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DESCRIBING THE OCCURRENCE AND INFLUENCE OF MENTORING FOR OCCUPATIONAL THERAPY FACULTY MEMBERS WHO ARE ON THE TENURE TRACK OR ELIGIBLE FOR REAPPOINTMENT

By

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Seton Hall University

2011

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DEDICATION

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ABSTRACT

DESCRIBING THE OCCURRENCE AND INFLUENCE OF MENTROING FOR OCCUPATIONAL TIIERAPY FACULTY MEMBERS WHO ARE ON THE TENURE TRACK OR ELEGIBLE FOR REAPPOINTMENT

By

Mary Falzarano

Seton Hall University

2011

As the demand for occupational therapists in healthcare continues to grow, and enrollments in occupational therapy programs continue to expand, so does the need for qualified occupational therapy faculty. Yet the increase in the number of occupational therapists qualified in all areas of scholarship of the professoriate may not be sufficient to meet the demand, resulting in a need to attract, mentor and retain qualified educators. Gaining an understanding of the type of mentoring provided for full-time faculty who are on the tenure track or eligible for reappointment in occupational therapy programs is important to further address this need.

This study sought to understand the current state of mentoring for occupational therapy faculty members in the entry level and doctoral programs in the United States. A descriptive, survey cross-sectional design using an online questionnaire was used to gather qualitative and qualitative data from the faculty members in the 151 programs who met the inclusion criteria of the study. A non-probability sample of 818 faculty members were contacted and invited to participate resulting in a return rate of 14.7% as 107 participants met the criteria and completed the survey. Descriptive statistics were used to describe the data using frequencies, percentages

and measures of central tendency. The three open ended questions were analyzed using inductive analysis for emergent themes. The theory of mentoring a t work and the person-environment-occupation model are discussed to explain the constructs of mentoring and mentoring functions and the possible influence on the transition from clinician to academician resulting in optimal occupational performance and fit in the academic environment.

The findings of this study indicate that more than half (n=56) of the participants reported that they were in a mentoring relationship. Mentored faculty members positively rated their perception of the influence of mentoring on the four tenets of academic success: improvement in teaching, research productivity, service engagement and achievement of tenure, promotion or reappointment. Additionally mentored faculty members positively rated mentoring as often important on the items surrounding the influence of mentoring academic socialization: understanding of the formal and informal expectations of teaching, research, service and tenure/promotion expectations, feeling a sense of connectedness in the academic environment and understanding the unique culture of the institution. Mentored faculty members indicated that their most preferred mentoring functions were those that are career based: being nominated for honors, receiving assistance with grants and publication development and collaboration with research. Non-mentored faculty indicated mentoring functions more closely aligned with psychosocial aspects of mentoring: receiving constructive feedback, a trusting relationship, belief in their potential and support and encouragement. Themes that emerged from the qualitative data described all faculty member's belief surrounding the most important functions of a mentor reflected those discussed in the literature on faculty mentoring with high indications of "mentor support and assistance" and "information source". The emergent themes that suggest specific beliefs of the participants in this study included "being available", "willingness to serve" and

"individualized approach". Having "someone to go to" was the strongest theme that emerged in response to the question what are the benefits of a mentoring relationship. Finally, the response to the question surrounding the challenges of a mentoring relationship reveled themes that describe "not enough time", "the fit does not fit" and "struggling down the unknown path" inferring that these participants recognized the barriers to effective mentoring and the challenges of forming a productive and shared learning experience for the mentor and mentee.

Responses to the survey described that most mentoring relationship were informally developed as most faculty members found a mentor on their own and the relationship was developed based on a mutual agreement as opposed to being assigned a mentor. Mentoring occurred as needed and lasted for less than an hour. The topics most frequently discussed in the mentoring sessions were teaching, research, service, university polices and procedures and issues surrounding tenure, promotion or reappointment. Lastly all faculty members rated the transition from clinician to faculty member the highest as one of the eight issues that may be perceived to be stressful when first hired.

Findings from this study serve as a first look at the current state of mentoring for occupational therapy faculty members on the tenure track or eligible for reappointment. The information from this study serves to inform current and potential faculty members of the occurrence of mentoring, the functions of a mentor and the perception of the influence on tenets of academic success and items of academic socialization. Department chairs in occupational therapy higher education programs and administrators in institutions will have a deeper understanding of the needs and desires of occupational therapy faculty, which can serve to retain and recruit effective faculty to prepare future occupational therapists and may continue the process of mentoring as mentored faculty ultimately become a mentor.

CHAPTER I

INTRODUCTION

As the demand for occupational therapists in healthcare continues to grow, and enrollments in occupational therapy programs continue to expand, so does the need for qualified occupational therapy faculty (American Occupational Therapy Association (AOTA), 2008; Fisher & Keehn, 2007; Powell, Kanny & Ciol, 2008; U. S. Department of Labor, 2008). Yet the increase in the number of occupational therapists qualified in all areas of scholarship of the professoriate may not be sufficient to meet the demand, resulting in a need to attract, mentor and retain qualified educators (Boyer, 1990; Copolillo, Peterson & Helfrich, 2001; Crepeau, Thibodaux & Parham, 1999; Mitcham & Gillette, 1999; Powell, Kanny & Ciol, 2008; Preissner, Cahill & Peterson, 2007). Gaining an understanding of the type of mentoring provided for full-time faculty who are on the tenure track or eligible for reappointment in occupational therapy programs is important to further address this need.

Mentoring has been suggested to be a way that new and junior faculty can gain guidance and support to develop or improve in teaching, research and service, learn about the expectations of their academic responsibilities and become socialized into the institution (Bower, 2007; Cawyer, Simonds & Davis, 2002; Harrison & Kelly, 1996; Morin & Ashton, 2004, Sorcinelli & Yun, 2007; Taylor & Berry, 2008). The faculty member must learn how to navigate the culture of academia by understanding the explicit and implicit expectations of tenure and promotion in order to achieve academic success (Luna & Cullen, 1995; Sorcinelli & Yun, 2007; Tierney, 1997). Finally, achievement of reappointment, tenure or promotion is a marker of academic

success, at times reported to be both a source of stress and a challenge for new faculty members, in particular, those faculty members who transition from a clinical career to an academic career (Mitcham, Lancaster & Stone, 2002; Sawatzky & Enns, 2009; Vassantachart & Rice, 1997; Zeind, et al., 2005).

A review of the occupational therapy literature reveals that there is a dearth of research that has investigated academic mentoring for occupational therapy faculty. Paul, Stein, Ottenbacher and Lui (2002) examined the role of academic mentoring on the research productivity of new faculty members. Provident (2004) conducted a qualitative study to understand how mentoring of occupational therapy faculty members was perceived to determine the outcomes of a one-year curriculum-revision mentoring project. Both of these studies were conducted prior to the change in the Accreditation Council for Occupational Therapy Education (ACOTE) standards for faculty in occupational therapy programs. The new standards require that a majority of occupational therapy faculty have an earned doctorate by 2012 (AOTA, 2008). Given the limited evidence of what is currently occurring in occupational therapy education programs to support faculty members in developing or improving in teaching, research and service, achieving academic success, and becoming successfully socialized into the academic culture, an understanding of how faculty mentoring is perceived in other healthcare and non healthcare higher educational programs provides a background of the problem.

Background

Occupational Therapy Faculty

Current demographics for occupational therapy faculty reveal that there is a 4.6% to 11.9% vacancy rate in the entry-level and doctoral occupational therapy programs in the United States (AOTA, 2008; Fisher & Keehn, 2007). Furthermore, the majority of occupational therapy

faculty members are nearing retirement age, therefore, there is a need to recruit new faculty to academia to meet the needs of educating future occupational therapists (Powell, Kanny & Ciol, 2008, U.S. Department of Labor, 2008). There are a few studies and articles in the occupational therapy literature that discuss or examine mentoring as a form of professional development and academic socialization to better understand how to recruit, support and retain occupational therapy faculty, if they transition from their role as a clinician to an academician (Masagatani & Grant, 1986; Mitcham & Gillette, 1999; Mitcham, Lancaster & Stone, 2002; Rozier, Gilkeson & Hamilton, 1991). Furthermore, the transition from the role of a clinician to the role of a faculty member has been reported to be stressful for occupational therapists, physical therapist and nurses (Crepeau, Thibodaux & Parham, 1999; Crist, 1999; Harrison & Kelly, 1996; Sawatzky & Enns, 2009; Vassantachart & Rice, 1998).

As occupational therapists consider or begin a career in academia, the opportunity for professional development has been suggested to provide support and guidance for these new faculty members with the transition from clinic to academia (Crepeau, et al. 1999; Crist, 1999; Mitcham & Gillette, 1999; Mitcham, Lancaster & Stone, 2002). Vassantachart and Rice (1998) reported that occupational therapists that select a career in academia reported that they desired professional development to further their understanding of teaching, scholarship and to become successfully socialized into the academic culture. Recently, the American Occupational Therapy Association (AOTA) articulated a statement of specialized knowledge and skills for occupational therapy educators and the role of a mentor is considered to be a needed attribute to achieve in order to contribute to strengthening, promoting and advancing the profession (AOTA, 2009). However, there are no current studies that examine if there are mentoring opportunities for

occupational therapy faculty and the perception of the influence of mentoring for occupational therapy faculty members who are on the tenure track or eligible for reappointment.

Mentoring

The construct of mentoring is multidimensional in that it is used across a variety of contexts: business, healthcare professions, elementary through doctoral education and teacher/faculty development and across life stages: a young worker or student, an adolescent in need of guidance, or for an adult who changes their career (Kram, 1985; Pinto-Zipp & Olson, 2008; Pololi, Knight, Dennis & Frankel, 2002; Ragins & McFarlin, 1990; Roche, 1979; Zalenick, 1977). Thus it is important to gain an understanding of how mentoring is perceived by faculty in higher education programs.

The concept of mentoring has permeated literature in business as a process to provide a novice, inexperienced worker guidance and support by a more experienced older and wiser worker (Kram 1985; Roche, 1979; Zaleznik, 1977). The mentoring relationship was discussed as a normal stage of adult career development, where a young man seeks the advice and direction from the more experienced worker in order to realize his professional identity under the guidance of the mentor (Erikson, 1963; Levinson, Darrow, Klein, Levinson, & McKee, 1978). In turn, the mentor, the senior employee, derives a sense of "giving back", by taking the young worker under his wing, therefore, fulfilling the life stage of generativity (Erikson, 1963; Levinson, et al., 1978).

Mentoring Faculty

Similar to mentoring at work, mentoring for faculty has been defined as a reciprocal relationship where both the senior faculty member, the mentor, and the junior faculty member, the mentee, benefit from teaching and learning (Fox, Waldron, Bohnert, Hishinuma & Nordquist,

1998; Luna & Cullen, 1995; Sorcinelli & Yun, 2007; Zeind, et al., 2005). While the definitions of a mentoring relationship are similar, yet not consistent across the literature, the recurring characteristics reported are those that describe the relationship as one of guidance, support, encouragement and facilitating career advancement (Fox, et al., 1998; Kram, 1985; Leslie, Lingard & Whyte, 2005; Luna & Cullen, 1995; Moss, Teshima & Leszcz, 2008; Palepu et al., 1998; Sands, Parson & Duane, 1991; Selwa, 2003; Sorcinelli & Yun, 2007). A mentor is defined as a senior faculty member who provides support, encouragement, stimulating intellectual growth, visibility and protection (Kram, 1985; Palepu et al., 1998; Williams & Blackburn, 1988; Zeind et al., 2005). A mentee is a junior faculty member, inexperienced in the occupations of the professoriate who may wish to develop or improve their skills in teaching, research and service, understand the expectations of tenure/promotion or reappointment and to feel a sense of belonging (Paul et al., 2002; Schrodt, Cawyer & Sanders, 2003; Throrndyke, Gusic & Milner, 2008).

The literature reveals that the positive characteristics of a mentoring relationship and mentoring opportunities for health care and non health care faculty members suggests that an inexperienced junior faculty member can gain and develop the necessary skills to meet the demands of their tripartite role: teaching, research and service, achieve academic success by attaining tenure, promotion or reappointment and become successfully socialized into the culture of academia (Boyle & Boice, 1998; Cawyer, Simonds & Davis, 2002; Cunningham, 1999; Fox et al., 1998; Frandsen, 2003; Jones & Tucker-Allen, 1999; Luna & Cullen, 1995; Morin & Aston, 2004: Palepu et al., 1998; Paul, et al., 2002; Pololi & Knight, 2005; Sands, et al., 1991; Schrodt, et al., 2003; Sorcinelli & Yun, 2007; Taylor & Berry, 2008; Thorndyke, et al., 2008; Tierney, 1997; Wasserstein, Quistberg, & Shea, 2007; Williams & Blackburn, 1988; Zeind et al., 2005).

Mentoring for Academic Success: Teaching, Research, Service, Tenure, Promotion or Reappointment

The literature surrounding the effects of mentoring on teaching and research productivity suggest a positive correlation for nurse, occupational therapy and medical faculty members (Paul et al., 2002; Palepu et al., 1998; Thorndyke, et al., 2008; Siler & Klein, 2001; Williams & Blackburn, 1988; Zeind et al., 2005). While there is limited research that has specifically investigated the impact of mentoring on the service requirements expected of faculty member, two studies suggest that pharmaceutical and health education faculty members perceived mentoring to be a way to become informed about the type of service that is valued in their institution and how participation in service can lead to tenure or reappointment (Latif & Grillo, 2001; Miller & Noland, 2003).

Balogun and Sloan (2006) explored the trends for tenure and promotion for nurse and allied healthcare faculty and suggest that for these participants an emphasis on teaching and research were ranked higher than service to attain tenure and promotion. Positive trends were reported in tenure achievement, promotion and retention for health profession and physical therapy faculty members in the research of Kosoko-Lasaki, Sonnino & Voytko (2006) and Peterson, Stuart, Hargis and Patel (2009). Kosoko-Lasaki, Sonnino and Voytko (2006) reported that 100% of the health professions faculty members at Creighton University were retained after one year in the mentoring program and 58% after two years. The researchers further reported that the mentoring program was pivotal in recruitment of faculty members. Peterson et al. (2009) suggested that those institutions with mentoring programs promoted and awarded tenure to 74.7% of the faculty who participated in the programs.

Mentoring for Academic Socialization

Mentoring opportunities have also been suggested to be beneficial in socializing new faculty members into the culture of academia to better understand the expectations of tenure and promotion, to derive a sense of belonging, which in turn, has been reported to lead to satisfaction with a career in academia (Bower, 2007; Cawyer, et al., 2002; Harrison & Kelly, 1996; Morin & Ashton, 2004; Pagliarulo & Lynn, 2003; Schrodt, et al., 2003; Sorcinelli & Yun, 2007; Steinert, 2000; Taylor & Berry, 2008; Tracy, Jagsi, Starr & Tarbell, 2004). Furthermore, mentoring opportunities are suggested to ease the transition from clinical work to a career in academia for health care faculty, including occupational therapists, as theses clinicians typically have no or limited training to teach (Fox, et al., 1998; Schrodt, et al., 2003; Tracy, Jagsi, et al., 2004; Wasserstein, et al., 2007).

How Mentoring is Provided

To further understand the construct of mentoring, the literature describes how the relationship is developed and how the mentoring process occurs across contexts and occupations. Formal matching of mentors and mentees by administration, department chairs, or as a requirement of a formalized mentoring program, occurs as well as informal mentoring relationships that are formed when faculty members find or seek out their own mentors. A formal mentoring relationship is reported to occur as a result of an assignment of the mentor for a particular mentee by an administrator/supervisor, a dean or department chair, or as a part of a formalized mentoring program (Boyle & Boice, 1998; Fox et al., 1998; Mullen & Hutniger, 2008; Zeind et al., 2005). These researchers suggested that formal assignment of a mentor to a mentee resulted in improvement and advancement of the mentee's professional development and is suggestive of a commitment of the institution to the mentoring process as a form of

professional development. However, some respondents reported negative aspects of being formally matched as the mentor or mentee may not have developed a trusting relationship or committed to the responsibilities of the relationship [e.g. meeting at the assigned times or as frequently as needed] (Eby & Allen, 2002; Provident, 2004). In contrast, informal matching of mentors and mentees was also suggested to be effective as the mutual agreement by the mentor and the mentee, to form the relationship, was reported to result in a longer duration, thus leading to a trusting, reciprocal interaction (Frandsen, 2003; Sands, Parson & Duane, 1991; Williams & Blackburn, 1988). However, the limitations discussed by these researchers included the availability of mentors who were willing to develop a relationship and/or a lack of institutional support for the mentoring relationship (Palepu et al., 1998; Sorcinelli & Yun, 2007; Zeind et al., 2005).

Mentoring opportunities have been reported in the literature to be offered as a part of a formal mentoring program, required for new faculty members as a part of their professional development (Fox et al., 1998; Mullen & Hutniger, 2008; Thorndyke, Gusic & Milner, 2008; Tracy, et al.; Zeind et al., 2005). The benefits reported by these researchers were the inherent value that the institution placed on mentoring as a part of the new faculty member's career development thus leading to a commitment to retention by the new faculty member. Most researchers reported positive outcomes as a result of the mentee's participation in the programs including increased research productivity, a deeper understanding of the expectations of required amount of scholarship and service, improvement in teaching approaches, balancing the tripartite roles of teaching, research and service and a sense of belonging to the institution (Fox et al., 1998; Mullen & Hutniger, 2008; Thorndyke, Gusic & Milner, 2008; Tracy, et al., 2004; Zeind et al., 2005). However, there was variability in the duration of the mentoring programs offered,

who mentored whom, and how mentors were assigned and how mentoring was conducted. Therefore, while most of these researchers suggest that results describe positive perceptions of mentoring for faculty members or substantive outcomes of the mentee's acquisition of needed or desired skills, comparison of the measures is difficult to compare.

Zeind et al. (2005) conducted a pre and post assessment of the perception of the participants about the impact of the program and suggest the findings reveal that the participants improved in all areas of the professoriate and better understood the tenure and promotion expectations. Thorndyke, Gusic and Milner (2008) rated medical faculty who had participated in a mentoring program to create a specific scholarly project immediately after, 6 months and 18 months post program and reported that overall these faculty members perceived that completing a project with a mentor resulted in improvement in the new faculty member's academic skills.

Functions of a Mentor

It is important to understand the functions of a mentor in order to examine how the relationship contributes to the positive outcomes of a mentoring relationship. The functions of a mentor have been described in the seminal work of Kram (1985) who theorized that both career and psychosocial functions could positively facilitate a mentee's professional development. Career functions may include sponsorship, exposure to people and opportunities for advancement, visibility, coaching, protection and providing challenging assignments (Kram, 1985). Psychosocial functions include role modeling, acceptance, conformation, counseling and friendship (Kram). Researchers who investigated the impact of mentoring functions on the research productivity identified the role of role modeling/teaching approach as a predictor of increased research productivity for nurse and occupational therapy faculty (Frandsen, 2003; Paul et al., 2002; Williams & Blackburn, 1988). Those researchers who examined the functions of

mentoring that were perceived to be ideal and have a positive impact on the faculty member's professional development were: career guide, intellectual guide, research assistant, friend, caring and information source (Cunningham, 1999; Sands, Parson & Duane, 1991; Sawatzky & Enns, 2009).

Sands, Parson and Duane (1991) developed a tool to measure the nature and occurrence of mentoring for liberal arts and health sciences faculty members in a public university in the Midwest. The researchers used the constructs of mentoring based on the theoretical constructs of mentoring functions proposed by Kram (1985) and other instruments cited in the literature. Sands, Parson and Duane (1991) suggested that their findings revealed that there were four preferred mentoring functions perceived by the participants to have a positive impact on their professional development: Friend, Career Guide, Information Source and Intellectual Guide. Frandsen (2003) utilized the theoretical constructs of mentoring functions proposed by Kram (1985) to explore the nature and occurrence of mentoring and the preferred and actual mentoring functions of nurse faculty. Frandsen (2003) suggested findings revealed that nurse faculty members preferred mentors to function as a Leader/Coach, University Information Guide/Norms Guide, Friend or Research Guide.

How Mentoring is Measured

Most of the measurement tools used by researchers who gathered data about the impact of mentoring programs on faculty member's skill development, understanding of tenure/promotion/reappointment issues and academic socialization, to assess the impact of mentoring for junior faculty were developed from the literature, adapted from prior studies or specific to the population and/or the way that mentoring was offered (Frandsen, 2003; Rogers,

Monterio & Nora, 2002; Sands, Parson & Duane, 1991; Sawatzky & Enns, 2009; Schrodt, et al., 2003; Williams & Blackburn, 1988).

A number of researchers used the constructs and functions of mentoring based on the Theory of Mentoring at Work as proposed by Kram (1985). Williams and Blackburn (1988) used Kram's constructs to develop a tool to measure the impact and relationship of mentoring and institutional support on the research productivity of nurse faculty. Sands, Parson and Duane (1991) and Cunningham (1999) developed a tool to measure the occurrence and nature of mentoring for faculty members based on the functions of a mentor as proposed by Kram (1985) and the literature surrounding mentoring of faculty in higher education programs. A numbers of factors that emerged from these two studies that were similar include mentoring functions and were rated to be important are: Career Guide, Friend, Leader/Coach, Information Source and Research Guide. Finally, Rogers, Monterio and Nora (2008) developed a tool to measure medical faculty member's perceptions of their most meaningful mentoring functions. The factors that emerged from this study were: Personal Exploration, Practical Guidance, Mentor Support and Mentor Advice.

Schrodt, Cawyer and Sanders (2003) developed and obtained construct validity of a tool to measure the nature of mentoring, the functions of a mentor considered to be important and the impact on academic socialization for communication faculty members. Mentoring functions that were reported to be important were: Research Assistance, Protection, Collegiality, Promotion and Friendship. Three factors surrounding academic socialization found to be important were: Ownership, Adequate Information and Connectedness. Lastly, a mentoring needs assessment for nurse faculty members was developed and pilot tested for reliability by Sawatzky and Enns (2009).

In summary mentorship opportunities in health care programs for nursing, medical and pharmaceutical faculty and faculty in non health care programs have been found to benefit new full-time faculty in dealing with the responsibilities of teaching, research, and service (Boyle & Boice, 1998; Moran & Ashton, 2004; Thorndyke, et al., 2008; Williams & Blackburn, 1988). Mentoring has been suggested to assist new faculty members in achieving tenure/promotion or reappointment and facilitating successful academic socialization resulting in job satisfaction and retention (Balogun & Sloan, 2006; Kosoko-Lasaki, et al., 2006; Schrodt, et al., 2003). The nature of how mentoring is offered to new faculty members is varied across the research including formal assignment of a mentor and mentees, informal arrangement developed between self selected mentors and mentees or as a formal program (Boyle & Boice, 1998; Mullen & Hutniger, 2008; Fox et al., 1998; Schrodt, et al., 2003; Siler & Kliener, 2001; Zeind et al., 2005).

Mentoring is prevalent in medical faculty programs and the research suggests it is both necessary and has a positive impact on the professional development of medical faculty (Fox et al., 1998; Thorndyke, et al., 2008; Tracy, et al., 2004; Zeind et al., 2005). Similarly, the literature surrounding mentoring for nurse faculty recommends that opportunities for mentoring be provided as professional development, demonstrates that, in fact, it does occur in numerous nursing programs and the research supports the positive outcomes of both mentoring programs and mentoring partnerships (Dunham-Taylor, Lynn, Moore, McDaniel & Walker, 2008; Jones & Tucker-Allen, 1999; Sawatzky & Enns, 2009). Furthermore, the research suggests that faculty in other higher education programs benefit from understanding the type of mentoring functions that contribute to positive professional development and are considered to facilitate academic success (Cunningham, 1999; Sands, et al., 1991). Given what is known about the benefits of mentoring for health sciences and other faculty members, it is necessary to discover what is occurring in

occupational therapy programs. However, there are only two studies that examine the current state of mentoring for occupational therapy faculty members (Paul, et al., 2002; Provident, 2004).

Problem Statement

Despite the recommendations of the occupational therapy professional organization, AOTA, and the two research studies that suggest mentoring opportunities can provide occupational therapy faculty members with the support and guidance necessary to learn and improve the tripartite roles of the professoriate, there is limited evidence that has examined the current state of mentoring for occupational therapy faculty members who are on the tenure track or eligible for reappointment in entry-level and doctoral programs (AOTA, 2009; Paul et al., 2002; Provident, 2004). Furthermore, there is not a tool that measures those constructs specific to healthcare faculty who transition from clinical work to a career in academic and their perception of the influence of mentoring on their occupation as a professor.

Purposes of the Study

The purpose of this investigation was twofold: to develop and obtain face and content validity of a tool to use in the primary study to gather data surrounding the occurrence, mentored faculty member's perceived influence of mentoring and preferred functions of a mentor for occupational therapy faculty members who are on the tenure track or eligible for reappointment. Second, to describe the current state of mentoring for occupational therapy faculty members of interest.

Pilot study: The Delphi technique.

A Delphi technique was conducted from a panel of experts in the areas of faculty mentoring and teaching research methods to validate a survey created by the principal

investigator from an exhaustive review of the literature and permission from researchers to use their mentoring survey instruments (Biondo, Nekolaichuk, Stiles, Fainsinger & Hagen, 2008; Davis, Zayat, Urton, Belgum & Hill, 2008; Keeney, Hasson & McKenna, 2006; Portney & Watkins, 2009).

Purpose of the dissertation study.

The main purpose of this study is to discover if and how frequently mentoring is occurring for occupational therapy faculty who are on the tenure track or eligible for reappointment. In doing so, it is important to understand the nature and extent of mentoring to discover who is mentoring occupational therapy faculty members, how the mentoring relationships are formed, when and how long the mentoring sessions occur. Furthermore, this study sought to discover the perception of mentored faculty members surrounding the tenets of academic success. Academic success has been perceived to include improved teaching, research and service, understanding the tenure and promotion expectations and feeling a sense of belonging in the institution. Additionally, this study sought to discover if those faculty members who are mentored feel a better sense of "community" in their academic institutions, thus a perception of academic socialization. Finally, the study sought to discover the preferred and not preferred functions of a mentor as indicated by the mentored and non-mentored occupational therapy faculty members who participated in the survey. The findings from this study will inform occupational therapists that may be considering a career in academia the current state of mentoring and department chairs in occupational therapy programs about the perceived needs of current occupational therapy faculty members or potential faculty members. Moreover, the institution stands to benefit from this knowledge as a way to retain and recruit effective faculty who are satisfied in their academic career.

Research Questions

The pilot study hypotheses were:

1. The Health Science Faculty Mentoring Survey will demonstrate face validity.
2. The Health Science Faculty Mentoring Survey will demonstrate content validity.

The dissertation research questions and hypotheses are:

The over arching research questions were to discover if and to what extent mentoring is occurring in occupational therapy entry level and doctoral programs, the perception of mentored faculty members surrounding the influence of mentoring on academic faculty success and academic faculty socialization. Additionally, the Health Sciences Faculty Mentoring Survey was designed to gather data to understand how these occupational therapy faculty members define the ideal mentoring functions, the benefits and challenges of a mentoring relationship and the preferred and not preferred functions of a mentor as indicated by mentored and non-mentored faculty.

Research Question 1: Is and to what extent mentoring is occurring for occupational therapy faculty members who are on the tenure track or eligible for reappointment?

H_{a1}: Mentoring is occurring for at least 25% of occupational therapy faculty members in occupational therapy entry level and doctoral programs as reported by the participants surveyed.

Research Question 2: What is the perceived influence of mentoring on the tenets of academic success: teaching, research, service and tenure/promotion/reappointment (TPR)?

The alternate hypothesis is: H_a2. Mentored faculty members perceive that mentoring has a positive influence on the tenets of academic success. Sub hypotheses for each tenet are:

H_a1: Mentored faculty members perceive that mentoring has a positive influence on their teaching.

H_a2: Mentored faculty members perceive that mentoring has a positive influence on their research.

H_a3: Mentored faculty members perceive that mentoring has a positive influence on their service.

H_a4: Mentored faculty members perceive that mentoring has positive influence on their tenure/promotion/reappointment.

Research Question 3: What is the perceived influence of mentoring on academic socialization? Mentored faculty members perceive that mentoring has a positive influence on their academic socialization as measured by Schrodt, Cawyer and Sanders (2003) on the 11 items of academic socialization. The alternate hypothesis is: H_a3. Mentored faculty members perceive that mentoring has a positive influence on their academic socialization as measured by Schrodt, Cawyer and Sanders (2003) on the 11 items of academic socialization.

Sub hypotheses for each item are:

H_a1: Mentored faculty members perceive that mentoring has a positive influence on their feeling of being valued.

H_a2: Mentored faculty members perceive that mentoring has a positive influence on their feeling of ownership to their program.

H_a3: Mentored faculty members perceive that mentoring has a positive influence on their feeling of loyalty to their department.

H_a4: Mentored faculty members perceive that mentoring has a positive influence on the provision of resources for conducting research.

H_a5: Mentored faculty members perceive that mentoring has a positive influence on their understanding of teaching expectations.

H_a6: Mentored faculty members perceive that mentoring has a positive influence on their understanding of research expectations.

H_a7: Mentored faculty members perceive that mentoring has a positive influence on their understanding of service expectations.

H_a8: Mentored faculty members perceive that mentoring has positive influence on their understanding of how to achieve tenure/promotion/reappointment.

H_a9: Mentored faculty members perceive that mentoring has a positive influence on their feeling of connectedness to their department.

H_a10: Mentored faculty members perceive that mentoring has a positive influence on their feeling of having opportunities to socialize with colleagues.

H_a11: Mentored faculty members perceive that mentoring has a positive influence on their feeling of considering their co-workers friends.

Research Question 4: What do occupational therapy faculty members believe are the most important functions of an ideal faculty mentor?

Research Question 5: What do occupational therapy faculty members believe are the benefits of a faculty mentoring relationship?

Research Question 6: What do occupational therapy faculty members believe are the challenges of a faculty mentoring relationship?

Research Question 7: What do faculty members who are mentored believe are the preferred and not preferred functions of a mentor?

Research Question 8: What do faculty members who are not mentored believe are the preferred and not preferred functions of a mentor?

Theoretical Foundation

Five major theories that addressed mentorship at work and academic fields were explored in the review of the literature: 1) developmental stages 2) adult life stage development 3) the theory of mentoring at work, 4) organizational socialization, and 5) the ecological theory of the person-environment fit (Kram, 1985; Erikson, 1963; Germain & Gitterman, 1987; Levinson, Darrow, Klein, Levinson, & McKee, 1978; Van Maanen & Schein, 1979.) Two developmental stages of life theories propose that mentoring, and being mentored, is a natural stage of adult development (Erikson, 1963; Levinson, et al., 1978).

In the review of the literature on academic mentoring, three theories emerged more frequently than others and were used to guide and explain the research process and findings: Kram's (1985) theoretical model of mentoring at work, organizational socialization (Van Maanen & Schein, 1979) and Germain and Gitterman's (1987) ecological theory of person-environment fit (Bower, 2007; Cawyer, et al., 2002; Cawyer & Friedrich, 1998; Cunningham, 1999; Gaskin, Lumpkin & Tennant, 2003; Palepu et al., 1998; Sands, et al., 1991; Schrodt, et al., 2003; Tierney, 1997; Vassantachart & Rice, 1997). Much of the literature surrounding faculty mentoring research used the theoretical constructs of Kram's career and psychosocial functions of a mentoring relationship to explain and guide the investigation and develop measurement instruments (1985). While the ecological theory of person environment fit was discussed in a few studies, the theory of Person-Environment-Occupation (PEO), as proposed by Law et al. 1996) will be discussed as a contributing theory to Kram's work, to describe the interaction and impact of mentoring on the faculty member, the occupations of the professoriate and the

environment of the academic institution to explain and guide the findings from the proposed study.

Summary of Methodology

The methodology for the proposed study is twofold. First the tool was developed and validated for face and content validity to explore the occurrence and perceived influence of mentoring for faculty members. Second, the tool was used to gather data to discover the current state of mentoring for occupational therapy faculty members who are on the tenure track or eligible for reappointment in 147 entry-level master's and 4 doctoral occupational therapy programs in the United States listed at the time of the study.

Pilot study methodology.

To gather data to discover the occurrence and perceived influence of mentoring for occupational therapy faculty and if they perceive stress when they transition from the clinic to academia a tool was developed from the literature and adapted with permission from other research studies (Ragins & Cotton, 1990; Rogers, et al., 2008; Sawatzky & Enns, 2009; Schrodt, et al. 2003). A Delphi method was used to obtain face and content validity of a Health Sciences Faculty Mentoring Survey. This method is based on the premise that the collective and anonymous consensus of identified experts in the field related to the topic or problem being examined results in broader knowledge of the topic (Hasson, Keeney & McKenna, 2000). Faculty from Seton Hall University's School of Health and Medical Sciences and the College of Nursing were recruited to volunteer as a panelist for the Delphi technique. Ten panelists volunteered initially; however, six panelists continued the Delhi process until completion. The literature suggests that 70 to 80% is considered a reasonable guideline and it is highly recommended that this level be set prior to the data analysis (Biondo, Nekolaichuk, Stiles,

Fainsinger & Hagen, 2008; Keeney, et al., 2006). The panelists reviewed the survey for a total of two rounds. Upon completion of the pilot study for face and content validity the Health Sciences Faculty Mentoring Survey was found to have face and content validity after reaching 80% consensus upon completion of the second iteration.

Dissertation Methodology.

The Health Sciences Faculty Mentoring Survey, validated for face and content validity, was used to explore the items of interest of occupational therapy faculty members who are on the tenure track or eligible for reappointment surrounding the occurrence and influence of faculty mentoring for this population. A descriptive, cross-sectional survey design was used to describe the current state of mentoring for occupational therapy faculty members in the U.S. The sample was recruited from 147 occupational therapy entry-level and 4 doctoral programs in the U.S. Those faculty members who are licensed occupational therapists, have been teaching full time, are on the tenure track, but not yet tenured or eligible for reappointment and have access to the Internet were invited to participate in this voluntary, online survey study. The Heath Sciences Faculty Mentoring Survey was recreated on the Seton Hall University Academic Survey System & Evaluation Tool (Wachsmuth, 2006). A solicitation letter was sent via an email to the faculty members identified from the American Occupational Therapy Association list of accredited colleges and universities as listed on the websites of the college or university.

The email described the purpose and intent of the voluntary study, and agreement to participate in the online survey will serve as informed consent. Data from the survey was entered into the online survey and the data from Academic Survey System & Evaluation Tool (ASSET) program was downloaded into a SPSS 17.0 program for analysis.

Descriptive statistical analysis methods included the use of frequencies, percentages and measures of central tendency for demographic data and to describe the occurrence and nature of mentoring for occupational therapy faculty members. Finally, the qualitative data from the three open ended questions was inductively analyzed for themes that emerged (Creswell, 2007).

Summary

There is a dearth of evidence in the occupational therapy literature that examines what is currently occurring to support and mentor new faculty. Therefore it was necessary to discover if mentoring opportunities are occurring for full time occupational therapy faculty, the nature and the perception of the influence of mentoring. It was further necessary to discover the perception of mentored faculty member's surrounding the tenets related to academic success: improved teaching, research and service, understanding the expectations of promotion and tenure, and their perception of academic socialization items surrounding feeling a sense of ownership, understanding of the academic culture and feeling of a sense of belonging to the academic institution. Through this understanding of the nature and extent of mentoring, we will discover who is mentoring junior faculty, how the relationships are formed, and the frequency and duration of the mentoring process. This information will fill the gap in the research, as the findings will be used to inform program directors, current junior faculty members and those occupational therapists that may be considering a career in academia.

The knowledge gained from an investigation will serve to update the current knowledge of mentoring for new occupational therapy faculty. Furthermore, the findings will inform occupational therapy clinicians of the state of mentoring to support the transition into academia, and the administration of higher education programs about the needs and benefits of mentoring

for retention and recruitment of qualified and dedicated faculty members. Therefore, to understand the current state of mentoring in occupational therapy programs, questions that can provide evidence about the state of mentoring of occupational faculty would concern the mentoring opportunities in their institution, if it is offered, how mentoring is provided, what mentored faculty members perceive is the influence of mentoring on their academic success and socialization. Furthermore, this study can provide an understanding of the mentoring functions occupational therapy faculty members believe are ideal, how a mentoring relationship may be beneficial or challenging and the preferred and not preferred functions of a mentor.

"The entire profession stands to benefit when occupational therapy faculty members thrive as teachers and scholars in the world of the university, where new ideas are born and new clinicians are nurtured" (Crepeau, et al, 1999, p.30).

CHAPTER II

REVIEW OF LITERATURE

Introduction

The purpose of this chapter is to provide a thorough literature review surrounding mentoring as a form of support for faculty members in occupational therapy and the issues facing new faculty who transition to a career in academia. Furthermore mentoring will be defined and discussed as a professional development approach for faculty, the theories that provide a framework for understanding faculty mentoring will be examined and the research that has investigated mentoring for faculty in health sciences and other higher education programs will be reviewed.

Mentoring as Support for Faculty

Support and mentorship opportunities in health sciences and other professional programs have been found to benefit new full-time faculty in dealing with the responsibilities of teaching, research, and service. It has also proved beneficial in facilitating the faculty member's acquisition of tenure, promotion or reappointment and in socializing new faculty members into the culture of academia (Cawyer, et al., 2002; Harrison & Kelly, 1996; Morin & Ashton, 2004; Pagliarulo & Lynn, 2003; Sorcinelli, 1994; Sorcinelli & Yun, 2007; Steinert, 2000; Taylor & Berry, 2008). Furthermore, a common finding in the literature is that support, in the form of mentorship, resulted in improved professional development, job satisfaction, and retention of faculty (Kosoko-Lasaki, et al., 2006).

Broadly defined, faculty mentoring is defined as a reciprocal relationship where both faculty members benefit from teaching and learning (Fox, et al., 1998; Zeind, et al., 2005). The traditional model of mentoring is based on the guidance, role modeling, friendship, encouragement and coaching that a senior faculty member provides to a junior faculty member to facilitate the new faculty member's skill development and socialization into the culture of the academic institution (Kram, 1985; Palepu et al., 1998; Sorcinelli & Yun, 2007). The success of academic mentoring in other areas of higher education suggests the importance of investigating this aspect of occupational therapy programs, particularly in view of the challenges they face in this expanding field.

As occupational therapists consider or begin a career in academia, the opportunity to be mentored may provide assistance for these new faculty members with the transition from the clinic to the professoriate. However, a review of the occupational therapy literature reveals that there are only two studies that have investigated mentoring for occupational therapy faculty. Paul, Stein, Ottenbacher and Liu (2002) examined the role of academic mentoring on the research productivity of new faculty members. Provident (2004) sought to understand how faculty mentoring was perceived to determine the outcomes of a one-year curriculum-revision mentoring project.

Both of these studies were conducted prior to the change in the Accreditation Council for Occupational Therapy Education (ACOTE) standards for faculty in occupational therapy programs, which will require that a majority of occupational therapy faculty have an earned doctorate by 2012 (AOTA, 2008). Furthermore, it is important to understand the status of faculty development in occupational therapy programs for the faculty members are responsible for the education of occupational therapy students to meet the increasing and complex demands

in healthcare. Additionally, it is important to understand if occupational therapy faculty members prepared to take on the tripartite challenge of teaching, research and service; how they receive support in the form of mentoring and the influence of mentoring on their perception of improved academic success and academic socialization.

Need for Occupational Therapists - Need for Occupational Therapy Faculty

According to The United States Health Workforce Profile (Center for Health Workforce Studies, 2006) the demand for healthcare providers will continue to increase due to the projected 148% increase in the population of people who will be over 65 years old by the year 2050 (Department of Health & Human Services, 2008). The United States Bureau of Labor Statistics predicts that occupational therapy will be one of the fastest growing professions, with a 26% increase projected for occupational therapists and occupational therapy assistants from 2008-2018 (Powell, Kanny & Ciol, 2008; U.S. Bureau of Labor Statistics, 2010.).

To meet the need for occupational therapists, occupational therapy programs have seen a rise in student enrollment. The number of occupational therapy educational programs had remained relatively consistent since 2000 with 147 accredited entry-level master's occupational therapy programs and 128 occupational therapy assistant programs listed in the American Occupational Therapy Association's Academic Program Annual Data Report for 2007-2008 (American Occupational Therapy Association, AOTA, 2008). As of 2009, four occupational therapy doctoral programs have applied for accreditation and established programs are expanding (AOTA, 2009). Occupational therapy programs were raised to a graduate level in 2006 to prepare the students with a solid foundation in research and theory to meet the demands of the healthcare environment. Additionally, the total student enrollment in entry-level master's programs has increased from 10,008 in 2003-2004 to 12, 246 for 2007-2008 (AOTA, 2008). In

2008, there were 9,347 applicants to occupational therapy programs, with only 5,633 available positions (AOTA, 2008).

Occupational therapy students must become autonomous critical thinkers, apply clinical reasoning, effective in communication and team interaction, and able to understand, apply and develop effective evidenced based practice in their service delivery (Fisher, 2003; Fisher & Keehn, 2007). To meet the demands set for students to earn entry level master's degrees in occupational therapy, colleges and universities need faculty that are ready to assume the scholarly roles and tripartite responsibilities of teaching, research and service. Furthermore, occupational therapy programs must attract and retain faculty who can meet the priorities of the professoriate: the scholarship of discovery (creation of new knowledge), integration (interpretation of knowledge across disciplines or novel integration), application (research findings applied to practice) and teaching (transformation versus transmission of knowledge) (Boyer, 1990).

Compounding the issue of meeting the need for occupational therapy faculty who are prepared to assume the roles and responsibilities of the professoriate, is the "aging out" of current faculty, as well as a 10% vacancy rate as professors leave academia for other pursuits (Fisher & Keehn, 2007; Powell, et al., 2008). Further complicating these issues is the fact that the median age for occupational therapy faculty is 50 and department chairs is 53, therefore these faculty members may be considering retirement (Fisher & Keehn, 2007; Powell, et al., 2008).

Demographics from the 2010 AOTA workforce study (AOTA, 2010) revealed that of the 520 occupational therapy faculty respondents who completed the online survey, the median calculations for the following factors were: median age of 52, teaching in the current program for six years, and had been primarily a faculty member for 10 years. Eighty nine percent are female

and 11% male. The respondents reported that teaching was 49.1% of their workload; research 10.4%, scholarship represented 7.9%, service 9.5%, and other functions, including student advising and administration, was 23.1% of their workload (AOTA, 2010). The previous workforce study conducted in 2007 revealed that 12.8% (of the 553 OT faculty participants) indicated they planned to retire by 2011-2015 (AOTA, 2007). The 2010 workforce study findings revealed that the highest academic rank reported by the participants was: assistant professor (31.3%), followed by associate (29.8%), full (15%), instructor (14.8%), and other (8.5%). The highest academic degree was reported to be baccalaureate (30%), followed by master's (35%), PhD (16.2%), OTD (9.4%) Associate (3.3%) and ScD (1.2%). It is possible that the high indications of baccalaureate and associate degrees reflect the inclusion of occupational therapy assistant (OTA) programs, as the report did not discriminate OT versus OTA faculty when reporting academic degree. The status of occupational therapy assistant programs was not included in this literature review as the focus of this inquiry is on entry-level and doctoral occupational therapy program faculty.

Previously, Snodgrass and Shachar (2008) reported the demographics of occupational therapy faculty in their research on occupational therapy program director's leadership styles and leadership outcomes. Of the 184 faculty members who responded, 79% held the rank of assistant or associate professor. The age range reported was 40 to 60 years old (78%) and 87-90% of faculty members are women. Faculty reported being employed from 6 to 20 years with a 58% retention rate (Snodgrass & Shachar, 2008). The data were collected during 2005 to 2006 from a random selection of 500 faculty members from 98 occupational therapy programs in the United States.

Another issue surrounding recruitment and the needs of occupational therapy faculty members discussed by other authors is that many occupational therapists who pursue a career in academia transition from clinical practice must learn or enhance their teaching and research skills while learning the expectations of service requirements, tenure and promotion (Mitcham & Burik, 2007; Preissner, Cahill & Peterson, 2007). Additionally, current or prospective occupational therapy faculty members must be prepared to meet the Accreditation Council for Occupational Therapy Education's (ACOTE) revised standards and will require that the majority of full time occupational therapy faculty hold a doctoral degree by 2012 (AOTA, 2006). The ACOTE standards require that faculty "must possess expertise in curriculum design, content delivery and program evaluation" and that the "faculty responsibilities will be consistent with the mission of the institution" (AOTA, 2005, p. 5). Finally, faculty in occupational therapy programs must have degrees that are commensurate with those in their institution (Kearney, 2006). The results of the AOTA faculty workforce survey conducted by the AOTA Board of Directors in 2007 indicated that 40% of full time occupational therapy faculty members have a master's degree, 6% an occupational therapy doctorate (OTD), and 16% a Ph.D. While the more recent workforce study reveals that 16.2% of faculty who responded indicated they hold PhD and 9.4% indicated they hold an OTD, 35% reported they hold a master's level degree, to meet the ACOTE standards, the majority of occupational therapy faculty members in entry-level and doctoral programs must have a doctoral degree by 2012 (AOTA, 2006). Additional challenges that institutions face in the search for occupational therapy faculty are the issues discussed in the literature surrounding adjusting to the roles and responsibilities of the professoriate that many new or junior faculty members face when beginning a career in academia (Cawyer, et al., 2002;

Crepeau, Thibodaux & Parham, 1999; Crist, 1999; Mitcham & Gillette, 1999; Sawatzky & Enns, 2009; Siler & Kleiner, 2001; Sorcinelli, & Yun, 2007; Steinert, 2000).

Transition from Clinician to Faculty Member

A few authors in the occupational therapy literature have discussed the benefits and the challenges of transitioning from clinician to academician (Crepeau, et al., 1999; Crist, 1999; Mitcham & Gillette, 1999; Vassantachart & Rice, 1998). These authors identified that occupational therapists often sought a career in academia for reasons that included enjoyment of teaching, interest in moving the profession forward through research and to improve their own intellectual skills.

Crepeau, Thibodaux and Parham's article (1999) discussed that occupational therapists who become full-time faculty may transition to academia directly from graduate schools of occupational therapy, other related fields or from clinical practice. The authors report that these new faculty members face many challenges in becoming socialized into the specific culture of the academic institution (Crepeau, et al., 1999). This socialization process is described as the process by which faculty acquire the values and beliefs of the institution (Cawyer, et al., 2002; Crepeau, et al., 1999; Fox, et al., 1998; Tierney, 1997).

According to Crepeau, Thibodaux and Parham, new faculty must learn how to fit into their department and university as well as to understand what is required to achieve excellence in teaching, research and to serve on committees that will ensure academic success that leads to promotion and tenure. Crepeau, Thibodaux and Parham (1999) described the recollections of four occupational therapy faculty members to discuss the challenges of the transition from the clinic to academia. Several issues relating to the challenges of the transition were reported in this article, including the stress of transitioning to the roles and responsibilities after initial hire

and as faculty members strive to maintain a clear research agenda while juggling teaching, service commitments and their personal life. The authors concluded that professional development for new faculty could ease the transition to facilitate improved teaching, research and service skills. They propose that new occupational therapy faculty require assistance in developing time management and teaching skills, along with strategies for sustaining a research agenda and building a base of support.

Crist (1999) discussed the transition from clinician to professor could be more easily achieved if an occupational therapist is prepared. Crist (1999) wrote that the similarities between "teaching and doing therapy are not synonymous" (p. 15). She warns that faculty must view the students as an active participant in the educational process, yet, be able to nurture and provide opportunities for the student to develop the critical reasoning skills, ethical and technical skills required to be an effective healthcare provider. Through the review of the literature and anecdotal reports of four occupational therapy faculty members, Crist (1999) delineates the specific responsibilities of a being a professor. They included developing courses and curriculum, advising students, developing and conducting research, becoming active in department, university and community committees, learning how to network with colleagues to increase visibility and recognition and working towards promotion and tenure (Crist, 1999).

While there are some similarities between the skills required in clinical practice and those required in teaching, occupational therapists that enter academia have limited to no experience with a number of the roles and responsibilities essential to successful and productive work in higher education (Crepeau, et al., 1999; Crist, 1999; Mitcham & Gillette, 1999; Preissner, et al., 2007; Vassantachart & Rice, 1997). The similarities reported in the articles by Crepeau, Thibodaux and Parham and Crist were that occupational therapy faculty must be prepared to

educate students who will in turn deliver evidenced-based, ethical, effective and efficient interventions and be effective with a diverse clientele in the fast-paced, complex, challenging healthcare environment. In both articles, the overarching theme is the need for faculty to learn how to use their skills as clinicians to meet their teaching, research and service responsibilities. Additionally, new faculty members must concurrently seek out support to understand the academic culture, the shared values, and beliefs that drive the mission and vision of the institution, in order to meet the implicit and explicit expectations of that institution.

In 1999 Mitcham and Gillette found that 94% of occupational therapists who participated in 3-day faculty development workshops were clinicians who had pursued careers in academia and may have taught as guest lecturers, adjuncts or clinical instructors. The researchers used open-ended questions to gain an understanding of the reasons why these faculty members left clinical practice, what clinical skills they perceived would assist them in teaching and what challenges they perceived they would encounter as a faculty member. The responses were inductively analyzed and the following themes emerged. The participants shared that the reasons they decided to enter academia included a desire to teach, the lure of academia and the need for a change. The participants reported that the areas of strength as a clinician they thought would facilitate teaching were effective interpersonal, leadership and organizational skills and their connection to the clinic. However, the respondents reported that they felt insecure in adapting to the culture of the institution, learning expectations, advising students, developing instructional skills, and balancing multiple priorities. Mitcham and Gillette (1999) reported that over a 5-year period, additional programs for faculty development have been offered and attendees have reported benefits from their participation. This study served to assess the needs of new faculty and how the development of a faculty development program can meet those needs.

Vassantachart and Rice (1997) surveyed 165 faculty members in occupational therapy programs on the factors that led them to become professors and the relationship of the support provided in making the transition. Content validity and a pilot test for reliability of an adapted survey were conducted. The survey was used to collect data to examine why clinicians sought a career in academia, and if there was a relationship between faculty development, organizational culture and collegial support to assist faculty to adjust to their role. Faculty development practices included issues surrounding teaching skills, producing scholarly work and becoming socialized to the academic culture. Organizational culture was defined in this study as the knowledge of policies, awareness of resources, support services and the expectations of their faculty role (Vassantachart & Rice, 1997). The findings reported in this study were that faculty with 4-5 years experience ranked sharing ideas with peer faculty higher for faculty development practices, than faculty members with 6 -16 or 17-40 years of teaching. Vassantachart and Rice reported those faculty members with 4-5 years of teaching reported the strongest relationship between organizational culture and collegial support. However, there was a small but significant relationship found ($p < .05$), suggesting that organizational culture and collegial support were positively correlated to facilitating a better understanding of expectations of the institution and of available resources for all respondents.

The findings from this 1997 study must be viewed with caution given the current standards required for faculty in entry-level graduate and doctoral occupational therapy programs. Furthermore, recall bias may be a limitation in the use of Vassantachart and Rice's (1997) adapted 114-question mailed, self-report survey. Nevertheless, the researchers propose that with this first attempt at gathering data on the extent of support for occupational therapists who chose a career in academia, that mentoring programs, with support from the program chairs,

could assist new faculty in their adjustment to academia and the improve in their teaching, research and service responsibilities (Vassantachart & Rice, 1997).

The limited studies and literature for occupational therapy faculty thus far have proposed that the shift from clinician to academic faculty is paradoxical in that the new faculty member has a desire to teach, to be a part of the development of future therapists, to gain more knowledge and contribute to their profession. Yet the literature suggests that the challenge of developing new or enhanced skills in teaching, research and service and learning the expectations of the institution, and not feeling a part of the professoriate remains a challenge for new occupational therapy faculty members (Crepeau, et al., 1999; Crist, 1999; Mitcham & Gillette, 1999; Vassantachart & Rice, 1997).

The challenges noted by occupational therapy faculty are not unique: Harrison and Kelly (1996) explored the career satisfaction of physical therapy faculty who entered academia from a career in clinical practice. The researchers developed a survey for this study to collect data to measure the relationship between satisfaction with the faculty position and intention to remain. The 100 respondents reported that high workload (teaching); limited social support and feelings of isolation were perceived to be challenges. Despite limitations of respondent bias using a self-report measurement and cross-sectional study design, the researchers suggest that as the needs of physical therapy faculty are known, administration will understand the types of support that is required to retain faculty (Harrison & Kelly, 1996). In a longitudinal study, Olsen and Sorcinelli (1992) suggests that new faculty members experience stress as a result of a number of factors: time constraints, insufficient resources, balancing work and life outside of work, unrealistic expectations, lack of collegial relations and inadequate feedback, recognition and reward. In the research studies of Christian faculty (Cunningham, 1999) and medical faculty (Tracy, et al.,

2004) the researchers reported that new faculty members considered that a lack of time to meet with a mentor was a factor that led to stress.

Furthermore, many new faculty report that they are not adequately socialized into the culture of the institution in order to become aware of the expectations of tenure and promotion, or how to network with colleagues to improve their visibility and to develop collaboration opportunities. The negative results are that these new faculty members may leave their positions, thus the institution must repeat the process of recruiting and retraining replacement faculty (Dunham-Taylor, Lynn, Moore, McDaniel & Walker, 2008; Fox, et al., 1998; Fuller, Maniscalco-Feicht & Droege, 2008; Schrodt, et al., 2003; Zeind, et al., 2005).

One way that higher education institutions try to deal with the attrition of faculty members is through faculty development programs for teaching, research and service, socialization and acclimation to its mission and expectations, is through professional development programs or orientation programs for new faculty (Fox, et al., 1998; Mitcham & Gillette, 1999; Moran & Ashton, 2004; Sorcinelli & Yun, 2007; Taylor & Berry, 2008; Zeind et al., 2005; Vassantachart & Rice, 1997). Mitcham and Gillette (1999) proposed that an occupational therapy faculty development program is necessary to provide new and experienced occupational therapy faculty members to develop or enhance teaching, research and service skills.

In 2002, Mitcham, Lancaster and Stone surveyed 106 faculty members who participated in face-to-face occupational therapy faculty development programs. The participants reported that the most positive changes noted after the program were in the areas of design, implementation and evaluation of a course and in their overall teaching and career progress (Mitcham, Lancaster & Stone, 2002). While there was no discussion of mentoring as a form of

professional development, the respondents overwhelmingly reported that they preferred the face-to-face format of the workshops and being able to learn from a master teacher. The researchers suggest, based upon their findings, that further faculty development programs should continue using the role modeling approach of a master teacher in their faculty development programs, as it "served as a form of coaching and mentoring" (Mitcham, Lancaster & Stone, 2002, p. 338).

Given the limited research on occupational therapy faculty development programs, it was necessary to review literature in other healthcare programs to understand if the programs served to ease the transition from a clinical to an academic career. Medical faculty mentoring programs were found to be an integral part of faculty development and therefore, investigated to examine if the faculty who participated reported improvement in teaching, research, service and socialization into the institution (Fox et al., 1998; Garman, Wingard & Reznik, 2001; Tracy, et al., 2004; Zeind et al., 2005). Fox et al. (1998) found that the 8 psychiatry faculty members who participated in a 1:1 mentoring program (an assigned mentor [senior faculty] with a mentee [junior faculty, untenured]) reported a positive difference in their understanding of the expectations of their roles and responsibilities from the pre to post survey developed by the researchers.

Tracy et al. (2004) qualitative study with18 obstetrics and gynecology junior faculty members were conducted to gain a deeper understanding of the promotion process and found reoccurring themes of camaraderie and support. The senior faculty who were mentors reported a sense of altruism as a result of the mentoring experience. Zeind et al. (2005) suggested that the results of the pre and post survey of the 93 pharmaceutical junior faculty (mentees) and 73 pharmaceutical senior faculty (mentors) in a mentoring program resulted a perceived ability in learning about teaching, research and service thus easing the transition from clinician to

professor. The literature for nursing faculty and non healthcare faculty also suggests that academic mentoring has been found to be beneficial for new faculty members in the areas of learning or enhancing the tripartite responsibilities of the professoriate, easing the transition for clinicians into academic and enhancing a sense of belonging and understanding of the tenure and promotion expectations (Boyle & Boice, 1998; Garman, et al., 2001; Jones & Tucker-Allen, 1999; Palepu, et al., 1998; Sands, et al., 1991; Williams & Blackburn, 1988). However, mentoring for faculty members, as a form of professional development for faculty, was found in only two studies in the occupational therapy literature (Paul, et al., 2002; Provident, 2004).

Mentoring

Mentoring was first discussed in the fictional accounts in Homer's epic poem, *The Odyssey*, as the character Mentor guided, befriended, supported and facilitated the development of the King's son, Odysseus over 10 years (Luna & Cullen, 1995; Provident, 2004; Roche, 1979). This concept of mentoring has been applied in business to facilitate the development of new employees through the partnership with a senior employee (Kram, 1985; Levinson, et al., 1978; Roche, 1979; Zaleznik, 1977). In Roche's (1979) seminal study, *Much Ado About Mentors*, he examined the satisfaction of over 4000 top business executives who had participated in a mentoring relationship. Over 78% of the participants reported that mentoring substantially influenced their own professional development and 70.2% reported its substantial influence over their career progress (Roche, 1979). Roche concluded that for the 20% of executives whom had a mentoring relationship, the intrinsic benefits of mentoring contributed to the satisfaction and pleasure in their work and that the protégés reported they were more likely to become a mentor themselves.

Zaleznik (1977) proposes that a mentor, a senior, experienced executive, contributes to and benefits from the mentoring relationship of new executives as a result of facilitating the development leadership behaviors in the less experienced employee. The protégé is considered the younger or less experienced newcomer who may benefit from the support and guidance of the mentor in establishing the necessary skills and behaviors to achieve success, satisfaction and self-confidence through the relationship. In turn the mentor also benefits from sharing his or her wisdom and encouraging the inexperienced worker (Kram, 1985; Levinson, Darrow, Klein & McKee, 1978; Roche, 1979; Zaleznik, 1977).

Similar to the description of mentors and protégés in business, mentors and mentees in academic environments have been defined as follows:

- A faculty mentor is typically a senior faculty member who is experienced, has an advanced rank (associate or full professor), provides various types of support, guidance, stimulating intellectual growth, visibility, protection and derives sense of generativity from participating in a mentoring relationship (Palepu, et, al., 1998; Paul et al., 2002; Williams & Blackburn, 1988; Zeind et al, 2005).
- The mentee in academia is typically a junior faculty member who is less experienced, untenured or eligible for reappointment, has taught at that institution for 3 to 5 years, and may wish or need to improve or learn tripartite skills of the professoriate (teaching, research and service), want to develop a sense of autonomy, achieve academic success (reappointment, tenure, promotion) and wishes to become successfully socialized into the culture of the institution (Paul et al., 2002; Thorndyke, et al., 2008; Williams & Blackburn, 1988).

Mentoring for occupational therapy faculty.

Paul, Stein, Ottenbacher and Liu (2002) replicated the study by Williams and Blackburn (1988) to compare the research productivity of occupational therapy faculty who were mentored and those who were not. These researchers sought to assess if a relationship existed between institutional support, mentoring behaviors identified by faculty and the amount of research productivity perceived by the participants to be related to these factors. Paul et al. (2002) collected data from a sample of 127 occupational therapy faculty members who were randomly selected from an AOTA database of educational programs. While the researchers did not allude to a theoretical basis for this study, they referenced mentoring as a stage of career development and referred to mentoring as a psychological and physical contract to assist faculty in developing skills necessary to be successful in academia (Paul et al., 2002). The participants in the study were comprised of 49 faculty members who were mentored (mentees) and 44 faculty members who were not mentored. Theses respondents were instructors or assistant professors with a mean age of 43 who had taught for an average of 3.5 years. The 27 senior faculty members who were mentors and 8 faculty members who were not mentors had a mean age of 51 or over, had taught for over 12 years and were associate or full professors. Paul et al. (2002) adapted the questionnaire developed by Williams and Blackburn (1988), and discussed how William and Blackburn conducted their own validity and reliability measurements of the questionnaire. To establish content reliability, Paul et al. reported that two junior and two senior faculty members independently reviewed the questionnaire. Therefore the reliability and validity of this adapted questionnaire must be considered with caution in this study due to the limited assessment of reliability and no report of validity testing.

Paul et al. (2002) analyzed the research productivity components and the institutional factors originally found and reported in the Williams and Blackburn (1988) study using the

Spearman's-rho correlation to determine what relationship exist between these factors. To analyze the influence of mentoring on faculty, an analysis of variance (ANOVA) was conducted to compare research productivity between mentored and non-mentored faculty and between faculty members ranks (instructor, assistant, associate). While Williams and Blackburn reported low correlations between institutional support and research productivity, Paul et al. (2002) found that there were low to moderate correlations between the institutional support and research productivity reported by these occupational therapy faculty member participants.

It was further reported that mentees reported spending more hours per week on research than non-mentees, while mentors spent fewer hours on research than did those faculty who were not mentors. However, for total research productivity there was not a significant difference between senior faculty mentors and senior faculty who were not mentors. Junior faculty members who were mentored were found to be significantly more productive ($p > 0.05$) than those who were not. Similar findings were reported in the Williams and Blackburn (1988) study suggesting that mentoring had a positive effect on research productivity of junior faculty members in the findings of the study.

The research of both Williams and Blackburn (1988) and Paul et al. (2002) captured other positive aspects of mentoring, albeit, different ones. Paul et al. indicated that the majority of the mentees and mentors began the relationship as an informal matching, that is, a mutual agreement by the faculty members to enter into a mentoring relationship. This was similar to the findings in Sands, Parson and Duane (1991) who found that informal mentoring was preferred and Kram (1985) who proposed that informal mentoring results in more effective and long-term relationships. This is in contrast with the findings of Boyle and Boice (1998) and Garman, Wingard and Reznik (2001) who found that formalized mentoring opportunities (being assigned

a mentor by the department or administration) were perceived to be effective in the areas of satisfaction and socialization of junior faculty. Paul et al. (2002) concluded that the reported benefits of mentoring for faculty, found in the literature, and the results of this study, suggests that mentoring is valuable for new occupational therapy faculty to increase their research productivity.

To date the only other study in the occupational therapy literature that has investigated mentoring of faculty is the dissertation work of Provident (2004). In this qualitative study, the researcher used a critical case study design to determine the outcomes of a one-year curriculum-revision mentoring project that was sponsored by the American Occupational Therapy Foundation. Provident (2004) used the theoretical framework of adult learning theorists and referenced the mentoring theory proposed by Kram (1985) as a conceptual framework. The sample was chosen from five teams of assigned mentors and faculty that had applied to participate in the project. Two teams were chosen to obtain a multiple case analysis to understand the experience of the participants. One team had six faculty members with one mentor and the other team had five faculty members and two mentors, the ranks of the faculty members was not reported except to say that they varied: assistant, associate and full professors (Provident, 2004). Data from semi structured interviews; phone conversations, monthly electronic journals and a researcher-developed questionnaire were analyzed through content analysis. As in the qualitative studies of nursing and medical faculty members, the participants reported that the benefits of mentoring was that the mentor acted as an informer or as a guide through the process (Siler & Kleiner, 2001; Tracy, et al., 2004). Provident (2004) reported the challenges perceived by the participants as the importance of having enough time for communication, and that for one group, the reciprocity of working together may have been

negatively impeded by a faculty member's availability and willingness to participate in the mentoring relationship. Despite the variety of ranks of the mentees and mentors and the differences in the two cases, Provident (2004) proposed that the themes that emerged from the data suggest that the mentoring experience had a positive influence on the task of revising the occupational therapy curriculum.

In summary, the work of Provident (2004) and Paul et al. (2002) have contributed to what is known regarding faculty development and mentoring to facilitate and improve career skills for occupational therapy faculty members. Given the limited evidence of what is currently occurring in occupational therapy education programs to support new faculty members in achieving academic success, an understanding of how academic mentoring is perceived in other healthcare and non healthcare higher educational programs provides a background of the problem. Therefore, a more thorough understanding of the issues surrounding mentoring for faculty in other health sciences programs was gained by reviewing literature from studies for nursing and medical faculty members.

Mentoring is discussed in detail or at least mentioned in articles across the disciplines, ranging from the studies in academic mentoring for non healthcare faculty, medical and nursing faculty, as an effective approach with regard to providing early and substantial support to new faculty. The following sections will explore the occurrence, nature and influence of faculty mentoring relationships, who and how the process evolves, the influence of mentoring on improving or developing teaching, research and service abilities, achieving academic success and becoming adequately socialized into the culture of academia through a review of the literature and research in health sciences and other higher education programs.

Mentoring faculty.

In the literature reviewed that examines mentoring for faculty the process is defined as a reciprocal relationship between a more experienced faculty member who guides, coaches, supports and acts as a role model for new, less experienced faculty (Gaskin, Lumpkin & Tennant, 2003; Palepu, et al., 1998; Sands, et al., 1991). Although many definitions of a faculty mentor are provided in the studies reviewed, the consensus is that the mentor is a more experienced senior faculty member who assists the new faculty member in the development or enhancement of scholarly teaching, research production and participating in appropriate service responsibilities in order to achieve academic success in the form of promotion and tenure (Boyle & Boice, 1998; Garman, et al., 2001; Jones & Tucker-Allen, 1999; Williams & Blackburn, 1988). The mentor typically derives a sense of altruism and benefits from the shared teaching and learning process (Sorcinelli & Yun, 2007; Tracy, et al., 2004). Additionally, the mentor serves as a facilitator to promote academic/organizational socialization necessary for the new faculty member to understand the implicit and explicit expectations of the institution and to develop a sense of belonging (Bower, 2007; Cawyer, et al., 2002; Frandsen, 2003; Sorcinelli & Yun, 2007; Tracy, et al., 2004; Vassantachart & Rice, 1997; Zeind, et al., 2005).

The recipient of the mentoring relationship, as defined in the studies, is a novice or junior faculty member, less experienced in the professoriate role and understanding of the expectations to achieve academic success: tenure and promotion. The junior faculty member is considered the mentee, in business and a few studies of faculty mentoring, the protégé (Kram, 1985; Roche, 1979; Zaleznik, 1977). According to most studies, the junior faculty member is typically on the tenure track or seeks to earn tenure and promotion or reappointment, and has taught for one to five years (Paul, et al., 2002; Williams & Blackburn, 1988; Zeind, et al., 2005).

Mentoring for academic success: Teaching, research, service and tenure, Promotion or reappointment.

The tripartite responsibilities of the professoriate reported in the literature are excellence in teaching, research and service (Houston, Meyer, & Paewai, 2006; Kosoko-Lasaki, et al., 2006; Luna & Cullen, 1995; Miller & Noland, 2003; Moran & Ashton, 2004; Peterson, et al., 2009; Pololi, Dennis, Winn & Mitchell, 2003; Sorcinelli, 1994). Faculty members are expected to be able to develop syllabi, curriculum and course content using current evidenced based teaching methods while simultaneously infusing the latest technology into their course work. As a large part of their responsibilities, faculty members provide academic advisement and thesis mentoring for students. Depending on the type of institution, research productivity may be a large part of their responsibilities. Research productivity may include conducting research, publishing the results, articles and/or books; presenting workshops, research finding or posters at scholarly conferences and obtaining grants (Paul, Stein, Ottenbacher & Liu, 2002; Palepu, et al., 1998; Thorndyke, Gusic & Milner, 2008; Williams & Blackburn, 1988). Faculty members are required to provide service to the department, program institution and local community depending on the requirements of that institution. Service commitments may include sitting on a departmental, program and/or university committee and may extend to service outside of the institution into the local community, state, national or global level (Latif & Grillo, 2001; Miller & Noland, 2003). Despite the variability in the types of responsibilities that are expected of faculty members, the following research has examined the perception and impact of mentoring for faculty on the development, improvement or guidance to improve in their tripartite roles, achieving tenure/promotion or reappointment and academic socialization.

To understand the experience and meaning of what it is to be a new faculty member in a nursing program, Siler and Kleiner (2001) conducted a qualitative study with six new and six experienced faculty members. Using the phenomenological approach, the researchers discussed the themes of "expectations, learning the game, being mentored and fitting in", that emerged from the face-to-face and phone open-ended interviews (Siler & Kleiner, 2001, p. 399). Participants reported that the strongest feelings that caused them stress was the realization that "not anyone can teach" and feeling as if they were on their own in trying to understand the expectations and how to seek out information to succeed. This qualitative investigation provides an understanding of the lived experience of these participants concerning the stress of entering, succeeding and remaining in academia and brings into focus issues of new faculty adjustment. However, a limitation in this study is that Siler and Kleiner (2001) did not discuss any attempts at credibility or trustworthiness procedures.

The concerns regarding stress and the challenges of an academic career have been reported in a descriptive article by Dunham-Taylor, Lynn, Moore, McDaniel and Walker (2008). The authors discuss the need for new nursing faculty members to acquire information regarding the latest teaching technology, organizing teaching responsibilities, understand the promotion and tenure process and how to improve in the tripartite responsibilities of teaching research and service. The authors interviewed nurse faculty members and suggested that the reported positive effects of mentoring for new faculty members in nursing educational programs may be a way to ease the transition for nurse practitioner to professor, to facilitate academic success and improve retention (Dunham-Taylor, et al., 2008).

Research productivity has been suggested to be an important marker of a faculty member's academic success (Boice, 1992; Luna and Cullen, 1995; Olsen & Sorcinelli, 1992;

Pagliarulo & Lynn, 2003; Paul et al., 2002; Sands, et al., 1991; Williams & Blackburn, 1988). Williams and Blackburn (1988) investigated the influence of mentoring for faculty to determine the prevalence of research productivity for nurse faculty members. In this empirical and frequently replicated work of Williams and Blackburn (1988), the researchers compared the level of productivity of junior faculty who were mentored to those who were not mentored. The purpose of this investigation was to determine what influence mentoring had on research productivity, the types of mentoring functions perceived to be most effective, if there was institutional support for mentoring and the relationship between institutional support and research productivity. A sample of senior faculty (n=53 mentors) and junior faculty (n=50 mentees) was compared to senior faculty (n = 39) and junior faculty (n = 41) from 20 top colleges of nursing in the United States. The theoretical concept that guided this investigation, according to Williams and Blackburn (1988), was that "scholarly behaviors (research and dissemination of findings) were integral to faculty roles and appropriate social interaction with senior members of the institution can be facilitated" (p. 205).

These researchers created a questionnaire to gather the perception of the mentor/mentee relationship and mentoring functions on research productivity, the type of mentorship functions that predicts types of research productivity, and the institutional contribution to research productivity (Williams & Blackburn, 1988). Nurse academics reviewed the instrument for content validity and a Cronbach's alpha of .57 to .90 was reported to address internal consistency of mentorship, productivity and institutional support. A second pretest was conducted with nurse faculty not in the study sample, which resulted in the final revision that included 117 variables (Williams & Blackburn, 1988). To determine the factors that were correlated with mentorship characteristics, the data was analyzed using a principal component analysis (PCA) and varimax

rotation factor analysis. A factor analysis is a statistical procedure that is used with abstract concepts, such as attitude or behavior, to assess the patterns of relations and therefore reduce the variables to factors (Portney & Watkins, 2009).

To examine these abstract concepts and the linear correlations, the principal component analysis was used to discover which variables "fit together" and to more clearly determine where the factors are loaded, or have the least amount of variance, a varimax rotation was used. Williams and Blackburn (1988) reported that out of 19 mentorship characteristics, four factors emerged with loadings from .45 to .81 (p. 205). Portney and Watkins (2009) discuss that a factor loading of greater than .30 to .40 can be considered to indicate some degree of relationship (p. 708). The mentor function that was "Role-Specific, Modeling/Teaching" emerged with the highest loading and was reported to be more predictive of research productivity than the characteristics of Encouraging the Dream, Organizational Socialization and Advocate. Role–Specific, Modeling/Teaching was found to include those aspects of a mentoring relationship that helped the mentees with skills to plan research, obtain grants, find funding resources, co-authorship and assistance publishing research (Williams & Blackburn, 1988, p. 205). This finding is congruent with many of the career functions proposed by Kram (1985). The institutional factor of a professionally stimulating environment was found to predict the highest level of productivity (r =. 01) over clerical/technical assistance and general professional support.

Williams and Blackburn (1988) concluded that both mentors and mentees perceived a positive mentorship relationship, specifically using a collaborative, role-modeling/teaching approach, which facilitated more research productivity. While the Williams and Blackburn (1988) study was the seminal work that was a foundation for similar studies of faculty mentoring and research productivity, the limitations reported in this study was the use of a self report

questionnaire which introduces recall bias and a lack of generalizability to other settings or populations.

Despite these limitations, the work of Williams and Blackburn (1988) was replicated in other higher education programs to understand mentoring of faculty members. Sands, Parson and Duane (1991) suggested the mentoring functions of career guide and intellectual guide to likely contribute to research productivity. These researchers proposed that the career and intellectual guide functions of a mentor included collaboration on research, advice about grant proposals and funding, and collaboration for and review of papers for publication.

Sands, Parson and Duane (1991) used the theoretical lens of adult developmental stages (Erickson, 1963; Levinson, et al., 1978) and the ecological model to explain the development of relationships between a person within their context of an academic institution with its own organizational culture and expectations (Germain & Gitterman, 1987). The researchers created an instrument by adapting tools developed for similar studies, a review of the literature and a qualitative study of junior faculty. The tool was validated for content with an 18-member panel of experts and pilot tested for reliability with 9 faculty members, yet no psychometric measures were reported. Both male and female faculty members (n=347) participated in the mailed survey with response rate of 64.5%. The faculty members represented a mixed ranking of tenure and non-tenure track, assistant, associate or full professors. The researchers discussed results that revealed that although most respondents had some form of mentoring (72%) in their past, most was as a graduate student (55.2% of females and 47.6% of males). It was reported that as a faculty member only 35.9% of females and 32.5% of males were being mentored at their university. The mentoring patterns reported were that most found a mentor through a self selected manner, most mentees were assistant professors, mentoring took place through face-to-

face meetings, and 10 to 30 hours per semesters were spent in this relationship (Sands, Parson & Duane, 1991).

A factor analysis of the 29 mentor functions was conducted to determine the functions preferred by the respondents. Based upon the Likert scale ratings (1 = not important to 5=very important) a principal component analysis with a varimax rotation was conducted resulting in four factors that emerged with eigenvalues over 1.0. An eigenvalue is a statistical cutoff point that reveals how much of the total variance is explained by a factor (Portney & Watkins, 2009). The four factors are ordered here from highest to lowest: friend, career guide, information source and intellectual guide. The researchers then conducted a multiple regression analysis to determine the type of mentoring function predicted by the independent variables of rank, gender and experience with a mentoring relationship. The researchers concluded that faculty rank of tenured predicted the mentoring function of "friend"; faculty in the Arts and Sciences predicted "career guide"; female faculty predicted "career guide and information source" and those who were previously mentored predicted "intellectual guide". Sands, Parson and Duane's (1991) research contributed knowledge of the preferred mentoring functions based on faculty member's academic demographics, and while the results are perceptions of the respondents, the research methods and analysis aligned with the mentoring functions proposed by Kram (1985). The limitations of this study are the lack of generalizability to other universities and the recall bias due to the self-report questionnaire; however, the data collected and analyzed provided a descriptive understanding of the nature of mentorship and the findings from this study have been cited and replicated in subsequent studies in nursing, and communication higher education programs (Cunningham, 1999; Frandsen, 2003; Schrodt, et al., 2003).

To gain a deeper understanding of the needs of medical faculty, Palepu, et al. (1998) and Pololi, Dennis, Winn and Mitchell (2003) developed questionnaires to discover if there was a need for faculty development and mentoring programs, the prevalence of mentoring, the quality of the mentoring relationship, variation by gender or race, and the perception of mentoring on the improvement in academic skills, understanding tenure and promotion and job satisfaction. Palepu, et al. (1998) sent a 177-item questionnaire to a stratified, random sampling of faculty in 24 randomly selected medical schools in the United States to measure faculty member's career satisfaction, perceived support of the work environment and career and psychosocial support based on the mentoring functions proposed by Kram (1985). The questionnaire's reliability was assessed to have a Cronbach's alpha ranging from .78 to .93, but validity of the scales was not provided in the article. The data from 1,808 faculty members, who responded, representing a 69% return rate, were analyzed to compare junior faculty with and without mentors, by gender or race and by professional rank. Junior faculty with mentors ($n = 703$) as compared to those without mentors ($n = 599$) were calculated with an ANOVA to calculate the difference between groups. While there were similar percentages of faculty of gender, race and rank that reported they have mentors, the women who did not have a mentor reported that they perceived it negatively affected their career growth. Faculty who had mentors reported support high for teaching, research and service responsibilities ($p <. 0001$), improved skills for research ($p <. 0001$) and obtaining grants and career satisfaction ($p < .003$). Overall faculty members who were mentored reported higher scores for the mentoring support they received in most areas than faculty members without mentors (Palepu et al., 1998). Limitations of this study conducted in 1995, is that it is cross-sectional and the survey method of data collection may introduce the possibility of self-report bias. However, the Palepu et al. (1998) study was one of the first to

describe the extent and perceived benefits of mentoring for a randomized sample of medical faculty members.

In a longitudinal study, Thorndyke, Gusic and Milner (2008) evaluated 165 medical junior faculty members who had participated in a formal mentoring program at three different stages: the end of the program, six and 18 months post program. The focus of the program was mentoring provided through a formal assignment of a mentor to mentee to complete a project. Through the process and completion of the project, the mentees were able to learn or improve their skills in teaching and research, thus the experience and tangible project was designed to add to the mentees' professional dossier for reappointment or tenure. The project was considered to be both a "means and the end" as the mentors and mentees were able to assess the results of their partnering and the results of the project, thus, data could be both subjectively and objectively measured to assess the professional development of the Penn State College of Medicine junior faculty (Thorndyke, et al., 2008, p. 158). The researchers developed a model of a mentoring program, based on the project, to assess the outcomes of the mentoring program. A pre and post questionnaire was given to the participants. Junior faculty members were purposefully matched with a mentor (a senior faculty member) for the project. Measures of the relationship, skill development, and successful completion of the project and the perceived impact of the project on the mentee's future career success were measured for 97 faculty members who participated in the program over a 5 year period. The researchers reported that over 90% of the junior faculty members who participated reported satisfaction with the process and project. Both qualitative and quantitative data collected suggested that 85 % mentees were satisfied with the mentors and with the relationship (87%). A longitudinal follow up questionnaire was given after 6 and 18 months to the mentees and the reported mean scores of 3.08 at 6 months to 4.37 at 18 months

were suggested to indicate that the participants improved in their skills (1=strongly disagree to 5=strongly agree; 5 point Likert scale). The researchers concluded that the results were in agreement that the program was beneficial to the development of skills needed by the junior faculty members (Thorndyke, et al., 2008).

While the studies reviewed thus far have focused on the development of research and teaching skills, the area specific to service commitments required by faculty members is not as extensive. Miller and Noland (2003) conducted a qualitative study of 11 senior faculty members in a heath education program to understand the type of advice that senior faculty perceived should be provided for junior faculty. The themes that emerged from the data were that senior faculty felt advice should be provided in the areas of teaching (balance workload, advising students, using resources), research (have a focus, know expectations, working with teams) and service (seek appropriate to achieve tenure & promotion).

Miller and Noland (2003) explored the content of mentoring relationships between senior and junior health education faculty member's understanding of the knowledge and behaviors believed to be important for faculty success. Through phone and in person interviews, based on 18 structured questions, the researchers interpreted the data to reveal that there are "unwritten" roles for academic success with an emphasis on "appropriate" service as necessary to achieve tenure and promotion. Furthermore, the respondents indicated that both the quantity of service and the opportunity to become more visible at the institution and to learn form more experience faculty members was also considered important. However, service was considered specific to promotion as it facilitates connection it was not considered to be as important as the responsibilities of research (planning, collaboration and knowing the expectations) and teaching (being available to students, being able to balance time and locating and finding resources).

Similarly, in a statement paper, Popovich and Abel (2002) discuss how pharmaceutical faculty members need to extend the definition of scholarship to encompass the scholarship of clinical service to be recognized and added to the faculty member's tenure and promotion achievements.

Latif and Grillo (2001) also investigated the role of service in their study that explored the satisfaction of pharmaceutical faculty members regarding the roles of the professoriate. The researchers developed a 52-item, 5-point Likert scale Faculty Satisfaction Questionnaire. The data collected from the 195 respondents was reported to indicate that research was considered to be of most importance (M=4.17), teaching slightly less (M=3.98) and service the least important (M=3.49). Respondents indicated that there was a lack of time to devote to service responsibilities given the emphasis on research (Latif & Grillo, 2001). While teaching, research and service define the tripartite roles and occupations of faculty members, how successful the faculty members are in each area leads to their achievement of tenure, promotion or reappointment.

Much of the literature surrounding the effects of mentorship on tenure, promotion or reappointment has been investigated as a part of the overall impact of mentoring. However, Balogun and Sloan (2006) and Kosoko-Lasaki, Sonnino and Voytko (2006) isolated the variables of tenure and promotion when analyzing the data from their studies. Although Balogun and Sloan (2006) did not measure mentoring as an aspect of their study, their examination of the trends for tenure policies and practice as reported by the 262 deans of nursing and allied health programs nationwide provides background information. The researchers sought to understand if there is a shift in the requirements for tenure and promotion given the trend for healthcare practitioners to use evidence based practice and the accountability of the universities granting tenure. This information can provide knowledge about the expectations of untenured faculty

members and serve as a way to inform prospective faculty about the preparation and credentials that are required. The researchers developed and obtained content validity of a survey to determine the trends in tenure and promotion polices and to rate the criteria for tenure based on the faculty member's teaching, research and service. Over 70% of both the nursing and allied health deans reported faculty were required to hold a doctoral degree to obtain tenure and both cohorts of deans supported a tenure system. Interestingly, teaching was considered to be more important to tenure by both the nursing and allied health deans 77%). However, research, as a criterion for tenure, was rated important by 22% of allied health deans and 10% of nursing deans. Service was rated the lowest in importance with allied health deans rating it at 1% and nursing deans at 4%. Literature that has discussed the balance of faculty work, teaching, research and service, is varied across institutions, programs, the tenure or reappointment polices of the institution, rank of the faculty member and how scholarship is considered (Boyer, 1990; Huber, 2002). However, an understanding of the impact of the level of expertise for teaching, research and service responsibilities on the acquisition of tenure or reappointment is important to understand when examining the influence of mentorship opportunities.

In the Kosoko-Lasaki, Sonnino and Voytko (2006) study, women and minority health professions faculty were surveyed to determine their progress as a result of being in a mentoring program. The mentoring program was offered at two different universities, Creighton University of Health Sciences (CU SOM) and Wake Forest University School of Medicine (WFU SOM). While the researchers discuss the findings from this study on the progress of both students and junior faculty members, the results of the faculty members who were assessed will be discussed here. After two years, the researchers report that the retention rate for the 10 faculty participants at CU SOM was 100% for both the first year mentoring program and the second. After five

years, the retention rate for the first year mentoring program was 58% and the second year program was projected to be 81%. One faculty member was tenured and three were promoted during the first year of the mentoring program. After the second mentoring program there was an advancement rate of 100%. The results for the WFU SOM were reported for the 25 junior faculty members who participated in their mentoring program that six were promoted to associate, 17 left the institution and six withdrew to find their own mentor. The researchers report that the positive results for tenure and promotion of the women and minority faculty members who participated in these two programs also were proposed to be a "valuable tool for recruitment" (Kosoko-Lasaki, et al., 2006, p. 1459). The researchers provided the survey tool they developed to assess the mentoring program at WFU SOM, but do not discuss reliability or validity measures; however, they discuss future modification to investigated objective measures to evaluate the program. Despite the small sample size in this study and the emphasis on woman and minority faculty at these two universities, the proposed benefits of the mentoring program reported may provided a starting point for other programs that have primarily women and or minority faculty members.

To further understand the impact of mentoring on tenure for faculty, Greene, O'Connor, Good, Ledford, Peel and Zhang (2008) describe the challenges and needs of junior faculty in six public universities in the southeastern U.S. The researchers developed and obtained content validity for a survey to gather information about the type of university (research level), demographics of the untenured faculty to be surveyed, and to discover how these faculty member's perceive the expectations of teaching, research and service, the support they receive in the form of mentoring and how that support assists them in balancing teaching, research and service. The survey was distributed online with a response rate of 50%. Data were analyzed

using frequencies, and means for demographic information, ANOVA to understand the differences among the three types of institutions (research extensive, research intensive and comprehensive), and multinomial logistic analysis models to identify the factors (multiple independent variables) that may influence a faculty member's ability to manage their workload (Greene, et al., 2008). Open-ended questions were also used to gain a deeper understanding for the faculty member's experience through qualitative analysis methods.

Greene et al. (2008) reported that while the teaching represented 62% of the workload of the faculty, the expectation for research productivity was higher in order to achieve tenure. The researchers reported that the faculty members perceived that an imbalance of a high teaching workload coupled with the expectation to produce publications was considered as a source of stress. Faculty from research-intensive universities reported the greatest disparity between teaching, research and service, with research as the priority expectation, despite the reality of high teaching loads. Support for junior faculty members was reported to be varied, both formal and informal systems were in place and some respondents (10%) reported no support. Support included assistance from colleagues (63%), receiving clear expectations from administration (26%) and extra time for teaching (relief from other duties), professional development workshops and peer observation (18%). The faculty rated their perception of the type of support they received using a 5 point Likert scale (5 being the highest) with an overall rating for teaching (M=3.56); research support (M=2.79); service (M=2.97) and technology the highest (M=4.13). Thirty nine percent of the respondents reported that they wanted research support through collaboration with a colleague, funds for research and writing groups. Mentoring was the next most frequently requested support (14%). Despite the differences in the three types of universities and the levels or absence of support, the researchers propose that the findings from

this study suggest that a comprehensive system of support be provided for untenured faculty given the work load imbalance and disparity between teaching load and research productivity expectations (Green et al., 2008).

Peterson, Stuart, Hargis and Patel (2009) examined the relationship between institutional programs and new faculty characteristics to understand the tenure and promotion trends in physical therapy programs. The researchers created a survey to gather data from department chairs in physical therapy programs in the U.S. The researchers defined a successful professor as having achieved tenure and/or promotion and sought to discover what characteristics of the institution and characteristics of the faculty members that may suggest an association between the factors. Institutions with mentoring programs were reported to have a higher percentage (74.4%) of faculty members who achieved tenure or promotion. Furthermore, the data revealed that these participants reported that both teaching and scholarship (research) were important (44.2%); which was higher than teaching (23.9%) or scholarship alone (31.9%). Interestingly, of the 118 respondents, 50% reported there was no release time for research, teaching or service and the other 50% reported that their institutions did provide release time. Data were reported to reveal that faculty who held a doctorate comprised the majority of faculty (71.8%). The relationship between characteristics of the institution and characteristics of the faculty was examined and the data was interpreted to reveal that those institutions that required faculty driven research projects for students had a higher instance of achieving tenure or promotion ($p = <.01$). While this study examined only physical therapy faculty members, the researchers suggest that at those institutions that offered mentoring to these faculty members had a higher academic success rate than those who did not (Peterson et al., 2009).

The studies examined thus far have suggested that teaching, research and service are vital to the academic success of new faculty members. Mentoring has been suggested to be a way to provide support for new faculty members, yet how it is offered, the duration of the experience and the impact on the faculty member studied are different among the types of universities, the population and programs. However, similarities discussed are the need for the support for new faculty members to ease the transition into their new occupation as a professor while learning or improving in the roles of the professoriate. One other area that is of concern for new faculty members is being socialized into the academic culture. Junior faculty members need to understand the explicit and implicit expectations of academic achievement and political forces within the institution to achieve a sense of satisfaction with their role as a faculty member (Fox, et al., 1998; Schrodt, et al., 2003; Tracy, et al., 2004; Wasserstein, et al., 2007).

The literature reveals that faculty academic socialization includes those factors that relate to understanding the culture of the institution (Schrodt, et al., 2003; Vassantachart & Rice, 1997). Each institution has their own values, beliefs and expectations of behavior and work practices. The expectations are both explicit (shared in the form of a job description, faculty orientation programs or departmental procedures) and implicit (shared by department chairs, other faculty or observed patterns of behavior) (Schrodt, et al., 2003).

Mentoring for academic socialization.

What has been found in the studies reviewed thus far, is that many new faculty report that they are not adequately socialized into the culture of the institution in order to become aware of the expectations of tenure and promotion, or how to network with colleagues to improve their visibility and collaboration opportunities. The negative results are that these new faculty members may leave their positions, thus the institution must repeat the process of recruiting and

retraining replacement faculty (Dunham-Taylor, et al., 2008; Fox, et al., 1998; Fuller, et al., 2008; Schrodt, et al., 2003; Zeind, et al., 2005).

Schrodt, Cawyer and Sanders (2003) investigated the relationship between academic mentoring behaviors and the satisfaction and socialization of new faculty members in a mixed methods study. The researchers collected data from 259 faculty members from the National Communication Association comparing those who were mentored and not mentored to examine how mentoring related to satisfaction, commitment and retention. Additionally the researchers wanted to understand what behaviors were associated with mentoring relationship as described by the protégés. The researchers adapted the Mentoring Role Instrument (MRI) created by Ragins and McFarlin (1990) that had been based on the theoretical constructs Kram's (1985) theory of mentoring at work. The MRI also included questions from Cawyer and Friedrich's (1998) academic socialization investigation and four open-ended questions. The 50-item survey was mailed to faculty who met the criteria set of non-tenured faculty members. A 5-point Likert scale was used to rate responses. The responses were submitted to a principal component factors analysis and varimax rotation resulting in five mentoring function factors (research assistance, protection, collegiality, promotion, friendship) and three academic socialization factors (ownership, adequate information and connectedness). A Pearson product correlation was calculated to determine the relationship among the mentoring and academic socialization behaviors. Ownership was significantly correlated to all five mentoring behaviors, connection was correlated to friendship, research assistance, collegiality and protection, and adequate information was correlated to friendship and research assistance ($p<.05$ and $p<.01$). The researchers reported that the results of the multivariate analysis of variance (MANOVA) revealed that the mentee were significantly more satisfied ($p = .04$) with the socialization than

the non-mentored faculty members (Schrodt, et al., 2003). The researchers suggested that the results indicated that mentored faculty members felt more connected to their work, a sense of ownership in their departments and claimed to better understand the promotion and tenure process (Schrodt, et al., 2003).

The qualitative results were interpreted to reveal that the protégés described the most effective mentoring behaviors were those of friend and research assistant. However, some participants reported that they wanted additional help with research, publications and more information about how to position themselves within the political climate of the institution (Schrodt, et al., 2003). The generalizability of this study is limited since the findings were based upon one population, faculty from Communication Education programs. Additionally, there was no data collected to determine if mentoring was formal or informal and self-report is a reliability threat due to recall bias.

Similar to academic mentoring of faculty in other higher education programs, socialization of new medical faculty members was examined by Fox, Waldron, Bohnert, Hishinuma and Nordquist (1998). These researchers investigated the perceptions of psychiatry faculty (n= 8 mentees; n=7 mentors) who participated in a 4-month mentoring program were the faculty pairs were formally matched. The researchers created a 5-point Likert scale, 36-pre and posttest questionnaire and then assessed the internal consistency as resulting in a Cronbach's alpha of 0.95 pretest and 0.98 posttest. The researchers sought to discover if the pilot mentoring program would be perceived to have a positive effect on new faculty member's socialization to alleviate stress associated with achieving exemplary teaching, research and service (TRS) while learning how to fit into the culture of the institution. The researchers reported a statistically significant ($p< 0.05$) finding based on the mentees perception of an increase in their

understanding of the expectations of the department responsibilities (TRS). However, there was no significant difference found in regards to mentoring as a way to prepare junior faculty members to teach or to improve retention. Limits to the validity of these findings include a small sample size, lack of control, data collected from one university and only the mentees responses were collected from pre and post questionnaires. Yet, the researchers concluded that despite the limitations, that examining both mentees and mentors perceptions of the mentoring experience provides a deeper understanding of how mentoring is likely to facilitate socialization and decrease the stress many new faculty feel during pre-tenure years.

In a mixed methods study Tracy, Jagsi, Starr and Tarbell (2004) sought to understand if a mentoring program would facilitate the new faculty member's self-efficacy, job satisfaction and feeling of connectedness. The researchers compared obstetrics and gynecology junior faculty (n=18 mentees) to senior faculty (n=14 mentors) regarding the effects of a pilot 12-month mentoring program. The researchers conducted a focus group to identify and develop a structured survey questionnaire. The post questionnaire was developed to measure response with a Likert-scale and two open ended questions to assess the attitudes of the faculty members about their satisfaction and expectations about the mentoring program, and compare the positive and negative aspects of the program. The hospital institute for health policy assessed the survey for face and content validity. The authors reported that there was a significant positive relationship attributed to mentoring as reported by the mentees ($p = 0.043$) in the areas of understanding academic promotion, increased camaraderie and support. Mentors reported increased feelings of altruism as a result of their mentoring activities. The researchers interpreted the qualitative results to be similar for both groups who reported positive opportunities for self-reflection and feeling of connectedness. Negative issues reported about the process included a lack of time to

meet, possible personality conflicts and the possibility of the mentoring having a role as an evaluator (Tracy, et al., 2004). Limitations sited by the researchers included the small sample and lack of control, voluntary participation in both the mentoring program and the written surveys. However, the researchers propose that mentoring programs likely contribute to both the mentee and mentor's professional growth and sense of efficacy in academic medicine (Tracy, et al., 2004).

In a large study by Wasserstein, Quistberg and Shea (2007) the researchers developed a survey to compare the mentoring factors surrounding tenure track, non-tenure track and clinical educators (n=1,046) in the school of medicine at the University of Pennsylvania. The researchers revised a previously used survey that examined faculty work to include a focus specifically on mentoring and its perceived impact on the faculty of the three ranks. While at all ranks faculty must achieve tenure or promotion, research faculty does not have teaching responsibilities, therefore, the researchers sought to compare the differences between ranks. Faculty members with the professional development program provided content validity of the survey. Questions were closed-ended, designed to gather data regarding demographics (age, gender, rank, department, frequency of mentoring meetings), the types of mentoring provided (advice or opportunities) and the performance/functions of the mentoring relationship. The mentoring function the researchers labeled as "Advice" consisted of those mentoring functions that were concerned with information about how to work towards a goal, promotion, career, how to become involved in leadership and enhancing visibility. The second label of a mentoring function for this study was "Opportunities"; it consisted of those functions that provided faculty with constructive criticism, achieving autonomy, committee participation, research opportunities,

informal social gatherings and collaboration on research and presentations (Wasserstein, et al., 2007).

Data revealed that advice was the most frequently reported type of mentoring received by men (75%) as compared to women (72%). There were differences for the mentoring function of "opportunities" as men received 42% and women 38% of this type of mentoring. Differences in rank were reveled with clinical educators receiving 45% of this type of mentoring which was higher than assistant professors who received 37%. However, it was reported that assistant professors did receive a higher percentage of both types of mentoring: advice (75%) and opportunities (41%). Faculty members on the tenure track rated satisfaction of the mentoring relationship highest (M=7.4 of a 10 point Likert scale) and there were no significant differences reported between genders for tenure track faculty regarding satisfaction with mentoring. Interestingly, tenure track faculty who had multiple mentors reported higher satisfaction than those who did not (multiple mentors 63%; one mentor 57%). Additionally the results of a regression analysis revealed that rank, track, gender, age and frequency of mentoring were interpreted to be predictors of satisfaction with mentoring for those faculty members at the associate level. Wasserstein, Quistberg and Shea (2007) propose that findings from this study suggest the benefits of mentoring for medical faculty at the University of Pennsylvania and that satisfaction with the outcomes of the mentoring relationship are likely to indicate that the faculty will remain at the institution.

The issue of recruitment and retention has been linked to how satisfied new faculty feel and it is suggested that early socialization into the culture of the institution and the expectations of the responsibilities of the professoriate are likely factors (Dunham, Taylor, Lynn, Moore, McDaniel & Walker, 2008; Fox, et al, 1998; Paul, et al., 2002; Schrodt, et al., 2003; Siler &

Kleiner, 2001; Zeind, et al., 2005). The review of the literature surrounding faculty academic socialization suggests that faculty who are mentored report a deeper understanding of the expectations to achieve tenure, promotion and/or reappointment, have an increased sense of connectedness to the department and the institution, improved professional growth and less stress during their pre-tenure years (Fox et al., 1998; Schrodt, et al, 2003; Tracy et al., 2004; Wasserstein, et al., 2007).

Additionally, participants in a number of the studies identified specific mentoring behaviors they perceived facilitated their academic socialization: advice and opportunities (Wasserstein, et al., 2007) and the academic socialization behaviors of ownership, connectedness and adequate information were reported to be correlated to five mentoring behaviors: research assistant, friendship, collegiality, protection, promotion and adequate information (Schrodt, et al., 2003). The nature of how and when mentoring is occurring becomes important to understand to gain a broader and deeper view of the influence of mentoring for faculty members.

Nature and Occurrence of Mentoring

How mentoring is provided.

Across studies reviewed mentoring was offered as a part of a required mentoring program (Fox et al., 1998; Garman, et al., 2001; Kosoko-Lasaki, et al., 2006; Thorndyke, et al., 2008; Tracy et al., 2004; Zeind, et al., 2005), mentors were formally assigned by the institution (Boyle & Boice, 1998; Mullen & Hutinger, 2008) or the department chair (Zeind, et al., 2005) or mentors and mentees formed informal relationships (voluntary and mutually agreed upon) (Cunningham, 1999; Frandsen, 2003; Kram, 1985; Leslie, Lingard & Whyte, 2005; Paul et al., 2002; Sands, et al., 1991; Schrodt, et al., 2003). In addition, there is variability noted in the duration of the mentoring program or relationship and the frequency of meetings for the purposes

of mentoring (cite). Therefore, the next section will examine the similarities and differences in the nature of mentoring for faculty in health sciences and other higher education programs.

The research of Boyle and Boice (1998) and Mullen and Hutinger (2008) concluded that a formally established mentoring relationship was perceived to have positive outcomes. Boyle and Boice (1998) developed a one-year, systematic mentoring program utilizing the theoretical framework of Boice's (1992) Involvement-Regimen-Self-management and Social network (IRSS) theory originally developed to facilitate formal mentoring in a faculty development program. The researchers measured the perceived effectiveness based on the responses of 25 faculty pairs of mentors/mentees who were formally paired as compared to a control group of 25 faculty pairs who developed their own mentoring relationship (informally paired). The control group phoned in reports of their meetings with their mentors, the progress and value of the process intermittingly throughout the year. The experimental group agreed to meet weekly (1:1 or by phone), attend monthly group meetings with the rest of the mentoring pairs and mentees kept a journal that was reviewed by the researchers.

Boyle and Boice (1998) developed a Mentoring Index (MI), a 10-point rating scale, to obtain quantitative measures and compare the perceptions of the mentees about the dimensions of mentoring. A score of 6.5 was considered to be a measure of effective mentoring; however, there was no discussion by the researchers of reliability or validity testing of this instrument. At the end of the year long mentoring program, the researchers concluded that the experimental group reported higher scores on the weekly MI rating scale (most were 7 or higher), they met more frequently than the control group, the substance of the meetings evolved on three main areas: 1) research/publishing/scholarship, 2) retention/tenure and 3) collegial relations and politics. Limitations of this study include the lack of generalizability due to the small sample

size, sample taken from one university, the volunteer nature of participation in this study and no report of reliability and validity testing of the MI. However, Boyle and Boice (1998) suggest that a systematic mentoring program likely provides new faculty with the opportunity to develop their skills as professors, to become acclimated into the institution, to feel "welcomed and valued" and that faculty who were mentees are more likely to become mentors (p. 177).

Furthermore, these researchers suggest that institutional commitment to supporting new faculty in their professional development was necessary and beneficial to all stakeholders.

Mullen and Hutinger (2008) suggest that the academic institution invest in the development of formal mentoring programs to assist new faculty in achieving academic success. Mullen and Hutinger (2008) propose that an effective formal mentoring program can be the "tipping point" that creates positive, learning relationships and a "culture of mentoring" (p. 202). The focus of this case study was to understand how new faculty (n =14) and their mentors (department mentors (n = 13); college mentors (n = 14) who participated in the formal mentoring program described professional development and the mentoring relationship. Mullen and Hutinger (2008) drew upon the theories of Boice (1992) and Kram (1985) to understand how participation in a formal mentoring program and the effect of mentoring functions would be described by the participants. Data were collected at the end of the program using an open-ended questionnaire designed for this study. Two independent coders analyzed the responses to establish credibility and trustworthiness. The researchers discussed the four themes that emerged from the analysis to explain their findings: topics (what was discussed/learned during mentoring meetings; the mentoring functions that were used); functionality (how easily the relationship developed); dynamics (how the interactions took place) and benefits (perceived positive outcomes). Mullen and Hutinger (2008) discussed that the data revealed that many of the

participants reported the career functions of a mentor that occurred most often in the first year were providing support, information, protection and visibility. In the second year the respondents reported how the relationship developed to include the psychosocial functions of role modeling and counseling. The findings from this study may inform higher education institutions about the value of developing and supporting a mentoring program to enhance the professional development of new faculty, support senior faculty who mentor and improve recruitment and retention (Mullen & Hutinger, 2008, p. 186).

Garman, Wingard and Reznik (2001) concluded that the 136 medical junior faculty members who were surveyed after participating in a formal mentoring process at the University of California perceived that their self-efficacy in academic skills improved after completion of the 7-month National Centers of Leadership in Academic Medicine program. Interestingly, even though these faculty members began the program with an assigned mentor, the participants reported that secondary mentoring relationships developed in small workshops and one-to-one meetings. The researchers propose that programs designed to develop the self-confidence of medical faculty should facilitate opportunities for informal matching of mentors and mentees within the formal mentoring program (Garman, et al., 2001).

As the result of a formal 4-month mentoring program that was developed for new psychiatry faculty members, Fox et al. (1998) propose that the one-on-one mentor model was effective in facilitating academic socialization and retention of faculty. While there was not a significant change from pre to post survey in the area of improvement in the functions in their academic role as a faculty member, the researchers posit that a formalized mentoring program can assist new psychiatry faculty in gaining a deeper understanding of the academic culture and responsibilities of the professoriate (Fox et al., 1998).

In contrast to the findings of the studies reviewed that proposed formal matching of mentors and mentees and/or formalized mentoring programs were most effective (Boyle & Boice, 1998; Fox et al., 1998; Garman, et al., 2001; Mullen & Hutinger, 2008), other studies reviewed reveal that informal mentoring was perceived to be preferred and effective (Cunningham, 1999; Frandsen, 2003; Paul et al., 2002; Sands, et al., 1991). The way that mentors were selected was varied in the study of Paul et al. (2002) with 14.6% of occupational therapy faculty reporting that they found their own mentors, 14.6% were chosen by a mentor, 14.6% were assigned a mentor by the institution with the remaining 56% developing a mutually agreed upon mentoring relationship. This was similar to the findings in Frandsen's (2003) study of nurse faculty members who reported that most relationships were mutually agreed upon (55%), assignment by the department was (11%), mentors initiated (26% and mentees sought out a mentor 7% of the time. Sands, Parson and Duane (1991) discussed the findings of their study revealed that most mentoring relationships were mutually negotiated and rarely were mentors assigned by the department (p. 184). The literature and research is varied surrounding the issue of the most effective development of mentoring relationships thus prompting researchers to examine others mentoring approaches including: formalized mentoring programs, peer mentoring and opportunities to have multiple mentors.

Mentoring programs and other forms of mentoring.

The most frequent type of mentoring opportunities offered was through formalized mentoring programs for faculty in medical programs (Fox et al., 1998; Kosoko-Lasaki, et al., 2006; Thorndyke, et al., 2008; Tracy, et al., 2004; Zeind et al., 2005). Thorndyke, Gusic and Milner (2008) developed a project-based outcome to measure the effectiveness of the formal 4-month mentoring program for Penn State College of Medicine's Junior Faculty Development

Program (JFDP). Mentors and mentees were assigned and collaboratively worked on a project that served as a vehicle for the mentor to guide, support and introduce the new faculty member to the skills and responsibilities of the professoriate (Throndyke, et al., 2008). After conducting the JFDP, the researchers described the positive outcomes that resulted in 85% of the participants reporting that they improved in their confidence for their professorial work and felt as if they could translate those skills to advance their academic career. However, the researchers report that more objective measures over a longer time to determine if the JFDP does result in career success. Despite this limitation, the researchers conclude that with the support of the institution, the mentoring program is important for the professional development of new faculty and to forward the mission of the institution (Thorndyke, et al., 2008).

The 12-month faculty mentoring program developed by Tracy et al. (2004) for obstetrics and gynecology faculty members was considered to benefit both the mentees and the mentors as the senior faculty mentors reported improved professional skills along with gaining a sense of altruism. Mentees reported that they felt more supported, had increased visibility, acquired leadership skills, found a balance between work and home life and developed a sense of belonging to the institution (Tracy et al., 2004). Zeind et al. (2005) found similar outcomes for the pharmaceutical faculty members who participated in the formalized, one-year faculty mentoring program offered for the first year of the new faculty member's appointment. In this study, the department chairs assigned the mentors and mentees. After the first year the mentees could continue with the same mentor or a peer advisory team would assign a new mentor. After five years of conducting the mentoring program, the researchers report that the retention rate was 72%. Most faculty reported in the post program survey that the formal matching of pairs was beneficial, that they improved in the areas of grant writing, curriculum revision and

understanding the promotion process. However, some areas of improvement that were reported included better matching of mentoring pairs, additional training for mentors and challenges surrounding having to recruit a mentor from across disciplines (Zeind et al., 2005).

A different approach to mentoring was discussed in an article by Pololi and Knight (2005) using peer group mentoring for faculty in academic medicine. The authors propose that dyadic formal matching or informal, mutually agreed upon matching of a mentor and a mentee is not as effective as a collaborative mentoring program (CMP). A facilitated peer mentoring program was conducted over a six month period to develop a "learning environment" in which new faculty members would be able to identify short and long term career goals, develop close collaborative collegial relationships and develop skills in a supportive learning environment (Pololi & Knight, 2005, p. 868).

Despite the way that mentoring relationships are formed, both benefits and challenges surrounding the relationship were discussed in the literature reviewed. Benefits reported were increased self esteem, improvement in teaching skills including student advisement issues, and curriculum development, improved and/or increased research productivity including publishing research, conducting research, writing and obtaining grants and obtaining funding and guidance to appropriate service committees (Cunningham, 1999; Kosoko-Lasaki, et al., 2006; Thorndyke, et al., 2008; Zeind et al., 2005). Furthermore, studies reported that faculty members achieved tenure or reappointment and promotion or perceived that the mentoring process would lead to academic success (Greene, et al., 2008). Many faculty members reported that they felt a sense of commitment, and belonging to their institution, increased job satisfaction and intent to stay, thus, as a result of mentoring, these aspects of academic socialization were suggested to be positive (Pololi, Knight, Dennis & Frankel, 2002; Schrodt, et al., 2003; Tracy, et al., 2004; Wasserstein,

et al., 2007). However, barriers or challenges were reported by the researchers with the most prevent barrier as a lack of time and funds for the mentoring process. A number of studies discussed a lack of institutional support as a barrier even though the institution may believe mentoring was positive for retention and recruitment, if time and finances were not set aside faculty were likely not able to devote the time necessary to adequately mentor new faculty members (Dunham-Taylor, et al., 2008; Peterson & Sandholtz, 2005; Sawatzky & Enns, 2009; Williams & Blackburn, 1988). Other issues that emerged that were considered negative aspects of mentoring was the sense that the new faculty member may become dependent on the mentor, that the need for a mentor may be perceived as a weakness or that the mentor may take advantage of the work that is done in the mentoring relationship and take credit for the mentees work (Boyle & Boice, 1998; Dunham-Taylor, et al., 2008; Long, 1997; Eby, McManus, Simon & Russell, 2000; Pololi & Knight, 2005; Zeind et al., 2005). Additionally, if the mentor was a supervisor or department chair, the mentee was less likely to feel he or she could confide and/or admit to a lack of confidence in their skills or with issues within the department (Sands, et al., 1991).

Occurrence of mentoring.

Most studies that examine the prevalence or occurrence of mentoring were of medical faculty, however, nurse faculty studies indicate that mentoring is both offered and needed and other higher education programs discuss occurrence of mentoring in their institutions. Palepu et al. (1998) is frequently cited for their research of faculty in medical schools and concluded that 54% of 1, 808 faculty members surveyed had a mentoring relationship and rated their skills and their career satisfaction higher than those who did not. Ninety-two percent of assistant professors and 48% of associate professors at the University of Pennsylvania medical program

surveyed in the study of Wasserstein, Quistberg and Shea (2007) reported that they had an academic mentor. Zeind et al. (2005) cite the study of Wutoh et al. (2000) found that 18% of pharmaceutical faculty participated in formal mentoring programs and 53% reported the opportunity and participation in informal mentoring relationships. Finally, Frandsen's (2003) dissertation results revealed that 66.9% of the 142 nurse faculty members who responded to the survey had or are being mentored by a faculty member.

Similar to studies of medical faculty, over 51% of faculty in a variety of higher education programs surveyed in Sands, Parsons and Duane's (1991) study reported that they had been mentored at their current or past institutions. Cunningham (1999) reported that 60% of the 128 Christian faculty members reported that they were mentored at their institution. Finally, Paul et al. (2002) discussed the prevalence of mentoring for occupational therapy faculty based on the 127 of 350 surveys returned to understand the role of mentoring and institutional support for junior and senior faculty in occupational therapy programs in the United States. There were 92 junior faculty members who responded to the survey and 48 were mentees and 41.7% reported that their mentoring experience was positive.

Frequency and duration of mentoring.

Psychiatry faculty studied in the research of Fox, Waldron, Bohnert, Hishinuma and Nordquist (1998) participated in a one-on-one mentoring model during a 4-month program, twice a month for 30 minutes to one hour per meeting. Garman, Wingard and Reznik (2001) reported that medical faculty members who participated in the seven month National Centers for Leadership in Academic Medicine (NCLAM) mentoring program met for 12 hours per month. Paul, Ottenbacher, Stein and Liu (2002) reported that the average time of a mentoring relationship of the occupational therapy faculty surveyed was 3.57 years. Finally, Tracy, Jagsi,

Starr and Tarbell (2004) reported that 55.6% of the medical faculty members in the mentoring program met monthly for their mentoring sessions.

In other higher education programs, Cunningham (1999) reported that 60% of the Christian faculty members estimated that they met for less than five hours a month with their mentor and the rest (n=21) mentees reported they met for over 10 hours. Sands, Parson and Duane (1991) had reported that the faculty members in their survey reported that they spent 10 to 30 hours per quarter in face-to-face meeting with their mentors.

Functions of a mentor.

The mentoring functions proposed in the theory of mentoring at work posited by Kram (1985) have emerged as factors or characteristics of faculty mentoring functions studied by a number of researchers in higher education (Cunningham, 1999; Frandsen, 2003; Sands, Parson & Duane, 1991; Schrodt, Cawyer & Sanders, 2003). The career and psychosocial functions of a mentor have been used to examine which functions are actually occurring (Cunningham, 1999; Sands, Parson & Duane, 1991), to compare what is occurring and what is the preferred or ideal functions (Frandsen, 2003) and what faculty member characteristics may predict a preference for a particular function (Sands, Parson & Duane, 1991; Williams & Blackburn, 1988).

Sands, Parson and Duane (1991) used 29 functions of a mentor, based on literature review and adapted from mentoring questionnaires in business research to discover those mentoring functions identified as "ideal" by higher education faculty members surveyed. The four functions that emerged as a result of a principal component analysis and a varimax rotation were:

- Friend (included 7 variables: friendship, emotional support, advice about people, social activity participation, assistance making career decisions and personal issues, defense from criticism)
- Career Guide (5 variables: research collaboration, introduction to influential people, assistance with writing research and grants and funding sources, and provision of opportunities for visibility)
- Information Source (4 variables: information about university polices, formal and informal expectations to achieve promotion/tenure, advice about appropriate committee work)
- Intellectual Guide (4 variables: intellectual guidance, feedback and constructive criticism, review of papers, promoting an equal and collaborative relationship) (Sands, et al., 1991, p. 185)

Sands, Parson and Duane (1991) then conducted a multiple regression analysis using age, gender, rank, tenure status, marital status, college program, and having a mentor in graduate school as independent variables to discover if they would predict the four types of mentoring functions which served as dependent variables. As discussed earlier: being a tenured faculty member predicted friend, faculty in the Arts and Sciences predicted career guide, female faculty predicted both career guide and information source and those faculty members who were previously mentored predicted intellectual guide (Sands, et al., 1991).

In congruence with the findings of Sands, Parson and Duane (1991), Cunningham (1999) posited that the "Career Guide" factor was considered the most effective mentoring function ranked by the 282 Christian faculty members surveyed. The Career Guide functions associated with this factor were those concerned with advice about research, grants and publications,

collaboration with research, assistance with skill development in reviewing paper, providing introductions to influential others and visibility opportunities to further advance the mentee's career (Cunningham, 1999). The other functions of a mentor that resulted from the principal factor analysis were:

- Friend (5 variables: friendship, emotional support, promoting a collaborative and caring relationship and belief in capabilities)
- Discipleship Guide (5 variables specific to Christian faculty and included in this survey adaptation)
- Information Source (5 variables: formal and informal information about tenure/promotion; college polices, advice about committee work and social norms) (Cunningham, 1999, p. 455).

Frandsen's (2003) investigation of nurse faculty members replicated the work of Cunningham and Sands, Parson and Duane, and of the 29 mentoring functions that emerged from the principal factor analysis, five were considered to be dimensions of mentoring as reported in this survey:

- Leader/Coach (6 variables: role model, belief in capabilities, promoting equal and collaborative relationship, encouragement and coaching, constructive feedback and intellectual guidance)
- University Information Guide (5 variables: informal and formal advice about tenure/promotion, information about policies and procedures with the university, informal advice about committee service and assistance with teaching)
- Career Development Guide (7 variables: introduction to influential others, assistance obtaining employment and making difficult professional decisions, informal advice

about social norms [dress code, student relationships], nomination for honors and opportunities for visibility)

- Research Guide (4 variables: review drafts of papers, advice about resources for grants, research opportunities, advice about publications, and funding sources)
- Friend (6 variables: friendship, defense from critical people, opportunities for socialization in and outside of work, informal advice about others, emotional support and advice about personal issues) (Frandsen, 2003, p. 40).

Schrodt, Cawyer and Sanders (2003) examined both mentoring functions and functions proposed to facilitate academic socialization of the 263 communication faculty members they surveyed. These researchers reported that five factors emerged from the principal component analysis to describe the type of mentoring functions the respondents reported:

- Research Assistance (working on research, editing work, providing opportunities for visibility)
- Protection (from people or situations that may have a negative effect on the mentees academic career)
- Collegiality (socialization in and outside of the university)
- Promotion (offering strategies for career advancement, advice on tenure and promotion)
- Friendship (provision of support and encouragement)

The academic socialization items that emerged included three specific factors, as proposed by the researches:

- Ownership (items reflected the mentee's belief that they would continue to work in their department, were loyal to the department and university and felt valued)

- Adequate Information (mentees felt they received enough information to understand the expectations of research, teaching and service requirements to achieve tenure and promotion)
- Connectedness (mentees reported feeling they had opportunities to socialize with others in the department/work environment and considered co-workers friend) (Schrodt, Cawyer & Sanders, 2003, p. 23).

Finally, Rogers, Monterio and Nora (2008) discuss the mentoring functions that were reported in their study of family medicine faculty members. The factors that emerged from the 27 original items were:

- Personal Exploration (review of career options, life and work strategies, making informed choices, feelings about achieving success and academic experience, career problems)
- Practical Guidance (developing realistic expectations about a mentor and ideas for career goals, being referred to others for advancement opportunities, receiving guidance and exploring commitment to academia)
- Mentor Support (someone to be a sounding board, belief in capabilities, support when upset, sharing personal experiences)
- Mentor Advice (help with reaching their own decisions, uninterrupted meetings with mentors, recommendations for career development, coping strategies and provided with training opportunities) (Rogers, Monterio & Nora, 2008, p. 261).

How mentoring is measured.

Numerous researchers have used the theory of mentoring at work to examine mentoring of employees and Kram's theory has been use to guide empirical research in academic mentoring

of faculty in higher education programs (Cunningham, 1999; Frandsen, 2003; Mullen & Hutinger, 2008; Sands, et al., 1991). The mentoring functions proposed by Kram (1985) have been used as variables to examine the type of mentoring perceived to be preferred by faculty involved in mentoring relationship. As a result of these studies, researchers suggest that if faculty and administration understand the type of mentoring functions preferred by both mentee (protégés) and mentors, a more effective and efficient mentoring program can be developed (Cunningham, 1999; Frandsen, 2003; Mullen & Hutinger, 2008; Sands, et al., 1991; Schrodt, Cawyer & Sanders, 2003).

Sands, Parson and Duane (1991) developed a questionnaire to measure the functions of a mentor based on the theory proposed by Kram (1985). The survey was developed from a review of the literature, adapted based on instruments used in other studies and included 29 mentor functions served as items on the survey. Items for mentoring functions were measured using a Likert scale to rate the importance of the mentoring functions (1=not at all important to 5 = very important). Additionally, the survey included questions about demographic characteristics and mentoring experiences including how the relationship was formed, the duration and frequency of the mentoring process and barriers to a mentoring relationship. This instrument was validated for content by 18 identified experts in research development or professional development and then was pilot tested by 16 people on and off the campus (Sands, et al., 1991, p. 182).

Cunningham (1999) replicated much of the Sands, Parson and Duane study by adapting the survey to measure the mentoring functions that occur in mentoring relationships for Christian faculty members. Cunningham added 6 additional variables to the original 29 mentoring functions to reflect those functions that were specific to Christian faculty. The adapted tool was then pretested with four faculty members who had experience with mentoring relationships,

adaptations were made and the final instrument was pilot tested with three faculty members. Finally, Frandsen (2003) adapted the original instrument developed by Sands, Parson and Duane (1991) to capture items of interest of the 142 nurse faculty who responded to the survey. The 29 mentoring functions as proposed by Kram (1985) were included along with demographic items to understand the characteristics of the respondents and the nature of mentoring for these faculty members. Frandsen reported that the tool was validated for content by 18 identified experts in research development or professional development, however, it was not clear if this was the same validation conducted by Sands, Parson and Duane (1991) or if Frandsen conducted her own validation (Frandsen, 2003, p. 28).

Schrodt, Cawyer and Sanders (2003) combined the mentoring functions based on the work of Kram (1985) from the Mentoring Role Instrument originally developed by Ragins and McFarlin (1990) to examine mentoring practice in business research. Additionally, Schrodt, Cawyer and Sanders developed items to measure the academic socialization of the 214 faculty members surveyed. The combination of mentoring and academic socialization functions and open ended questions resulted in a 50-item survey that was used to collect data from the respondents. However, there was no discussion about the validity or reliability of this instrument except for the principal component analysis of the constructs mentoring and academic socialization factors.

While the seminal study of Williams and Blackburn (1988) focused on the influence of mentoring and institutional support on the research productivity of nurse faculty, these researchers developed their instrument from a review of the literature. Nurse academic validated the 117-item instrument for content, pretested by a second group of nurse academic and a

Cronbach's alpha coefficient of .57 to .90 was obtained for internal reliability (Williams & Blackburn, 1988).

Paul, Stein, Ottenbacher and Liu (2002) replicated the Williams and Blackburn study to examine the research productivity, institutional support and influence of mentoring for occupational therapy faculty. While these researchers cited the validity and reliability testing conducted by Williams and Blackburn (1988) of the instrument for nurse faculty, Paul et al. (2002) did not report any further validation or reliability testing for use on occupational therapy faulty. Finally, Rogers, Monterio and Nora (2008) developed a tool to measure medical faculty member's perceptions of their most meaningful mentoring functions. Originally the instrument was developed for students; however, the researchers revised the instrument to reflect 29 aspects of faculty mentoring to describe mentor role competencies. A pilot test was conducted with faculty members from the university and the instrument was revised. A Cronbach's alpha was conducted for reliability (0.96) and a principal component analysis was conducted with four factors that emerged with eigenvalues of >1.0. The factors that emerged were: Personal Exploration, Practical Guidance, Mentor Support and Mentor Advice (Rogers, et al., 2008).

A number of survey instruments were developed to assess the needs of new and junior faculty in health sciences and other higher education programs (Pololi et al., 2003; Sawatzky & Enns, 2009). Sawatzky and Enns (2009) developed the Faculty Mentoring Needs Assessment to understand how nurse faculty at their institution perceived faculty mentoring. The survey was developed from a review of the literature to gather data about what defines a "good mentor". Open-ended questions were included and a 5-point Likert scale was used to rate the respondent's agreement with the items on the survey. The survey was pretested on three nurse faculty members. Results from the 29 faculty members who responded are suggested to indicate that

important functions of a "good" mentor were trustworthiness, honesty, positive attitude, respectful, experience and excellent communication skills (M=3.3). Of the 15 mentoring functions rated on this survey, the functions of a positive role model, provider of information, provider of help to reduce isolation, provider of support and encouragement during stressful times were rated highest (M=3.3). Benefits of having a mentor included increased job satisfaction, developing teaching skills, collegiality, team building and overall improvement in faculty abilities (M=3.3). Furthermore, the benefits of being a mentor rated the highest (M=3.38) was sharing insight and career advancement was rated lowest (M=2.42). The open-ended questions were suggested to reveal that these nurse faculty members preferred voluntary participation in the mentoring program and freedom to find an appropriate mentor that matched their needs (Sawatzky & Enns, 2009, p. 148).

Theoretical Framework

The five major theories that were discussed in much of the literature surrounding mentoring for faculty in higher education programs included: adult life stages development (Erickson, 1963; Levinson, et al., 1978); organizational culture (Van Maanen & Schein, 1979), the theory of mentoring at work (Kram, 1985) and the ecological theory of person-environment fit (Germain & Gitterman, 1987). While these theories have been used to explain and guide the studies that investigated mentoring for faculty members, two theories will be discussed in depth as a way to understand the constructs of mentoring for clinicians who may transition from clinical work to the occupation of a faculty member in health sciences higher educational programs.

Theory of Mentoring at Work.

The theory of mentoring at work, as proposed in Kram's (1985) seminal research, a model of mentoring at work, was developed as a framework to guide and examine how a mentoring relationship can enhance the career development of junior employees at each stage of development. Kram (1985) posited that both life stages and career stages in work followed a developmental progression.

Given that Kram's (1985) model of mentoring at work has been cited in numerous academic mentoring studies, it is discussed here in detail. Kram (1985) conducted an exploratory qualitative study of 18 pairs of junior managers in a mentoring relationship in a large northeastern public utility worksite. Kram identified career and psychosocial mentoring functions: career functions include sponsorship, exposure and visibility, coaching, protection and challenging assignments, and psychosocial functions are role modeling, acceptance and confirmation, counseling and friendship (1985).

The purpose of the grounded theory study design was to develop a deep understanding of the developmental nature of mentoring relationships at work. The naturalistic setting was chosen to examine how a mentoring relationship between senior and junior managers facilitates the socialization of the new employees into the organizational context. Kram (1985) defines the organizational context as including the reward system, the culture, and task design and performance management system and proposed that the "relationships are situated within the context"; therefore, the organizational context must be considered (p. 15).

Based on the in-depth, inductive analysis of the narrative data, Kram (1985) proposed that key themes emerged to explore and gain an understanding of the interpersonal relationship functions and phases of the junior and senior managers. Kram posited that mentoring functions can be differentiated from a mentoring relationship and other supportive work relationships in

that the functions of mentoring occur within a developmental relationship (p. 22). Kram proposed that both life stages and career stages in work followed a developmental progression: initiation, cultivation, separation and redefinition (Luna & Cullen, 1995). The issue of competence becomes important as the junior person in his or her new position must deal with the anxiety of learning and fitting into the organization (Kram, 1985).

Kram (1985) identified career and psychosocial mentoring functions. Career functions include sponsorship, exposure and visibility, coaching, protection and challenging assignments. Career functions are those aspects of mentoring where the mentor provides opportunities for the protégé to advance within the organization (Kram). The senior person, with his or her experience, status and recognition, thus facilitates skill development and enhances the junior person's relationship within the organization and prepares him or her for the roles and responsibilities of the job/career. Psychosocial functions are role modeling, acceptance and confirmation, counseling and friendship. The psychosocial functions are based on the quality of the relationship and the ability of the senior person to provide a sense of emotional support to enhance the junior person's sense of competence, identity and effectiveness in their role as a worker (Kram, 1985).

Kram concluded that career and psychosocial functions of the mentoring relationship for junior workers early in their career development could be supported in the areas of competence, identity, commitment, advancement, relationships and work and family balance. Kram furthered posited that the mentoring relationship was most effective when it occurred over a few years. This conclusion was reported based on the analysis of the cultivation phase of the mentoring relationship that occurred over a period of five years. Kram suggested that initiation of the

mentoring relationship was best if it was informal, that is, the protégé and mentor mutually agreed upon the relationship versus the protégé having a mentor assigned (1985).

Numerous researchers have used the theory of mentoring at work to examine mentoring of faculty in higher education programs (Cunningham, 1999; Frandsen, 2003; Mullen & Hutinger, 2008; Sands, et al., 1991). The mentoring functions proposed by Kram (1985) have been used as variables to examine the type of mentoring perceived to be preferred by faculty involved in mentoring relationship. As a result of these studies, researchers suggest that if faculty and administration understand the type of mentoring functions preferred by both mentee (protégés) and mentors, a more effective and efficient mentoring program can be developed (Cunningham, 1999; Frandsen, 2003; Sands, et al., 1991). Furthermore, the literature suggests that mentoring new faculty members can lead to academic success.

Person-Environment-Occupation (PEO) Model.

In two studies, additional theories were proposed to explain the process of academic mentoring and the perceived outcomes of socialization and a sense of belonging to the institution (Sands, et al., 1991; Vassantachart & Rice, 1997). Vassantachart and Rice (1997) discussed how organizational culture theory might play a role in understanding how the culture of an institution impacts socialization of the new employee/faculty member. Organizational socialization is discussed as, "the process where one "learns the ropes" of a particular organizational role" (Van Maanen & Schein, 1979, p. 3) and to gain an understanding of the culture of the organization, the implicit and explicit beliefs, values and expectations of the organization. Similarly, a new faculty member may be assimilated into the new institution based on the ecological theory of the person-environment relationship, thus describing the "fit" between the new faculty member and the institution (Germain & Gitterman, 1987; Sands, et al., 1991).

Concepts of ecological theory of the person-environment relationship are currently used in a number of theoretical models in occupational therapy education, research and practice to guide assessment, intervention and predict outcomes. The Canadian Model of Occupational Performance (CMOP) as developed by the Canadian Occupational Therapy Association (1997) proposes that the interactions between the person, environment and occupation influences occupational performance. The environment is described as having cultural, institutional, social and physical elements at the community, national and/or institutional levels. The elements of the environmental conditions are then proposed to influence the person's occupational performance. One other person-environment model is the Person-Environment-Occupation (PEO) model that defines characteristics of the environment to include cultural, institutional and social domains as proposed by Law et al. (1996). Occupational performance is the outcome of the person-environment relationship based on the transaction of the person, environment and occupation (Law, et al., 1996). Occupation is defined as the everyday activities and tasks that people need and want to do to function in whatever role and life activities they may have or want to do: work, education, parenting, friend, leisure participant.

The ecological theory of the person-environment relationship and the "fit" between the new faculty member and the institution must also be considered when examining the impact of mentoring on developing or improving professional development skills necessary for a new faculty member to achieve tenure/promotion or reappointment and to be successfully socialized into the academic culture (Germain & Gitterman, 1987; Sands, et al., 1991). The concepts of ecological theory of the person-environment relationship are currently used in a number of theoretical models in occupational therapy education, research and practice to guide assessment, intervention and predict outcomes. One person-environment model is the Person-Environment-

Occupation (PEO) model that defines characteristics of the environment to include cultural, institutional and social domains as proposed by Law et al. (1996). Through the lens of the PEO model, a positive occupational performance (academic success and academic socialization) would result as an outcome of the person-environment relationship based on the transaction of the person (the faculty member), environment (academia and the understanding of the expectations of the roles and responsibilities of a faculty member) and occupation (the tripartite roles of the professoriate) supported by the functions of a mentoring relationship (Kram, 1985; Law, et al., 1996).

In summary, the literature reviewed thus far suggests that academic mentoring is a reciprocal relationship between an experienced, senior faculty member and a less experienced junior faculty member (Boyle & Boice, 1998; Cunningham; 1999; Fox, et al., 1998; Frandsen, 2003; Luna & Cullen, 1995; Paul et al., 2002; Sands, et al., 1991; Schrodt, et al., 2003; Sorcinelli & Yun, 2007; Zeind et al., 2005). Kram's (1985) theory of mentoring at work considers the life stage of each of the participants and proposes that the senior faculty mentor serves in both career and psychosocial functions to assist the junior faculty mentee in their career success (Cunningham, 1999; Frandsen, 2003; Sands, et al., 1991). Additionally, it is suggested in the literature that the junior faculty mentee must become socialized into the academic culture to understand how to achieve academic success (Schrodt, et al., 2003; Tierney, 1997; Vassantachart & Rice, 1997). Furthermore, it has been suggested that there may be a relationship between the junior faculty member and his or her fit within the organizational environment (Sands, et al., 1991).

Conceptual Model

The theoretical framework that was used to explain, guide and used to understand the outcomes of this proposed study is based on the theory of mentoring at work proposed by Kram (1985) and the Person-Environment-Occupation (PEO) Model as proposed by Law et al. (1996). Figure 1 presents the graphic representation of the mentoring functions as proposed by Kram (1985) and possible positive benefits of a mentoring relationship for new full time occupational therapy faculty members. Figure 2 depicts the Person-Environment-Occupation model proposed by Law et al. (1996) for an occupational therapist as a clinician and as a new faculty member. Figure 3 depicts a less than optimal fit or occupational performance of a new occupational therapy faculty member in an academic environment who must learn or improve in the tripartite roles of the professoriate, achieve academic success and academic socialization. Finally, a representation of how the Theory of Mentoring at Work (Kram, 1985) may support the Person-Environment-Occupation fit for a new faculty member and ultimately resulting in optimal performance for the occupations of the professoriate, thus leading to academic success and academic socialization is displayed (see Figure 4).

Figure 1. Theory Mentoring at Work (Kram 1985)

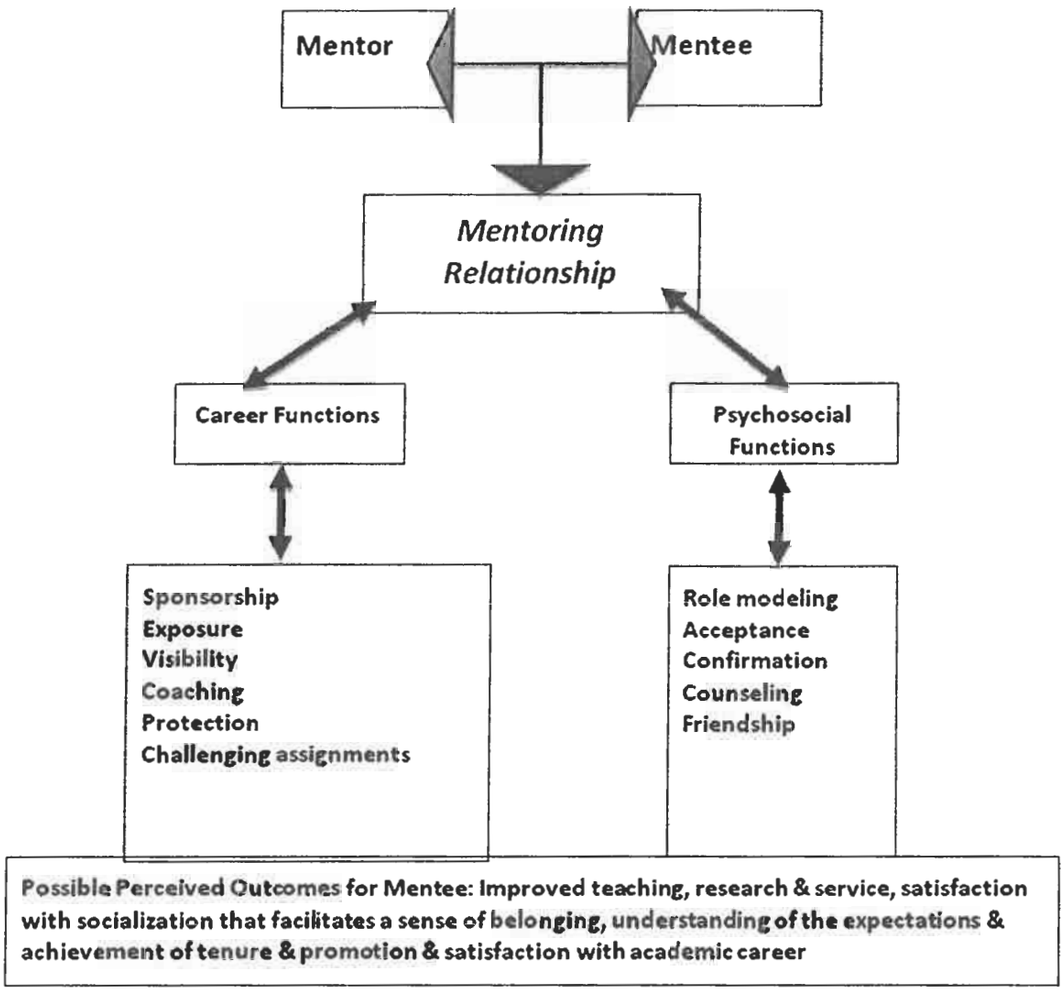


Figure 2. Person-Environment-Occupation: Occupational Therapy Clinician, Law et al. (1996)

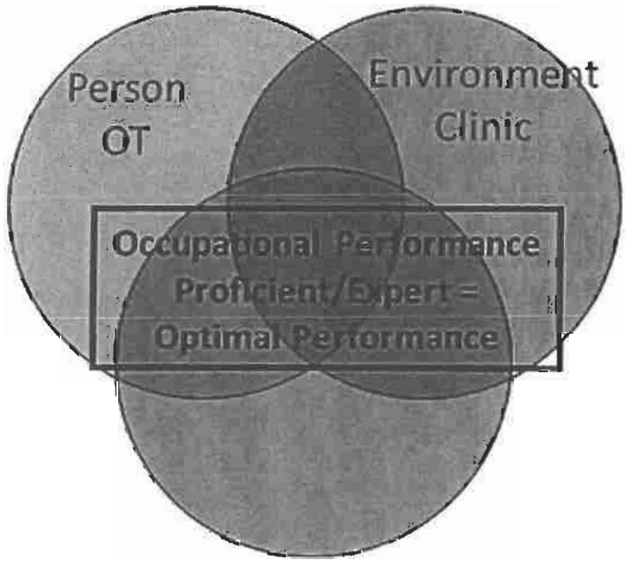


Figure 3. Less Than Optimal Fit

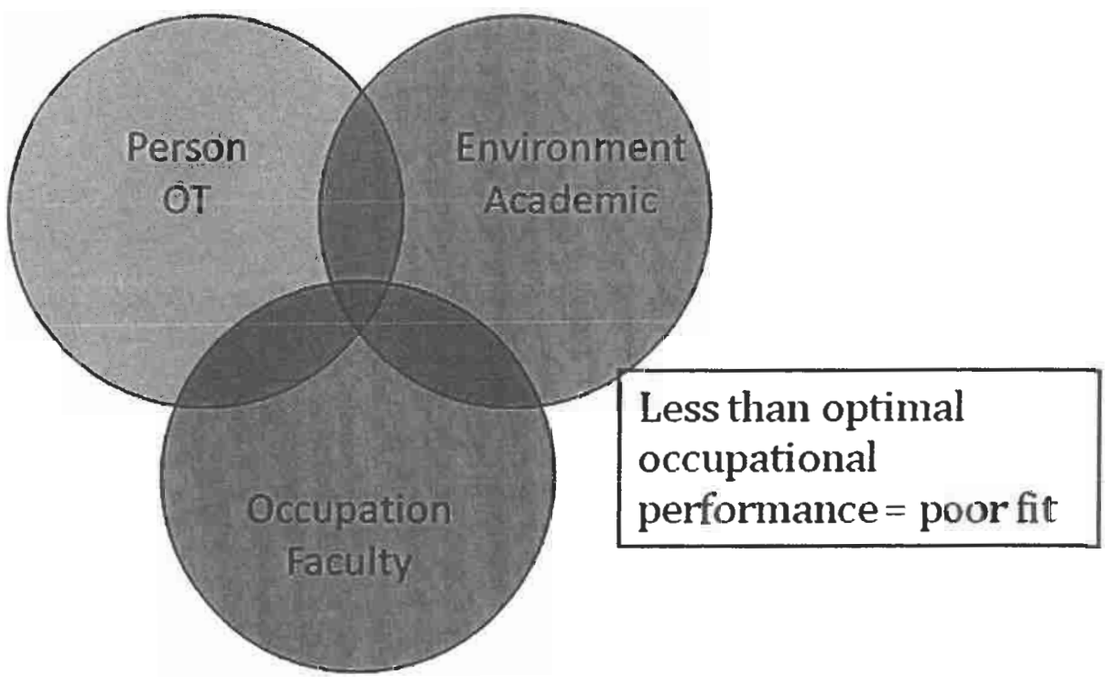
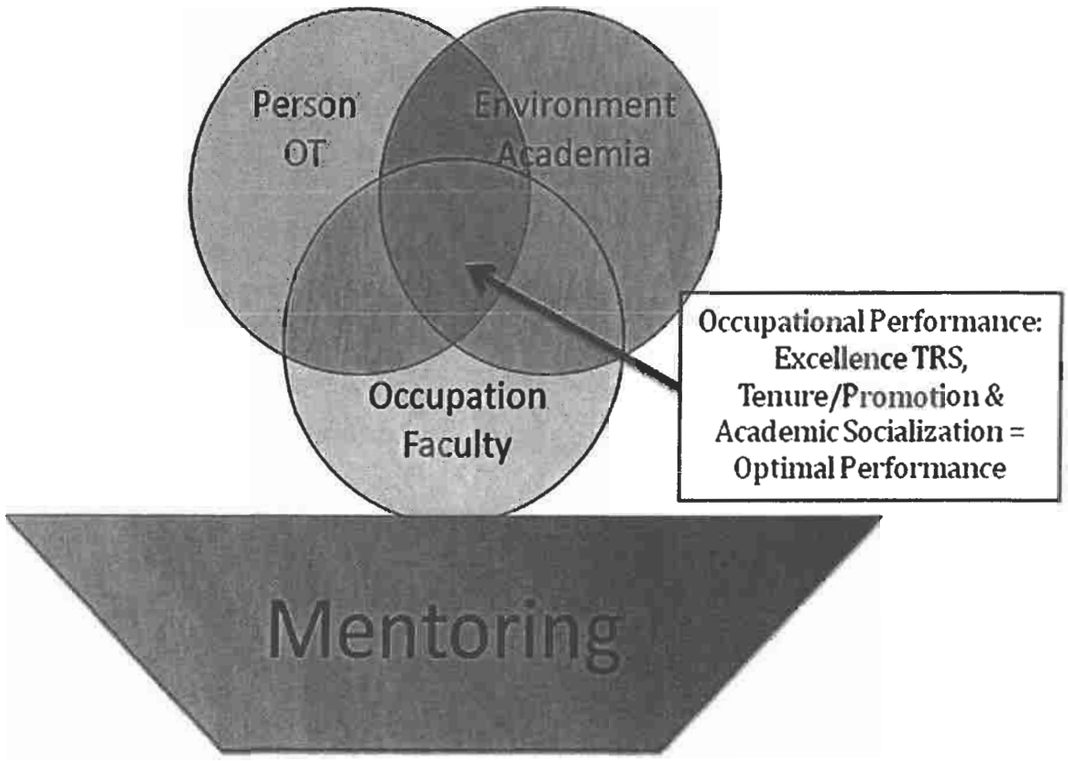


Figure 4. Person-Environment-Occupation: Occupational Therapy Faculty Supported by Mentoring, Kram (1985); Law et al. (1996)



Summary

What is know from the literature surrounding the influence of mentoring for new faculty in higher education programs is that both are empirically and anecdotally considered to have a positive effect on the new faculty member's acquisition or improvement in the tripartite roles of the professoriate (Boyle & Boice, 1998; Cunningham, 1999; Fox et al., 1998; Kosoko-Lasaki, et al., 2006; Palepu, et al., 1998;Paul et al., 2002; Sands, et al., 1991; Throndyke, et al., 2008; Tracy et al., 2004; Williams & Blackburn, 1988; Zeind et al., 2005). Mentoring has been suggested to provide new faculty with the formal and informal information regarding the tenure, promotion or reappointment expectations (Frandsen, 2003; Sands, et al., 1991; Schrodt, et al., 2003). Furthermore mentoring has been suggested to be a way to ease the tension from clinical work or when first hired to socialize the new faculty member into the culture of the academic environment. This socialization process is suggested to lead to job satisfaction, commitment and loyalty to the institution and ultimately retention of new faculty. Additionally, institutions, department and those faculty members who are considering a career in academia may be recruited to the institution if mentoring is offered as an opportunity to develop or improve in teaching, research and service (Dunham, et al., 2008; Fox, et al, 1998; Sawatzky & Enns, 2009).

However, there is a dearth of evidence in the occupational therapy literature that examines what is occurring to support and mentor new faculty. Therefore it is necessary to discover if mentoring opportunities are occurring for new full time occupational therapy faculty. It is important to understand the how mentoring is defined by occupational therapy faculty members. Additionally, understanding the nature and extent of mentoring to know who is mentoring new faculty, how the relationships are formed, and the frequency and duration and extent of the mentoring process can fill the gap in the research and inform program directors,

new faculty and those occupational therapists who are considering a career in academia. It is further necessary to discover if there is a relationship between mentoring and the perception of the factors related to academic success: improved teaching, research and service, understanding the expectations of tenure, promotion and/or reappointment, satisfaction with a career in academia and a sense of belonging to the academic institution.

The knowledge gained from an investigation will serve to update the current knowledge of mentoring for occupational therapy faculty who are on the tenure track or eligible for reappointment in the entry-level and doctoral programs in the United States. Furthermore, the findings will inform occupational therapy clinicians of the state of mentoring to support the transition into academia, and the administration of higher education programs about the needs and benefits of mentoring for retention and recruitment of qualified and dedicated faculty members.

CHAPTER III

METHODS

Introduction

This study is a descriptive, cross-sectional, survey research design utilizing primarily quantitative descriptive methods and qualitative methods to analyze three open-ended questions. First a pilot study was conducted using the Delphi technique to obtain face and content validity for the Health Sciences Faculty Mentoring Survey instrument developed by the principal investigator (PI), then descriptive and qualitative methods were used to gather and analyze data surrounding the occurrence and perception of the influence of mentoring for occupational therapy faculty members who are on the tenure track or eligible for reappointment. This section will discuss the research questions and alternate hypotheses, the variables and the research methodology. The pilot study information can be located in Appendix C.

The research questions and hypotheses for the study were:

RQ1. If and how frequently is mentoring occurring for occupational therapy faculty members who are on the tenure track or eligible for reappointment in occupational therapy entry-level and doctoral programs.

Ha.1. Mentoring is occurring for at least 25% of occupational therapy faculty members who are on the tenure track or eligible for reappointment in occupational therapy entry-level and doctoral programs as reported by the participants surveyed.

RQ2. What is the perceived influence mentoring of mentored faculty members on the tenets of academic success: teaching, research, service and tenure/promotion/reappointment (TPR)?

- H_a2. Mentored faculty members perceive that mentoring has a positive influence on the tenets of academic success: teaching, research, service and tenure/promotion/reappointment (TPR).
- Sub hypotheses:

  H_{a1}: Mentored faculty members perceive that mentoring has a positive influence on their teaching.

  H_{a2}: Mentored faculty members perceive that mentoring has a positive influence on their research.

  H_{a3}. Mentored faculty members perceive that mentoring has a positive influence on their service.

  H_{a4}: Mentored faculty members perceive that mentoring has positive influence on their tenure/promotion/reappointment.

RQ3. What is the perceived influence of mentoring of mentored faculty members on items of academic socialization: feeling valued, having a sense of ownership and loyalty to their program, feeling a sense of connection in their work environment, having been provided with resources to conduct research, and understanding teaching, research, service and tenure/promotion/reappointment expectations?

- H_a3: Mentored faculty members perceive that mentoring has a positive influence on their academic socialization as measured by Schrodt, Cawyer and Sanders (2003) on the 11 items of academic socialization.

- Sub hypotheses:

H_{a1}: Mentored faculty members perceive that mentoring has a positive influence on their feeling of being valued.

H_{a2}: Mentored faculty members perceive that mentoring has a positive influence on their feeling of ownership to their program.

H_{a3}: Mentored faculty members perceive that mentoring has a positive influence on their feeling of loyalty to their department.

H_{a4}: Mentored faculty members perceive that mentoring has a positive influence on the provision of resources for conducting research.

H_{a5}: Mentored faculty members perceive that mentoring has a positive influence on their understanding of teaching expectations.

H_{a6}: Mentored faculty members perceive that mentoring has a positive influence on their understanding of research expectations.

H_{a7}: Mentored faculty members perceive that mentoring has a positive influence on their understanding of service expectations.

H_{a8}: Mentored faculty members perceive that mentoring has positive influence on their understanding of how to achieve tenure/promotion/reappointment.

H_{a9}: Mentored faculty members perceive that mentoring has a positive influence on their feeling of connectedness to their department.

H_{a10}: Mentored faculty members perceive that mentoring has a positive influence on their feeling of having opportunities to socialize with colleagues.

H_{a11}: Mentored faculty members perceive that mentoring has a positive influence on their feeling of considering their co-workers friends.

RQ4. What do occupational therapy faculty members believe are the most important functions of an ideal faculty mentor?

RQ5: What do occupational therapy faculty members believe are the benefits of a faculty mentoring relationship?

RQ6: What do occupational therapy faculty members believe are the challenges of faculty mentoring relationship?

RQ7. What do occupational therapy faculty members who are mentored believe are the preferred and not preferred functions of a mentor?

RQ8. What do occupational therapy faculty members who are not mentored believe are the preferred and not preferred functions of a mentor?

Variables

Attribute variables as independent variables.

Variables in descriptive survey research design studies are not manipulated, only studied as they exist, however independent and dependent variables labels will be used to describe the responses of the survey participants (Portney & Watkins, 2009). The response that a participant has a mentor will be considered the independent variable to answer the research questions surrounding the occurrence influence of mentoring on tenets of academic success and academic socialization. The variables that are responses to survey questions surrounding characteristics of the participants and their mentors are the attribute variables that include: gender, age range, highest academic degree, highest academic rank, tenure track or reappointment status and number of years teaching. Attribute variables were counted for the characteristics of the mentors

including: gender, highest academic degree, highest academic rank, if the mentor is an occupational therapist, is the mentee's supervisor and if the mentor is on the mentee's campus/institution.

Response variables as dependent variables.

Portney and Watkins (2009) discusses that responses in a survey research design may vary depending on the independent or characteristic variable, thus aligning a dependent variable to the outcome of the responses of the participants. Therefore in this study the participant's rating of 5-point Likert scaled items will be considered the dependent variables as they measured the perception of the participants on three questions that include: eight items of stress related to transitioning to academia, four tenets surrounding the influence of mentoring of academic success and 11 items concerning academic socialization. Additional response variables include the answers of the participants on the questions designed to gather data surrounding the nature of mentoring including: how the mentoring relationship was formed, the duration and frequency of the mentoring process, topics discussed during the mentoring sessions and the yes and no answers to questions regarding the 27 functions of a mentor that were actually occurring, preferred or not preferred as previously described in the literature (Cunningham, 1999; Frandsen, 2003; Kram, 1985; Rogers, et al., 2008; Sands, et al., 1991; Schrodt, et al., 2003).

Methods

Design

The study is an exploratory, cross sectional survey research design to gather descriptive data to examine the occurrence and perceived influence of mentoring for occupational therapy faculty who are on the tenure track or eligible for reappointment in entry-level master's and doctoral occupational therapy programs in the United States. Descriptive research is considered

to be an appropriate method to describe and classify the individuals and variables of interest and to document their characteristics (Portney &Watkins, 2009). Additionally, through the use of the online survey, the researcher is able to gather data surrounding the occurrence of mentoring for occupational therapy faculty members, describe attitudes of the participants and explore the responses to discover the perceptions of the mentored faculty members on the influence of faculty mentoring on the 4 tenets of academic success, 11 items of academic socialization, their beliefs about the ideal mentoring functions, benefits and challenges of a mentoring relationship and the preferred and not preferred functions of a mentor (Portney & Watkins, 2009).

Participants

Once Institutional Board Review (IRB) approval from SHU was obtained, the subjects who were invited to participate in this study were full-time tenured track or contracted occupational therapy faculty members from the 147 entry-level master's and 4 doctoral occupational therapy programs in the United States that are accredited by the Accreditation Council for Occupational Therapy Education (ACOTE). Given there are potentially different criteria the years faculty members were on probation prior to being eligible for tenure across institutions and that contract faculty members may have different reappointment periods, the survey criteria did not discriminate years as new or junior faculty, but left this open to the interpretation of the possible participants, thus increasing the potential sample size. A list of the 151 colleges and universities was obtained from the American Occupational Therapy Association (AOTA) at the time of this study. The AOTA did not have a listing of which faculty members were new and/or on the tenure track or contract faculty members, therefore the 818 names of all occupational therapy faculty members were located and chosen to be potential participants by specifically viewing the college or university website. The eligibility criteria

were included in the email solicitation letter and as the introductory section of the survey. The criteria to participate were: the faculty member was a licensed occupational therapist, a full-time faculty member, on the tenure track but not yet tenured or a contract faculty who was eligible for reappointment and has access to the Internet. The potential participants could then indicate their eligibility and chose to take or not to take part in the study if they met the criteria. By directly contacting each of the 818 faculty members it was anticipated there would be a higher response rate than if the email was sent to the occupational therapy program chairs, who would in turn, then have to send the email to faculty members he or she felt met the criteria.

It was estimated that at least two faculty members would potentially meet the eligibility criteria, thus the sample pool was estimated to be 302 potential participants. These estimates are based upon the following data from the recent 2010 Occupational Therapy Compensation and Workforce Study (AOTA, 2010), which noted that 116 occupational therapy faculty members who responded reported that they had taught for two or less years, 117 reported having taught for 2.1 to 5 years and 108 reported teaching 5.1 to 10 years, thus the total number of potential participants, based on the AOTA workforce study is 341. Given there was no information about the number of eligible occupational therapy faculty members who would meet the study criteria, the entire pooled population of occupational therapy faculty members (n=818) in the 151 occupational therapy entry-level and doctoral programs in the United States was sent an email solicitation letter inviting them to participate in the survey. Therefore, there was no randomization of the sample pool to ensure that there would be a sufficient number of participants to attempt an acceptable return rate of 20% for an email survey method of data collection (Alreck & Settle, 2003; Portney & Watkins, 2009).

Instrument

The Health Sciences Faculty Mentoring Survey was developed by the principal investigator (PI) based on the lack of published survey tools that would gather data to measure the occurrence, perception of the influence of mentoring and the nature of mentoring for health sciences faculty member and for this study, occupational therapy faculty members. The PI obtained face and content validity prior to using used to gather data surrounding the occurrence, nature and perceived influence of mentoring for new occupational therapy faculty members in the U.S. Please see Appendix C for the full pilot study.

Data Collection Procedures

The Health Sciences Faculty Mentoring Survey (HSFMS) was entered into and maintained through an online format using the Academic Survey System & Evaluation Tool (ASSET) Version 2.3, developed by Bert G. Wachsmuth (Wachsmuth, 2006) from Seton Hall University in South Orange, NJ. This program allows the researcher to design and administer a survey online, then gather and download data into a statistical analysis program such as SPSS or Excel to confidentially interpret the data. Open-ended questions were analyzed using qualitative methods.

The list of 818-faculty member email list was separated to represent eight regions of the United States in order to group the blast email into smaller contact lists that could be sent from the Seton Hall University email of the principal investigator. This procedure allowed the PI to manage and review undeliverable emails and to examine the responses of participants in groups of approximately 100 per region. Regions were divided into the Tri-state area (NY, NJ, CT); the Northeast (DC, MD, MA, NH, PA), Midwest was divided into two regions: Midwest #1 (MO, NE, OH, IN, IA KS), Midwest #2 (IL, MI, MN, ND, SD, WI), the Southeast was divided into

two regions: Southeast #1 (TN, AL, AR, GA, KY, VA), and Southeast #2 (FL, LA, MS, NC, SC, WV, PR), the Southwest (AZ, OK, NM, TX), and the West (CA, CO, ID, NV, OR, UT, WA, WY).

The invitation to participate in the study was sent via email to 818 occupational therapy faculty members as identified by the American Occupational Therapy Association's (AOTA) list of accredited entry-level master's and doctoral programs in the United States. A solicitation letter was included in the blast email (see Appendix D) to invite the potential participants to participate in the anonymous, confidential and voluntary online survey. Inclusion criteria were listed in the solicitation and as the first section of the survey (see Appendix D). A link and password to take the Health Sciences Faculty Mentoring Survey was provided in the email. Two weeks later a reminder email (see Appendix E) was sent to the participants reminding them of the invitation to participate if they have not done so (Dillman, 2007). The survey was disabled two weeks later.

Data Analysis

Quantitative data was analyzed using descriptive statistics including univariate statistical procedure using frequencies, percentages, measures of central tendency and frequency tables for the nominal data (Portney & Watkins, 2009). The qualitative data from the three open ended questions were inductively analyzed for preset and emergent themes (Creswell, 2007).

Quantitative analysis methods.

The use of descriptive statistics allows the researcher to summarize and explain the data by reporting the frequency of occurrences of the responses (Elliot & Woodward, 2007). Frequency tables and percentages were used to examine the following: number participants reporting having a faculty mentor, demographic characteristics including gender, age range,

academic rank and highest degree of both the mentored participants and the participants who are not mentored. Frequencies and percentages were calculated to discover the characteristics of the mentors. Frequency counts were derived to explore the amount of time and frequency of the mentoring sessions, and the number of the types of topics covered in the meetings. Additionally, frequency counts were examined to understand items surrounding the nature of mentoring including how the relationships were formed, how the mentoring process progressed and the actual, preferred and not preferred functions of a faculty mentor as reported by the mentored faculty participants.

Descriptive statistics using frequencies and percentages were used to describe the distribution of the level of agreement of the participants on the three questions that had a 5-point Likert scale. To answer the research questions surrounding the participant's perception of the influence of mentoring, the Likert scale responses were treated as ordinal data as the interval between each point was ordered from 1 to 5, that is, they have a logical order (Elliot & Woodward, 2007; Portney & Watkins, 2009). The data were examined using a frequency table to analyze the most and fewest responses of the mentored faculty participants who rated their perception of the importance of the influence of mentoring on four tenets of academic success (1=not important to 5=very important) and on 11 items surrounding the perception of the influence of mentoring on academic socialization (1=none to 5 =always). To understand the issues that have previously been described in the literature that may cause stress for faculty members when they are first hired, the data from the participant's rating of their perceived level of stress (1=none to 5=extreme), if any, when they transitioned to a career in academia was examined. The number of responses was examined to discover the preferences of mentored and

non-mentored faculty members surrounding the preferred and not preferred functions of a mentor, (Elliot & Woodward, 2007).

Qualitative analysis methods.

The three open-ended question responses were analyzed through inductive coding and categorization for themes. The researcher employed reflexivity during data analysis by bracketing her biases surrounding issues discussed in the literature surrounding mentoring for faculty. In this way trustworthiness of the findings would be reflected through the words of the participants (Lincoln & Guba, 1985). A second reviewer, blinded to the study, coded and grouped the open-ended question responses into themes as a form of peer review to reduce researcher bias and increase credibility and dependability (Creswell, 2007).

CHAPTER IV

RESULTS

Quantitative Analysis

Description of subjects.

Response Rate. Of the 818 faculty members contacted, 107 eligible occupational therapy faculty members completed the online survey representing a 13% response rate. To gain a more accurate understanding of the response rate, each returned or undeliverable email response was examined for indications of ineligibility (respondent retired, tenured, not full time, undeliverable) or for refusal to participate in an attempt to decrease the number of possible ineligible occupational therapy faculty members and thus more accurately determine the eligible population for pooling. Based on the review, the recalculated number of potential participants from the entire population was determined to be 727, resulting in a revised response rate of 14.7%. While the revised rate is still lower than the 20% typical of survey response rates, it is however, considered an acceptable return rate for an online survey (Alreck & Settle, 2004). While the response rate has been recalculated from the 818 initially contacted, the 727 faculty members who potentially could be eligible, the PI suggests that there were still a number of potential occupational therapy faculty members who were not eligible to participate in the study but, due to the lack of a truly identifiable cohort received the initial survey request but failed to return an email notifying the PI of their non eligibility.

Demographics.

Demographics and professional characteristics of the 107 participants are summarized in Table 1. The participants were predominately female (86.9%, n=93) with only 13.1%(n=14) being male. This finding is consistent with the gender characteristics reported from the American Occupational Therapy Compensation and Workforce Study of occupational therapists in the U.S. with 89% female and 11% male (AOTA, 2010) of the 552 occupational therapists who responded to the AOTA survey. The most frequently reported age range was 36-45 (44.9%, 44 of 107), followed by 46-55 (27.1%, 29 of 107), no respondents reported being over 65. The youngest age range (less than 36) and the older age range (over 55) were reported to be 15% and 13.1% of the sample respectively.

Table 1 displays the academic degree and academic ranks of the participants. The highest degree that participants reported was a PhD (32.7%, 35 of 107), followed by MS/MA (27.1%, 29 of 107) and OTD (17.8%, 17 of 107). Most participants reported their highest academic rank to be assistant professors (70.1 %, 75 of 107), followed by associate professors (15%, 16 of 107) and professor (1.9%, 2 out of 107).

Table 1

Academic Degree and Academic Rank for 107 Participants

	Frequency	Percentage
Highest Academic Degree		
PhD	35	32.7%
MS/MA	29	27.1%
OTD	17	15.9%
Other*	26	24.3%
Total	107	100%
Highest Academic Rank		
Assistant Professor	75	70.1%
Associate Professor	16	15%
Professor	2	1.9%
Instructor**	11	10.2%
Clinical Professor***	3	2.8%
Total	107	100%

Note: *Other Highest Degree includes: ABD (n=5); DC (n=1); DHS (n=1); DrOT (n=1); JD (n=1); MHS (n=2); MHA (n=1); MBA (n=1); MC (n=1); M.Ed. (n=1); MS pursuing OTD (n=1). **Instructor includes: Instructor (n=4); Clinical Instructor (n=3); Assistant Clinical Instructor (n=2); Associate Clinical Instructor (n=1); Senior Instructor (n=1). ***Clinical Professor includes: Assistant Clinical Professor (n=1); Associate Clinical professor (n=1); Clinical Assistant Professor (n=1).

Table 2 displays the number of years the 107 participants reported teaching and the years teaching grouped by lowest to highest to summarize the responses. The most frequently reported years of teaching was 2.5 years or less representing 24.3% (26 of 107), 15.9% (17 of 107) reported teaching for 3 years, 8.4% (9 of 107) taught for 4 years and 14.9% (16 of 107) reported teaching for 5 years. Finally, 36.4% (39 of 107) reported teaching between 6 and 23 years.

Table 2

Frequency and Percentage of Years Teaching for 107 Participants

Year Teaching (Grouped)	Frequency	Percentage
2.5 years or less	26	24.3%
3 years	17	15.9%
4 years	9	8.4%
5 years	16	14.9%
Sub-Total	68	63.5%
6 years	7	6.5%
7 years	5	4.7%
7.5 to 9 years	8	7.5%
10 to 13 years	8	7.5%
14 to 17 years	10	9.4%
23 years	1	.9%
Sub-Total	39	36.5%
Total of all participants	107	100%

While 95 participants reported that their institution has a tenure track, just over half (52.3%, 56 of 107) reported being on the tenure track. Seventy-two participants (67.3%) reported that they had not yet achieved tenure or reappointment.

Occurrence of mentoring.

To answer the research question if and how frequently mentoring is occurring for occupational therapy faculty members who are not yet tenured or eligible for reappointment in entry level and doctoral programs descriptive statistical analysis were used to calculate frequencies (Elliot & Woodward, 2007). The alternate hypothesis was: Mentoring is occurring for occupational therapy faculty members who are on the tenure track or eligible for reappointment in occupational therapy entry level and doctoral programs 25% of the time as reported by the participants surveyed. Research question one was supported as more than half of the participants surveyed indicated that mentoring is occurring.

Section II of the Health Sciences Faculty Mentoring Survey was designed to gather data about those participants who have a mentor. Most of the mentored faculty participants reported that they have a mentor at their institution (52 of 56), five of the participants also reported having a mentor outside of their institution. Additionally, four participants reported they have a mentor at another institution, resulting in a total of 52.3% (56 of 107) participants who reported having a faculty mentor (see Table 3).

Most faculty mentors are female (87.5%; 49 of 56), 69.6% (39 of 56) are a part of the school's occupational therapy department, and 23.2% (13 of 56) were not occupational therapists but were mentors from the participant's campus. Over 39.3% (22 of 56) of the mentors were mentee's supervisors. Mentor's highest academic rank was associate professor (53.6%, 30 of 56), followed by full professor (32.1%, 18 of 57).

Table 3

Mentor Characteristics

Mentor Characteristics	Frequency	Percentages
Where and Who are the Mentors		
Mentor from institution's OT department	39	69.6%
Mentor from institution but not from OT dept	13	23.2%
Mentor from another institution and is an OT	6	10.7%
Mentor is mentee's supervisor	22	39.3
Mentor's Highest Academic Rank		
Mentor's highest academic rank is associate professor	30	53.6%
Mentor's highest academic rank is professor	18	32.1%
Mentor's highest academic rank is assistant professor	6	10.7%
Other**	2	3.6%

Note. Other**5 participants indicated they have mentors at both their institution and another institution. ** One participant responded, "assistant clinical instructor" and the other reported, "a mixture of people"

Perceptions of the influence of mentoring.

Section IV of the Health Sciences Faculty Mentoring Survey addressed the second and third research questions that were analyzed using frequency tables with counts and percentages to describe the 5-point Likert scaled responses for each research question. The data were measured as ordinal as the items on the Likert scale provides information about the relative rank order of the responses (Batavia, 2001). A chi square test of independence was not used to discover if there was a difference between the participants who indicated that they had a mentor and the responses from the 5 point Likert scale surrounding their perception of the influence of mentoring on four tenets of academic success or the 11 items of academic socialization. Once categories of age range, academic rank of mentored faculty, years being mentored or years of teaching was extracted from the total of 56 participants who indicated they had a mentor, the categories were too small to obtain statistical significance. Furthermore, one of the two assumptions that must be met to appropriately use the chi square statistic is that the categories must be mutually exclusive and not a summary statistic (Portney & Watkins, 2009). Given the 5 point Likert contained anchors that provided participants the opportunity to indicate that mentoring was not perceived to be important on tenets of academic success or never influenced academic socialization, these rating could not be collapsed (Portney & Watkins, 2009) with the ratings of somewhat important or sometimes influenced to form a category that indicated low ratings of the perception of the influence of mentoring and then be compared to a category of the two ratings that would represent higher ratings of the influence of mentoring (important and very important for academic success and often and always for academic socialization).

Research question two specifically sought to discover what is the perceived influence of mentoring on the tenets of academic success: teaching, research, service and tenure/promotion/reappointment (TPR)?

The alternate hypotheses were:

- Mentored faculty members perceive that mentoring has a positive influence on their teaching
- Mentored faculty members perceive that mentoring has a positive influence on their research
- Mentored faculty members perceive that mentoring has a positive influence on their service
- Mentored faculty members perceive that mentoring has positive influence on their tenure/promotion/reappointment.

Research hypothesis two is supported that mentored faculty members will perceive mentoring has a positive influence as indicated by the high ratings of importance of mentoring on the tenets of academic success. Table 4 displays the responses of the participants who reported having a mentor who rated their perception of the importance (1=not important to 5=very important) on the influence of mentoring on four tenets of academic success: improvement/skill development for teaching, research productivity, service engagement and achieving reappointment, tenure or promotion. The majority of the participants indicated that the tenet of tenure and/or reappointment was very important (61.7%, 33 of 56), and 26.7% (14 of 56) rated this tenet as important. Research productivity was rated very important at 51.7% (26 of 56), teaching was rated very important at 40% (21 of 56) and 40% (22 of 56) reported it as

important. The tenet of service engagement was rated important at 46.7% (18 of 56) and 21.7% (13 of 56) as very important.

Table 4

Responses of Mentored Faculty's Perception of the Influence of Mentoring on Tenets of Academic Success

Tenets of Academic Success	N	Not Important	Somewhat Important	Neutral	Important	Very Important
Improved teaching	54	1 (1.8%)	7 (12.9%)	3 (5.5%)	22 (40.7%)	21 (38.9%)
Research productivity	54	0 (0%)	4 (7.4)%	4 (7.4%)	20 (37%)	26 (48.1%)
Service engagement	54	2 (3.7%)	7 (12.9%)	9 (16.7%)	18 (33.3%)	12 (22.2%)
Reappointment, tenure &/or promotion	54	0 (0%)	3 (5.5%)	4 (7.4%)	14 (25.9%)	33 (61.1%)
Missing	53					

Note: The n=54 represented on this table reflects two participants who did not complete this portion of the survey. The missing 53 represents the two mentored faculty who omitted to complete this section and the remaining 51 participants who indicated they did not have a mentor and thus they were required to skip this section.

Research question three sought to address what is the perceived influence of mentoring on items of academic socialization: feeling valued, having a sense of ownership and loyalty to their program, having been provided with resources to conduct research, understanding teaching, research, service and tenure/promotion/reappointment expectations, feeling a sense of connection in their work environment, having opportunities to socialize and considering their co-workers friends? Based upon the literature it was hypothesized that: Mentored faculty members perceive that mentoring has a positive influence on their academic socialization as measured by Schrodt, Cawyer and Sanders (2003) on the 11 items of academic socialization. Additionally, several sub-hypotheses were proposed which include:

- Mentored faculty members perceive that mentoring has a positive influence on their feeling of being valued.
- Mentored faculty members perceive that mentoring has a positive influence on their feeling of ownership to their program.
- Mentored faculty members perceive that mentoring has a positive influence on their feeling of loyalty to their department.
- Mentored faculty members perceive that mentoring has a positive influence on the provision of resources for conducting research.
- Mentored faculty members perceive that mentoring has a positive influence on their understanding of teaching expectations.
- Mentored faculty members perceive that mentoring has a positive influence on their understanding of research expectations.
- Mentored faculty members perceive that mentoring has a positive influence on their understanding of service expectations.
- Mentored faculty members perceive that mentoring has positive influence on their understanding of how to achieve tenure/promotion/reappointment.
- Mentored faculty members perceive that mentoring has a positive influence on their feeling of connectedness to their department.
- Mentored faculty members perceive that mentoring has a positive influence on their feeling of having opportunities to socialize with colleagues.
- Mentored faculty members perceive that mentoring has a positive influence on their feeling of considering their co-workers friends.

The overall hypothesis is supported in that these mentored faculty members perceive that mentoring has a positive influence on the 11 items of academic socialization. Table 5 displays the responses of the participants who reported having a mentor, perceptions of how frequently mentoring influences (1= never to 5= always) the 11 items of academic socialization. Mentored faculty participants rated "feeling valued" the highest of all of the academic socialization items with 58.5% (31 of 53) reporting that they often perceived that mentoring influenced this item. Feeling a "sense of ownership" was the next highest rating with 47.2% (25 of 53) reporting that they often felt mentoring influenced this item of academic socialization and 41.5% (22 of 53) participants reported they always felt that mentoring positively influenced their loyalty to their department. Participants rated their "understanding of teaching expectations" as always influenced by mentoring (47.2%, 25 of 53) and "understanding service expectations" as often influenced representing 47.2% (25 of 53) of the reported responses. Less than half of the participants reported that they often felt mentoring influenced their "understanding of research expectation" with 41.5% (22 of 53) and only 32.1% (17 of 53) reported that they always felt that mentoring influenced their understanding of this item. Slightly less than half of the participants (47.2%, 25 of 53) reported they often felt mentoring influenced their understanding of "service expectations". The lowest rated item by the participants was "provided with the resources to conduct research" with 7.5% (4 of 53) reporting they never felt that mentoring influenced this item and only 11.3% (6 of 53) reported they always perceived mentoring influenced this item. The highest rating for the item of "provision of resources for research" was neutral with 32.1% (17 of 53) reporting this rating. Finally, 43.4% (23 of 53) participants reported that they often felt "connected to others" in their work environment while the other items of "collegiality" and "friendship" were lower with 32.1% (17 of 53) for the opportunity to socialize with colleagues

and 35.8% (19 of 53) considering co-workers friends reporting they often felt mentoring influenced these items rating respectively. It is noted that for these last two items that a rating of neutral was given from 14 of 53 participants (26.4%) for the opportunity to "socialize with colleagues" and from 15 of 53 participants (28.3%) "considering co-workers friends".

Table 5

Responses of Mentored Faculty's Perception of the Influence of Mentoring on Items of Academic Socialization

Items of Academic Socialization	N	Never	Sometimes	Neutral	Often	Always
Feel Valued	53	1 (1.9%)	8 (15.1%)	5 (9.4%)	31 (58.5%)	8 (15.1%)
Feel ownership	53	0 (0%)	5 (9.4%)	11 (20.8%)	25 (47.2%)	12 (22.6%)
Understand service expectations	53	1 (1.9%)	6 (11.3%)	7 (13.2%)	25 (47.2%)	14 (26.4%)
Feel connected to others in my work environment	53	0 (0%)	6 (11.3%)	8 (15.1%)	23 (43.4%)	16 (30.2%)
Understand research expectations	53	0 (0%)	5 (9.4%)	9 (17%)	22 (41.5%)	17 (32.1%)
High loyalty	53	0 (0%)	3 (5.7%)	7 (13.2%)	21 (39.6%)	22 (41.5%)
Understand teaching expectations	53	1 (1.9%)	2 (3.8%)	5 (9.4%)	20 (37.7%)	25 (47.2%)
I consider my co-workers to be friends	53	0 (0%)	7 (13.2%)	15 (28.3%)	19 (35.8%)	12 (22.6%)
I have been given adequate information on TPR	53	1 (1.9%)	13 (24.5%)	11 (20.8%)	17 (32.1%)	11 (20.8%)
I have opportunities to socialize with colleagues	53	1 (1.9%)	10 (18.9%)	14 (26.4%)	17 (32.1%)	11 (20.8%)
I have been provided with resources research	53	4 (7.5%)	15 (28.3%)	17 (32.1%)	11 (20.8%)	6 (11.3%)

Note: The n=53 represented on this table reflects three participants (#18, 104, 108) who did not complete this portion of the survey. The missing 54 represents the two mentored faculty who omitted to complete this section and the remaining 51 participants who indicated they did not have a mentor and thus they were required to skip this section.

Qualitative Responses

Research question four sought to understand what occupational therapy faculty members believe are the most important functions of an ideal faculty mentor.

The open-ended questions within the survey provided qualitative data that was used to address research question four. Specifically, this narrative data was analyzed using inductive coding, preset and emergent themes and frequency of responses to theoretical constructs of mentoring functions as posited by Kram (1985) and as measured by Cunningham (1999), Frandsen (2003), Sands, Parson & Duane (1991), Schrodt, Cawyer & Sanders (2003), Rogers et al., (2008) and analyzed to draw further meaning from the data (Miles & Huberman, 1984). However, as the data were analyzed, themes emerged that had not been found in the literature or had not been discussed in depth, thus those themes were added as they became apparent and are discussed in the discussion section of this paper as they may offer greater insight into the depths of this question (Creswell, 2007).

From the 102 responses to the first open-ended question, initially 22 categories were extracted: support, assistance, advice, availability, guidance, encouragement, information, feedback, coaching, welcoming, protection, role modeling, willingness, honesty/trustworthiness, listening, experienced, belief in mentee, challenges, resource, consistency, individualized approach and personal characteristics. These categories were further analyzed to reduce the data and categorize within seven preset themes and three emergent themes. Table 6 includes examples of those themes that were aligned with the preset categories from the literature and the emergent themes that emerged from the narrative of the participants.

Table 6

Preset Themes, Participant's Selected Responses, Occurrences and Emergent Themes of the Most Important Functions of a Mentor

Preset themes from literature	***(# of participant) Selected Participant Responses***	***Occurrences***
Mentor Support/ Assistance*	(6) "proving initial support for the new faculty member" (34) "assistance in all the roles of academia"	Support = 24 Assistance = 35*
Research Assistance	(97) "help establishing research opportunities"	5
Career Guide	(4) "providing guidance, especially related to institutional culture and relationships" (83) "to save time & effort to reach the next level of promotion & research"	17
Information Source	(28, 41) Orient to the culture of academia (58) "Tells me how things 'really work'" (84) "providing "pearls of wisdom"	23
Intellectual Guide	(105) "fosters confidence & intelligence" (52) "empowers me to problem solve" (107) "facilitates reflective thinking"	7
Protection	(21, 26, 35) Protect time, productivity	4
Leader/Coach/Role Model	(18, 25, 45, 47) Excellence in teaching, experienced in within the system (107) "leads through example"	16
Emergent Themes		
Being available	(55) "just to answer questions as they arrive, no matter how trivial"	8
Willingness to serve	(56) "being open to the mentoring process"	9
Individualized approach	(91) "allows the mentee to drive the need for mentoring" (68) "faculty-centered coaching"	5

Research questions 5 and 6 sought to understand what occupational therapy faculty members believe are the benefits and the challenges of a mentoring relationship. Narrative data were analyzed through inductive analysis using data reduction; data display and emergent themes were recorded from the second and third open-ended questions on the HSFMS (Creswell, 2007).

Research question 5 sought to understand, what occupational therapy faculty members believe are the benefits of a faculty mentoring relationship? The overarching theme that emerged from the narrative of the 102 participants who completed this section is "Learning the tricks of the trade". Four subthemes were inferred from the data: Someone To Go To, Shared Learning, Easing the Stress and Professional Growth and Productivity.

Table 7 displays the themes, participant responses and occurrences. Learning the tricks of the trade emerged as an overall theme with 13 specific responses alluding to this issue. However, within most of the responses the message of the participants suggests that a faculty member needs to learn about their roles and responsibilities in this academic environment in order to succeed in their occupation as a professor. The theme identified as, "Someone to go to" occurred 49 times, either as direct words or statements or in reference to a mentor who is available and invested in the mentee's professional growth. Easing the stress was a theme that occurred 25 times as participants described their feelings of anxiety or uncertainty and the benefits of having a mentoring relationship to ease these feelings. The theme of professional growth and productivity was described 33 times as responses of the participants who described achieving tenure, increasing their confidence and obtaining professional goals, as some of the benefits of having a mentor. Finally shared learning emerged as a strong theme with 16 responses that defined the benefits to both the mentor and the mentees in areas of professional growth and collaboration. Within this theme, issues surrounding the benefits to the institution

were included as the productivity that results as a product of mentoring can increase retention and increase grant attainment.

Table 7

Emergent Themes, Participant's Selected Responses and Occurrences of the Benefits of a Mentoring Relationship

Emergent Themes	***# of Participant and Selected Participant Responses***	***Occurrences***
Learning the tricks of the Trade	(4) prevent miss-steps on the way to tenure/promotion" (87) "Mentors are how you figure it all out!" (24) "If a fledgling faculty member is given the resources necessary for success, then the faculty member would not have to compromise passion for production"" (23) "A shorter time to become acclimated to the institution"	13
Some One To Go To	(37) having someone to talk to, to listen to you, guide you and be an example of how you should "look" as an academician" (53) having someone to celebrate with after an article is accepted or to commiserate with when grants are rejected is such an essential part of keeping your sanity"	49
Easing the Stress	(25) address uncertainty (56, 87) "like being a new grad clinician; an apprenticeship model (67, 73, 90) increased job satisfaction, improved confidence"	25
Shared Learning	(9, 104) both people increase their professional development (28) mutual support	16
Professional Growth and Productivity	(82) I think I could have moved a bit faster in my professional development in academia with a stronger, inherent support system"	33

Research question 6 sought to understand what occupational therapy faculty members believe are the challenges of a faculty mentoring relationship. One hundred and three participants completed this survey item to answer the research question about what they believe are the challenges of a faculty mentoring relationship. Five themes emerged: Not enough time, Where are the mentors? The fit does not fit, Mentoring relationships are not valued and Struggling through an unknown path. Table 8 displays the theme, the occurrence of words or statements that reflect the theme and selected quotes. There were 51 occurrences of the word or statements surrounding time and included subthemes that were described as a lack of time to find a mentor, to participate in the process, and to develop a mentoring relationship. The issue of finding a mentor occurred 16 times and participants reported that issues surround a poor fit between the mentor and mentee occurred 23 times. Participants reported that mentoring relationships are not valued 12 times and finally statements surrounding the struggles of a mentoring relationship occurred 38 times.

Table 8

Emergent Themes, Participant's Selected Responses and Occurrences of the Challenges of a Mentoring Relationship

Emergent Themes	***(# of Participant) Selected Participant Responses***	***Occurrence***
Not enough time	(7) Time! Every faculty member is busy with teaching, research and clinical practice. I think faculty mentoring is seen as "one more thing" that takes away time from those other necessary functions." (95) Finding time for both the mentor and mentee to meet. I also feel guilty taking his time on occasions. (107) Time required to have an effective relationship – everyone is already teaching overload and this is another time demand.	51
Where are the mentors?	(6, 48) not enough OT faculty in the school or the faculty not experienced enough (19, 24) someone who is willing to serve	16

	(28) informally matched mentors and more than one can be more effective to meet the mentees different needs	
The fit does not fit	(6, 77, 86) personality clashes (66) The relationship could be key in developing an extraordinary professor or killing the spirit of the budding academician." (84) The challenges are ensuring there is a good fit between the mentor and mentee. The mentor and mentee both need to be vested in the process.	23
Mentoring relationships are not valued	(24) "Mentoring must be a part of the culture. If the culture does not buy into the concept, then it will not be effective." (51) Mentors are pressed for time and do not receive an additional compensation. There really should be more, "teach the teacher" formalized methods to help faculty with the basics of technology, creating PowerPoints, etc."	12
Struggling through an unknown path	(7, 25, 41, 50, 60) feeling needy, like a drain on the mentor, guilty about taking the mentor's time (30) moving from mentored to independent scientist (39) Maintaining a collegial (rather than paternalistic) relationship (52) delegating work without "dumping" on the mentee (70) if the mentor has a hidden agenda to meet their own needs versus what is in the best interest of the mentee. If the mentee becomes socially and politically aligned with the mentor which may limit their career at very political institutions. (67, 103) the mentor is your supervisor – never worked out well	38

Research question 7 sought to understand what faculty members who are mentored believe are the preferred and not preferred functions of a mentor. One hundred and seven of the participants responded to one or more of choices provided in the survey to understand the actual, preferred and not preferred functions of a mentor for the faculty who are mentored and two

choices of preferred or not preferred for the faculty members who are not mentored. The frequencies of the responses of the participants for the preferred and not preferred functions are discussed.

Mentored faculty members reported that functions that were preferred in a mentor included nomination for honors (32 indications), protection (28), assistance with publications (28), collaboration with research (28), advice about research/grants/funding (27) and advice identifying ways to find balance (27) as displayed in bold on Table 9. The least preferred functions of a mentor were: belief in my potential (15), challenging work to foster professional growth (16), and constructive criticism and feedback (17).

Table 9

Mentored Faculty Preferences in a Mentor

	Functions of a Faculty Mentor	Preferred	Not Preferred
q.	Nomination for honors	**32**	11
t.	Assistance with grants	**32**	6
k.	Assistance with publications	**28**	6
l.	Collaboration with research	**28**	9
j.	Protection	**28**	4
aa.	Advice about research/grants/funding	**27**	5
z.	Assistance identifying ways find balance	**27**	**5**
h.	Informal information on TPR*	25	2
d.	Visibility	24	6
g.	Formal advice on TPR*	23	3
i.	Understanding of academic culture	23	2
m.	Advice about committee work	23	6
u.	A trusting relationship	21	0
x.	Social opportunities	21	7
y.	Practical suggestions to improve my teaching	21	7
f.	Suggests career strategies	20	2
n.	Intellectual guidance to foster my career	20	2
p.	Emotional support	20	5
w.	Editing & preparation of manuscripts	20	**12**
a.	Advice specific to my needs	19	1
c.	Friendship	18	8
e.	Support & Encouragement	18	0
r.	Role modeling	18	1
v.	Advice on time management	18	**16**
o.	Constructive criticism & feedback	17	3
b.	Challenging work to foster professional growth	16	**19**
s.	Belief in my potential	15	1

Note: Items are not in alphabetical order but are arranged in highest to lowest order of preferences. * TPR = tenure/promotion/reappointment.

Research question 8 sought to understand what faculty members who are not mentored believe are the preferred and not preferred functions of a mentor. Table 10 displays the responses of the non-mentored faculty to their preferred or not preferred functions of a faculty mentor. Non-mentored faculty members indicated 51 times that each of the following was the most preferred function of a mentor: constructive criticism and feedback, a trusting relationship

and belief in their potential. The function of support and encouragement was indicated 50 times, and being provided with formal and informal advice about tenure, promotion and reappointment and role modeling were each indicated 48 times. The least preferred function of a faculty mentor was challenging work to foster professional growth, as indicated 10 times by the non-mentored faculty members.

Table 10

Non-mentored Faculty Preferences in a Mentor

	Functions of a Faculty Mentor	Preferred	Not Preferred
o.	Constructive criticism & feedback	**51**	0
u.	A trusting relationship	**51**	0
s.	Belief in my potential	**50**	1
e.	Support & Encouragement	**48**	3
g.	Formal advice on TPR	**48**	3
h.	Informal information on TPR	**48**	3
a.	Advice specific to my needs	**49**	2
r.	Role modeling	**49**	2
f.	Suggests career strategies	46	5
i.	Understanding of academic culture	47	3
k.	Assistance with publications	46	5
n.	Intellectual guidance to foster my career	46	5
y.	Practical suggestions to improve my teaching	46	5
aa.	Advice about research/grants/funding	45	6
d.	Visibility	44	7
l.	Collaboration with research	41	10
t.	Assistance with grants	41	10
m.	Advice about committee work	41	9
j.	Protection	40	11
q.	Nomination for honors	38	13
w.	Editing & preparation of manuscripts	39	12
p.	Emotional support	36	**14**
v.	Advice on time management	33	**18**
z.	Assistance identifying ways to balance career & life	33	**18**
c.	Friendship	32	**19**
x.	Social opportunities	29	**21**
b.	Challenging work to foster professional growth	22	**29**

Note: Items are not in alphabetical but are arranged in highest to lowest order of preferences. * TPR = tenure/promotion/reappointment.

Finally, Table 11 displays the preferences of mentored and non-mentored faculty surrounding their preferred mentor functions ordered from most to least based on the responses of the mentored faculty in column two. While mentored faculty participants most frequently indicated the top six mentoring functions (see Table 11), the most frequently indicated functions of the non-mentored faculty participants are scattered among the remaining 21. In fact, non-mentored faculty indicated constructive criticism and feedback 51 times while mentored faculty indicated this as a preferred function the least amount of times (17 times).

Table 11

Mentored and Non-mentored Faculty Preferences in a Mentor

	Preferred Functions of a Faculty Mentor	Mentored	Non-mentored
q.	Nomination for honors	**32**	38
t.	Assistance with grants	**32**	41
k.	Assistance with publications	**28**	46
l.	Collaboration with research	**28**	41
j.	Protection	**28**	40
aa.	Advice about research/grants/funding	**27**	45
z.	Assistance identifying ways find balance	**27**	33
h.	Informal information on TPR*	25	**48**
d.	Visibility	24	44
g.	Formal advice on TPR*	23	**48**
i.	Understanding of academic culture	23	47
m.	Advice about committee work	23	41
u.	A trusting relationship	21	**51**
x.	Social opportunities	21	29
y.	Practical suggestions to improve my teaching	21	46
f.	Suggests career strategies	20	46
n.	Intellectual guidance to foster my career	20	46
p.	Emotional support	20	36
w.	Editing & preparation of manuscripts	20	39
a.	Advice specific to my needs	19	**49**
c.	Friendship	18	32
e.	Support & Encouragement	18	**48**
r.	Role modeling	18	**49**
v.	Advice on time management	18	33
o.	Constructive criticism & feedback	17	**51**
b.	Challenging work to foster professional growth	16	22
s.	Belief in my potential	15	**50**

Table 12 displays the mentoring functions that mentored faculty reported are actually occurring and include the preferred and not preferred functions. The top three mentoring functions that were actually occurring were indicated 52 times were a) providing advice specific to my needs, b) providing support and encouragement and c) mentor acts a s role model. The mentoring function, "believes in my potential" was indicated the second more frequently at 51 and "provides a trusting relationship was indicated 49 times. The next most frequently indicated mentoring functions that were indicated 45 times each were a) provides intellectual guidance to foster my career goals, b) provides constructive criticism and feedback and c) provides emotional support. The least indicated actually occurring mentoring function was, "nominates me for honors" with 14 responses, however, mentored faculty also indicated that this was a preferred function 32 times. The mentoring function, "provides assistance with grants" was indicated to be actually occurring 18 times, and this function was indicated to be preferred 32 times.

Table 12

Mentored Faculty Member's Actual, Preferred and Not Preferred Functions of a Mentor

	Mentoring Functions	**Occurrences***		
		Actual	Preferred	Not Preferred
a.	Advice specific to my needs	52	19	1
e.	Support & Encouragement	52	18	0
r.	Role modeling	52	18	1
s.	Belief in my potential	51	15	1
u.	A trusting relationship	49	21	0
n.	Intellectual guidance to foster my career	45	20	2
o.	Constructive criticism & feedback	45	17	3
p.	Emotional support	45	20	5
f.	Suggests career strategies	43	20	2
c.	Friendship	42	18	8
x.	Social opportunities	42	21	7
i.	Understanding of academic culture	41	23	2
m.	Advice about committee work	41	23	6
y.	Practical suggestions to improve my teaching	41	21	7
g.	Formal advice on TPR	36	23	3
h.	Informal information on TPR	34	25	2
d.	Visibility	33	24	6
j.	Protection	33	28	4
z.	Assistance identifying ways find balance	29	27	5
w.	Editing & preparation of manuscripts	**28**	**20**	**12**
aa.	Advice about research/grants/funding	26	27	5
b.	Challenging work to foster professional growth	25	16	19
v.	Advice on time management	25	18	16
k.	Assistance with publications	**24**	**28**	6
l.	Collaboration with research	**20**	**28**	9
t.	Assistance with grants	**18**	**32**	6
q.	Nomination for honors	**14**	**32**	11

Note. *Mentored faculty could indicate more than one answer, thus the total across the rows may not add up to n=56 of the mentored faculty.

Data describing issues surrounding the transition to an academic career

To gain a deeper understanding of issues that occupational therapists, who consider a career in academia may experience, data were gathered from the HSFMS that describes the participant's perception of stress, if any, they may have experienced when first hired. Eight issues of stress identified in the literature (Anderson, 2009; Fuller, Maniscalco-Feichtl & Droege, 2008; Mitcham & Gillette, 1999; Moran & Ashton, 2004; Sawatzky & Enns, 2009; Siler & Kliener, 2001; Vassantachart & Rice, 1997) were measured using a 5-point Likert scale (1=none to 5=extreme).

All 107 participants completed this section of the survey with most of them reporting that they perceived minimal to moderate stress for all of the eight issues (see Table 12). The issue, "Transition from clinician to faculty member" was rated moderately high by 42.1% (45 of 107), with "Knowledge about teaching expectations" rated moderately stressful at 39.3% (42 of 107) and the issue of "Knowledge about research productivity" was rated moderately stressful by 29% (31 of 107) participants. Participants rated the issue of "Information about service obligations" as minimally stressful with 39.3% (42 of 107) and "Information about university culture" was rated the next highest as minimally stressful with 33.6% (36 of 107) reporting their perception of stress levels on these issues. The lowest rated issue of stress was, "Information about the informal rules of how to achieve tenure, promotion or reappointment" with 26.2%, 28 of the 107 participants reporting they perceived no stress for this issue when they were first hired.

Table 13

Perception of Level of Stress When First Hired

Issues of Stress	N	None	Some	Minimal	Moderate	Extreme
Transition from clinician to faculty member	107	9 (8.4%)	18 (16.8%)	21 (19.6%)	45 (42.1%)	14 (13.1%)
Peer support	107	13 (12.1%)	22 (20.6%)	34 (31.8%)	23 (21.5%)	15 (14%)
Knowledge about teaching responsibilities	107	10 (9.3%)	19 (17.8%)	32 (29.9%)	42 (39.3%)	4 (3.7%)
Knowledge about research productivity	107	24 (22.4%)	19 (17.8%)	23 (21.5%)	31 (29%)	10 (9.3%)
Information about service obligations	107	19 (17.8%)	22 (20.6%)	42 (39.3%)	21 (19.6%)	3 (2.8%)
Information about university culture	107	20 (18.7%)	24 (22.4%)	36 (33.6%)	23 (21.5%)	4 (3.7%)
Information about formal rules of how to achieve tenure, promotion or reappointment	107	15 (14%)	26 (24.3%)	28 (26.2%)	30 (28%)	8 (7.5%)
Information about *informal* rules of how to achieve tenure, promotion or reappointment	107	28 (26.2%)	14 (13.1%)	31 (29%)	23 (21.5%)	11 (10.3%)

Nature of Mentoring

Mentored faculty participants responded to survey questions designed to understand the nature of mentoring: that is, how the relationships are formed, who selects the mentors and mentees, how frequently and long mentoring sessions occur and what topics are discussed.

To understand how mentoring relationships are formed, mentored faculty participants selected one or more different ways that their mentoring relationship developed. Most indicated that mentoring relationships were informally established. Twenty-six indicated that the "mentee informally chose a mentor", with the next highest indentified was "mutually agreed upon relationship" (14 indications) and 11 mentored faculty indicated that the "mentor informally chose the mentee" with one indication that the relationship was "very informal, not really even verbalized". The rest of the mentored faculty participants indicated that mentors were "assigned by the department chair (9) or mentors were assigned by the department or institution (8).

Table 14 displays the frequency and duration of the mentoring sessions. Mentored faculty participants indicated that most of their mentoring meetings occurred "as needed" (24 indications), "once a week" was indicated 11 times and "once a semester", 9 times. Five of the mentored faculty wrote: a) as I request- 1 or 2 times a semester, b) every other week, c) twice a year and on-line, d) informal-varies week to week and e) very frequently, thought not always on a formal level.

Most mentored faculty (45) indicated that they spent one hour or less in their mentoring meetings, eight indicated they spent 2-3 hours and the remaining mentored faculty wrote: a) as needed, "drop-ins" with varied lengths, b) varies according to my needs and c) mentoring role is not separate from other aspects of the relationship.

Table 14

Frequency and Duration of Mentoring Meetings

Frequency and duration of mentoring meetings	Occurrences
How often do you meet with your mentor?	
As needed	24
Once a week	11
Once a month	9
Once a semester	6
Other*	5
Annually	1
How much time do you spend in your mentoring meetings?	
1 hour or less	45
2-3 hours	8
Other**	3
4 or more hours	0

Note: Other*: Five of the mentored faculty wrote: a) as I request- 1 or 2 times a semester, b) every other week, c) twice a year and on-line, d) informal-varies week to week and e) very frequently, thought not always on a formal level. Other **: Three mentored faculty wrote: a) as needed, "drop-ins" with varied lengths, b) varies according to my needs and c) mentoring role is not separate from other aspects of the relationship.

Mentored faculty members were directed to choose more than one, if needed for this question. Teaching was indicated 52 times, research indicated 47 times, service was indicated 36 times and topics surrounding university policies and procedures were indicated 35 times. The topic of promotion was indicated 32 times, tenure was indicated 29 times, and reappointment was indicated 8 times (see Table 15).

Table 15

Topics Discussed with Mentor

Topics discussed with mentor	Occurrences
Teaching	52
Research projects	47
Service	36
University policies & procedures	35
Promotion	32
Personal issues	30
Tenure (if applicable)	29
Time management	27
Research funding	24
Team building	15
Reappointment (if applicable)	8
Other*	5

Note: * Other topics included: departmental relationships, joint projects, management of fieldwork and student issues, student advising, time management for research and writing manuscripts.

CHAPTER V

DISCUSSION

The purpose of this study was to describe the occurrence and perceived influence of mentoring for occupational therapy faculty members who are on the tenure track or eligible for reappointment. As the demand for occupational therapists increases, and the occupational therapy entry-level programs expand to meet the needs, the need to recruit and retain occupational therapy faculty members has increased (AOTA, 2010; Fisher & Keehen, 2007; Powell, et al., 2008). However, many occupational therapy faculty members are not formally trained to teach and may be novice researchers, thus the shift from clinical practice to academic has been reported to be fraught with challenges (Crepeau, et al., 1999; Crist, 1999; Mitcham, Lancaster & Stone, 2002). Mentoring for junior faculty members has been found to provide faculty members in other healthcare and higher education programs with career and psychosocial support and assistance that facilitates the improvement or development in their academic success: excellence in teaching, scholarly research productivity, engagement in service to the educational institution and achievement of tenure, promotion or reappointment (Boyle & Boice, 1998; Cawyer, et al., 2002; Kram, 1985; Palepu, et al., 1998; Paul, et al., 2002; Thorndyke, et al., 2008; Williams & Blackburn, 1988). Furthermore, mentorship opportunities have been found to assist the junior faculty member in becoming successfully socialized into the culture of the academic institution (Cawyer, et al., 2002; Schrodt, et al., 2003). The positive outcomes of mentoring for occupational therapy faculty have only been investigated in two research studies in the field of occupational therapy (Paul, et al., 2002; Provident, 2004). Therefore, describing if

and how often mentoring is occurring for occupational therapy faculty members who are on the tenure track or eligible for reappointment and what their perceived influence of mentoring has on their academic success and academic socialization will provide a beginning understanding of these issues and inform current and prospective occupational therapy faculty and department chairs of the current state of mentoring.

Sample

The participants in this study were drawn from the entire population of 818 occupational therapy faculty members who were listed on the 151 AOTA accredited entry level and doctoral programs in the United States as of September 2010. One hundred and seven occupational therapy (OT) faculty members participated in the online survey as they indicated they met the study criteria: a) full time faculty member, b) on the tenure track or eligible for reappointment, c) a licensed OT and d) have access to the Internet. The majority of the participants were female, which reflects the national workforce status of the occupational therapy profession as well as the practice area of academia (AOTA, 2010). The most frequently indicated age range of the participants was 36 to 45 years old (48 of 107) with the second most indicated range was 46-55 (29 of 107), thus the majority of participants in this study are slightly younger than the median age of 52 as reported in the 2010 AOTA Workforce Study of 520 OT faculty who responded (AOTA, 2010). However, this study sought to understand the views of OT faculty who were not yet tenured or eligible for reappointment, thus the more frequently reported lower age range of these participants may reflect that they are just beginning their academic careers. The highest academic rank reported by the participants was assistant professor (70.1%, 75 0f 107), then associate (15%, 16 of 107), professor (1.9%, 2 of 107) and instructor (3.7%, 4 of 107). While the higher percentage of assistant professors who responded to this study is consistent with the

results of the Workforce study that reported that their respondents indicated that assistant professors made up the highest percentage (31.3%), as compared to associate at 29.8%, full professor at 15% and instructors at 14.8%, it is interesting to note that the higher percentage of OT faculty who are assistant professors may indicate that these faculty members are in the process of moving forward in their academic careers. Finally, the highest indicated academic rank of the participants in this study was PhD (32.7%, 35 of 107), which was higher than the Workforce Study results, which indicated that 16.2% of their respondents hold a PhD (AOTA, 2010). However, the second highest indicated academic degree was 27.1% (29 of 107) participants indicated they hold an MS or MA degree as compared to 35% of the faculty who reported holding a MA degree in the Workforce Study (AOTA, 2010). Given the occupational therapy profession has set forth new standards for faculty, by the year 2012, the majority of faculty must hold a doctoral degree, mentoring for these faculty can facilitate their progress towards obtaining a higher degree and thus strengthen the occupational therapy programs. Finally, the participants in this study indicated that 88.8% (95 of 107) of the institutions have a tenure track, 52.3% (56 of 107) and reported being on the tenure track. Therefore the sample for this study is suggested to reflect those faculty members who represent faculty who are on the tenure track or eligible for reappointment and thus the responses from these participants allows a deeper understanding of the current state of mentoring, thus meeting the purpose of the study.

Occurrence of Mentoring

The first research question sought to discover if and how frequently mentoring is occurring for occupational therapy faculty members who are not yet tenured or eligible for reappointment in entry level and doctoral programs. The hypothesis was supported as findings indicated that 52.3% (56 of 107) participants reported having a mentor at their institution or

another institution. This finding is consistent with Paul, Stein, Ottenbacher and Liu (2002) who conducted found that 52.2% (48 of 92) junior occupational therapy faculty members were mentored and reported a positive effect of mentoring on their research productivity. While the extent of mentoring is similar to Paul et al. (2002), given the changes in the accreditation standards for the majority of faculty to hold a doctoral degree by 2012 and the need for qualified faculty, mentoring can be beneficial to support and recruit faculty. Thus, while the occurrence of mentoring for the participants in this study reflects just over half of those surveyed, participants who were not mentored indicated that they perceive mentoring would be beneficial. Therefore, understanding how frequently mentoring is occurring informs department chairs and institutions to explore and develop additional mentoring opportunities for potential and current occupational therapy faculty members.

Perception of the Influence of Mentoring on Tenets of Academic Success

The second research question was what is the perceived influence of mentoring on the tenets of academic success: teaching, research, service and tenure/promotion/reappointment (TPR). The hypothesis was supported as participants rated their perception of the importance of the influence of mentoring high for all fours tenets.

The majority of mentored faculty members (61.7%) rated the influence of mentoring very important for the tenet of reappointment, tenure and reappointment in this survey. These ratings are consistent with the literature that suggests mentoring positively impacts a faculty member's achievement of tenure promotion or reappointment in physical therapy, nursing and allied health programs (Balogun & Sloan, 2006; Kosoko-Lasaki, et al., 2006; Peterson, et al., 2009). Research productivity was the next highest rated influence with 51.7% of the survey participants reporting that mentoring was very important to this tenet of academic success. These ratings are

consistent with the study of occupational therapy faculty members in the research of Paul, Stein, Ottenbacher and Liu (2002) and with research among nursing and medical faculty members (Palepu et al., 1998; Thorndyke, et al., 2008; Williams & Blackburn, 1988). Teaching was rated very important by 40% and important by 38.9% of the participant respectively and while teaching has been discussed as an equally important tenet of academic success in some studies, (Boyer, 1990; Greene et al., 2008; Zeind et al., 2005), other research has suggested that teaching is not rated as high a priority as the expectation is that a faculty member enters academia with strong teaching skills and maintains excellence in teaching (Latif & Grillo, 2001; Mitcham, Lancaster & Stone, 2002; Peterson, et al., 2009).

Thus the findings from this study suggest these participants rated similarly towards the positive influence of mentoring on teaching improvement. Given most occupational therapy and other health care faculty members enter academia from a clinical setting and are not formally prepared to teach at the academic level, mentoring offers these faculty members the opportunity to learn and enhance their teaching skills. Finally the tenet of service engagement was rated as very important by 21.7% of participants and 46.7% rating it as important. The tenet of service engagement has been found to be one of the least valued tenet of academic success in the literature with evidence suggesting that faculty members reported there is a lack of time to engage in service commitments considering many institutions place a strong emphasis on research productivity and achieving excellence in teaching scores based on student evaluations (Latif & Grillo, 2001; Miller & Nolland, 2003). The findings from this study and the consistencies with the literature suggests that mentoring is not as highly valued for service engagement, however, it is unclear from this study if the lower rating of the need for service

engagement guidance/support stems from the institutional demands or a lack of emphasis on mentoring for this tenet.

Perception of the Influence of Mentoring on Items of Academic Socialization

The third research question was what is the perceived influence of mentoring on items of academic socialization: feeling valued, having a sense of ownership and loyalty to their program, having been provided with resources to conduct research, understanding teaching, research, service and tenure/promotion/reappointment expectations, feeling a sense of connection in their work environment, having opportunities to socialize and considering their co-workers friends? The overall hypothesis is supported in that these mentored faculty members perceive that mentoring has a positive influence on the 11 items of academic socialization. The individual items of academic socialization that may have been influenced by mentoring are discussed grouped by the items that represent being provided with adequate information, then items surrounding ownership and finally those items concerned with feeling a sense of connectedness.

Adequate information.

The item surrounding "understanding my teaching expectations" was rated overall the highest item with 47.2% of the participants indicating that they always felt that they were influenced by faculty mentoring and 37.7% of the mentored faculty reporting that mentoring often influenced this item. In the previous section the tenet of academic success concerning improved teaching was rated as the third highest influenced by faculty mentoring, however in this section concerning academic socialization, this item was presented as how mentoring influenced the faculty member's understanding of their teaching expectations. Thus it is possible that these participants felt that they were provided with adequate information about their responsibilities of teaching. Over 41% of the participants rated that they often felt that

mentoring influenced their "understanding research expectations required for tenure and promotion" and with 32.1% reporting that it was always influenced by mentoring. This was the third highest rated item of academic socialization, yet it is interesting to note that 51.7% of participants rated mentoring as very important to research productivity while only 32.1% indicated that mentoring influence their understanding of their research expectations. While it is not possible to compare the responses for each section, the results of each suggest that while research productivity is considered by these participants to be very important, some participants may feel that they are not receiving enough mentoring to fully understand their research expectations. Lower ratings for the item of "understanding of service expectations" were indicated with only 26.4% feeling that mentoring always influenced this item, 47.2% felt mentoring often influenced, yet 13.2% were neutral. These results may reflect that the responses are similar to those noted in the participants responses to the influence of mentoring on their service engagement as a tenet of academic success as the overall ratings appear to reflect less importance on the tenet and item of service and is consistent what is found in the literature (Latif & Grillo, 2001; Miller & Noland, 2003).

The item, "I have been given adequate information on how to successfully navigate tenure, promotion or reappointment" was rated lowest of the 11 items with only 20.8% of the participants reporting that they always felt it was influenced by mentoring, 32.1% that it was often influenced, yet 20.8% were neutral. Additionally, the item "I have been provided with the resources necessary to conduct research (funding, research time, etc.)" was also rated low as 26.4% reported that this item was always influenced by mentoring, 47.2% reported that it was often influence, and 13.2% were neutral. Together these two items appear to suggest that these participants felt there is less influence of mentoring on these items of academic socialization

despite the higher ratings of the importance of mentoring that the participants gave to the tenets of research productivity and reappointment, tenure and promotion. A comparison cannot be made between the ratings of academic success and academic socialization on the similar tenets and items surrounding research productivity, understanding research expectations and begin provided with resources to conduct research.

The nature of this exploratory study and the self-report of the survey design may not capture the actual amount of research productivity and an objective measure of understanding of research expectations. However, the findings do represent a beginning understanding of the similar ratings of the positive influence of mentoring on these tenets of academic success and items of academic socialization. The findings do suggest a similar positive perception of the influence of mentoring between the higher ratings of the influence of mentoring as perceived to be very important on research productivity and tenure, promotion and reappointment yet there are lower ratings of mentoring influencing items of academic socialization concerned with provision of resources to conduct research and being given adequate information to navigate tenure, promotion or reappointment. If these mentored faculty members perceive that mentoring is very important to the tenet of research productivity and yet may feel that mentoring is only sometimes influencing their provision of resources for research, this may suggest that the mentoring provided needs to be specific to that institution's expectations for research. The issue of institutional support and mentoring specific to guiding new and junior faculty in their research productivity has been suggested to lead to increased research productivity and improvement in the faculty member's research skills (Palepu et al., 1998; Paul, et al., 2002; Thorndyke, et al., 2008; Tracy, et al., 2004; Vassantachart & Rice, 1997; Williams & Blackburn, 1988).

Ownership.

Of the three items that are suggested to be considered as an indication that a faculty member feels an ownership to their department, the item "loyalty to the department/program is high" was rated as the second highest of all 11 items. Over 41% of participants rated this item as always influenced by faculty mentoring, and 39.6% rated it as often being influenced by mentoring. This is in contrast to the other two items concerning feeling a connection in the department as the item concerning opportunities to socialize with colleagues was rated by 20.8% as always and 32.1% of participants as often being influenced by mentoring and the item of considering co-workers friends rated by 22.6% as always being influenced by mentoring and 35.8% as often being influenced by mentoring. Both of these items had ratings of 26.4% and 28.3% respectively in the neutral column. The lower ratings for these two items and the high ratings in the neutral column may suggest that for these participants mentoring was not considered to be a strong influence on these items or it is possible that these items are not considered as to be important to their academic socialization or a function of mentoring.

Connectedness.

Research surrounding the influence of mentoring on a new or junior faculty member's academic socialization has been suggested to be correlated with the mentoring function of "friend", in which the mentor interacts with the mentees on a social level, provides advice about other people in the work environment and may assist the mentees with personal problems (Cawyer, et al., 2002; Cunningham, 1999; Frandsen, 2003; Kram, 1985; Sands, et al., 1991; Schrodt, et al., 2003). Additionally, Schrodt, Cawyer and Sanders (2003) found positive correlations between the three items of connectedness and the other eight items of academic

socialization in their research of 138 communication faculty members who reported having a mentor as compared to the 76 who did not.

One of our philosophical foundations in occupational therapy is the concern with the impact of the environment (the context) on the person and their occupation (or task, or role). The academic culture or climate/environment has both similarities to clinical practice and differences, and the literature has suggested that a deep understanding of the values, beliefs and expectations of an organization's culture leads to the person's sense of belonging, understanding of the formal and informal expectations and finally satisfaction with their position in the institution.

Thus, the findings from this research question suggest that mentored occupational therapy faculty felt that mentoring often provided them with information to understand the teaching, research and how they may achieve tenure, promotion or reappointment. The literature suggests that this leads to a faculty member's self confidence, and skill development, therefore, findings from this study suggest that OT faculty also perceive that mentoring can support this skills and responsibilities, thus leading to more effective performance in the role of the professoriate. While service was rated somewhat lower, this is also consistent with the literature on faculty in that service is not considered as important to academic socialization or success.

Regarding the items surrounding ownership, these findings further suggest and are aligned with the literature as the mentored occupational therapy faculty participants indicated that they felt valued and a sense of loyalty to the program which suggest their commitment to the department and the institution, thus providing the consistency in the department which positively benefits occupational therapy students.

Finally, the items surrounding connectedness were rated as often influenced by mentoring were feeling as if their colleagues were friends and there were opportunities to socialize, again supporting that for some of the occupational therapy faculty surveyed, having someone to make a specific connection to was important to their academic socialization, This is later reflected in the qualitative response to the research question five to gather data surrounding the benefits of a mentoring relationship.

Given the design of this study and survey, the data collected provides a beginning understanding of the perception of the items surrounding academic socialization for those occupational therapy faculty members who participated in this study with trends suggesting that mentoring was perceived to always have an influence on understanding teaching and research expectations, and the feeling of loyalty to the department. The next section of the discussion will focus on the research questions that sought to understand the beliefs of all of the participants surrounding the ideal mentoring functions, and the benefits and the challenges of a mentoring relationship.

The Ideal Functions of a Mentor

Research question four sought to understand what occupational therapy faculty members believe are the most important functions of an ideal faculty mentor. One hundred and two participants commented on the survey in response to the question, "What do you believe are the most important functions of an ideal faculty mentor?" Eight themes were preset to reflect those functions of an ideal mentor that have been posited and measured in other faculty mentoring research. However, three additional themes emerged from the qualitative analysis of the narrative data. Overall the responses of the participants in this study reflect the theoretical constructs of career and psychosocial mentoring functions posited by Kram (1985) and used to

measure the preferences of mentoring functions and positive correlations to successful outcomes of other healthcare and higher education faculty research (Cunningham, 1999; Frandsen, 2003; Sands, et al., 1991; Schrodt, et al., 2003; Williams & Blackburn, 1988)

Preset themes.

Mentor Support and Assistance.

The word or statements referring to the theme of *Support* occurred 24 times and the word or statements reflecting *Assistance* occurred 35 times. Participants overwhelmingly shared that support for the tripartite responsibilities of the professoriate was paramount as a function of a mentor: support in developing and enhancing their teaching skills, the research and grant writing skills and productivity and becoming successfully engagement in service and committees that would lead to tenure promotion or reappointment. Assistance was reported to be integral to "learning about and navigating the culture of the academic environment". Support and assistance was considered to be extremely important early on in their academic careers. This is consistent with the literature and research which has suggested that insufficient preparation of the knowledge and skills necessary for effective faculty work is one aspect of the challenges faced by health care faculty, and nursing faculty members who transition from a clinical career (Anderson, 2009; Miller & Noland, 2003). The findings from theses studies may be reflected in the words of participant 6 who stated, "A person who provides initial support for the new faculty member, helps them integrate into the academic society and culture, while at the same time serving as a role model."

Assistance was mentioned 35 times and frequently emerged as a tangible act or task that a mentor would provided as stated by participant 74 who said, "Support meaning assistance with ides, design analysis, manuscript preparation and editing". The other task or occupation

described as a form of assistance was to "develop a plan to achieve tenure" (participants 24, 47 and 87). Participants described the importance of mentoring assistance for the transition from the clinical to the academic setting stating, "the most important function is to assist in transitioning into the academic environment" (participant 98) and "to give me confidence and support when needed so I don't "jump ship" due to the stresses of leaving a clinical career and moving into academia" (participant 95). These statements are reflective of the research of Sawatsky and Enns (2009) who developed a needs assessment for nurse faculty given the challenges that the nursing profession faces due to the issues of faculty shortage, recruitment and development of new nurse faculty. Perhaps these statements indicate that these participants value those mentoring functions that are career based, in that the mentor is an active participant in the mentoring process, providing "hands on" assistance for manuscript, teaching and grant preparation as well as psychosocial based as evidenced by responses surrounding describing ideal functions of emotional support and advice to encourage the junior faculty member.

Research Assistance.

This theme occurred in some form five times and is aligned with the function of a mentor as measured by Frandsen (2003) and Schrodt, Cawyer and Sanders (2003). Participants described specific assistance with research through statements surrounding the development of a research agenda (participant 24 and 47), and "help establishing research opportunities" (participant 97).

Career Guide.

This mentoring function was first proposed in the seminal work of Kram (1985) and although developed from research in a business organization, researcher of faculty mentoring have measured the reliability of this construct as it relates to mentoring for nursing, medical and

other higher education faculty members (Frandsen, 2003; Rogers et al., 2008; Sands, et al., 1991; Schrodt, Cawyer & Sanders, 2003; Williams & Blackburn, 1988). Terms and statements reflecting the construct of career guide or guidance occurred 17 times through the words of the participants. Many of the statements revolved around the issue of guidance through the culture of the academic environment as in the statement of participant 4, "provide guidance, especially related to institutional culture and relationships' and "provide guidance in filtering the academic noise" (participant 24).

Information Source/Mentor Advice.

This mentoring function was measured in the research of Sands, Parson and Duane (1991), replicated in the research of Frandsen (2003) and Cunningham (1999) and was defined as the function of a mentor that entails the provision of information that is needed by the mentee to accomplish the professional facets of academia and to learn about the formal and informal expectations to achieve tenure, promotion or reappointment. Rogers et al. (2008) measured this construct in their study of medical faculty and described it as a function in which an emphasis is placed on the skill development of the mentee and assistance with coping strategies. The occurrence of statement pertaining to information or mentoring advice appeared 23 times with many participants describing the need to know, "how things really work' (participant 58). Participants described the importance of "practical advice about teaching, research and time management" (participants 41, 65, 90 and 100). The high frequency of responses that allude to the need to understand the culture of the academic environment perhaps reflects the desire of these participants to find the optimal fit through adequate socialization which has been found to be a positive function of mentoring and may be explained by the Person-Environment-

Occupation model (Cunningham, 1999; Frandsen, 2003; Law et al., 1996; Sands, et al., 1991; Schrodt, et al., 2003)

Intellectual Guide.

Sands, Parson and Duane (1991) defined this mentoring function as a one in which the mentor and mentees develop a collaborative relationship revolving around constructive feedback, provision of challenging work to assist the mentee in developing his or her scholarship and reviewing manuscripts. Participants seemed to infer that this was an ideal mentoring function in seven of the statements as reflected in the words of the following participants: Participant 52 stated, "empowers me to problem solve", participant 105 said, "fostering confidence and independence" and participant 107 felt the ideal mentoring function should "facilitate reflective thinking".

Protection.

While this function only occurred specifically in this study four times, it was suggested to be a function of academic socialization as measured by Schrodt, Cawyer and Sanders (2003). It was describe as the function of a mentor to protect the mentee from situations or individuals who may negatively impact the mentee's career. Participants described that they valued a mentor who would provide protection of their time to enhance the mentee's research productivity and to protect the junior faculty member, "especially in the first 1-2 years of appointment" (participants 21, 26, 37).

Leader/Coach or Role Model.

This function of a role model as a major function of a mentor consistently emerges from the literature and research surrounding business, student and faculty mentoring (Boyle & Boice, 1998; Kram, 1985; Palepu et al., 1998; Williams & Blackburn, 1988). The participants in this

study inferred or mentioned this construct 16 times. Participant 107 specifically stated, "leads by example" in this section and other participants described that the mentor would demonstrate, "excellence in teaching" and would be "experienced in the system" (participants 18, 25, 45 and 47). The statements that reflect the beliefs of these participants may be explained through the psychosocial mentoring functions that Kram (1985) posited and further explained by Luna and Cullen (1995). Kram (1985), Frandsen (2003) and Williams and Blackburn (1988) defined the mentoring function of a role model or leader/coach as that of providing the mentee with the opportunity to develop an interpersonal relationship where the mentee identifies with and works to emulate the positive characteristics of the mentor.

Emergent themes.

Through iteration after iteration of the narrative data in qualitative analysis, patterns of words, phrases or meanings arise from the iterations and paying attention to the themes and patterns that recur in the data (Miles & Huberman, 1994). These emergent themes are described below and are suggested to reflect both the function of an ideal mentor and characteristics of an ideal mentor as described by the participants in this study.

Being Available.

This aspect of mentoring as an ideal function was mentioned eight times and statements described the importance of consistent meeting times (participant 27), providing support as needed (participant 56), and "just to answer questions as they arise" (participant 55). The focus on this aspect of mentoring is described frequently in the next research question surrounding the benefits of a mentor as participants repeatedly discuss the benefit of having "someone" to go to for this connection and consistency. Sangole, Abreau and Stein (2006) described the characteristics of a mentor that include "commitment and willingness share their professional

and personal experiences" in their article that describes reflections of their own experiences with faculty mentoring (p. 9). This willingness to share is mentioned in the work of Schrubbe (2003) describing the importance of mentoring for the academic success of dental education faculty members.

Willingness to Serve.

Participants referred to the importance of a mentor's willingness to serve as an integral function nine times. "Being open to the mentoring process" as stated by participant 56, may be explained by the life stage of generativity as posited in the developmental theory of Erickson (1963), and ultimately was one of the guiding theories in the development of Kram's (1985) theory of mentoring.

Individualized Approach.

Participants mentioned the importance of an ideal mentoring function that was specific to their needs five times. While this represents a small proportion of responses, a number of statements made by the participants were described as, "allows the mentee to drive the need for mentoring" (participant 91) and "faculty-centered coaching" (participant 68). This function of a mentor, individualizing the mentoring approach, as described by these participants, is aligned with the mentoring function, "provides advice specific to my needs" and reflects a main tenet of occupational therapy's process: the individualized, "client-centered" and collaborative approach between practitioner and client (AOTA, 2008). In this case, the mentee can be viewed as the client and the mentor as the OT practitioner, thus it is suggested that the participants in this study may be using their philosophical foundation to describe an ideal mentoring function.

Benefits of a Faculty Mentoring Relationship

Research question five sought to understand what occupational therapy faculty members believe are the benefits of a faculty mentoring relationship. The responses of the 102 participants reflect the findings in the literature that suggest the positive influence of mentoring for junior faculty in health sciences programs on improving and enhancing the following: teaching, research service, achieving tenure or reappointment and being successfully socialized into the academic culture, job satisfaction, retention and recruitment (Boyle & Boice, 1998; Cawyer, et al., 2002; Cunningham, 1999; Daley, Wingard & Reznick, 2006; Harrison & Kelly, 1996; Morin & Ashton, 2004; Palepu et al., 1998; Paul, et al., 2002; Peterson, et al., 2009; Thorndyke, Gusic & Milner, 2008; Wasserstein, et al., 2007; William & Blackburn, 1988; Zeind et al., 2005).

Learning the tricks of the trade.

The overarching theme of "learning the tricks of the trade" that emerged to answer the research question surrounding the benefits of having a mentoring relationship describes the participants beliefs in those functions that concern professional advice or career guidance (Cawyer, et al., 2002; Cunningham, 1999; Kram, 1985; Palepu et al., 1998). Professional advice is the form of communication that is provided to a new faculty member to learn the specific tasks and occupations, explaining how to manage the tripartite roles and doing so in a way that saves time and may, "prevent miss-steps on the way to tenure or promotion", and to "avoid the pitfalls" as two faculty members explained. Other faculty members said that a mentoring relationship results in, "a shorter time to become acclimated to the institution" (participant 23) and "you do not have to reinvent the wheel" (participant 38) and finally, "mentoring is a way to learning the system in a more timely and organized manner" (participant 93). The statements of these

participants also reflect the literature in nursing and medical studies that suggests that mentoring early on in the junior faculty member's career leads to not only a faculty member who is productive but improved job satisfaction and retention (Miller & Noland, 2003; Sawatzky & Enns, 2009; Siler & Kleiner, 2001; Wasserstein, et al., 2007).

Someone to go to.

Nearly half of the 102 participants who answered the question about the benefits of a mentoring relationship describe having, someone to go to as integral to their faculty role, responsibilities and socialization into the academic culture. While this theme is not specifically represented in the literature, research surrounding medical faculty members has suggested that the characteristics of the mentor, such as being available, honest, a good listener for the day to day and the formal issues of the professoriate, are integral to a successful and productive process (Berk et al, 2005; Fox et al., 1998; Cawyer, et al., 2002). Participants in this study reported that having someone to go to would, "help entrain me to the academic culture. It is reassuring to have someone to communicate with on a professional and personal level" (participant 14). Other participants described how having someone to share experiences was considered a way to keep their "sanity" as described by participant 52: "having someone to celebrate with after an article is accepted or to commiserate with when grants are rejected is such an essential part of keeping your sanity". These statements, as perceived by the participants in this study, infer and reflect the literature that suggests that the person or persons who are doing the mentoring, to demonstrate characteristics that are aligned with the theoretical model proposed by Kram (1985). Specifically, the psychosocial functions defined by Kram as integral to a mentoring relationship are considered those that address role modeling, acceptance and conformation, counseling and

friendship (Frandsen, 2003; Kram, 1985; Cunningham, 1999; Sands, et al., 1991; Schrodt, et al., 2003).

Easing the stress.

The stress of learning and balancing the tripartite roles of the professoriate and achieving tenure or reappointment have been discussed in the literature as one of the most challenging aspects for most junior faculty members (Crepeau, et al., 1999; Crist, 1999; Greene, et al., 2008; Mullen & Forbes, 2000; Sawatzky & Enns, 2009). Comments of the participants in this study reflect their belief about how a mentoring relationship may, "improve my comfort in the academic setting", "feel less isolation", "decrease my anxiety" and "address uncertainty". Green et al. (2008) found that those untenured junior faculty members reported more stress and a less balanced work and personal life. These researchers recommended that mentoring would be an integral piece of a support system for these junior faculty members. Zeind et al. (2005) reported the findings from their study of pharmaceutical faculty members who participated in a formal mentoring program and found that there were positive outcomes for the protégés and mentors in the area of self efficacy, grant writing, teaching requirements (syllabi and examination development), leadership and understanding the promotion process.

Within this theme of easing stress were statements that of the participants that infer that transitioning from a clinical role was challenging. One participant (56) stated that the transition was, "like being a new grad clinician" and another said that mentoring was, "like an apprenticeship model"(participant 87), while another participant wrote that a benefit of a mentoring relationship could "promote a nurturing environment and help me increase my confidence". Garman, Wingard and Reznik (2001) found that the medical junior faculty members reported an improvement in their self-efficacy in the areas of research, teaching,

administration and professional development skills. While these studies can not be generalized to the occupational therapy faculty participants in this study, the issues that emerged from the responses to the open ended questions suggests that occupational therapy faculty members perceive similar stress as they strive to learn and improve as professor and to succeed as they transition to the academic culture.

Shared learning.

"Giving back", "mutual support", "both people increase their professional development" and "bi-directional" were statements that the participants wrote that support the theme of shared learning. The reciprocal nature of a mentoring relationship is one of the cornerstones of this partnership as found in the empirical work of Kram (1985) and further supported in higher education and health sciences faculty research (Cunningham, 1999; Dunham-Taylor, et al., 2008; Luna & Cullen, 1995; Palepu et al., 1998; Zeind et al., 2005). Furthermore, the research suggests that when the institution supports mentoring, the mentors are revitalized, scholarly productivity increase (grants are warded and research publications increase), faculty are more likely to remain at that institution, thus reducing attrition and the positive outcomes of successfully mentored junior faculty serves as a recruitment tool (Taylor & Berry, 2008; Thorndyke, et al., 2008). The statements of theses participants are congruent with AOTA's call to its membership to take on the role of mentoring in all areas of practice (clinician to clinician, faculty to student, faculty to faculty) reflects the beliefs of these participants who indicated that a mentoring relationship is beneficial to all who are involved (AOTA, 2009). Participant 34 summed up the benefit for the mentor as well as the institution in this statement, "For the mentor, it provides an opportunity to support the success of someone in your department, so although the mentee benefits, the department benefits from his or her success as well".

Professional growth and productivity

This theme reflects prior studies that found that scholarly productivity is frequently used as a measure of academic success (Paul, et al., 2002; Williams & Blackburn, 1988). Thus the statements that mirror theses findings include that a mentoring relationship assists in, "meeting requirements for tenure", "developing a career path", "obtain professional goals", developing teaching and research skills", and "time management". One participant wrote that the mentoring relationship would provide, "more opportunities for research" and another said, " development of collegial relationships" was a benefit. Finally, participant 82 stated, "I think I could have moved a bit faster in my professional development in academia with a stronger, inherent support system".

The themes of learning about the specific expectations of the institution, easing the stress (and doing so early on in the faculty member's career) and the benefit of mentoring on faculty productivity and growth are found numerous times in the literature (healthcare, other educational and business mentorship studies) thus this revelation of the beliefs of these occupational therapy faculty participants is congruent and provides support for department chairs and university administration to create formal mentoring opportunities for new faculty and to recruit faculty. Additionally, the themes of professional growth & productivity support the theoretical model of Law (1996) and how the fit in the environment as the faculty learns and improves in her or his new role results in improved/optimal performance. The theme of shared learning reflects the theoretical construct a developmental life stage, in that the mentor receives benefits as he or she gives back through his or her wisdom in the mentoring relationship. Developing mentoring opportunities and becoming a mentor fulfills the AOTA's (2010) call to its membership to take on the role of mentoring to move the profession forward. Finally, nearly half of the occupational

therapy faculty participants indicated that having a designated "someone to go to" was a benefit, thus this reflects the psychosocial function of mentoring as theorized by Kram, (1985) and will inform others about the need for and preparation of potential mentors to fulfill this desire of new and junior faculty members.

The themes that emerged from the research question surrounding the participant's beliefs in the benefits of a mentoring relationship are replete with similarities to what has been found in the literature to support the opportunity for mentoring for junior occupational therapy faculty members (Fox, et al., 1998; Garman, et al., 2001; Kosoko-Laski, et al., 2006; Paul, et al., 2002; Siler & Kleiner, 2001). This beginning understanding of what these participants believe are beneficial aspects of mentoring provide a glimpse at what mentoring characteristics are preferred as in the theme "someone to go to". Participants report that a mentor who is able to listen and provide as needed advice and support is integral. This is aligned with the research question to discover the ideal mentor functions as reflected in the themes, "willingness to serve" and being available". However, the research also reveals there are challenges within a mentoring relationship and in offering mentorship opportunities.

Challenges of a Faculty Mentoring Relationship

Research question six sought to understand what occupational therapy faculty members believe are the challenges of a faculty mentoring relationship. Five themes emerged to answer the research question surrounding the participant's beliefs about the challenges of a faculty mentoring relationship. The most frequently occurring was issues of time: not enough time to find a mentor, to spend in the process or to develop the relationship. Given the participants discussed the challenge of finding a mentor and the issues of the right fit between the mentor and mentee, the findings from this study suggest that opportunities for effective mentoring is desired.

Not enough time.

One hundred and three participants completed this section of the survey and most responses were centered on this issue of a lack of time, with 51 people stating this a major challenge. One participant stated, "time to find a mentor" as a challenge, while other participants focused on the lack of time available to form the relationship: "prioritizing time to meet and finding faculty willing and who also have the time", and "finding time for both the mentor and mentee to meet". Participant 95 stated, "I also feel guilty taking his time on occasions" and participant 107 said, " time required to have an effective relationship – everyone is already teaching overload and this is another time demand."

The high response to this challenge is congruent with the findings of Cunningham (1999) who found that potential hindrances to mentoring were the heavy emphasis on teaching, scholarship expectations and committee responsibilities of the faculty members. Research in nursing faculty studies suggests a similar barrier as the demands of the tripartite roles of the professoriate are the same for the junior and senior faculty members, leaving little time to properly or even provide mentoring (Dunham-Taylor, et al., 2008). To deal with the issue of a lack of time for mentoring, formal mentoring programs and peer mentoring models have been discussed in the literature (Fox et al, 1998; Kosoko-Lasaki, et al., 2006; Moss, Teshima & Leszcz, 2008; Taylor & Berry, 2008; Thorndyke, et al., 2008; Zeind et al., 2005). Zeind et al. (2005) found that the first and subsequent years of the junior faculty's professional development was positively influenced in the areas of teaching, grant writing, research productivity, service and balancing obligations. Thorndyke, Gusic and Milner (2008) found that junior faculty reported improvement in their professional skills through the paring a mentor and mentee to complete a specific project (research study, grant attainment). Finally, Moss, Teshima and

Leszcz (2008) suggest that a peer-mentoring model was effective as perceived by the junior psychiatry faculty members. Given almost half of the participants in this study perceived that a lack of time for a mentoring relationship was a challenge, this information can be used in the future to explore how the occupational therapy program provide, or not, mentoring and how much time is allotted for the faculty members.

Where are the mentors?

Findings from this section of the survey suggests that these participants were actively looking for a mentor and described the challenges of finding a mentor and other factors that contributed to this challenge. One participant said, "there are not enough OT faculty in the school or the faculty not experienced enough" while another one stated that a challenge was to find, "someone who is willing to serve". A few participants alluded to the challenge of having a mentor who was from a different discipline (participant 63) and another discussed the challenge of finding, "someone who is in the same stage of life "(participant 61). Participants addressed the issue of how mentors are found in some of their responses, that is, if the mentor was assigned or if the mentor and mentee informally agreed upon forming a relationship as in this statement of participant 50, "a forced relationship is not effective" while participant 28 offered a solution, "informally matched mentors and more than one can be more effective to meet the mentees different needs". The issue of the best model of mentoring is discussed in the literature with a number of studies that demonstrate the positive and negative outcomes of a variety of mentoring relationship models that include informally matched pairs, formally matched pairs or multiple mentors who may be informally or formally matched (Boyle & Boice, 1998; Thorndyke, Gusic & Milner, 2008; Zeind et al., 2005).

The fit does not fit.

Twenty-three participants discussed the challenges they perceived over how good a fit was between their mentor or a potential mentor. Participants 6, 77 and 86 all mentioned "personality clash" as a challenge with participant 66 very succinctly stating, "The relationship could be key in developing an extraordinary professor of killing the spirit of the budding academician." Other participants related that a mismatch between the mentor and mentor could be negatively by, "ineffective communication and thinking styles resulting in less closeness" (participants 20, 65, 77, 102, 105). Finally participant 84 said, "The challenges are ensuring there is a good fit between the mentor and mentee. The mentor and mentee both need to be vested in the process." The other issue that arose is about the formal matching of a mentor to a mentee and the concern of participant 43 who said, "if the relationship is too formal, it can limit growth". This was a similar statement made by participant 50 who said, "forced relationship are not effective". The positive and negative issue of assigning a mentor to a mentee has been discussed in the literature with studies that found formally matching of mentors and mentees were positive due to the ability to account for the process and the recognition of the relationship by the department and institution (Boyle & Boice, 1998). However formal matching was reported in other studies to result in shorter or unproductive relationships due to the forced nature of the pairing (Cunningham, 1999; Kram, 1985; Paul, et al., 2002; Sands, et al., 1991; Williams & Blackburn, 1988). The concern of these participants over the importance of a good fit between them and their mentors reflects the person-environment-occupational theory as proposed by Law et al. (1996) in that this model posits that when a person, their occupation and their environment are aligned and in balance, there is congruency, and the overlap results in improved occupational performance (Law, et al., 1996). These statements infer that the

participants believe that there needs to be a good "fit" between the people, the culture of the department and that the institution must also value mentoring. In this sense the institution itself would be a supportive environment that is nurturing, sensitive to and able meet the needs of junior faculty by providing mentoring opportunities for faculty who desire a mentoring relationship. These issues emerged in the next theme surrounding the perception of mentoring as being a valued role of senior faculty members.

Mentoring relationships are not valued.

The academic culture that supports mentoring has been discussed in the literature as a predict of faculty member's success and satisfaction with their academic careers, however, mentoring is also reported to not be valued in all academic environments (Peterson & Sandholtz, 2005; Sawatsky & Enns, 2009; Wasserstein, et al., 2007; Williams & Blackburn, 1988). The findings from this study are consistent with the literature as participants in this study mentioned this concept 12 times in their narratives. Participant 24 stated, "Mentoring must be a part of the culture. If the culture does not buy into the concept, then it will not be effective." Adding to that theme, participants 107 said, "there must be institutional support – have it part of the teaching load, released time, etc." while participant 51 replied, "Mentors are pressed for time and do not receive an additional compensation. There really should be more, 'teach the teacher' formalized methods to help faculty with the basics of technology, creating PowerPoint, delivering effective lectures and learning activities, instead of trial and error, hit and miss." Finally, participants 88 shared," if mentoring is informal, then the time spent mentoring is not 'recognized', thus mirroring the previous theme of finding a good fit and the issue of the positive effect of informal mentoring on the relationship but the lack of recognition if the institution does not reward the faculty members for taking the time to foster the relationship. Peterson and Sandholtz (2005)

propose that institutions that support and encourage mentoring are more likely to sustain the mentoring programs over time. Schrodt, Cawyer and Sanders (2003) suggest that positive academic socialization as a result of mentoring leads to faculty member's job satisfaction, increased sense of connectedness and loyalty and in turn, the institution gains from this mentoring process. Vassantachart and Rice (1997) found that occupational therapy faculty members valued institutional support for their professional development.

Struggling through the unknown path.

The dark side of mentoring has been discussed in studies surrounding business mentoring (Long, 1997; Eby, McManus, Simon, & Russell, 2000; Ragins, Cotton & Miller, 2000) however the issues that were found to contribute to the negative aspects of a mentoring relationship have been mentioned in faculty mentoring studies (Boyle & Boice, 1998; Dunham-Taylor, et al., 2008; Zeind et al., 2005). The issues discussed are lack of time due to heavy work load and to allow the relationship to form, lack of funds to support the time needed to mentor, ineffective matching of mentors and mentees (personality clashes, different teaching and learning styles), dependency of the mentee on the mentor, mentors place undue work burden on the mentee and mentors who are supervisors may not allow for fully open communication. The participants in this study mirrored many of these challenges as they inferred that they may be perceived as being, "needy" (participant 7) or that they, "feel like a drain on the mentor, guilty about taking the mentor's time" (participants 25, 41) and (participant 61 said, " Time. We are all so busy that asking for support is sometimes difficult, partly because I do not want to burden others."

Participant 70 shared, "if the mentor has a hidden agenda to meet their own needs versus what is in the best interest of the mentee. If the mentee becomes socially and politically aligned with the mentor which may limit their career at very political institutions." Participant 88

alluded to the "attitudinal barriers, it seems that some more experienced faculty do not feel they need to provide mentoring. I've heard people say, you got the job, figure it out'- I had to do it on my own".

Preferred and Not Preferred Functions of a Faculty Mentor

Mentored faculty members.

Research question seven sought to understand what faculty members who are mentored believe are the preferred and not preferred function of a mentor. Participants were able to check more than one choice to indicate if a mentoring function was actually occurring, if it was a preferred function or if the faculty member did not prefer this function. Only the preferred and not preferred functions are reported here. Overall the mentored faculty member participants in this study most frequently indicated career functions as preferred and this infers that they perceive mentoring to be a way to improve in their occupational performance in the tripartite roles of the professoriate, thus leading to tenure, promotion or reappointment. The function of a mentor that concerns being nominated for important honors or awards was indicated 32 times by the participants as preferred and according to the literature, this may be aligned with the mentoring function of career guide as the visibility may enhance the faculty member's chances of recognition of achievement and lead to tenure, promotion or reappointment (Kram, 1985; Sands, et al., 1991). However, this function was also indicated 11 times as not to be a preferred, thus this mixed response may suggest that for these participants, the issue of honors or awards nomination may not be necessary or valued, yet, without further data this assumption is proposed with caution. Participants who reported having a mentor indicated that 32 of them would prefer assistance with grants, 27 preferred advice about resources for research grants and funding and 28 indicated these two functions were preferred: assistance with publications and collaboration

with research. Given this trend in the areas of those functions surrounding research productivity and grant attainment, it is possible that these participants who are receiving mentoring value these functions as a way to secure their attainment of tenure, promotion or reappointment. Furthermore, this trend is consistent with the survey question and research question regarding academic success, specifically the high rating of the importance of the influence of mentoring on research productivity.

Finally, the next highest function preferred by the mentored participants was, "protection from people and situations that could impact their career" indicated 28 times. This may be a trend that is consistent with the high rating of the influence of mentoring on the specific tasks and protection of time to complete the tasks identified to lead to tenure, promotion or reappointment (Pagliarulo & Lynn, 2003; Palepu, et al., 1998).

Non-mentored faculty members.

Research question eight sought to understand what faculty members who are not mentored believe are the preferred and not preferred functions of a mentor. The non-mentored faculty members indicated either preferred or not preferred functions of a faculty mentor if mentoring would be available. It is interesting to note that none of the mentoring functions that non-mentored faculty choose more often were the same as the ones mentored faculty members choose more often. Non-mentored faculty members choose the mentoring functions of constructive criticism and feedback and, "a trusting relationship" most often (51 times each), and the second highest was, "belief in my potential" indicated 50 times. Five mentoring functions were all rated the third highest, each indicated 48 times: support and encouragement, role modeling, formal advice on tenure, promotion and reappointment (TPR), informal advice on TPR and advice specific to my needs. Three of the functions indicated most often (trusting

relationship, belief in potential and role modeling) reflect the psychosocial functions as proposed by the theory of Kram (1985).

The least preferred functions of a mentor indicated by the non-mentored faculty were challenging work to foster professional growth (29 times), having social opportunities (21 times), friendship (19 times) and assistance indentifying ways to balance career and personal life and advice on time management were both indicated 18 times. The highest indications of these non-mentored faculty members as compared to those of mentored faculty, may suggest that non-mentored faculty feel there are mentoring functions that can positively influence their academic responsibilities, understanding expectations and support their acclimation to the culture of the institution. Whereas mentored faculty members may be indicating their actual understanding of how mentoring functions influence their academic performance and socialization, thus their choices of functions linked to research, grant attainment and visibility may reflect the importance of advancement.

To summarize the findings of the mentored and non-mentored faculty member's preferences for mentoring functions to answer research questions seven and eight, it is suggested that the differences in the responses may reflect the fact that mentored faculty know what mentoring has afforded them. Many of the preferred functions indicated by the participants in this study are consistent with other studies. Frandsen (2003) found that nursing faculty indicated the type of mentor Leader/Coach was most frequency preferred and within this dimension of mentoring are the functions of role modeling and belief in potential. Sands, Parson and Duane (1991) found that the gender or type of program of allied health and other higher education faculty members in their study predicted the type of mentored that was preferred. Faculty who were tenured preferred a friend (which included mentoring functions of social interaction,

providing advice and help with personal problems) while female faculty members, and those faculty who taught in schools of arts and sciences, preferred the information source type of mentoring which included functions of formal and informal advice about tenure, promotion and reappointment, committee work and ways to enhance publications (Sands, Parson & Duane, 1991).

Conversely, Williams and Blackburn (1988) found that nursing faculty members indicated that the most predictive type of mentoring that influenced their research productivity was one the researchers defined as role specific modeling/teaching which included functions related to helping the mentee to pan a research project, co-authoring or help obtaining a grant). Williams and Blackburn (1988) did not find strong correlations between the other three type of mentoring they defined: a) encouraging the dream which included functions related to promoting the mentee's belief in self, personal counseling, b) organizational socialization which included helping the mentee to learn the values, politics and culture of the institution, introducing the mentees to other influential people or c) advocate which included the function of protection and general support and encouragement (Williams & Blackburn, 1988, p. 206). This study was specific to research productivity; therefore generalizations to the findings from this exploratory study on general perceptions of the influence of mentoring cannot be made.

Although the research of Paul, Stein, Ottenbacher and Liu (2002) was also specific to research productivity, these researchers discussed how mentoring can provided a physical and psychological contract, which is aligned with Kram's (1985) career and psychosocial functions of a mentoring relationship. The physical contract, as defined by Paul et al., (2002) includes actually working with the mentee on projects and skill development and psychological contract includes functions friendship and encouragement. The similarities to the findings in other

research of the preferred functions of a mentor, as reported in this study, suggest that occupational therapy faculty members perceive certain mentoring functions to be valued to meet their needs as they improve in their occupational performance in the roles and responsibilities of the professoriate and in becoming acclimated to the academic environment (Crepeau, et al., 1999; Cunningham, 1999; Frandsen, 2003; Sands, et al., 1991; Schrodt, et al., 2003). In striving to achieve a fit between the occupations of a professor and the institutional environment, the model of the Person-Environment-Occupation (PEO) is suggested to explain how the positive influence of mentoring can support a faculty member's occupational performance in this context (Law, et al., 1996). This information can assist others in identifying those preferred functions as they can serve to inform potential and current occupational therapy faculty members who are likely mentees and mentors of the types of functions that may meet their individual needs.

Mentored faculty member's perceptions of what is actually occurring with regards to mentoring functions.

The data from this study revealed that the most frequently occurring functions perceived to be occurring were psychosocial based: a) provision of advice specific to the mentee's needs, b) support and encouragement, c) role modeling and d) belief in the mentee's potential. However, these four mentoring functions were preferred less than half of the time, which may infer that these mentored faculty may not require these functions that are psychologically based as they may be more focused on the functions that could provide tangible outcomes such as assistance with research and to attain grants as indicated by the responses of the mentored faculty participants who indicated least often occurring mentoring functions that did surround career functions. Those functions included: a) assistance with publications, b) collaboration with research, c) assistance with grants and d) nomination for honors, yet these functions were

indicated more than half of the time to be preferred and are aligned with the career functions posited by Kram (1985) to be those that support a mentee's career development. Additionally, these career-based functions have been suggested to facilitate a junior faculty member's research productivity (Paul, et al., 2002; Williams & Blackburn, 1988) and may reflect the needs of the mentored faculty who responded to this survey. Thus the findings from this study may inform current mentors of the types of functions that are preferred to meet the individualized needs of the mentee.

Transition to Academia

Consistent with the literature most of the participants in this study indicated that they experienced minimal to moderate stress in the areas of transitioning from a clinician to an academician and acquiring knowledge about their teaching and research productivity expectations (Crist, 1999; Dunham-Taylor, et al., 2008; Siler & Kleiner, 2001; Vassantachart & Rice, 1997). They also reported minimal stress in learning about their service obligations and understanding the culture of the university. The research surrounding nurse faculty and medical faculty who transition from clinical practice to an academic career mirrors the responses of these occupational therapy faculty members (Dunham-Taylor, et al., 2008; Sawatzky & Enns, 2009; Siler & Kleiner, 2001). Therefore the findings from this study suggest that strategies to decrease the level of stress when a new or junior faculty is first hired can provide the faculty member with early support to decrease their sense of frustration.

The Nature of Mentoring

The Health Sciences Faculty Mentoring Survey (HSFMS) was designed to gather data to measure the mentored faculty member's responses to describe the nature of mentoring: who are the mentors, when and how often does mentoring occur, and how the relationship was formed.

Participants who reported that they had a mentored indicated that most of the mentors were female (49 of 56) which is consistent with the demographics of the occupational therapy profession and practice area of academia and with nursing faculty research and research which suggests that mentee's tend to feel more comfortable with a mentor of the same gender (AOTA, 2010; Frandsen, 2003; Williams & Blackburn, 1988). However, research of medical faculty suggests that due to the paucity of female mentors, many female mentees do have a male mentor and there was no significant difference reported in the effectiveness of the relationship (Palepu, et al., 1998; Wasserstein, et al., 2007).

Most of the mentored faculty indicated that their mentor was at their institution and within their own occupational therapy department (39 of 56) with six mentored faculty indicating their mentor was from another institution and was an occupational therapist. Twenty-two participants reported that their mentor was also their supervisor, thus the results suggest that for these mentored faculty most of the mentors were occupational therapists and within close proximity. The research on faculty mentoring suggests that having a mentor who understands the specific needs of the mentee's profession, as well as the institutional expectations, provides the opportunity for more positive relationships to form and to last (Kram, 1985; Sangole, Abreu & Stein, 2006). However, it is interesting to note that 22 mentored faculty indicated that their mentor was also their supervisor and though this survey did not capture how mentored faculty perceived this to impact their relationship, research has suggested that having a supervisor as a mentor may prevent the mentee from fully sharing his or her concerns as the supervisor also evaluates the mentee's performance (Morin & Ashton, 2004). The faculty mentors in this study were primarily associate professors (30 of 56), which is consistent with research that indicated that most mentors were full or associate professors (Cunningham, 1999; Paul, et al., 2002; Sands,

et al., 1991; Wasserstein, et al., 2007). Given the general operational definition of a faculty mentor who has a higher rank and is experienced, the findings from this study are consistent with other research.

Mentored faculty in this study indicated that they met with their mentor as needed (24 times and 11 participants indicated they meet once a week. Most reported they spent an hour or less in their meeting (45 indications) with eight mentored faculty reporting they met for two to three hours. This is consistent with findings in other faculty mentoring studies which indicated faculty met for 10 to 30 hours per quarter (Sands, et al., 1991) and less than five hours a month (Cunningham, 1999). Finally, mentoring relationship were reported to be formed most frequently through an informal process where mentees informally choose a mentor (26), mentors informally choose a mentee (11) or there was a mutually agreed upon relationship (14 indications). While some research posits that formal matching of mentors and mentees may ensure that mentoring will occur (Boyle & Boice, 1998) most faculty mentoring studies suggest that informally developed relationships provide the opportunity for both the mentor and mentee to develop a lasting, trusting relationship that meets the needs of the junior faculty and provides both with shared learning (Cunningham, 1999; Frandsen, 2003; Paul, Stein, Ottenbacher & Liu, 2002; Sands, Parson & Duane, 1991). However, other studies suggest that a formalized mentoring program provide a recognized and structured process with defined outcomes which resulted in increase self efficacy of the faculty member's teaching and research skills, attainment of tenure or reappointment, job satisfaction and intent to stay at the institution (Fox et al., 1998; Kosoko-Lasaki, Sonnino & Voytko, 2006; Peterson, et al., 2009; Thorndyke, Gusic & Milner, 2008; Tracy, Jagsi, Starr, & Tarbell, 2004; Zeind, et al., 2005). Given most occupational therapy faculty reported informal development of mentoring relationships, further research is needed to

discover and compare the outcomes between informal and formally developed mentoring relationships. However, the indication of these mentored faculty members' was that there is not enough institutional support for mentoring, thus further research may investigate if and how institutions provide mentoring opportunities.

Summary

In summary, the responses from the survey questions that gathered data to understand the nature of mentoring for mentored faculty participants reveals that more than half of the participants have a mentor, that mentored faculty perceive that mentoring has a positive influence on the four tenets of academic success and the 11 items of academic socialization. The findings from this study infer similarities among occupational therapy faculty mentoring experiences and perceptions and that of other healthcare faculty in that faculty members who are mentored or are aware of mentoring perceive and report positive benefits from the opportunity and process of mentoring on their occupation as a professor and socialization into the academic environment (Fox et al., 1998; Kosoko-Lasaki, et al., 2006; Peterson, et al., 2009; Sands, et al., 1991; Schrodt, et al., 2003; Silier & Kliener, 2001).

Additionally, all faculty participants indicated those mentoring functions they would prefer and not prefer, with mentored faculty focused on career related functions: improving research productivity, attaining grants, achieving tenure and promotion and non-mentored faculty indicated they preferred mentoring functions that were psychosocial based: provision of constructive feedback, a trusting relationship and belief in their potential. The narrative data from the open-ended question is aligned with the quantitative data in that all faculty member participants indicated ideal mentoring functions that are consistent with the theoretical constructs posited by Kram (1985) and found in other research to provide junior faculty with positive

support to achieve their academic success and provided a venue to understand the culture of the academic environment (Cunningham, 1999; Frandsen, 2003; Sands, et al., 1991; Schrodt, et al., 2003).

Limitations

As with any study there are limitations to this present study. First, the nature of a descriptive design provides a beginning understanding of what is occurring but cannot be interpreted to indicate correlations or cause and effect. An exploratory study, designed to gather data surrounding the academic success tenets achieved, and the retention and recruitment rates of mentored OT faculty members as compared to non-mentored occupational therapy faculty members could possibly provide more information about the outcomes of mentoring.

The cross-sectional survey and voluntary nature of participation in the online survey to gather the data measures the participant's responses at one point in time and may be subject to self-selection bias. Given participants volunteered to complete the survey this may reflect those who are more likely to respond and thus over represent those who do not (Alreck & Settle, 2004). It is also possible that there is non-response bias as those who did not participate, but met criteria, may have had different responses, thus yielding different results.

The sample frame developed to recruit participants for this study relied on the faculty member's indication of eligibility based on their completion of the survey if they met the criteria. However, since there was no way to definitely determine which of the 818 faculty members who were listed on the websites of the 151 programs accredited by the AOTA were in fact eligible to participate, the survey invitation only included the inclusion and exclusion criteria. Thus not all faculty members contacted would have been eligible. A future survey could be designed to ask

the participants to respond if they are not eligible so they can be excluded from the total number of participants contacted.

The Health Sciences Faculty Mentoring Survey developed for this study contained six sections and 74 questions, thus there may have been fatigue bias possibly resulting in yea and nay saying or recall bias. Now that a global understanding of how frequently mentoring is occurring, the perception of the influence of mentoring and the types of mentoring functions that are preferred, a shorter version of the survey can be developed to focus on specific aspects of mentoring to measure and correlate the outcomes for mentored and non-mentored faculty. To increase the rigor of the statistical analysis of data surrounding mentoring for health sciences faculty, a larger sample size would be necessary so that every category would result in at least one count versus a summary statistics to calculate a chi square test of independence (Portney & Watkins, 2009). Furthermore, a forced choice 4 point Likert scale could be created with anchors that could be combined to examine two categories: low (strongly disagree/disagree) as compared to higher (agree/strongly agree) ratings of items of interest. To further increase the statistical rigor of a study that examines the relationship of faculty mentoring on academic success, questions could be asked to explore the difference among mentored faculty and non mentored faculty and the influence of mentoring on teaching effectiveness (as measured by student evaluations); research productivity (as measured by peer reviewed articles published, scholarly publications); number of service engagements and reappointment or achievement of tenure. Therefore with a larger sample size of occupational therapy faculty members as compared to other health care faculty (physical therapy, speech language pathology faculty members) parametric tests (t test or analysis of variance) can be conducted to examine the difference

between groups and within groups for the variables of academic success (Portney & Watkins, 2009).

While this was designed as a descriptive study to gather data among occupational therapy faculty, given the need for faculty to meet the expanding student enrolment in occupational therapy programs and the societal need for occupational therapists, more rigorous analysis could be conducted with a larger sample size. A heterogeneous sample of health sciences faculty members who transition from clinical work to a career in academia would enhance the external validity of a future study as findings could be generalized. A study that compared other health sciences faculty members could be conducted to examine the relationship among physical therapy, speech language pathology and physician assistant faculty members to correlate their mentoring experiences on academic success tenets and items of academic socialization.

CHAPTER VI

SUMMARY AND CONCLUSIONS

This study sought to describe the occurrence of mentoring for occupational therapy faculty members who are on the tenure track or eligible for reappointment in the 151 entry-level and doctoral programs in the United States. It also sought to understand the perceived influence of mentoring for mentored faculty members on the four tenets of academic success (teaching, research, service and achievement of tenure, promotion or reappointment (TPR) and the influence on their academic socialization. Furthermore, this study describes the beliefs of all of the occupational therapy faculty participants surrounding the ideal functions of a mentor, the benefits and challenges of a mentoring relationship. Finally, information from this study describes the participant's preferred and not preferred functions of a mentor, the issues that may cause stress when first hired as faculty member and the nature of mentoring for that participant who indicated they have a mentor.

The findings from this study are a first look at the current state of mentoring for occupational therapy faculty members. As the need for occupational therapists increases, so does the enrollment in occupational therapy programs and the need for faculty to prepare students for the complexities of clinical practice. Given the demand for occupational therapy faculty, due to retirement and recruitment into this area of practice, an understanding of what is occurring and preferences of how mentoring is offered informs current and prospective occupational therapy faculty members of the potential benefits of mentoring. In turn, department chairs and educational institutions can derive a deeper understanding of the needs and desires of

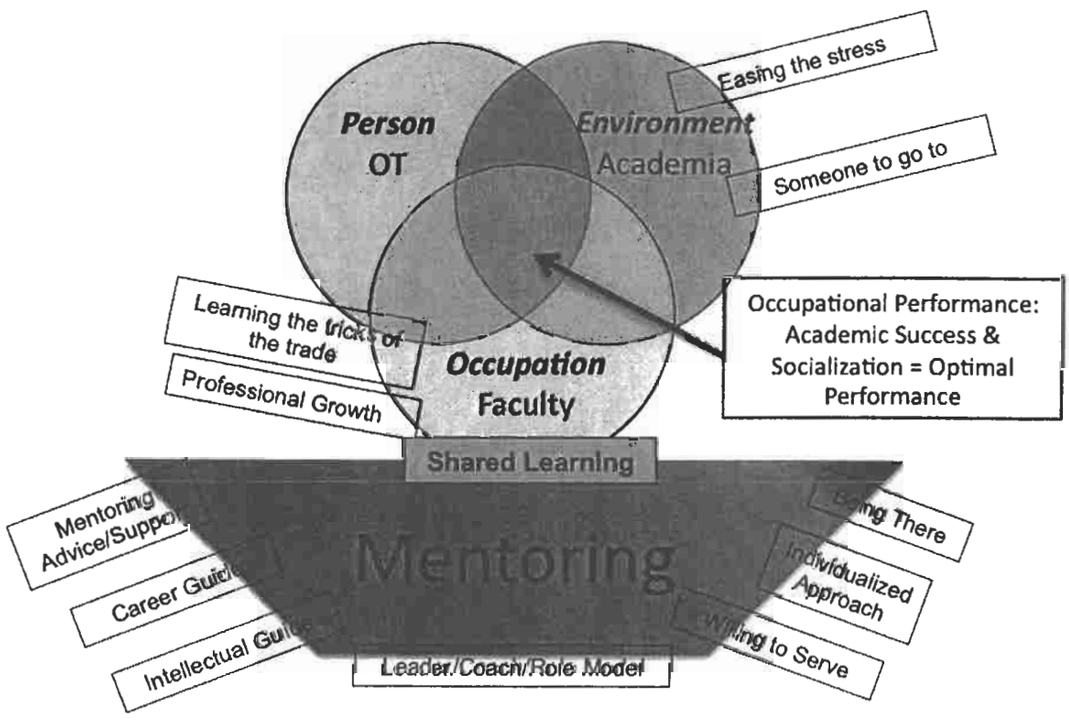
occupational therapy faculty who may want the opportunity for mentoring or potential faculty members can learn about the variety of functions of mentoring to meet their individual needs.

This study was designed within the theoretical constructs of mentoring at work as proposed by Kram (1985) and the Person-Environment-Occupation (PEO) model proposed by Law et al. (1996) to explain how mentoring functions can facilitate an occupational therapy faculty member's fit within the culture of academia and can result in academic success and academic socialization. The results of this study suggest that the career and psychosocial mentoring functions, as posited by Kram (1985) and researched in other health care faculty studies, could provide a junior faculty member with the support, guidance, encouragement, role modeling and socialization that has been found to improve their occupational performance in the roles and responsibilities of the professoriate. The Person-Environment-Occupation model used in this study to describe how an occupational therapy clinician may develop the skills (optimal occupational performance) and then derive a sense of a "good fit" within the academic environment is congruent with the ecological theory to describe the person-environment fit in the study conducted by Sands, Parson and Duane (1991) and discussed in Vassantachart and Rice (1997). Sands et al. (1991) described how the "ecological theory proposes that as the human relationships that are formed in the environmental context as individuals adapt overtime through reciprocal interactions, thus allows or facilitates the "organism" to survive through a "goodness of fit" with the support, satisfaction of mutual needs and development of the capacity to cope" (p. 179). These researchers proposed that the relationships are developed in the person-environmental exchanges and when the individual has support they adapt overtime and through the reciprocal transactions they ultimately develop satisfaction as mutual needs are met, they

develop coping strategies and thrive, resulting in a "goodness of fit" between the person and the environment.

While this was a descriptive study, the findings reveal not only how frequently mentoring is occurring but the data revealed that they are consistent with the theoretical constructs found in the literature to explain and guide the understanding of mentoring for faculty and in this sub population of health care faculty that had not been previously explored. The theoretical findings may infer that as we continue to examine mentoring for occupational therapy faculty that we utilize these theories to guide research. Please see figure 5 in which the two theoretical models are merged.

Figure 5: Health Sciences Faculty Mentoring Optimal Performance & Fit



The results from this study inform us about the current practice of mentoring for occupational therapy faculty members and serves to inform us about tomorrow's research and mentoring opportunities. In turn, department chairs and educational institutions can derive a deeper understanding of the needs and desires of occupational therapy faculty who may want the opportunity for mentoring or potential faculty members can learn about the variety of functions of mentoring to meet their individual needs.

The findings from this study indicate that mentoring is occurring for over half of the participants surveyed and provides information about that cohort's experiences and perceptions of the mentoring process. Given the occupational therapy profession has called on its membership to developed specialized knowledge in mentoring to improve and enhance the practice of occupational therapy across practice areas, these mentored faculty can serve as a resource for further investigation into the development of expanded mentoring opportunities and the outcomes of mentoring.

Overall the mentored faculty surrounding report positive perceptions of the influence of mentoring on the four tenets of academic success and 11 items of academic socialization indicating that these faculty members perceived value in the opportunity for mentoring. The findings that describe the mentored faculty member's perception of the influence of mentoring on the four tenets of academic success were similarly positive for all four tenets: improved teaching, research productivity, service engagement and achievement of tenure, promotion and or reappointment. These occupations and career goals of the professoriate were found to be positively impacted through mentoring for faculty in other health care research, therefore, the findings from this study support the continuation and development of mentoring for junior faculty. Support early in a junior faculty member's career has been found to retain and recruit

faculty members, therefore, mentoring for occupational therapists who are considering a career in academia can be used as a recruitment tool and the development of, or improvement in mentoring for current occupational therapy faculty can serve to retain much needed faculty.

The findings from the mentored faculty surrounding their perception of the influence of mentoring on their academic socialization were positive. The mentored faculty members indicated that they perceived mentoring to be important to those socialization functions of mentoring that facilitated the new faculty member's understanding of the unique culture of the academic environment, the informal and formal expectations of teaching, research productivity, service engagement and how to achieve tenure or reappointment. Furthermore, academic socialization was found to be perceived as a way to assist the faculty member in feeling sense of ownership and acceptance into the academic environment, thus this sense of loyalty is likely to reflect the faculty members job satisfaction and desire to remain.

All occupational therapy faculty members described their beliefs about the ideal functions of a mentor thus these findings inform all stakeholders with information about the type of mentoring behaviors that may be specific to occupational therapy faculty. However, many of those ideal mentoring functions were consistent with those reported by faculty members in medical, physical therapy and nursing educational programs, therefore replicating a mentoring program or model for occupational therapy faculty can provide a foundation for occupational therapy departments and educational institutions. Furthermore, the description of an ideal mentor provides information to faculty who wish to become an effective mentor, thus completing the cycle and continuation of this practice for future junior faculty.

The narrative of all occupational therapy faculty members surrounding the benefits of a mentoring relationship revealed that these participants believe that through mentoring learning

how to fit into the new environment of academia could facilitate their transition from clinical practice, ease the stress of the learning about the different responsibilities and aid in learning and improving in their new occupation as a professor. Interestingly, three themes emerged that may be specific to occupational therapy faculty members, yet still reflect aspects found in the literature surrounding "being available" and "willing to serve" as ideal mentor characteristics. The individualized approach theme is suggestive of the philosophical foundations of occupational therapy, in that we strive to individualize our approach with each client, within each context and along the developmental stages and lifespan, thus, it is not surprising that these participants voiced this as one of the ideal functions of a mentor.

The findings from the themes that emerged also infer that these faculty members believe that having a designated "someone to go to" was integral to their successful role acquisition and acclimation to the academic environment. Thus this information informs the institution, department and potential mentors of the value of having a recognized and rewarded mentoring opportunity available for junior faculty who desire mentoring.

The findings surrounding the participant's belief about the challenges of a mentoring relationship highlight those aspects that can inform department chairs and institutions of the barriers to effective mentoring. As the previous findings suggest, mentoring was reported to be beneficial, however, a number of other issues were reported as barriers and challenges to mentoring. The literature revealed that challenges included: not enough time to find a mentor, to form a productive relationship or to spend on the mentoring process as well as minimal, to nonexistent recognition of the mentoring process as being valuable to new or junior faculty development. These findings underscore the need for institutions and department in occupational therapy to explore and develop opportunities for mentoring for faculty depending

on their needs and the contextual expectations of faculty to succeed and excel in their professorial occupation. Finally, the narrative of the participants revealed difficulties within and maintaining a positive, supportive relationship that were believed to be affected by a poor fit between the mentor and mentee and how each member fairly managed their shared responsibilities. This information provides department chairs, potential mentors and mentees with information about how to be aware of the downside of mentoring and in turn to develop positive mentoring relationship behaviors. Thus a positive and effective outcome of a mentoring relationship could lead to a continuation of the mentoring process, as mentees become mentors.

Mentored faculty reported their preferred and not preferred functions of a mentor and the findings suggest that these participants valued functions that were career based and focused on assistance with tangible task development (teaching improvement, research productivity and grant attainment, achievement of tenure or reappointment). Given these participants have experienced mentoring, findings suggest that they understand the process and how mentoring facilitates particular aspects of academic success and socialization, thus those functions that are valued. Thus this study's finding underscores the importance of an individualized approach and mentee driven mentoring agenda. Furthermore, with a deeper understanding of the ideal mentoring functions, the effective outcome of a mentoring relationship could lead to a continuation of the mentoring process, as mentees become mentors.

Findings from the non-mentored faculty members surrounding preferred and not preferred functions revealed that these participants leaned heavily towards those functions that were psychosocial support, thus suggesting that without the actual experience of having a mentor, these faculty members may perceive that a mentor's primary function is the emotional and encouragement based support or may reflect the need that these faculty members have for a

person or persons to whom they can find psychosocial support. Therefore, findings from this study serve to inform non-mentored faculty of the types of functions that are preferred by those mentored faculty and thus can better prepare them for the contribution that mentoring can provide to career success and development.

Findings from this study serve to inform others about the nature of mentoring for the mentored faculty participants and serve as a foundation from which to enhance or develop mentoring opportunities or programs. Findings suggest that mentoring relationship are informally established thus department chairs, institutions and potential mentors and mentees, if provided with the time and resources, can formalize a mentoring opportunity or program to allow these informal relationships to develop. Furthermore, findings from this study reveal that mentoring occurs most frequently as needed or once a week and ranges from one hour or less to 2 to 3 hours, thus understanding how much time may be required for mentoring can prepare the department and institution to develop reserved time for mentoring during the week or the semester for the mentors and mentees.

Finally, the findings from this study surrounding the level of stress that faculty members perceived was minimal to moderate for those issues that revolve around their transition from their occupation as a clinician, to that of an academician, learning and improving teaching, developing and producing research and understanding how to achieve tenure, promotion or reappointment. Therefore the findings from this study serve to inform department chairs and institutions about those perceptions of potential faculty members so early and effective systems, including mentoring, can be developed to ease the transition and stress of new faculty members. This is suggested to result in recruitment and retention of occupational therapy faculty members

as well as to decrease the clinical and time costs required to recruit and retain effective faculty thus providing consistency and depth in occupational therapy educational programs.

This study offers the first description of the occurrence and influence of mentoring for occupational therapy faculty members who are on the tenure track or eligible for reappointment. It provides direction for future research that can further inform and develop mentoring for faculty in occupational therapy educational programs.

Future Studies

The data from this study is a catalyst for the development of future studies that will provide more insightful understanding of mentorship and its role in the academy. While there are many paths one may take to explore this area further, a longitudinal study exploring and comparing the outcomes of mentoring for occupational therapy faculty members who are mentored as compared to those who are not mentored is a fruitful direction as it will provide objective data that can be used to replicate or develop and monitor the outcomes of mentoring opportunities and programs for current and potential occupational therapy faculty.

In addition, the outcomes of the mentored faculty member's teaching effectiveness (as measured by student evaluations), research and grant productivity and number of service engagement practices can be measured as well as achievement of tenure, promotion or reappointment. Furthermore, data could be gathered to explore the retention and recruitment as influenced by the opportunity and outcomes of mentoring opportunities.

Future research may compare the mentoring functions or programs that are provided to the mentees across types of institutions including: research intensive, tenure track or reappointment, public or private, entry-level or doctoral. This information would provide a

deeper understanding of the types of mentoring required, how mentoring is delivered and how the effectiveness of mentoring is measured for the specific programs and institution, thus informing the department chairs and mentors of the nature of mentoring and the specific functions that are utilized (career and/or psychosocial functions).

Additionally a study that would explore the mentor's experience could serve to inform the profession of what led the mentor to this service, the characteristics of the mentor, the outcomes of the relationship and process for the mentor. Findings would contribute to our understanding of how to prepare faculty for a mentoring role, the time required and the benefits and challenges of mentoring for the mentor.

Finally, future research can examine mentoring for adjunct occupational therapy faculty and occupational therapy doctoral students to understand how mentoring may impact their decision to transition to a full-time academic career. Research may be conducted to follow their occupational performance as an academician, explore their socialization into the culture of the institution and discover if they become mentors.

Perhaps the strong indications of the non-mentored faculty participants surrounding the lack of mentors will inform and prompt the occupational therapy profession and occupational therapy educational programs to actively seek solutions to develop mentors and mentoring opportunities to recruit and retain occupational therapy faculty, thus meeting the needs of the professional programs and ultimately to prepare future occupational therapists to meet the healthcare needs of society.

REFERENCES

Alreck, P.L., & Settle, R.B. (2004). *The Survey Research Handbook.* (3rd Ed.). Boston, MA: McGraw-Hill.

American Occupational Therapy Association, (2008). *Academic Program Annual Data Report.* Bethesda MD: Author.

American Occupational Therapy Association. (2008). Occupational therapy practice framework: Domain and process (2nd ed.). *American Journal of Occupational Therapy, 62*, 625–688.

American Occupational Therapy Association. (2009). Specialized knowledge and skills of occupational therapy educators of the future. *American Journal of Occupational Therapy*, 63, 804-818.

American Occupational Therapy Association. (2010). 2010 *Occupational Therapy Compensation and Workforce Report.* Bethesda, MD: AOTA Press.

Balogun, J.A., & Sloan, P.E. (2006). Emerging trends on tenure polices and practices in nursing & allied health education. *Journal of Allied Health, 35*(3), 134-141.

Beck, S.J. & Laudicina, R.J. (2001). Mentoring tomorrow's leaders in education. *Clinical Laboratory Science, 14*(1), 38-44.

Biondo, P.D., Nekolaichuk, C.L., Stiles, C., Fainsinger, R.L., & Hagen, N.A. (2008). Applying the Delphi process to palliative care tool development: lessons learned. *Support and Care in Cancer, 16,* 935-942.

Boice, R. (1992). *The new faculty member supporting and fostering professional development.* San Francisco, CA: Jossey-Bass.

Bower, G.G. (2007). Factors influencing the willingness to mentor 1st year faculty in physical education departments. *Mentoring & Tutoring, 15*(1), 73-85.

Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Princeton, NJ: The Carnegie Foundation of the Advancement of Teaching.

Boyle, P. & Boice, B. (1998). Systematic mentoring for new faculty teachers and graduate teaching assistants. *Innovative Higher Education, 22*(3), 157-178.

Cawyer, C.S., & Friedrich, G.W. (1998). Organizational socialization: Processes for new communication faculty. *Communication Education, 47*(3), 234-245. DOI: 10.1080/03634529809379128.

Cawyer, C.S., Simonds, C. & Davis, S. (2002). Mentoring to facilitate socialization: The case of the new faculty membcr. *Qualitative Studies in Education, 15*(2), 225-242.

Center for Health Workforce Studies. (2006). *The United States Health Workforce Profile*. The New York Center for Health Workforce Studies. School of Public Health, University at Albany, State University of New York.

Centra, J. (1976). *Faculty development practices in U.S. college and universities*. Educational Testing Service. Princeton, NJ.

Copolillo, A.E., Peterson, E. W., & Helfrich. C.A. (2001). Combining roles as an academic instructor and a clinical practitioner in OT: Benefits, challenges and strategies for success. *Occupational Therapy in Health Care, 15*(1/2), 127-143. doi: 10.1080/J003v15n01_13.

Crepeau, E.B., Thibodaux, L. & Parham, D. (1999). Academic juggling act: Beginning and sustaining an academic career. *The American Journal of Occupational Therapy, 53*(1), 25-30.

Creswell, J. W. (2007). *Qualitative inquiry & research design Choosing among five approaches*. Thousand Oaks, CA: Sage.

Crist, P. (1999). Career transition from clinician to academician: Responsibilities and reflection. *The American Journal of Occupational Therapy, 53*(1), 14-19.

Cunningham, S. (1999). The nature of workplace mentoring relationships among faculty members in Christian higher education. *The Journal of Higher Education, 70*(4), 441-463.

Daley, S. Wingard, D.L., & Reznik, V. (2006). Improving retention of underrepresented minority faculty in academic medicine. *Journal of the National Medical Association, 98*(9), 1435-1440.

Daloz, L. (1986). *Effective teaching and mentoring: Realizing the transformational power of adult learning experiences*. San Francisco: Jossey-Bass.

Davis, J., Zayat, E., Urton, M., Belgum, A., & Hill, M. (2008). Communicating evidence in clinical documentation. *Australian Occupational Therapy Journal, 55*(4), 249-255. Doi: 10.1111/j.1440-1630.2007.00710.x.

Department of Health and Human Services. (2008). *Administration on Aging*. Aging Statistics. Retrieved on March 7, 2010 from http://www.aoa.gov/AoARoot/Aging_Statistics/index.aspx.

Dillman, D. (2007). *Mail and internet surveys: the tailored design method.* John Wiley & Sons, Inc. New York, NY.

Dunham-Taylor, J., Lynn, C.W., Moore, P., McDaniel, S. & Walker, J.K. (2008). What goes around comes around: Improving faculty retention through more effective mentoring. *Journal of Professional Nursing, 24* (6), 337-346.

Eby, L.T., McManus, S.E., Simon, S.A., & Russell, J.E.A. (2000). The protégés perspective regarding negative mentoring experiences: The development of a taxonomy. *Journal of Vocational Behavior, 57*(1), 1-21.

Eby, L. T. & Allen, T. D. (2002). Further investigation of protégés' negative mentoring experiences. *Group & Organization Management, 27*, 456-479.

Elliot, A.C. & Woodward, W.A. (2007). *Statistical Analysis Quick Reference Guidebook with SPSS Examples*. CA: Sage Publications.

Erickson, E.H. 1963. *Childhood and Society*. 2 ed. New York: W.W. Norton.

Fisher, T. (2003). New era, new challenges: Fostering occupational performance and participation in the 21st century. *OT Practice Online*. Retrieved on February 16, 2009 from http://www.aota.org/Pubs/OTP/1997-2007/Features/2003/f-051903.aspx.

Fisher, G. & Keehn, M. (2007). *Workforce needs and issues in occupational and physical therapy*. Midwest Center for Health Workforce Studies, University of Illinois at Chicago. Retrieved on November 28, 2010 from http://www.ahs.uic.edu/ot/pdf/workforce.pdf.

Fox, E.C., Waldron, J.A., Bohnert, P., Hishinuma, & Nordquist, C.R. (1998). Mentoring new faculty in a department of psychiatry. *Academic Psychiatry, 22*(2), 98-106.

Frandsen, G. M. (2003). *Mentoring nursing faculty in higher education*. Ed.D. dissertation, Saint Louis University, United States, Missouri. Retrieved August 28, 2008, from Dissertations & Theses: Full Text database. (Publication No. AAT 3102895).

Fuller, K., Maniscalco-Feichtl, M. & Droge, M. (2008). The role of the mentor in retaining junior pharmacy faculty members. *American Journal of Pharmaceutical Education, 72*(2), 1-5.

Garman, K. A., Wingard, D.L. & Reznik, V. (2001). Faculty development: Why bother?. *Academic Medicine, 76*(10), S74-S76.

Gaskin, L.P., Lumpkin, A., & Tennant, L.K. (2003). Mentoring new faculty in higher education. *The Journal of Physical Education, Recreation and Dance, 74*(8), 49-54.

Germain, C. B., & Gitterman, A. (1987). Ecological perspective. In A. Minahan (Ed.-in-Chief), *Encyclopedia of Social Work* (18th ed., Vol. 1, pp. 488–499). Silver Spring, MD: National Association of Social Workers.

Greene, H.C., O'Connor, K.A., Good, A.J., Ledford, B.B., Peel, C.C., & Zhang, G. (2008). Building a support system toward tenure: changes and needs of tenure-track faculty in colleges of education. *Mentoring & Tutoring, 16*(4), 429-447.

Harrison, A.L. & Kelly, D. G. (1996). Career satisfaction of physical therapy faculty during their pretenure years. *Physical Therapy, 76*(11), 1202-1220.

Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing, 32*(4), 1008-15.

Houston, Meyer & Paewai, (2006). Academic staff workloads and job satisfaction: Expectations and values in academia. *Journal of Higher Education Policy and Management, 28*(1), 17-30.

Huber, M.T. (2002). Faculty development and the development of academic careers. *New Directions for Institutional Research*, 114, 73-84. Doi: 10.1002/ir.48.

Jones, D.P. & Tucker-Allen, S. (1999). Mentor/mentee relationship with the focus on meeting promotion/tenure guidelines. *The ABNF Journal, 10*(5) 113-116.

Kearney, P. (2006). Challenges of the academic department chair in occupational therapy. Organizational Issues and Insights, Online paper from New Foundations. Retrieved February 16, 2009 from http://www.newfoundations.com/OrgHeader.html.

Keeney, S., Hasson, F., & McKenna, H. (2006). Consulting the oracle: ten lessons from using the Delphi technique in nursing research. *Journal of Advanced Nursing, 53*(2), 205-212.

Kosoko-Lasaki, O., Sonnino, R.E., & Voytko, M.L. (2006). Mentoring for women and underrepresented minority faculty and students: Experience at two universities of higher education. *Journal of the National Medical Association, 98*(9), 1449-1459.

Kram, K.E. (1985). *Mentoring at work Developmental relationships in organizational life*. Scott Foresman and Company: Glenview, IL.

Latif, D.A., & Grillo, J.A. (2001). Satisfaction of junior faculty with academic role functions. *American Journal of Pharmaceutical Education, 65*, 137-143.

Law, M., Cooper, B.A., Strong, S., Stewart, D., Rigby, P., & Letts, L. (1996). The person-environment-Occupation model: A transactive approach to occupational therapy. *Canadian Journal of Occupational Therapy, 63*(1), 9-23.

Leslie, K., Lingard, L., & Whyte, S. (2005). Junior faculty experiences with informal mentoring. *Medical Teacher, 27*(8), 693-698. Doi: 10.1080/01421590500271217.

Levinson, D.J., Darrow, C.N., Klein, E.B., Levinson, M.A., & McKee, B. (1978). *The Seasons of a Man's Life*. New York: Knopf.

Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. New York: Sage.

Linstone, H. A., & Turoff, M. (Eds.). (1975). *The Delphi method: Techniques and applications*. Reading, MA: Addison Wesley.

Long, J. (1997). The dark side of mentoring. *Australian Educational Research, 24*(2), 115.23.

Luna, G., & Cullen, D. (1995). *Empowering the faculty: Mentoring redirected and renewed.* (ERIC Document Reproduction Service No. ED 399888).

Masagantani, G.N., & Grant, H.K. (1986). Managing an academic career. The American Journal of Occupational Therapy, 40(2), 83-88.

Miles, M.B., & Huberman, A.M. (1984). *Qualitative Data Analysis*. Beverly Hills, CA: Sage.

Miller, K., & Noland, M. (2003, March/April). Unwritten roles for survival and success: Senior faculty speaks to junior faculty. *American Journal of Health Education, 34* (2), 84-89.

Mitcham, M.D., & Burik, J.K. (2007). Shaping the beginning of an academic career in occupational therapy. *OT Practice, 12*(8), 20-25.

Mitcham, M.D. & Gillette, N.P. (1999). Developing the instructional skills of new faculty members in occupational therapy. *The American Journal of Occupational Therapy, 53* (1), 20-24.

Mitcham, M.D., Lancaster, C.J., & Stone, B.M.. (2002). Evaluating the effectiveness of occupational therapy faculty development workshops. The American Journal of Occupational Therapy, 56 (3), 335-339.

Morin, K.H. & Aston, K.C. (2004). Research on faculty orientation programs: Guidelines and directions for nurse educators. Journal of Professional Nursing, 20(4), 239-250.

Moss, J., Teshima, J., & Leszcz, M. (2008). Peer group mentoring of junior faculty. Academic Psychiatry, May-June, 32, 230-235. Doi: 10.1176/appi.ap.32.3.230.

Mullen, C.A., & Forbes, S.A. (2000). Untenured faculty: Issues of transition, adjustment and mentorship. *Mentoring & Tutoring, 8*(1), 31-45.

Mullen, C. A. & Hutinger, J. L. (2008). At the tipping point? Role of formal faculty mentoring in changing university research cultures. Journal of In-Service Education, Jun2008, 34(2) 181-204.

Munro, B.H. (2001). *Statistical methods for health care research.* (5th ed). Lippincott, Williams & Wilkins: Philadelphia, PA.

Olsen, D. & Sorcinelli, M.D. (1992). The pretenure years: A longitudinal perspective. New Directions for Teaching and Learning, 50, 15-25.

Pagliarulo, M.A. & Lynn, A. (2003). Priorities and benchmarks for new faculty in physical therapist education programs: Perceptions of program directors. Journal of Allied Health, 33(4), 271-277.

Palepu, A., Friedman, R.H., Barnett, R.C., Carr, P.L., Ash, A.S., Szalacha, L., & Moskowitz, M. (1998). Junior faculty members' mentoring relationships and their professional development in U.S. medical schools. Academic Medicine, 73(3), 318-323.

Paul, S., Stein, F., Ottenbacher, K.J. & Liu, Y. (2002). The role of mentoring on research productivity among OT faculty. Occupational Therapy International, 9(1), 24-40.

Peterson, C.A., & Sandholtz, J.H. (2005). New faculty development: Scholarship of teaching and learning opportunities. *Journal of Physical Therapy, 19*(3), 23-29.

Peterson, C., Stuart, D.W., Patel, R., & Hargis, J. (2009). Promotion and tenure: Institutional, program, and faculty candidate characteristics. *Journal of Physical Therapy Education, 23*(1), 64-70.

Pinto-Zipp, G., & Olson, V. (2008). Infusing the mentorship model of education for the promotion of critical thinking in doctoral education. *Journal of College Teaching & Learning, 5*(9), 9-16.

Pololi, L.H., Dennis, K., Winn, G.M., & Mitchell, J. (2003). A needs assessment of medical school faculty: Caring for the caretakers. The Journal of Continuing Education in the Health Professions, 23, 21-29.

Pololi, L.H., Knight, S., Dennis, K., & Frankel, R. (2002). Helping medical school faculty realize their dreams: An innovative, collaborative mentoring program. *Academic Medicine, 77*(5), 377-384.

Pololi, L.H. & Knight, S. (2005). Mentoring faculty in academic medicine A new paradigm? Journal of General Internal Medicine, 20, 866-870.

Popovich, N.G., & Abel, S.R. (2002). The need for a broader definition of faculty scholarship and creativity. American Journal of Pharmaceutical Education, 66, 59-65.

Portney, L.G. & Watkins, M.P. (2009). Foundations of Clinical Research: Applications to Practice.(3rd. ed.). Englewood Cliffs, NJ: Prentice Hall.

Powell, J.M, Kanny, E. M., & Ciol, M.A. (2008). State of the occupational therapy workforce: Results of a national study. American Journal of Occupational Therapy, 62(1), 97-105.

Preissner, K.L., Cahill, S.M. & Peterson, E. (2007, October 8). Teaching opportunities for clinicians. OT Practice, 12 (18), 17-19.

Provident, I. M. (2004) Outcomes of the American Occupational Therapy Foundation's curriculum-mentoring project. Retrieved July 16, 2008, from Dissertations & Theses: Full Text database. (Publication No. AAT 3122898).

Ragins, B. R., Cotton, J. L., & Miller, J. S. (2000). Marginal mentoring: The effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Academy of Management Journal*, 43, 1117–1194.

Ragins, B.R., & McFarlin, D. (1990). Perception of mentor roles in cross-gender mentoring relationships. *Journal of Vocational Behavior, 37*, 321-339.

Roche, G. R. (1979). Much ado about mentors. *Harvard Business Review*, 14-28.

Rogers, J., Monteiro, F.M., & Nora, A. (2008). Toward measuring the domains of mentoring. *Family Medicine, 40*(4), 259-263.

Rozier, C.K., Gilkeson, G.E., & Hamilton, B.L. (1991). Job satisfaction of occupational therapy faculty. *The American Journal of Occupational Therapy, 45*(2), 160-165.

Sands, R. G., Parson, L. A., and Duane, J. (1991). Faculty mentoring faculty in a public university. *Journal of Higher Education 62*(2): 174–193.

Sawatzky, J.V., & Enns, C.L. (2009). A mentoring needs assessment: Validating mentorship in nursing education. *Journal of Professional Nursing, 25*(3), 145-50.

Schrubbe, K.F. (2003). Mentorship: A critical component for professional growth and academic success. *Journal of Dental Education, 68*(3), 324-328.

Selwa, L.M. (2003). Lessons in mentoring. *Experimental Neurology, 184*(Supplement 1), 42-47. doi:10.1016/S0014-4886(03)00356-X.

Schrodt, P., Cawyer, C.S., & Sanders, R. (2003). An examination of academic mentoring behaviors and new faculty member's satisfaction with socialization and tenure and promotion process. *Communication Education, 52*(1), 17-29.

Siler, B.B. & Kleiner, C. (2001). Novice faculty: Encountering expectations in academia. *Journal of Nursing Education, 40*(9), 397-403.

Snodgrass, J., & Shachar, M. (2008). Faculty perceptions of occupational therapy program directors' leadership styles and outcomes of leadership. *Journal of Allied Health, 37*(4), 225-235.

Sorcinelli, M.D. (1994). Effective approaches to new faculty development. *Journal of Counseling and Development, 72*(5), 474-479.

Sorcinelli, M.D. & Yun, J. (2007). From mentor to mentoring networks: Mentoring in the new academy. *Change, 39*(6), 58-60.

Steinert, Y. (2000). Faculty development in the new millennium: Key challenges and future directions. *Medical Teacher, 22*(10), 44-50.

Taylor, & Berry, T.M. (2008). A pharmacy faculty academy to foster professional growth and long-term retention of junior faculty members. *American Journal of Pharmaceutical Education, 72*(2), 1-10.

Thorndyke, L.E., Gusic, M.E., & Milner, R.J. (2008). Functional mentoring: A practical approach with multilevel outcomes. *Journal of Continuing Education in the Health Professions, 28*(3), 157-164.

Tierney, W.G. (1997). Organizational socialization in higher education. *The Journal of Higher Education, 68*(1), 1-16.

Tracy, E.E., Jagsi, R., Starr, R., & Tarbell, N.J. (2004). Outcomes of a pilot faculty mentoring program. *American Journal of Obstetrics and Gynecology, 191* (6), 1846-1850.

U. S. Department of Labor Bureau of Labor Statistics. (2009). *Occupational Outlook Handbook.* Retrieved on November 12, 2010 from http://www.bls.gov/oco/ocos078.htm#outlook.

Van Maanen, J. & Schein, E.H. (1979). Toward a theory of organizational socialization. *Research in Organizational Behavior, 1*, 209-264.

Vassantachart, D.S.M. & Rice, G.T. (1997). Academic integration of occupational therapy faculty: A survey. *American Journal of Occupational Therapy, 51*(7), 584-588.

Wachsmuth, B.G. (2006). Open Source Surveys with Asset. In R.A. Reynolds, R. Woods, & J.D. Baker. *Handbook of Research on Electronic Surveys and Measurements* (pp. 241-247). London: Idea Group Publishing.

Wasserstein, A.G., Quistberg, D.A., & Shea, J.A. (2007). Mentoring at the university of Pennsylvania: Results of a faculty survey. *Society of General Internal Medicine, 22*, 210-214.

Williams, R. & Blackburn, R.T. (1988). Mentoring and junior faculty productivity. *The Journal of Nursing Education, 27*(5), 204-209.

Wutoh, A.K., Colebrook, M.N., Holladay, J.W., Scott, K.R., Hogue, V.W., Ayuk-egbe, P.B. & Lombardo, F. (2000). Faculty mentoring programs at schools/colleges of pharmacy in the U.S. *Journal of Pharmacy Teaching, 8*(1), 61-72. Doi: 10.1300/J060v08n01_06. XYZ

Zaleznik, A. (1977). Managers and leaders: Are they different? *Harvard Business Review*, 67-78.

Zeind, C.S., Zdanowicz, M., MacDonald, K., Parkhurst, C., King, C. & Wizwer, P. (2005). Developing a sustainable faculty mentoring program. *American Journal of Pharmaceutical Education, 69*(1), 1-13.

APPENDICIES

Appendix A

Operational Definitions

- A faculty mentoring relationship will be defined as a reciprocal teaching/learning relationship that takes place over time between an experienced senior faculty member and new junior faculty member. The focus of the relationship is the personal interaction of a mentor and mentee to assist the mentee in the following: achievement or acquisition of knowledge; assistance with career and professional development; emotional and psychological support and academic socialization (Paul, Ottenbacher, Stein & Liu, 2002; Schrodt, Cawyer & Sanders, 2003).
- A mentor will be defined as a senior faculty member who provides support, guidance and advice for the mentee.
- A mentee will be defined as a junior faculty member who is on the tenure track or eligible for reappointment.
- Faculty Academic Success
    - Includes achievement of & participation in:
        - Effective teaching
        - Research productivity
        - Engagement in appropriate service committees
        - Achievement of reappointment and/or tenure and promotion (Schrodt, Cawyer & Sanders, 2003; Schrubbe, 2003)
- Faculty Academic Socialization
    - Includes those factors that relate to understanding the culture of the institution:

- Values, beliefs & expectations of behavior that is specific to that institution.
- The explicit & implicit expectations of academic achievement & political forces within the institution to achieve a sense of satisfaction with their role as a faculty member (Schrodt, Cawyer & Sanders, 2003)

Appendix B

Health Sciences Faculty Mentoring Survey as Created on ASSET

Health Sciences Faculty Mentoring Survey

I appreciate your participation in this research study to explore the occurrence and influence of mentoring for new occupational therapy faculty.

Append Survey Element

1*. Edit Insert Delete Up Down

Please complete this screening for inclusionary criteria for the purpose of the study. Click the button to select your choice.

	Yes	*No*
Full time occupational therapy faculty member.	○	○
Licensed occupational therapist.	○	○
Tenure track but not yet tenured or contract faculty eligible for reappointment in both public and private US higher education institutions.	○	○
Have access to the Internet, the ability to access the online link to the online survey.	○	○

Edit Insert Delete Up Down

If you answered yes to all of the inclusion criteria please continue with the survey by clicking **Next**.

If you answered **no** to **any** of the inclusion criteria, you do not meet the criteria for the study. I thank you for your participation. Please close the browser. Thank you.

Edit Insert Delete Up Down

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Edit Insert Delete Up Down

You have met the inclusion criteria. Thank you for your participation. There are 6

sections.

Definitions for the purposes of this study:

Mentor: Senior faculty member who provides support, guidance and advice for the mentee.

Mentee: Junior faculty member who is untenured or eligible for reappointment and has taught at the current academic institution for less than 5 years.

Faculty Mentoring Relationship: Faculty mentoring has been defined as a reciprocal teaching/learning relationship that takes place over time between an experienced senior faculty member and new junior faculty member. The focus of the relationship is the personal interaction of a mentor and mentee to assist the mentee in the following: achievement or acquisition of knowledge; assistance with career and professional development; emotional and psychological support and academic socialization (Paul, Ottenbacher, Stein & Liu, 2002; Schrodt, Cawyer & Sanders, 2003).

Faculty Academic Success: Academic Success includes effective teaching, research productivity, engagement in appropriate service committees and achievement of reappointment and/or tenure and promotion (Schrodt, Cawyer & Sanders, 2003; Schrubbe, 2003).

Faculty Academic Socialization: Academic Socialization includes those factors that relate to understanding the culture of the institution: the values, beliefs and expectations of behavior that are specific to that institution. Junior faculty members need to understand the explicit and implicit expectations of academic achievement and political forces within the institution to achieve a sense of satisfaction with their role as a faculty member (Schrodt, Cawyer & Sanders, 2003).

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SECTION I

The literature on faculty mentoring tells us that many new health sciences faculty members experience stress when transitioning from clinical work to the work of the professoriate. The stress is reported to result from a number of factors: feelings of isolation, feeling inadequately prepared for the requirements of teaching, research and service responsibilities; feeling they do not have a clear understanding of the expectations of how to achieve tenure, promotion or reappointment and an understanding of the culture of academia.

2*. Edit Insert Delete Up Down

Instructions: Please select your choice for each of the items below.

Rate the level of stress, if any, you experienced from the following factors:

	None	*Some*	*Minimal*	*Moderate*	*Extreme*
Transitioning from the role of a clinician to the role of a faculty member.	O	O	O	O	O
Peer support when you were first hired.	O	O	O	O	O
Knowledge regarding teaching responsibilities when you were first hired.	O	O	O	O	O
Knowledge regarding your research productivity when you were first hired.	O	O	O	O	O
Information about service obligations when you were first hired.	O	O	O	O	O
Information regarding university culture when you were first hired.	O	O	O	O	O
Information regarding the formal rules/expectations to achieve tenure, promotion or reappointment when you were first hired.	O	O	O	O	O
Information regarding the informal or unspoken rules/expectations to achieve tenure, promotion or reappointment when you were first hired.	O	O	O	O	O

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SECTION II

If you **Do Not** have a faculty mentor, please scroll to the bottom of this page and click the **Next** button to proceed to SECTION III.

3. Edit Insert Delete Up Down

Instructions: Please select your choice for the items below.

A faculty mentor is defined as a senior faculty member who provides support, guidance and advice for the faculty mentee.

A faculty mentee is defined as a junior faculty member who is untenured or eligible for reappointment and has taught at the current academic institution for less than 5 years.

	Yes	No
Do you have a faculty mentor at your institution?	O	O
Is your mentor a faculty member from the occupational therapy (OT) department on your campus?	O	O
Is your mentor a faculty member from a non-OT department/program on your campus?	O	O
Is your faculty mentor from outside your institution?	O	O
Is the faculty mentor from outside of your institution an occupational therapist?	O	O
Is your mentor also your supervisor?	O	O
Is your faculty mentor a female?	O	O

4. Edit Insert Delete Up Down

Please select only one to indicate the academic rank of your faculty mentor.

- O *Full Professor*
- O *Associate Professor*
- O *Assistant Professor*
- O *Instructor*
- O *Associate Clinical Instructor*
- O *Assistant Clinical Instructor*
- O *Other*

5. Edit Insert Delete Up Down

On average, how often do you (did you) meet with your mentor? Please select only one.

- O *Once a Week*
- O *Once a Month*
- O *Once a Semester*
- O *Annually*
- O *As Needed*
- O *Other*

6. Edit Insert Delete Up Down

How much time on average do you (did you) spend in your mentoring meetings? Please select only one.

- O *1 Hour or Less*
- O *2-3 Hours*

- ○ *4 or More Hours*
- ○ *Other*

7. Edit Insert Delete Up Down

How are the mentoring relationships formed in your department? Please select ALL that apply.

- ☐ *Mentors are assigned by the institution/department*
- ☐ *Mentors are assigned by the department chair*
- ☐ *Mentee informally chose a mentor*
- ☐ *Mentors informally chose a mentee*
- ☐ *The relationship is mutually agreed upon between the mentor/mentee*
- ☐ *Other*

8. Edit Insert Delete Up Down

What topics have you discussed with your mentor? Select ALL that apply.

- ☐ *Teaching*
- ☐ *Research projects*
- ☐ *Research funding*
- ☐ *Service*
- ☐ *Tenure (if applicable)*
- ☐ *Promotion*
- ☐ *Reappointment (if applicable)*
- ☐ *Time management*
- ☐ *Team building*
- ☐ *University policies or procedures*
- ☐ *Personal issues*
- ☐ *Other*

9. Edit Insert Delete Up Down

Please specify in years how long you have been (were) engaged in the mentor/mentee relationship?

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SECTION III

Instructions:

In the first column is a list of possible functions of a faculty mentor.

If you have a faculty mentor, please select functions that occur in the Actual column.

Checking Actual indicates that "yes" it does occur.

In addition please select those functions you would prefer from your mentor in the Preferred column.

Checking Preferred indicates what you "want" or would consider "ideal".

If you Do Not have a mentor, please select the functions listed in the No Mentor BUT Preferred or the No Mentor NOT Preferred column.

Please select all that apply.

10*. Edit Insert Delete Up Down
Actual and Preferred Functions of a Faculty Mentor

	Actual	*Preferred*	*Not Preferred*	***No Mentor BUT Preferred***	***No Mentor NOT Preferred***
Provides advice specific to my needs	☐	☐	☐	☐	☐
Provides me with challenging work assignments to foster my professional growth	☐	☐	☐	☐	☐
Provides friendship	☐	☐	☐	☐	☐
Promotes professional visibility by bringing my work to the attention of others	☐	☐	☐	☐	☐
Provides me with support and encouragement	☐	☐	☐	☐	☐
Suggests specific strategies for achieving my career goals	☐	☐	☐	☐	☐
Offers formal advice on tenure, promotion or	☐	☐	☐	☐	☐

reappointment					
Provides information about informal expectations of tenure, promotion or reappointment	☐	☐	☐	☐	☐
Helps me to understand the organizational culture of a college/university	☐	☐	☐	☐	☐
Protects me from people or situations that could negatively impact my career	☐	☐	☐	☐	☐
Offers assistance with publications	☐	☐	☐	☐	☐
Works collaboratively with me on research projects	☐	☐	☐	☐	☐
Provides advice about committee work	☐	☐	☐	☐	☐
Provides intellectual guidance (suggests strategies to achieve my career goals)	☐	☐	☐	☐	☐
Provides constructive criticism and feedback	☐	☐	☐	☐	☐
Provides emotional support	☐	☐	☐	☐	☐
Nominates me for important honors or awards	☐	☐	☐	☐	☐
Acts as a role model	☐	☐	☐	☐	☐
Believes in my potential	☐	☐	☐	☐	☐
Assists me in acquiring external funding or grant writing	☐	☐	☐	☐	☐
Is someone I can trust	☐	☐	☐	☐	☐
Provides advice on time management	☐	☐	☐	☐	☐
Edits my work and helps me prepare manuscripts	☐	☐	☐	☐	☐
Socializes with me at work (e.g., have lunch, coffee, social conversations)	☐	☐	☐	☐	☐
Provides me with practical suggestions about teaching	☐	☐	☐	☐	☐
Assists me in identifying ways to balance my career and personal goals	☐	☐	☐	☐	☐
Provides advice about research opportunities, grant proposals or funding resources	☐	☐	☐	☐	☐

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SECTION IV

Instructions: Please rate your perception of the influence of mentoring on your Faculty Academic Success.

Faculty Academic Success: Academic Success includes effective teaching, research productivity, engagement in appropriate service committees and achievement of reappointment and/or tenure and promotion.

If you **Do Not** have a faculty mentor at your institution, please scroll to the bottom of this page and click the **Next** button to proceed to SECTION V.

11. Edit Insert Delete Up Down

My perception of the influence of faculty mentoring for academic success is based on the following factors.

	Not Important	*Somewhat Important*	*Neutral*	*Important*	*Very Important*
Improved teaching	O	O	O	O	O
Research productivity	O	O	O	O	O
Service engagement	O	O	O	O	O
Reappointment, tenure and/or promotion	O	O	O	O	O

Edit Insert Delete Up Down

Instructions: Please rate your perception of the influence of mentoring on your Faculty Academic Socialization.

Faculty Academic Socialization: Academic Socialization includes those factors that relate to understanding the culture of the institution: the values, beliefs and expectations of behavior that are specific to that institution. Junior faculty members need to understand the explicit and implicit expectations of academic achievement and political forces within the institution to achieve a sense of satisfaction with their role as a faculty member.

If you **Do Not** have a faculty mentor at your institution, please scroll to the

bottom of this page and click the **Next** button to proceed to SECTION V.

12. Edit Insert Delete Up Down

As a result of faculty mentoring…

	Never	*Sometimes*	*Neutral*	*Often*	*Always*
I feel valued in my work environment.	O	O	O	O	O
I feel an "ownership" toward my department/program.	O	O	O	O	O
My loyalty to my department/program is high.	O	O	O	O	O
I understand my teaching expectations.	O	O	O	O	O
I understand my research expectations required for tenure and promotion at my institution.	O	O	O	O	O
I have been provided with the resources necessary to conduct research (e.g., funding, research time, etc.).	O	O	O	O	O
I understand the service expectations of my department /program.	O	O	O	O	O
I have been given adequate information on how to successfully navigate tenure, promotion or reappointment process.	O	O	O	O	O
I feel connected to others in my work environment.	O	O	O	O	O
I have frequent opportunities to socialize with colleagues from my work environment.	O	O	O	O	O
I consider my co-workers to be friends as well as colleagues.	O	O	O	O	O

Edit Insert Delete Up Down

Previous Next

Edit Insert Delete Up Down

SECTION V

Instructions: Please complete the demographic information below.

13*. Edit Insert Delete Up Down
What is your gender?

- ○ *Male*
- ○ *Female*

14*. Edit Insert Delete Up Down

What is your highest academic degree?

- ○ *Ph.D.*
- ○ *Ed.D.*
- ○ *ScD.*
- ○ *OTD*
- ○ *MS/MA*
- ○ *Other*

15*. Edit Insert Delete Up Down

What is your highest academic rank?

- ○ *Instructor*
- ○ *Assistant Professor*
- ○ *Associate Professor*
- ○ *Professor*
- ○ *Clinical Instructor*
- ○ *Assistant Clinical Instructor*
- ○ *Associate Clinical Instructor*
- ○ *Other*

16*. Edit Insert Delete Up Down
Tenure Track and Reappointment

	Yes	*No*
Does your institution have a tenure track?	○	○
If your institution has a tenure track, are you in the tenure track?	○	○
Have you achieved tenure or reappointment?	○	○

17*. Edit Insert Delete Up Down
Please select your age range.

- ○ *25 - 35*
- ○ *36 – 45*
- ○ *46 – 55*
- ○ *56 – 65*
- ○ *65+*

18*. Edit Insert Delete Up Down
How many years have you been teaching full time at this institution?

Edit Insert Delete Up Down

Previous Next

Edit Insert Delete Up Down

SECTION VI

Instructions: Please answer the 3 opened ended questions in the spaces provided.

19. Edit Insert Delete Up Down
What do you believe are the most important functions of an ideal faculty mentor?

20. Edit Insert Delete Up Down
What do you believe are the benefits of a faculty mentoring relationship?

21. Edit Insert Delete Up Down
What do you believe are the challenges of a faculty mentoring relationship?

Edit Insert Delete Up Down

Thank you for submitting your survey, your participation is appreciated.

Append Survey Element

Appendix C

Pilot Study: Delphi Technique

Design

The pilot study was a descriptive, exploratory research design (Linstone & Turoff, 1975). Face and content validity were obtained for this instrument as a result of the Delphi technique. The Delphi technique has been used to obtain face and content validity from a panel of experts to reach consensus about a problem, issue or if items on a survey reflect concepts being measured (Davis, Zayat, Urton, Belgum & Hill, 2008; Portney & Watkins, 2009). This method is based on the premise that the collective and anonymous consensus of identified experts in the field related to the topic or problem being examined results in broader knowledge of the topic (Hasson, Keeney & McKenna, 2000). Currently in the Delphi method there is no set number of experts that are considered ideal to gain consensus, yet the literature suggests that the number and choice of identified experts provide a broad and diverse level of knowledge about the issue under consideration and varies depending on the objectives and issues of the study (Biondo, Nekolaichuk, Stiles, Fainsinger & Hagen, 2008; Keeney, Hasson & McKenna, 2006). The statistical analysis used for a Delphi technique to assess consensus for a survey tool is calculating the level of agreement through percentage of frequency of the responses to the yes and no questions posed (Hasson, Keeney & McKenna, 2000). Similarly, there is no universally agreed upon percentage of agreement for consensus however, the literature further suggests that 70 to 80% is considered a reasonable guideline and it is highly recommended that this level be set prior to the data analysis (Biondo, Nekolaichuk, Stiles, Fainsinger & Hagen, 2008; Keeney, Hasson, & McKeena, 2006). Based on the review of the literature, the Delphi technique was chosen as the method of choice to provide face and content validity of the survey.

Hypotheses for the pilot study were:

1. The Health Science Faculty Mentoring Survey will demonstrate face validity.

2. The Health Science Faculty Mentoring Survey will demonstrate content validity.

Design of the Survey Instrument

There was not an instrument that was found that could assess the items of interest to understand if and how mentoring is occurring for occupational therapy faculty members in the areas that have emerged from the literature. Therefore a tool was developed by the PI based on an exhaustive literature review and items from tools used in other faculty mentoring research were included with permission from the researchers (Cunningham, 1999; Fox, et al., 1998; Palepu, et al., 1998; Pololi, et al., 2003; Ragins & McFarlin, 1990; Rogers, et al., 2008; Sands, et al., 1991; Sawatzky & Enns, 2009; Schrodt, et al., 2003; Wasserstein, et al., 2007; Williams & Blackburn, 1988). A Delphi technique was used to obtain face and content validity of the survey instrument (Biondo, Nekolaichuk, Stiles, Fainsinger, & Hagen, 2008; Hasson, et al., 2000). The instrument developed is tilted, "Health Sciences Faculty Mentoring Survey".

Participants for the Pilot Study

Faculty members from the School of Health and Medical Sciences and the College of Nursing at Seton Hall University, South Orange, NJ were invited to participate in the Delphi panel. The participants invited were those faculty members at Seton Hall University (SHU) that have taught research and have mentored an academic colleague. The criteria to participate in the Delhi techniques were:

1. The faculty members must be currently teaching at SHU in the SHMS or the College of Nursing.

2. They must have taught research methods or have experience with mentoring an academic colleague.
3. They must be willing to participate in the 2 to 3 iterative rounds of the Delphi process.
4. They must have access to the Internet, the ability to access the online solicitation letter.

Procedure for Pilot Study

The Primary Investigator (PI) sent an email letter of solicitation to the department secretary of the GPHS at SHU who in turn sent a blast email with a solicitation letter (Please see Appendix) inviting the faculty members of the School of Health and Medical Sciences (SHMS) and the College of Nursing whose names were obtained from the SHU website. Once the faculty members agreed to volunteer, the invitees were instructed to contact the departmental secretary via email. This was done to ensure confidentiality and anonymity of the faculty members who agreed to participate and thus the Primary Investigator (PI) was blinded to the participants.

All faculty members of SHMS and the College of Nursing received a blast email containing a solicitation letter sent by the departmental secretary for the Ph. D. in Health Sciences program. The solicitation letter appeared in the body of the email message and explained the purpose of the pilot study, the criteria for participation, the volunteer nature of the Delphi panel, the commitment to completing the 2 or 3 rounds and the time frame required to complete the Delphi process if they choose to voluntarily participate in the pilot study (Please see Appendix). Also included in the email was a section where the invitees were able to indicate their agreement or disagreement to participate by replying to the departmental secretary.

Once the Delphi panel invitees agreed to participate, the departmental secretary forwarded a hard copy of the solicitation letter, instructions about the Delphi process and the Health Science Faculty Mentoring Survey and a return inter office envelope addressed to her via

inter office mail. The participants were able to conduct their portion of the research in a place of their choice (e.g., their office, home or place of work). The Principal Investigator (PI) conducted her portion of the research (data analysis) at her home (22 Cedar Street, Garfield, NJ).

Once the envelopes were returned to the departmental secretary, after the first round, she removed them from envelopes and placed them in a designated box located in the SHMS office for the PI to retrieve. The PI analyzed the data, entered it into an Excel Version 2008 spreadsheet and stored it on her thumb drive. The PI then modified the survey based on the response of the Delphi panel and provided the aggregate data from the statistical analysis with the corresponding code and returned the revised HSFMS and the statistical analysis to the departmental secretary. The departmental secretary then placed the revised survey with the code that corresponds to the panelist in an inter office envelope with a return inter office envelope addressed to her. The departmental secretary then re-distributed the envelopes with the revised survey to the panelists.

This process was repeated for the second round of the Delphi process until the PI determined that consensus has been reached (80% agreement on each item). The final results were sent to the panelists through the same method to ensure confidentiality and anonymity.

Data Analysis for Pilot Study

The Delphi pilot study was analyzed using descriptive, exploratory research design (Linstone & Turoff, 1975). A frequency tabulation was utilized for the nominal data from the yes/no responses. After the first round of responses was received, data were entered into an Excel Version 2008 spread sheet for analysis using percentage of agreement statistical analysis. The survey was revised based on the panel responses and an analysis of the frequency of yes or no responses was included in the next version of the survey.

Table 1.

Results of the First Round

Sections	Instruction revisions	Did not reach 80%	Questions revised
Introduction	"and nature" of mentoring"		
I	Revised/clarified Level of stress	1, 2a, 2b, 2c, 2d, 2e, 2f, 2g	1, 2a, 2b, 2c, 2d, 2e, 2f, 2g
II	Defined Mentor/Mentee		2, 3, 6, 9, 10, 11, 12,
III	Clarified actual/preferred	Instructions, 3, 5, 10, 14, 17, 23, 26, 27	2, 3(eliminated), 5, 8, 9, 14,19, 26, 27(eliminated), 28 (moved after revised #7),
IV Academic Success	Revised scale (neutral to mid point)		
IV Academic Socialization	Revised scale (neutral to mid point)	11	8
V			2, 6, added #7,
VI	100% consensus		

The second round was collected in the same manner: the departmental secretary opened the returned envelopes and distributed the coded forms to the PI. This process was repeated until consensus was obtained. Central tendency statistical analysis was conducted to analyze the data using the level of the percentage of agreement. A priori measure of consensus was set at 80%. The results of the frequency analysis allowed this principal investigator to determine if there was a consensus about the items on the survey. The second iteration reached 80% consensus from the panelists, thus the Delphi Technique was concluded.

Appendix D

Seton Hall University IRB

OFFICE OF INSTITUTIONAL REVIEW BOARD
SETON HALL UNIVERSITY

June 30, 2010

Mary Falzarano
22 Cedar Street
Garfield, NJ 07026

Dear Ms Falzarano,

The Seton Hall University Institutional Review Board has reviewed your research proposal entitled "The Occurrence and Influence of Mentoring for New Occupational Therapy Faculty" and has approved it as submitted under exempt status.

Enclosed for your records is the signed Request for Approval form.

Please note that, where applicable, subjects must sign and must be given a copy of the Seton Hall University current stamped Letter of Solicitation or Consent Form before the subjects' participation. All data, as well as the investigator's copies of the signed Consent Forms, must be retained by the principal investigator for a period of at least three years following the termination of the project.

Should you wish to make changes to the IRB approved procedures, the following materials must be submitted for IRB review and be approved by the IRB prior to being instituted:

- Description of proposed revisions;
- *If applicable*, any new or revised materials, such as recruitment fliers, letters to subjects, or consent documents; and
- *If applicable*, updated letters of approval from cooperating institutions and IRBs.

At the present time, there is no need for further action on your part with the IRB.

In harmony with federal regulations, none of the investigators or research staff involved in the study took part in the final decision.

Sincerely,

Mary F. Ruzicka, Ph.D.

Mary F. Ruzicka, Ph.D.
Professor
Director, Institutional Review Board

cc: Dr. Genevieve Pinto-Zipp

Presidents Hall • 400 South Orange Avenue • South Orange, New Jersey 07079-2641 • Tel: 973.313.6314 • Fax: 973.275.2361

REQUEST FOR APPROVAL OF RESEARCH, DEMONSTRATION OR RELATED ACTIVITIES INVOLVING HUMAN SUBJECTS

All material must be typed.

PROJECT TITLE: *The Occurrence and Influence of Mentoring for New Occupational Therapy Faculty*

CERTIFICATION STATEMENT:

In making **this application,** I(we) certify that I(we) have read and understand the University's policies and procedures governing research, development, and related activities involving human subjects. I (we) shall comply with the letter and spirit of those policies. I(we) further acknowledge my(our) obligation to (1) obtain written approval of significant deviations from the originally-approved protocol BEFORE making those deviations, and (2) report immediately all adverse effects of the study on the subjects to the Director of the Institutional Review Board, Seton Hall University, South Orange, NJ 07079.

Mary Falzarano Mary Falzarano 6/1/10 5/25/10

RESEARCHER(S) OR PROJECT DIRECTOR(S) DATE

Please print or type out names of **all researchers below signature.
Use separate sheet of paper, if necessary.**

My signature indicates that I have reviewed the attached materials and consider them to meet IRB standards.

Dr. Genevieve Pinto-Zipp 6/1/10 5/25/10

RESEARCHER'S ADVISOR OR DEPARTMENTAL SUPERVISOR DATE

Please print or type out name below signature

The request for approval submitted by the above researcher(s) was considered by the IRB for Research Involving Human Subjects Research ~~at the~~ in June 2010 ~~meeting.~~

The application was approved ✓ not approved ___ by the Committee. Special conditions were _____ were not ✓ set by the IRB. (Any special conditions are described on the reverse side.)

Mary J. Ruzicka, Ph.D. 6/30/10

DIRECTOR, DATE
SETON HALL UNIVERSITY INSTITUTIONAL
REVIEW BOARD FOR HUMAN SUBJECTS RESEARCH

Appendix E

Solicitation Letter/Email for Prospective Participants

Dear Prospective Study Participant (New Occupational Therapy Faculty Member)

I am Mary Falzarano, a Doctoral Candidate in the School of Health and Medical Sciences program at Seton Hall University South Orange, NJ and an assistant professor in the department of occupational therapy at Kean University Union, NJ.

You have been invited to participate in my dissertation study using a survey entitled *Health Sciences Faculty Mentoring Survey* to investigate the occurrence and influence of mentoring for new occupational therapy faculty members. You are receiving this message via an email distribution to all faculty members of the OT programs listed on the AOTA website in the United States. Your participation is voluntary, confidential and anonymous.

As the demand for occupational therapists increases, and educational programs expand, so does the need for qualified occupational therapy faculty members. Mentoring has been suggested as one way to support occupational therapist's transition from the clinic to academia and to guide their professional development in academia. However, despite numerous studies on faculty mentoring in other healthcare professions and non-health care educational programs, there are only two studies in the occupational therapy literature that have examined faculty mentoring.

Therefore, I developed the Health Sciences Faculty Mentoring Survey from an extensive literature review to assess the occurrence and influence of faculty mentoring for new occupational therapy faculty members. The online survey also includes items to assess the participant's perception of the influence of faculty mentoring on their academic success and academic socialization as a new faculty member.

To participate in this study you must:

1. Be a full-time occupational therapy faculty member.
2. Be a licensed occupational therapist.
3. Be on the tenure track but not yet tenured or contract faculty eligible for reappointment in both public and private US higher education institutions.
4. Have access to the Internet, the ability to access the online solicitation letter and link to the online survey.

If you meet the above criteria and would like to voluntarily participate in this study you can access the survey anonymously via the Seton Hall University ASSET survey system using the following link: <link will be included here> and typing in XXXX for password.

It should take no longer than 20 minutes of your time. At any time you may exit the survey and thus the study. Informed consent is assumed once you have completed and submitted the survey.

Your participation is greatly appreciated.

Sincerely,

Mary Falzarano, MHS, OTR, Doctoral Candidate, Seton Hall University, School of Health and Medical Sciences
Department of Occupational Therapy
Kean University
1000 Morris Ave.
Union NJ 07083 908 737 3378 mafalzar@kean.edu

Appendix F

Reminder invitation for participation in an OT faculty mentoring research study

Dear Prospective Research Participant,
If you have taken the survey, thank you. Findings will inform all stakeholders about the occurrence, nature and perceived influence of mentoring for new occupational therapy faculty. We anticipate the study will be published as a dissertation in the summer of 2011.
If you have not taken the survey and would like to reconsider, I have included the original solicitation letter in this email. Thank you.

Dear Prospective Study Participant (New Occupational Therapy Faculty Member),

I am Mary Falzarano, a Doctoral Candidate in the School of Health and Medical Sciences program at Seton Hall University South Orange, NJ and an assistant professor in the department of occupational therapy at Kean University Union, NJ.

You have been invited to participate in my dissertation study using a survey entitled *Health Sciences Faculty Mentoring Survey* to investigate the occurrence and influence of mentoring for new occupational therapy faculty members. You are receiving this message via an email distribution to all faculty members of the OT programs listed on the AOTA website in the United States. Your participation is voluntary, confidential and anonymous.

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Therefore, I developed the Health Sciences Faculty Mentoring Survey from an extensive literature review to assess the occurrence and influence of faculty mentoring for new occupational therapy faculty members. The online survey also includes items to

assess the participant's perception of the influence of faculty mentoring on their academic success and academic socialization as a new faculty member.

To participate in this study you must:

5. Be a full-time occupational therapy faculty member.
6. Be a licensed occupational therapist.
7. Be on the tenure track but not yet tenured or contract faculty eligible for reappointment in both public and private US higher education institutions.
8. Have access to the Internet, the ability to access the online solicitation letter and link to the online survey.

If you meet the above criteria and would like to voluntarily participate in this study you can access the survey anonymously via the Seton Hall University ASSET survey system using the following link:

http://asset.tltc.shu.edu/servlets/asset.AssetSurvey?surveyId=4084

and typing in the password: mentor

It should take no longer than 20 minutes of your time. At any time you may exit the survey and thus the study. Informed consent is assumed once you have completed and submitted the survey.

Your participation is greatly appreciated.

Sincerely,

Mary Falzarano, MHS, OTR, Doctoral Candidate, Seton Hall University, School of Health and Medical Sciences mary.falzarano@shu.edu
Department of Occupational Therapy
Kean University
1000 Morris Ave.
Union NJ 07083 908 737 3378 mafalzar@kean.edu