to have. It’s sort of a requirement that we have to do some external evaluation. So, his role is to evaluate the students who are in the program to find out what we’re doing that works for them and what we’re doing that’s not working for them. So, he gives them a survey. And the students will come back and say, well, these were the things IMSD has done for me that helped me succeed, or have gotten me to this point. Or these are the things I wish they would do that they haven’t done yet.”

A number of programs were planning to do conduct evaluations of their program at some time in the future. According to Jillian “over the semester I want to evaluate [the program] throughout. So, every month I have focus groups planned. One for mentees and one for mentors...in addition, we are going to have emailed out questionnaires and survey things.”

Further, according to Evelyn, “as a program as a whole, we are looking at evaluating those students who participated and did meet with their mentor, how did they end up academically?” Also, “we have faculty filling out their own survey on how they thought the mentoring relationship went and the students. And those we send out, even though we've switched to a year long program, we sent that out at the end of fall so we can get feedback at the end of each term.” What Shelly’s program is trying to do is “keep an idea on whether or not the student's actually meeting with their mentor...we've had a couple situations where the mentors have said, this isn't a good fit I don't want to mentor this student anymore. And vice versa. We've had the students say, I don't want to meet with this person.”

According to Stephanie “our evaluation is when the student leaves the lab or when we talk with the mentor, and if the mentor says ‘this is what I don’t like, this is what’s happening [in the lab]’, or if they say, ‘next time you send me a student they have to have had this class taken...they don’t have enough experience’...we just kind of keep our own notes on outcomes of the student from the lab.” Mark stated “seeing that they come back [to school] would be a good metric of student success.” So, retention is also a success, or seeing that students “come back” to continue their education at the college or university at which they were enrolled.

The best practices of other mentoring programs also guide MRU Administrators’ efforts. Charlotte thought that a big reason administrators support the Emerging Scholars program is that it has been shown to be effective at the University of Michigan in retaining students, especially first-generation students. Other program directors relied on similar mentoring programs on campus to guide them in what and how they should evaluate their programs. According to Cheryl “I’ve kind of been getting some preliminary feedback from the pilot at the business school about what’s worked and what’s not worked for them. So, that might kind of be

informative about how we would do [our] processes.” These quotes show that mentoring programs often look at other programs to view best practices or see common practices being implemented at similar post-secondary institutions. Such successes can be an important recruitment tool for a program. Programs are able to use past success in their communication with prospective students and funders. As Toni stated “I’ve had students who are successful experiences, they tell their friends.”

Recently, according to its director, the Initiative for Maximizing Student Development, didn’t meet its objectives but they then used this experience to restructure and re-plan its activities to be more successful, either by recruiting participants from a different population or providing services using a different electronic platform. According to Dante regarding the success of one of his program’s components, “I don’t know the numbers off the top of my head, but if your question is, ‘Is it working or is it a winning proposition, no, it is failing. We are struggling with it’.”

Summary of MRU Mentoring Program Evaluation.

The directors of mentoring programs that I interviewed did not use many formal methods for evaluation. Dante stated they get feedback from mentors and mentee which is mostly anecdotal. A few administrators (3-4) use a brief survey after events to assess program activities. Many administrators stated they would like to improve the way they evaluate their programs as when Charlotte stated that they planned to meet with their evaluation team a week after our interview to discuss future evaluation efforts. Thus, one take-away then is that directors have not done much evaluation of their programs and want to do more evaluation of their programs.

Success or failure depends on program goals and mentor and mentee expectations regarding their role, which are measured by evaluating reports, grades, probation status, etc. At the

university at which mentoring program directors were interviewed for this study, mentoring often occurs in meetings, seminars, or at conferences. These meetings are aided by various program processes like applying, matching, etc., which admit and move students through programs. Evaluation of success or failure in achieving goals of the program is done by using reports, surveys, interviews, focus groups, and a number of informal methods. Communication, especially electronic communication such as Email, shared calendars, and social media, is crucial to recruit students and mentors, share expectations, coordinate and market events, check on student progress, and many other processes associated with administering a mentoring program.

Program Administrators Provide Recommendations for First-Generation Mentoring

Many interviewees did not answer the question of what they would recommend for better serving first-generation college students or they answered it in previous sections, such as making recommendations to use a specific software platform or to obtain additional resources for their program. I asked this question but respondents really didn't have an answer. I have included a few recommendations below but these were gleaned from other parts of the interviews and then I made the interpretation that they were recommendations, as when Jillian talked about food and guest speakers as resources when describing the components of her program (Research Question #2).

Resources were a recurring theme and interviewees recommended that they would like more time and money to provide activities, meetings, etc. to support the building of relationships between mentors and students. However, these recommendations were discussed in terms of components of their programs that they would like to see more of, not necessarily as an answer to this specific interview and research question about what they would recommend for their programs to serve first-generation students. Cheryl indicated she would recommend providing

food at most activities because “I think food, generally, is a good way to engage! I’ve seen that as a common theme. Also, I think students really like to be hands on...do something that kind of gets them using their hands.” Further, according to Jillian, “I would love to bring in people from the community. I think that would be really cool. Or, like bring in different speakers...which is often really expensive. Also, I would love to pay mentors...because a lot of them are super busy.” Other respondents’ quotations have been woven into discussion of the other research questions.

Areas of Improvement

Even though administrators of mentoring programs at MRU did not provide many recommendations, many of them stated they would like to improve certain areas or processes of their programs. Jillian stated “the thing I would like to change, I don’t know how we would change it, is we did have people sign up in like early December and then the program didn’t start until February second. And we wanted to keep it open a long time to get people to sign up. But I think the people who signed up in early December forgot about it. Which has been...I think there’s been 2 mentees and 1 mentor that didn’t show up to the program...I’ve emailed them but haven’t heard anything back. So, that’s been frustrating but, I guess, shortening that process would be really helpful.” Further, “some people didn’t come to our first matching event, which I think was really important, because they got to meet the other people in the program...so figuring out how to get more people to the first matching event...that way people would get to have that experience, would be great.”

Conclusion

The results of this study show a number of interesting findings. First, I found that many interviewees defined mentoring as vague or squishy. Or, as described in the literature review,

administrators of mentoring programs at MRU had varying definitions of mentoring, which caused the overall general definition to be fluid. Second, the administrators of mentoring programs I interviewed identified many components of their programs. The main components are activities like meetings, conferences, classes, and seminars. Resources such as an adequate pool of faculty or peer mentors and access to online mentoring software were also important in administering a mentoring program at MRU. Next, not many administrators evaluated their programs. However, many of them stated a desire to do more evaluation of their programs in the future, as time and money allowed. Finally, not many administrators provided recommendations for their programs. Even so, I was able to glean many suggestions on how to make mentoring programs better from other parts of the interviews. For instance, when providing their responses for research question #2 regarding the components of their programs, many interviewees discussed what would help them run their programs, what would be helpful in administering their programs, or just what would be nice to see in their programs. Examples include more resources in general, guest speakers, more office help, online platforms for matching students and mentors or facilitating communication, and a number of other elements which could make administering their programs easier.

Chapter 5 – Discussion and Conclusions

Introduction

The purpose of this chapter is to summarize this study's findings and discuss what interviewees' responses mean. The main findings from this study include a discussion of definitions, components, resources, and recommendations. First, the definition of mentoring can be interpreted in many ways, giving rise to many definitions. Directors of mentoring programs at MRU each had a slightly different definition of mentoring, highlighted by one interviewee's assessment that the definition can be "squishy." A common part of the definition is that mentoring focuses on building relationships between student and mentors, with relationships often taking on a caring tone. Second, as discussed below, many program components were identified by the administrators of mentoring programs I interviewed. Among the most important components were activities like meetings, conferences, classes, and seminars. Maintaining a pool of mentors and keeping adequate office staff were also important considerations for administrators. Next, not many administrators evaluated their programs, even though they would like to do it more. Many of them stated they planned to evaluate their programs in the future. Finally, not many administrators provided recommendations for their programs, but offered suggestions for improvement in other parts of their interview, such as when they discussed the components of their programs. These recommendations are provided below as a response to research question #4.

Conclusion # 1 — The Definition of Mentoring is Vague -- Research Question #1

The first conclusion discussed here is tied to Research Question #1. In defining mentoring, a number of conclusions arose from this study's interviews. First, definitions of mentoring varied greatly among administrators of the mentoring programs that I interviewed. Basically, each

director of a mentoring program defined mentoring a little bit differently in their interview, which mirrors the many definitions and interpretations of mentoring discussed in the literature review. Each director defined mentoring based on their program's characteristics and their personal experiences. Thus, a primary take-away from this study is that each director has their own definition of mentoring which they use to guide and influence how they organize their programs and thus how students are mentored. This is seen in the various definitions provided by informants that included descriptors such as "squishy".

That the definitions of mentoring I received from my interviewees were vague or "squishy" is not surprising. The conclusions of this study were consistent with those described in this study's literature review by a number of researchers in which a lot of variability exists in mentoring definitions (Anderson & Shannon, 1988; Blackwell, 1989; Hengrenes, 2013). This may be because as Levinson et al. (1978) suggest, mentoring is indeed a complex phenomenon that includes many complex or nuanced roles and activities. The findings of this study support the contentions of Cruz et al. (2011) and Gershenfeld (2014) that everyone has a general idea of what the word means but very little about what it means specifically. Thus, one reason for a squishy definition of mentoring is the complexity of the field in which it is used.

Caring Relationships.

"Caring relationships" was a term that ran through several of the definitions. Emphasizing Tamisha's definition in Chapter 4, mentoring is distinct when there is "an actual caring relationship" between a mentor and student. Cheryl and Mark also mentioned caring relationships in their definition of mentoring, which is consistent with what Shannon and Anderson (2002) described in the literature review, that mentoring often reveals itself in a caring relationship. The presence of caring relationships may be another reason for squishy definitions

of mentoring. Building a caring relationship is important at an individual level, and thus contains many nuances and subtle components, meanings, and differing levels of importance defined by each person—the mentor and the mentee—who are involved in building a mentoring relationship. As seen in Chapter 4, regardless of each particular program director’s definition, the findings from my study suggest that, rather than just advising or teaching, mentoring is a more in-depth, personal investment of time and effort by a more experienced person in a less-experienced person’s life. This is very much in line with the literature.

Conclusion #2 — Meetings Are Important Program Activities -- Research Question #2

Activities are where and how mentoring relationships are built into programs. Mentoring programs schedule and organize activities that invite and encourage a student to connect with other people—faculty, staff, and peers—and to feel comfortable. The most common activities found by this study are meetings, courses, projects, conferences, symposia, and on-line chat sessions.

Many interviewees discussed how important meetings were in their programs. Specifically, interviewees described that the most beneficial type of activities were face-to-face and small group meetings. In addition to providing a way for mentors and students to interact, meetings also help administrators communicate and connect with their program’s mentors. Meetings can be weekly, monthly, or quarterly in regularity (periodic meetings are an important part of programs, no matter how much time passes between contacts). Also, meetings can be held in many different configurations: one-on-one, small group, or large group. The most common form of meetings at MRU are individual and small group face-to-face meetings while online video chats have become more popular in the past 2-3 years. Such online interaction is supported by electronic, web-based, mentoring platforms such as PeopleGrove or Brazen

Careers. I think that an important take-away of this study was that I learned about online mentoring platforms like PeopleGrove and BrazenCareers from the interviewees. Also, while face-to-face meetings, conferences, and projects are important program activities, they are in turn aided by various processes like recruiting, applying, matching, and evaluating.

Mentoring meetings can also be long and recurring or short and fleeting. Flash mentoring, which is a very brief online or face-to-face meeting between a mentor and a student, is especially encouraged by on-line mentoring platforms. These mentoring meetings are quick and a number of interviewees, including Margaret and Dante, questioned the value of only providing flash mentoring to students, with little follow up in providing additional services like face-to-face meetings. Even so, flash mentoring may serve as a good way to introduce mentors and students while providing an initial contact which may be built upon.

Because meetings are an important activity in mentoring programs, how, when, and by whom meetings are scheduled plays a role in the success of each meeting. For instance, if an office staff person is too busy with other duties, such as processing mentor stipends or communicating with faculty members to schedule and publicize meetings in a timely manner, then meetings potentially lose their impact. Specifically, scheduling meetings at a time, location, and venue acceptable to mentors and students is very important.

Whatever the type of activity--meeting, course, conferences, project, or on-line chat sessions—providing students and mentors with an opportunity to connect is the goal. Meetings are the most popular activity among the administrators interviewed and is where a lot of mentee-mentor communication, sharing of goals, and relationship-building.

Conclusion #3 — Evaluation Isn't Done Regularly -- Research Question # 3

The fact that many directors of mentoring programs did not evaluate their programs, as shown by the quotes in Chapter 4, may be due to two primary factors. First, the directors interviewed may not have the training necessary to conduct effective evaluations of their programs. The second reason directors do not conduct evaluations may be related to resources. While Toni described the evaluation conducted in her program by an external evaluator, it is important to note that funds were provided by her grant for such an evaluation. Evaluating the program was also a part of her objectives but, again, money was provided to meet these objectives.

I think it is important to note that many directors stated they planned to evaluate their programs at some time in the future. Even if they did not have formal plans to conduct an evaluation, many directors stated a desire to evaluate their programs at a later date. With additional training and resources, evaluation could become more a part of these programs.

Conclusion #4 — Time and Money Are Scarce -- Research Question #4

Resources were limited in many programs. Many interviewees stated they would like additional time and money with which to run their programs. A lack of resources affected the quality of activities and their program's ability to attract students to activities. Resources also provide students with opportunities to participate in program activities. Unfortunately, not every program has equal resources. One example is when Jillian stated that she would like to bring in guest speakers on a variety of topics, but she knew they would be expensive.

Another area where resources potentially affect a program's ability to provide quality services is in the training sessions, they are able to offer for their faculty and peer mentors.

Three directors of mentoring programs that I interviewed stated they would like to provide better training for faculty, staff, and peers.

Additional sources of funding would likely help programs pay for online mentoring software too. A number of programs, such as the Schools of Business and Engineering, relied on donations from wealthy alumni to help pay for program components such as technology like PeopleGrove or BrazenCareers. As with many services for first-generation students, funding is often an issue, especially for newer technology, which may not be a part of a program's traditional way of providing services. If available, another meaningful way to use resources was shown by a program when they paid for registration and transportation costs for students to attend national conferences.

Conclusion # 5 – Mentoring First Generation Students Was Not Programs' Objective

Contrary to my intent, first-generation students were not the central focus of the mentoring programs studied. To be fair, serving first-generation or low-income students was not the objective of many programs included in this study. While these programs may serve first generation students, they do not do so intentionally. Only 3 programs out of 13 listed in Table 2 intentionally serve first generation students as their objective to provide mentoring services to this population of students. Lack of specific focus on first generation student became clearer during the interviews and upon talking with the administrators of these programs. Program administrators did not mention specific strategies or efforts to mentor this population.

Recommendations for Practice and Policy

Recommendation 1 – Combine online and face-to-face activities in mentor programs.

Based on the findings of the study, I recommend a hybrid model of mentoring. This recommendation is in line with Conclusion #2 of this study, which describes the importance of

activities like meetings and conferences to mentoring programs. Hybrid mentoring combines the benefits of direct face-to-face mentoring with the efficiency of online platforms. Based on Dante and Margaret’s interviews, when using online platforms their mentoring programs can often conduct faster and more efficient matches. However, while on-line programs and platforms can save mentors time in matching students or completing other administrative tasks such as scheduling meetings or sending email reminders, these programs typically cannot provide direct, nuanced relationships between mentors and mentees.

Depending on whether meetings are conducted through face-to-face gatherings, group events, or on-line chats through a mentoring “platform” such as PeopleGrove or BrazenCareers, the quality of each relationship can vary greatly. Hybrid mentoring combines the best of both worlds—on-line matching and communication with face-to-face interaction—to effectively mentor undergraduates. Thus, a hybrid program combining the efficiencies and time-saving capabilities of on-line mentoring platforms with regular one-on-one or small group meetings which deeply connect mentors with students appears best.

Another example of where hybrid mentoring is taking place is the Alumni Mentoring Program. The MRU Mentoring website provides options for students to participate in one or both programs that are offered— a formal long-term mentorship, or a short-term, “flash mentorship” through MRU Connect. Students or alumni interested in a short-term (one-time) “flash connection” use MRU Connect to reach out to potential mentors. For long-term mentorships, MRU faculty or staff facilitate a match between each mentor and mentee. Mentors are able to view each student’s profile and send a message or a meeting request directly through the platform, based on the preferences a student sets upon registering with the platform. Mentors can customize the type of connection they want with students, such as an online video call or a

phone call, and then propose times to meet (<https://mentoring.MRU.edu/hub/MRU/home>). Students can suggest other forms of communication that fit their schedule and preferences.

As discussed above, on-line mentoring activities are supported by platforms such as PeopleGrove or BrazenCareers, which has a career mentoring website and application. Online mentoring platforms are used for multiple mentoring processes. They are used by administrators of mentoring programs to recruit potential students, screen applicants, match students with mentors, and to communicate between faculty, staff, peer mentors, and students.

Recommendation 2 – Strategically Obtain and Use Resources for Mentoring Programs.

This recommendation aligns with Conclusion #4. The findings from this study suggest that resources are scarce for many mentoring programs at MWR. Thus, mentoring programs should work diligently to diversify funding sources beyond those already available to them, whether from federal, institutional, alumni or other sources such as foundations. Also, the format of activities in mentoring programs is often connected to its availability and use of resources. Selecting the appropriate mode of mentoring, such as online, face-to-face, or hybrid, is often determined by the resources available to a program. The format of mentoring activities should change, or at least embrace technology, where it leads to efficiencies and cost savings, or using available resources more efficiently. For example, as mentioned above, online mentoring platforms allow for matching students and mentors much more quickly than in traditional mentoring models, which allows administrators and office staff to use their precious time elsewhere in the program. Each administrator should assess which activities can be moved online without too much cost or without losing the quality of interaction between mentors and students, while enjoying some of the time-savings for office and administrative tasks.

Not only could mixing face-to-face and online mentoring activities lead to increased efficiency, changing the formats of face-to-face mentoring can possibly be made more efficient too. As suggested in the literature (Johnson, 2002), one example of combining efficiency and quality is conducting meetings in a way that provides as much face-to-face contact between mentors and students as possible, such as the use of “vertical” meetings in which students at various stages of development or degree completion all meet together with their mentors (Johnson, 2002). Such meetings are a relatively efficient use of resources and often create desirable conditions for open communication, discussion of shared interests or possible research topics, and a basic level of trust between a faculty member and students.

Certain parts of the mentoring process, such as matching students with mentors or reaching out to potential mentors to gauge their interest in serving as mentors for a program, can be made easier or completed much more quickly than without online platforms. As discussed above, programs should recruit and match students efficiently, using online platforms to save time. Such platforms would save time for office staff for mentoring programs and allow them to focus on other parts of the mentoring process or mentoring activities that contribute more to building relationships between mentors and students. Thus, one way to address issues related to a lack of time in mentoring programs is to use online tools or platforms.

Recommendation 3 – Evaluate Programs.

In light of the interviewees’ responses, I recommend that administrators of mentoring programs evaluate their programs more often and rigorously. This recommendation aligns with Conclusion #3 earlier in the study and may help provide a standardized definition of mentoring or help with the consistency of administrators’ definitions of mentoring. According to Owen (2002), one purpose of evaluating a program is to clarify definitions and expectations, both those

of internal staff and external stakeholders, for the benefit of the program. Better, clearer, or more intentional definitions on the part of administrators may equal better or clearer program objectives, which could equal more effective services.

The level of depth and detail can be adjusted in online and face-to-face meetings based on the amount of time each person has available, as well as the immediate and long term needs of each student based on their personal concerns related to attending college, career exploration, research interests, or campus support services. Better understanding the format and level of support each mentor and student may benefit from a more comprehensive evaluation of the program than what is currently being conducted by administrators of programs at MRU. Briefly but accurately assessing initial student and mentor needs, monitoring their relationship's progress, and setting and achieving specific outcomes would likely be helpful for programs.

Better evaluating programs more may mean that administrators will find it necessary to seek additional training so they can adequately carry out an evaluation of their program or extra funds, as in the case of the IMSD Program, to hire an external evaluator. But, again, better evaluating certain components, as well as their program as a whole, could lead to coming up with a better definition of mentoring in the future and more effective implementation of program activities.

Limitations and Future Research

This study has a number of limitations. First, I never looked at mentoring programs' budgets or asked administrators about their budgets. It would be interesting and informative to know more about their resources, and how resources affect services in their programs. Because the funding for each of the programs described in this study is varied—federal funds, part of the institution's operating budget, grants, donations from alumni, etc.—asking questions to better understand each program's resources is important. Also, because a program's budget affects its

ability to provide quality activities and services, which is an implementation of their mentoring goals and objective, it is important to study a program's budget. Thus, gaining a better understanding of a program's resources by asking more detailed questions about budgets and funding levels could be valuable.

Second, I did not investigate how technological advances affect mentorship. Online platforms, websites, and software programs have increased in popularity and are used for mentoring program's activities, processes, and services, just as they have in many areas of life. Much of the research regarding online mentoring focuses on platforms available during the early 2000s prior to many of the networks used to build personal and career networks, such as FaceBook, LinkedIn, Twitter, InstaGram, and SnapChat. Online mentoring networks such as BrazenCareers and PeopleGrove were founded 2011 and 2014 respectively. More research on how these technological advances affect mentoring programs and mentor-mentee relationships will likely become more important in the future. What is the role of technology for mentoring in the future? How are matches made effectively using online platforms? What are best practices when using mentoring software? Which criteria are important when pairing mentors and students? Further, how might technology be widening the gap between mentoring programs which have enough resources to afford online platforms and those that don't?

Third, this study has limited generalizability since this is a study of mentoring programs at one university. Generalizability to other programs at other institutions will be very low and creating a framework of best practices for mentoring services that will work across different campuses, modes of delivery, and institutional types isn't possible. According to a number of researchers (Crisp and Cruz, 2017; Gershenfeld et al., 2014) many mentoring studies struggle with this limitation and ways should continue to be investigated to remedy it.

Additionally, I only interviewed directors of mentoring programs. In the future, interviewing faculty would be helpful in understanding how faculty, who play an important role in delivering mentoring services, think about what they do and describe how they provide mentoring services. Also, interviewing other staff members who are in support roles and who would be able to discuss more of the challenges related to recruiting and matching students; scheduling activities; paying bills; and providing administrative support for a program would be important.

Summmary and Conclusion

The purpose of this study was to describe mentoring programs at Mid-western Research University (MRU), concentrating on first-generation students. Mentoring programs are important for first-generation students. Mentors assist students in setting clear and realistic expectations while guiding them through challenging academic and social circumstances. Mentors also provide encouragement while providing opportunities to become more involved. MRU can improve the services it provides by better understanding how administrators of its mentoring programs define, implement, and evaluate mentoring.

The research questions guiding this study focused on how administrators of mentoring programs at MRU defined mentoring, how they administered their programs to implement their definition, how they evaluated their programs, and what recommendations they could provide to make programs better. The context of this study was that MRU, with an undergraduate enrollment close to 20,000, has stated a goal of improving the retention and graduation rates of under-represented students such as first-generation. Better understanding mentoring program administrators' efforts at the university was seen as one possible way to assist in this effort.

Many scholarly definitions of mentoring have existed in previous research, which has contributed to the vagueness with which it is often defined. A combination of role-modelling,

teaching, counseling, informing, supporting, and challenging students contributes to effective mentoring. Also, integrity, guidance, and relationships recur as themes in the literature and are a crucial part of mentoring.

Interviews with administrators were conducted and the responses analyzed. Administrators were selected through purposeful sampling which, due to their role as administrators, caused them to be asked if they were interested in participating in an interview for this study. Of 15 directors of mentoring programs who were emailed, 13 agreed to participate. Each interview lasted 45 minutes to one hour each and were conducted on the campus of MRU. After interviews were complete, transcribing, coding, and analyzing the responses began.

Findings were presented and administrators of mentoring programs at MRU provided their definition of mentoring while describing the primary components of their programs. I was surprised that more administrators didn't evaluate their programs. Further, I was surprised by how technology has changed mentoring since many of the studies discussed in the literature review were conducted. These studies mainly focused on traditional, face-to-face mentoring. However, during the last few years, online mentoring platforms like PeopleGrove and BrazenCareers have assisted in matching students and mentors more efficiently while contributing to the growth of short term mentoring, occasionally called flash mentoring. A final conclusion was that most administrators of mentoring programs at MRU generally felt their efforts were important in helping students, even though they vaguely defined the practice and processes of mentoring.

References

- Anderson, E. M., & Shannon, A. L. (1988). Toward a conceptualization of mentoring. *Journal of Teacher Education, 39* (1), 38–42. <https://doi.org/10.1177/002248718803900109>
- Austin, A. E. (2002). Preparing the next generation of faculty: Graduate school as socialization to the academic career. *The Journal of Higher Education, 73* (1), 94-122.
- Astin, (1993). What matters in college? *Liberal Education, 79* (4), 4-16.
- Blackwell, J.E. (1989). Mentoring: An action strategy for increasing minority faculty. *Academe, 75* (5), 8-14.
- Bourdieu, P., & Passeron, J. (1990). *Reproduction in education, society and culture*. Thousand Oaks, CA: Sage Publications Ltd.
- Bozionelos, N. (2006). Mentoring and expressive network resources: Their relationship with career success and emotional exhaustion among Hellenes employees involved in emotion work. *The International Journal of Human Resource, 17* (2), 362-378.
- Campbell, T.A., & Campbell, D.E. (1997). Faculty/student mentor program: Effects on academic performance and retention. *Research in Higher Education, 38*(6), 727-742.
- Chickering, Z. F., & Gamson, A.F. (1987). Seven Principles for Good Practice in Undergraduate Education. *AAHE Bulletin*.
- Cohen, N. H. (1995). The principles of the adult mentoring scale. *New Directions for Adult and Continuing Education, 66*, 15–32.
- Crisp, G., & Cruz, I. (2009). Mentoring College Students: A Critical Review of the Literature Between 1990 and 2007. *Research in Higher Education, 50*(6), 525–545.
<https://doi.org/10.1007/s11162-009-9130-2>

- Crisp, G., Baker, V., Griffin, K., Lundsford, L., & Pifer, M. (2017). Mentoring undergraduate students. *ASHE Higher Education Report, 43, 1*.
- Daloz, L. A. (1983). Mentors: Teachers who make a difference. *Change, 15, 24–27*.
- Eby, L., Rhodes, J., & Allen, T. (2007). Definition and evolution of mentoring. In T.D. Allen & L.T. Eby (Eds.), *Blackwell handbook of mentoring* (pp. 1–20). Oxford: Blackwell Publishing.
- Engle, J., & Tinto, V. (2008). Moving beyond access: College success for low-income, first-generation students. *Pell Institute for the Study of Opportunity in Higher Education, Washington, DC*.
- Foss, S.K., & Waters, W. (2007). Destination dissertation: a traveler's guide to a done dissertation. *London: Rowman & Littlefield*.
- Fox, F., Stevenson, L., Connelly, P., Duff, A., & Dunlop, A. (2010). Peer-mentoring undergraduate accounting students: The influence on approaches to learning and academic performance. *Active Learning in Higher Education, 11(2), 145-156*.
- Gannon, J.M., & Maher, A. (2012). Developing tomorrow's talent: The case of an undergraduate mentoring programme. *Education+Training, 54(6), 440-455*.
- Gershenfeld, S. (2014). A Review of Undergraduate Mentoring Programs. *Review of Educational Research, 84(3), 365–391*. <https://doi.org/10.3102/0034654313520512>
- Girves, J. E., Zepeda, Y., & Gwathmey, J. K. (2005). Mentoring in a Post-Affirmative Action World. *Journal of Social Issues, 61(3), 449–479*. <https://doi.org/10.1111/j.1540-4560.2005.00416.x>
- Hegrenes, S.A. (2013). *Pathways to success in higher education: Understanding the influence of mentoring programs on first-generation students*. (Doctoral Dissertation) Retrieved from the University of Minnesota Digital Conservancy.

- Jacobi, M. (1991). Mentoring and undergraduate academic success: A literature review. *Review of Educational Research*, 61(4), 505–532. <https://doi.org/10.3102/00346543061004505>
- Johnson, W. B. (2002). The intentional mentor: Strategies and guidelines for the practice of mentoring. *Professional Psychology: Research and Practice*, 33(1), 88–96. <https://doi.org/10.1037/0735-7028.33.1.88>
- Karcher, M.J., Davis, C., & Powell, B. (2002). The effects of developmental mentoring on connectedness and academic achievement. *School Community Journal*, 12(2), 35-50.
- Knowles, M. (1975). Adult education: New dimensions. *Educational Leadership*, 33(2), 85-88.
- Kram, K. (1983). Phases of the Mentor Relationship. *The Academy of Management Journal*, 26(4), 608–625.
- Kram, K. E., & Isabella, L. A. (1985). Mentoring alternatives: The role of peer relationships in career development. *Academy of Management Journal*, 28(1), 110–132. <https://doi.org/10.2307/256064>
- Kuh, G.D. (2001). Assessing what really matters to student learning: Inside the national survey of student engagement. *Change: The Magazine of Higher Education*, 33(3), 10-17.
- Levinson, D.J. (1978). *The seasons of a man's life*. New York: Ballantine Books.
- Mekolichick, J., & Gibbs, M. (2012). Understanding college generational status in the undergraduate research mentored relationship. *Council on Undergraduate Research Quarterly*, 33(2), 40–46.
- Midkiff, B., & Grinage, L. (2017). A Typology of supports for first-generation college students in the U.S. *Handbook of Research on Administration, Policy, and Leadership in Higher Education*, (October 2016), 348–376. <https://doi.org/10.4018/978-1-5225-0672-0.ch014>
- Muraskin, L. (1997). *Best practices in student support services: A study of five exemplary sites. Followup study of student support services programs*. (Department of Education Report). Washington, DC: Office of Planning, Budget, and Evaluation.

- Pascarella, E. T. (1980). Student-Faculty Informal Contact and College Outcomes. *Review of Educational Research*, 50(4), 545–595. <https://doi.org/10.3102/00346543050004545>
- Pascarella, E. T., Wolniak, G. C., Pierson, C. T., Schuh, J. H., & Pascarella Gregory. (2003). Experiences and outcomes of first-generation students in community colleges. *Journal of College Student Development*, 44(17), 420–429. <https://doi.org/10.1353/csd.2003.0030>
- Pike, G. R., & Kuh, G. D. (2005). First-and second-generation college students: A comparison of their engagement and intellectual development. *Journal of Higher Education*, 76(3), 276–300. <https://doi.org/10.1353/jhe.2005.0021>
- Pike, G. R., Kuh, G. D., & Gonyea, R. M. (2003). The relationship between institutional mission and students' involvement and educational outcomes. *Research in Higher Education*, 44(2).
- Rendón, L. I. (1992). From the Barrio to the academy: Revelations of a Mexican American “scholarship girl.” *New Directions for Community Colleges*, 80, 55–64. <https://doi.org/10.1002/cc.36819928007>
- Rhodes, J.E., Bogat, G.A., Roffman, J., & Edelman, P. (2002). Youth mentoring in perspective: Introduction to the special issue. *American Journal of Community Psychology*, 30(2), 149-155.
- Rose, G. L. (2003). Enhancement of mentor selection using the ideal mentor scale. *Research in Higher Education*, 44(4), 473–494. <https://doi.org/10.1023/A:1024289000849>
- Rose, G. L. (1999). What do doctoral students want in a mentor?: Development of the ideal mentor scale. (Doctoral Dissertation). *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 60(12-B), 6418.
- Ryan, G.W., & Bernard, H.R. (2003). Techniques to identify themes. *Field Methods*, 15(1), 85-109.

- Schlossberg, N. K. (1985). Marginality and mattering: Key issues in building community. *New Directions for Student Services*, 48(48), 5–15. <https://doi.org/10.1002/ss.37119894803>
- Shandley, T.C. (1989). The use of mentors for leadership development. *NASPA Journal*, 27(1), 59-66.
- Terenzini, P. T., & Pascarella, E. T. (1991). Twenty years of research on college students: Lessons for future research. *Research in Higher Education*, 32(1), 83–92.
<https://doi.org/10.1007/BF00992835>
- Terenzini, P. T., Pascarella, E. T., Aper, J., Hinkle, D., & Astin, A. (1998). Studying college students in the 21st century: Meeting new challenges. *The Review of Higher Education*, 21(2), 151–165.
- Terenzini, P. T., Rendon, L. I., Lee Upcraft, M., Millar, S. B., Allison, K. W., Gregg, P. L., & Jalomo, R. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education*, 35(1), 57–73. <https://doi.org/10.1007/BF02496662>
- Terenzini, P. T., Springer, L., Yaeger, P. M., Pascarella, E. T., & Nora, A. (1996). First-generation college students: Characteristics, experiences, and cognitive development. *Research in Higher Education*, 37(1), 1–22. <https://doi.org/10.1007/BF01680039>
- Torres, V. (2006). A mixed method study testing data-model fit of a retention model for Latino/a students at urban universities. *Journal of College Student Development*, 47(3), 299-318.
- Torres, V., & Hernandez, E. (2009). Influence of an identified advisor/mentor on urban Latino students' college experience. *Journal of College Student Retention: Research, Theory, & Practice*, 11(1), 141-160.
- Weichman, T. (2013). *Success informs success: Experiences of persisting first-generation college males*. (Master's Thesis). University of Nebraska-Lincoln.
- Winkle-Wagner, R. (2010). Cultural capital: The promises and pitfalls in education research. *ASHE Higher Education Report*, 36(1), 1-143.

Wolf-Wendel, L., Ward, K., & Kinzie, J. (2009). A tangled web of terms: The overlap and unique contribution of involvement, engagement, and integration to understanding college student success. *Journal of College Student Success, 50* (4), 407-428.

York-Anderson, D., & Bowman, S. (1991). Assessing the college knowledge of first-generation and second-generation college students. *Journal of College Student Development, 32*(2), 116-122.
Retrieved from <http://psycnet.apa.org/psycinfo/1991-22802-001>

Zachary, L.J. (2002). The role of teacher as mentor. *New Directions for Adult and Continuing Education, 93*, 27-38.

Appendix 1 - Sample Email Request

_____, good morning. I am conducting interviews for my doctoral dissertation in the MRU Higher Ed Program and I would like to interview someone from your office about mentoring. The purpose of my study is to describe mentoring programs and to gain a better understanding of how mentoring for first-generation, low-income (FGLI), and minority students is defined and implemented by administrators at MRU. Would you or someone in your office participate in a 45-60 minute interview in the next 3-6 weeks here on campus? Participation in this study is completely voluntary. Please let me know at your earliest convenience. Thank you much!

Appendix 2 - Interview Protocol

Interviewee Name: _____

Date of Interview: _____

A full interview protocol will be developed and approved prior to conducting interviews. This protocol will be provided in an appendix of the final version of the study. Examples of interview questions are given below:

1. What is your role in the MRU Mentoring Program?

2. How do you define mentoring?

3. Tell me about the mentoring components of your program -- what activities are specifically tied to mentoring? What are your mentoring goals?

4. Are there particular aspects of your program directed to first-generation, low-income, or minority students? If so, what are they?

5. If your program serves first-generation, low-income, and minority students what specific activities or services do your mentors provide?

a. How do they spend their time?

6. Please tell me about your students.

a. Who participates in your program?

b. How are they selected?

c. How do you specifically serve first-generation, low income and minority students?

7. How is your program staffed?

8. How are mentors selected, trained and evaluated?

9. How do you define success for your program or who do you know whether your mentoring program is successful?

- a. Have you formally assessed the mentoring program?
- b. What did you find?
- c. What works?
- d. What needs improvement?

10. What would you do to create the best mentoring program possible to serve first-generation, low income and minority students, if resources were not a factor?

11. Is there anything else you would like to say about mentoring programs from first-generation students that we have not talked about?
