

May 2015

# The Effect of Cultural and Emotional Intelligence on Mentor and Protege Perceptions of Attitude Homophily and Relationship Quality in Culturally Diverse Mentoring Relationships

Gloria J. Miller

*University of Wisconsin-Milwaukee*

Follow this and additional works at: <https://dc.uwm.edu/etd>

 Part of the [Human Resources Management Commons](#)

---

## Recommended Citation

Miller, Gloria J., "The Effect of Cultural and Emotional Intelligence on Mentor and Protege Perceptions of Attitude Homophily and Relationship Quality in Culturally Diverse Mentoring Relationships" (2015). *Theses and Dissertations*. 896.  
<https://dc.uwm.edu/etd/896>

This Dissertation is brought to you for free and open access by UWM Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UWM Digital Commons. For more information, please contact [open-access@uwm.edu](mailto:open-access@uwm.edu).

THE EFFECT OF CULTURAL AND EMOTIONAL INTELLIGENCE  
ON MENTOR AND PROTÉGÉ PERCEPTIONS OF ATTITUDE HOMOPHILY AND  
RELATIONSHIP QUALITY IN CULTURALLY DIVERSE MENTORING  
RELATIONSHIPS

by

Gloria J. Miller

A Dissertation Submitted in  
Partial Fulfillment of the  
Requirements for the Degree of  
Doctor of Philosophy  
in Management Science

at

The University of Wisconsin-Milwaukee

May 2015

## ABSTRACT

# THE EFFECT OF CULTURAL AND EMOTIONAL INTELLIGENCE ON MENTOR AND PROTÉGÉ PERCEPTIONS OF ATTITUDE HOMOPHILY AND RELATIONSHIP QUALITY IN CULTURALLY DIVERSE MENTORING RELATIONSHIPS

by

Gloria J. Miller

The University of Wisconsin-Milwaukee, 2015  
Under the Supervision of Professor Margaret Shaffer

Mentoring has become more common in organizations as firms have discovered the benefits of this process, such as the retention and cultivation of employees who create the work and products of the organization. To meet the challenges associated with increasing diversity within organizations, researchers have focused on understanding diverse mentoring relationships (Athey, Avery, & Zemsky, 2000; Clutterbuck & Ragins, 2002; Hardy, 1998; Knouse, Hill, & Webb, 2005; Ragins, 1997). The demographic (e.g., ethnicity, gender, age) and situational (e.g., position, power) disparities between mentors and protégés often make it more difficult for diverse partners to develop quality relationships that are needed to realize the full benefits of mentoring.

The purpose of this study is to identify important antecedents (i.e., cultural and emotional intelligence) that may foster a higher level of perceived attitude homophily (or attitude similarity) among diverse mentoring partners as well as higher quality mentoring relationships. Drawing on social information processing theory (Salancik & Pfeffer, 1978), I contend that mentors and protégés who are socially intelligent (i.e., culturally and emotionally) will be better mentoring partners. As a result of the enhanced social

intelligence, they will have a higher perception of having the same attitudes as their partners, in turn corresponding to a higher quality relationship with their partners.

This model was tested on mentors and protégés (not matched pairs) that were involved in racially and/or ethnically diverse mentoring relationships. The self-reports were used to test regression hypotheses of cultural and emotional intelligence on attitude homophily and perception of mentoring relationship quality. Bootstrapping was done to investigate mediation of attitude homophily on the relationships of cultural intelligence and emotional intelligence on relationship quality.

Regression results found significant positive relationships of emotional intelligence on attitude homophily for mentors, and on relationship quality for both mentors and protégés. It also found a significant positive relationship between mentors' metacognitive domain of cultural intelligence and relationship quality. Attitude homophily was also found to have a significant positive relationship to perception of relationship quality for both mentors and protégés. The other hypotheses were not proven through regression, although high and mostly significant correlations existed between all the main constructs of this study in both groups.

This study offers several contributions to mentoring research. One is that it examined the mentoring relationship from a fairly new theoretical perspective, social information processing, which may yield new insight into mentoring. It empirically tested a model that is grounded in SIP and validated success criteria of attitude homophily and relationship quality of mentors/protégés with their partners.

This study also offers practical contributions. It is possible for organizations to test and train individuals that one is considering for a diverse mentoring relationship in

emotional intelligence. The impact of this testing and training may result in higher quality mentoring relationships, which will be beneficial to the mentor/protégé in diverse mentoring relationships.

# TABLE OF CONTENTS

## Contents

ABSTRACT.....	i
LIST OF FIGURES .....	ix
LIST OF TABLES.....	x
ACKNOWLEDGMENTS .....	xi
CHAPTER 1: INTRODUCTION .....	1
1. INTRODUCTION .....	2
2. RESEARCH PURPOSE AND OBJECTIVES .....	5
3. THE CONTEXT OF THIS STUDY .....	6
4. CONTRIBUTIONS .....	6
CHAPTER 2: LITERATURE REVIEW .....	8
1. DEFINITIONS.....	9
Mentoring and Participants .....	9
Mentoring Programs .....	9
Mentoring Functions and Roles .....	11
2. MENTORING PROCESS .....	12
Mentoring Phases.....	12
3. THEORIES USED TO EXAMINE MENTORING.....	12
4. FINDINGS OF QUANTITATIVE RESEARCH .....	14
Points of Mentoring .....	14
Entry Point .....	15
Mentoring Behavior Point.....	21

Effects/Outcomes of Mentoring Point .....	30
5. FINDINGS OF QUALITATIVE RESEARCH.....	38
Entry Point .....	38
Mentoring Behavior Point.....	39
Effects/Outcomes of Mentoring Point .....	40
6. DIVERSITY AND MENTORING.....	41
Mentoring Behavior Point.....	41
Effects/Outcomes of Mentoring Point .....	43
7. REVIEW OF METHODS.....	43
8. CONCLUSION AND FUTURE RESEARCH POSSIBILITIES.....	44
Entry Point .....	44
Mentoring Behaviors Point.....	45
Effects/Outcomes of Mentoring Point .....	45
Overall Topic .....	46
CHAPTER 3: THEORY DEVELOPMENT, MODEL, AND HYPOTHESES .....	48
Social Intelligence and Perceived Attitude Homophily.....	50
Cultural Intelligence and Attitude Homophily .....	52
Emotional Intelligence and Attitude Homophily.....	55
Attitude Homophily and Relationship Quality .....	58
Cultural Intelligence and Relationship Quality.....	59
Emotional Intelligence and Relationship Quality .....	61
Attitude Homophily’s Mediation in CQ/EQ/Relationship Quality Association ....	63

CHAPTER 4: METHODS.....	66
1. SAMPLE AND DATA COLLECTION.....	67
2. MEASURES .....	72
Cultural Intelligence.....	72
Emotional Intelligence.....	73
Perceived Attitude Homophily .....	74
Relationship Quality .....	74
Controls.....	75
3. ANALYSIS.....	77
Preliminary Analyses .....	77
Hypothesis Testing.....	78
Post Hoc Analyses .....	81
CHAPTER 5: DISCUSSION AND CONCLUSION .....	84
Discussion.....	84
Limitations .....	87
Implications for Future Research.....	89
Implications for HR Managers.....	91
Contributions.....	92
Conclusion .....	92
REFERENCES .....	95



FIGURE 2: MODEL OF CQ AND EQ ON MENTOR/PROTÉGÉ ATTITUDE  
HOMOPHILY AND RELATIONSHIP QUALITY IN DIVERSE MENTORING  
RELATIONSHIPS.....118

TABLE 1: Mentoring Functions and Definitions \*(Kram, 1985) and \*\*(Ragins, 2011)  
.....119

TABLE 2: Protégé Findings at Entry Point .....122

TABLE 3: Mentor Findings at Entry Point.....126

TABLE 4: Protégé Findings at Mentoring Behavior Point .....128

TABLE 5: Mentor Findings at Mentoring Behavior Point.....134

TABLE 6: Findings at Effects/Outcomes Mentoring Point.....138

TABLE 7: Methods Used in Empirical Papers Reviewed.....154

TABLE 8: Cultural Intelligence Domains and their Relationship to Diverse Mentoring  
.....155

TABLE 9: Means, Standard Deviations, Reliabilities, and Inter-correlations for Mentors  
.....156

TABLE 10: Means, Standard Deviations, Reliabilities, and Inter-correlations for  
Protégés.....158

TABLE 11: Results of Regression Analyses for Mentors .....160

TABLE 12: Results of Regression Analyses for Protégés .....161

TABLE 13: Mediation Results of Bootstrapping for Mentors .....162

TABLE 14: Mediation Results of Bootstrapping for Protégés .....163

TABLE 15: Overall Results of Hypotheses.....	164
APPENDIX 1 – Measures .....	165
Cultural Intelligence.....	165
Emotional Intelligence .....	166
Attitude Homophily .....	167
Relationship Quality .....	167
APPENDIX 2 – Email to Participants from StudyResponse.....	168
CURRICULUM VITAE.....	170

## LIST OF FIGURES

Figure 1: Mentoring Points

Figure 2: Model of CQ and EQ on Mentor/Protégé Attitude Homophily and Relationship Quality in Diverse Mentoring Relationships

## LIST OF TABLES

- Table 1: Mentoring Functions and Definitions
- Table 2: Protégé Findings at Entry Point
- Table 3: Mentor Findings at Entry Point
- Table 4: Protégé Findings at Mentoring Behavior Point
- Table 5: Mentor Findings at Mentoring Behavior Point
- Table 6: Findings at Effects/Outcomes Mentoring Point
- Table 7: Methods Used in Empirical Papers Reviewed
- Table 8: Cultural Intelligence Domains and their Relationship to Diverse Mentoring
- Table 9: Means, Standard Deviations, Reliabilities, and Inter-correlations for Mentors
- Table 10: Means, Standard Deviations, Reliabilities, and Inter-correlations for Protégés
- Table 11: Results of Regression Analyses for Mentors
- Table 12: Results of Regression Analyses for Protégés
- Table 13: Mediation Results of Bootstrapping for Mentors
- Table 14: Mediation Results of Bootstrapping for Protégés
- Table 15: Overall Results of Hypotheses

## ACKNOWLEDGMENTS

The completion of my Ph.D. was a culmination of years of study, and there are numerous people who helped me along the way. There is no way I am able to thank them all here.

I thank my advisor and dissertation chair, Dr. Margaret Shaffer, for all the time and guidance she provided me throughout my degree. I also want to thank the other members of my dissertation committee for their advice and input along the way: Dr. Maria Goranova, Dr. Mark Mone, Dr. Belle Rose Ragins, and Dr. Hong Ren.

I thank my mother for her unwavering support through the first half of my degree. Although she has passed away, this degree was due in part through her faith in me.

Most importantly, I owe so much to my husband, Rich, for his total support throughout the process. He supported me financially and emotionally for much longer than we planned, without complaint. He was beside me with encouragement and help every moment. Without him, my degree and future would be empty. Now, we will share our future together.

I also gratefully acknowledge a grant received from CIRCQL (Center for Innovation Research in Cultural Intelligence + Leadership) for a research grant that helped me in this study.

## CHAPTER 1: INTRODUCTION

## 1. INTRODUCTION

In the United States, diversity in organizations has become reality (Ragins & Gonzalez, 2003). Diversity consists of differences at many levels, including age, gender, culture, sexual orientation, ability/disability, national origin, religion, and socioeconomic background, among others. The term diversity itself often elicits emotional reactions from individuals, who associate the word with ideas such as affirmative action and hiring quotas, yet it actually is defined as variety or a point or respect in which things differ (Milliken & Martins, 1996). Perhaps tied into these emotional reactions, diversity has been associated with both negative and positive outcomes for individuals and organizations. Some negative effects of diverse workgroups include lower satisfaction and higher turnover (Tsui, Egan, & O Reilly, 1992) as well as lower organizational commitment and employee perceptions of the reduced likelihood of promotion (Greenhaus, Parasuraman, & Wormley, 1990). Some of the benefits of organizational diversity, though, include the varied knowledge bases and perspectives these diverse employees bring (Phillips, Mannix, Neale, & Gruenfeld, 2004), greater creativity and innovation as well as improved decision-making (T. Cox, 1991), and positive impacts on organizations' bottom lines through positive changes in recruitment, retention, and more (SHRM, 2006).

To reduce the negative outcomes attributed to diversity and to enhance the positives, many organizations have implemented formal diverse mentoring programs (Ragins, 2007). Diverse mentoring relationships occur when the mentor and protégé differ in group membership (such as race, ethnicity, gender, sexual orientation, disability, etc.) associated with power differences in organizations (Ragins, 1995). The power

perspective in this context is a concept whereby individuals belong to groups in an organization that have differing degrees of power or influence (Ragins, 2002). These group memberships are brought into the mentoring relationship and are not left behind when the two individuals begin to work together (Ragins, 2002). Different power levels affect each individual in terms of his/her organizational influence and his/her individual needs.

The majority of diverse mentoring relationships likely occur in formal mentoring programs rather than informal relationships. Indeed, it has been found that mentors, when given the choice, most often choose protégés who are viewed as being similar to themselves (Allen, Poteet, & Burroughs, 1997). Cox and Nkomo (1990) found that people of color have a more challenging time gaining access to mentors.

According to the attraction-selection-attrition (ASA) model (Schneider, 1987), given personal choice, mentors and protégés would tend to enter into relationships with others similar to themselves. Therefore, informal mentoring relationships are less likely to be diverse relationships than formal mentoring relationships, although among formal programs, diverse relationships still are not common. Informal relationships often develop spontaneously, and therefore, visible similarities play a large part in the self-matching process. For these reasons, if minority individuals within organizations are to receive a mentor, informal mentoring may not provide a mentoring relationship for them.

A part of the formal mentoring assignment process is the decision to create homogenous or diverse pairs, or a combination of both homogenous and diverse pairs. There is usually a dearth of minorities (and women) in top management positions in the U.S. (Ragins, 2002). If minorities wish to be mentored, they will usually need to be



matched with a majority member, most likely a white male (Ragins, 1997). Homogenous pairs are extremely likely for white male protégés, and less likely for white female protégés.

Diverse mentoring dyads may face unique challenges. According to social identity theory, individuals categorize themselves into social categories that shape their individual identities and define themselves in relation to the social environment in which they find themselves (Ashforth & Mael, 1989). People belong to multiple categories at once and consider their memberships in these categories to be of varying levels of importance at any particular time. However, there is a belief that minority members' demographic group memberships have a stronger impact overall on their sense of self (Ragins, 2002). This view would make diversity within mentoring relationships especially important to consider since not only do these minority members bring their group memberships into the relationships, but their group memberships are more salient to them than the majority mentors' group memberships in majority groups. Furthermore, diversity of directly observable attributes has been found to increase discomfort and turnover in a group (Jackson et al., 1991).

Given the complexities associated with diverse mentoring pairs, it is important to consider what organizations can do to ensure that the mentoring experience is successful. This raises the research question: what is meant by a successful mentoring experience? Although the mentoring literature has articulated various benefits of diversity (Cox, 1991; Phillips et al., 2004; SHRM, 2006) and considered various mentoring behaviors enacted throughout the mentoring relationship (Allen, 2003; Allen & Eby, 2004; Thomas, 1990), researchers have not agreed on the criteria that represent successful outcomes. As an

initial attempt to clarify the success criteria, I focus on two indicators that target success for the mentoring members: (1) the perception of attitude homophily, and (2) the quality of the relationship.

## 2. RESEARCH PURPOSE AND OBJECTIVES

The purpose of this study is to understand how mentors and protégés in diverse mentoring relationships can get the most out of those relationships. One step in this understanding may be to find antecedents that help build positive mentoring relationships between diverse mentors and protégés. I look at cultural intelligence and emotional intelligence of the mentor and protégé in mentoring relationships as possible important antecedents. Then, using social information processing theory, I examined their impact on success criteria of attitude homophily and relationship quality. The overarching theory is that of social information processing theory (D'Zurilla & Goldfried, 1971).

The objectives of this study were to:

- Develop a model of successful diverse mentoring relationships that is grounded in social information processing theory, which has not been used much in mentoring research at this point.
- Empirically test this model using a sample of mentors and protégés who are participating in diverse mentoring relationships.
- Contribute to future mentoring research by validating success criteria.
- Contribute to the management of diverse mentoring programs by offering suggestions for ensuring success based on the results of the empirical test of the proposed model.

### 3. THE CONTEXT OF THIS STUDY

I used participants of StudyResponse who self-reported as being in a racially/ethnically diverse mentoring relationship. I did not use matched pair of mentors and protégés within a single relationship; rather, I collected a data set of mentors separately from a data set of protégés.

### 4. CONTRIBUTIONS

This study offers several contributions to mentoring research. One is that it examines the mentoring relationship from a fairly new theoretical perspective, social information processing (SIP), which is a theory that may yield new insight into mentoring. It empirically tested a model that is grounded in SIP and validated success criteria of attitude homophily and relationship quality. It tested the model with two sets of data, those of mentors and those of protégés.

This study also hoped to offer some practical contributions. If CQ and EQ were shown to impact the tested success criteria, it would be possible for an organization to test individuals that one is considering for a diverse mentoring relationship. It is also possible to train people to raise their CQ and EQ, and an organization may decide to train its members in advance of placing them as mentors or protégés in diverse mentoring relationships, or while the relationships are developing. The impact of this testing and training may result in higher quality mentoring relationships, which will be beneficial to the mentor/protégé in diverse mentoring relationships. Likewise, if attitude homophily (or similarity) is found to impact perceived relationship quality, mentoring program facilitators may wish to clarify areas of homophily or have the dyads discuss some of the attitudinal topics in order to discover similarities between themselves.

In the next chapter, I review the literature on diverse mentoring, including definitions, the mentoring process, theories used to examine mentoring, findings of quantitative as well as qualitative research, a review of methods used, and a conclusion that indicates future research possibilities. In Chapter 3, I develop the theory, model, and hypotheses. Chapter 4 includes a report of methods, including sample and data collection, measures used, and analyses. Finally, Chapter 5 covers the discussion, including limitations, implications, future research, and the conclusion.

## CHAPTER 2: LITERATURE REVIEW

## 1. DEFINITIONS

### Mentoring and Participants

Mentoring is an important developmental resource for career and personal growth (Kram, 1985). Kram (1985), in a seminal work, defined mentoring as an intense interpersonal relationship where a more senior individual (the mentor) provides guidance and support to a more junior organizational member (the protégé). Kram added that both participants are working together in this relationship that has been mutually agreed upon. Mentoring has been differentiated from other developmental and work relationships on several dimensions, including the power of the mentor, the relationship's emotional intensity, the hierarchical distance between the mentor and protégé, the focus and amount of assistance given by the mentor, and the relationship's social origins (Wanberg, Welsh, & Hezlett, 2003).

The mentor is defined as an older, more experienced person that helps someone younger to find his/her way through the adult world and employment (Kram, 1985). A mentor might or might not be employed by the same organization as the protégé (Ragins, 1997). The protégé is the second person in the mentoring relationship, generally younger, less senior, less experienced and sometimes employed in lower job roles than the mentor.

### Mentoring Programs

There are two main types of mentoring programs: informal and formal. Informal mentoring relationships, as the name suggests, develop by mutual identification, often spontaneously, where mentors choose protégés whom they see as younger versions of

themselves, and protégés decide on mentors whom they view as role models (Ragins, Cotton, & Miller, 2000). Informal mentoring relationships, as such, do not necessarily occur between employees of an organization, but can develop between persons employed in different organizations or even different industries.

A formal mentoring program is an organized program managed by the organization, typically using a systematic selection and matching process (Chao, Walz, & Gardner, 1992). Eligibility for participation varies among organizations that use formal mentoring from allowing anyone in the organization to take on the role of mentor or protégé to using screening criteria such as job performance, nomination by other individuals, or job type (Eddy, Tannenbaum, Alliger, D'Abate, & Givens, 2001).

A newer type of mentoring, that of group mentoring, has been said to occur in professional associations. This type of mentoring came about as the demand for organization-wide mentoring grew, and the ability to meet this widespread need with traditional one-on-one mentoring is virtually impossible (Carvin, 2011). These programs bring together multiple experts (mentors) and multiple learners (protégés) in a group. Although the presentation is in a group, this is considered group mentoring rather than classroom learning because each protégé works on his/her own needs and goals, and the relationship between the mentors and protégés grows past that of student/teacher (Carvin, 2011). This may well be an area that could supplement an organization's mentoring, whether formal or informal (Carvin, 2011). It is also believed to be a possible method to provide mentoring in flattened organizations that simply do not have enough veteran executives to fill the need (Kaye, 1999).

### Mentoring Functions and Roles

Mentoring relationships contribute to both participants in two broad categories of mentoring functions (Kram, 1985). Mentoring functions traditionally have included vocational/career functions and psychosocial/personal development (Wanberg et al., 2003). Career functions generally help protégés learn and aid their career advancement, and include coaching, challenging assignments, exposure, protection and sponsorship, while psychosocial functions build on trust and interpersonal bonds and include acceptance, counseling, friendship and role modeling (Ragins & Kram, 2007). A third type of function is one that both mentors and protégés exhibit, and is called relational functions (Ragins, 2011). This area includes functions such as personal learning and growth, inspiration, affirmation of selves, shared influence and mutual respect, and trust and commitment (Ragins, 2011). These functions are detailed in Table 1.

INSERT TABLE 1 HERE

Two additional roles/functions were observed (Clawson & Kram, 1984; Kram, 1985), parental and social, that may emerge, generally as a result of sexual issues in cross-gender relationships. In order to neutralize sexual concerns, a cross-gender mentor may assume a parental role, or a cross-gender mentor may be viewed by the protégé as a parent figure, which is asexual in nature. Social roles are those that involve one-on-one informal, after-work activities. These social roles are often avoided in cross-gender relationships that may be misconstrued as sexual attraction between the mentor and protégé. The public image of cross-gender relationships is a concern that may need to be managed (Clawson & Kram, 1984).



## 2. MENTORING PROCESS

### Mentoring Phases

Four predictable, although not entirely distinct, mentoring phases have been defined by Kram (1983), which have different levels of mentoring functions, experiences, and types of interactions. These phases are initiation, cultivation, separation, and redefinition. The initiation phase is when the relationship is started and the mentor and protégé choose/meet each other and begin to get to know one another. The cultivation phase is one where the relationship becomes a more mutual exchange, shifting away from the one-way helping relationship from which it began (Kram, 1985). This phase is also the phase where the range of mentoring functions provided is at its maximum (Kram, 1983). The separation phase occurs as the protégé experiences new independence and autonomy and both partners reassess the relationship, and this phase generally is characterized by disruption of the equilibrium that has been built in the cultivation stage (Kram, 1983). Most mentoring relationships reach termination because of physical separation rather than psychological reasons (Ragins & Scandura, 1997). Finally, the redefinition phase is reached in some mentoring relationships; others may end at the separation stage. The redefinition phase occurs when the mentoring relationship primarily becomes a friendship (Kram, 1983), where the mentor and protégé continue to have some informal contact.

## 3. THEORIES USED TO EXAMINE MENTORING

Kram's seminal work (1985) developed a theory in mentoring functions and roles. Most research on mentoring is based on her theoretical work using a network lens. There

are a great number of different theories used in investigating mentoring relationships, which follow.

Mentoring schema theory has been developed to examine how mentoring schemas (mental maps derived from past experiences/relationships that guide both mentor's and protégé's behaviors, expectations, and perceptions) are shaped by relational learning and individual differences, and it is used to explore the impact of mentoring schemas on the behaviors, expectations, and evaluation of the relationship by both partners (Ragins & Verbos, 2007).

Lawrence's organizational theory of age (Lawrence, 1987, 1988) states that age distributions (the patterns of employee chronological age within an organization or role) drive the development of age norms (shared assumptions concerning the normal/appropriate ages of employees within an organization or role) that produce age effects (outcomes that occur as a result of employee age) (Lawrence, 1987). This theory was used by Finkelstein and colleagues to study the role of age within mentoring relationships (Finkelstein, Allen, & Rhoton, 2003).

Intentional change theory describes the individual components and process of desirable, sustainable change in a person's behavior, thoughts, feelings, and perceptions (Boyatzis, 2006), and can be said to describe and explain learning as a form of this desired change (Boyatzis, 2007). Boyatzis (2007) uses intentional change theory to examine the role of mentors and the process of mentoring to effect desired changes in protégés.

Leader-member exchange theory states that leaders differentiate their subordinates according to several characteristics, and the two groups formed become in-

groups and out-groups, which are treated differently by the leader (Dansereau, 1975). In formal mentoring relationships, the mentor serves as a type of leader of the protégé. Women are less likely to be members of the in-group, and therefore may have limited access to mentors who are able to share informal communications networks (Noe, 1988). Lack of in-group membership affects mentoring and, therefore, the organization (Noe, 1988).

Social identity theory is a social psychological analysis of the role of self-conception in group membership and processes, and in intergroup relations (Hogg, 2006). Tajfel (1981) used this theory to define ethnic identity as a concept of self, and Gonzalez-Figueroa and Young (2005) examined ethnic identity's impact on mentoring.

One set of researchers included SIP in their study of perceptions of support, indicating that SIP explains that consequences not only shape future behavior, but also beliefs about the current social context (Eby, Lockwood, & Butts, 2006).

Mentoring research can benefit from continued, theoretical-based studies that connect to related disciplines of networks, communication, careers, and psychology, among others (Ragins & Kram, 2007).

## **4. FINDINGS OF QUANTITATIVE RESEARCH**

### **Points of Mentoring**

Past research of mentoring generally looks at one or more of these three points of mentoring: entry point, mentoring behaviors, and effects/outcomes of mentoring. The entry point is comparable to the initiation stage above, where the two parties are forming their connection. The point of mentoring behaviors can comprise the cultivation and

separation phases, and examines the behaviors of the mentor and the protégé during their relationship. The point of effects/outcomes examines the outcomes on both parties either throughout the mentoring relationship or after the relationship ends. These three points will be the format through which I review past mentoring research findings and are shown in Figure 1.

INSERT FIGURE 1 HERE

### Entry Point

Past literature has examined personality characteristics, demographics, history, and organization/job factors as independent variables (IVs), but there does not seem to be consensus on which IVs are important throughout all studies, possibly because of the variety of purposes of the many studies undertaken. For instance, among personality characteristics, some are only studied in one published study reported in this paper [i.e., emotional stability (Turban & Dougherty, 1994) and extroversion (Aryee, Lo, & Kang, 1999)]. Likewise, for history, many studies do not include length of employment or past mentoring experience, including Gonzalez-Figueroa & Young, 2005 and Thomas, et al., 2005. In addition to IVs, a plethora of other studies use many of these as control variables. The dependent variables also do not seem to be the same throughout different studies, and include willingness to enter into a mentoring relationship, likelihood to have an informal mentor rather than a formal mentor, perceptions of barriers to mentoring, and selection criteria of both the mentor and protégé, among others.

A listing of studied protégé and organization characteristics and findings at the entry point is found in Table 2 and is discussed below. Table 3 outlines some mentor

characteristics (personality, demographics, and history) that have been studied at the entry point as well as findings.

INSERT TABLES 2 AND 3 HERE

The study of mentor and protégé characteristics' influence on the mentoring relationship has been studied and has expanded our knowledge of the development and processes of mentoring (Wanberg et al., 2003). These characteristics include personality characteristics as well as demographics and history/experience. A practical application of these studies is the possibility of identifying mentors or protégés within an organization that will perform exceptionally well within a mentoring relationship.

### *Protégé Findings*

Protégé characteristics have been examined in three broad areas that fit into the entry point: 1) their relationship to the protégés' motivation to seek mentors or enter into a mentoring relationship; 2) the protégé characteristics that mentors desire in protégés; and 3) differences in mentored individuals vs. non-mentored individuals (Wanberg et al., 2003).

### *Willingness to be mentored/likelihood to be mentored*

The issue of whether a person enters into a mentoring relationship as a protégé has been labeled several different ways. When examining overall willingness to be mentored among Latinas, ethnic identity was found to be not significant (Gonzalez-Figueroa & Young, 2005). Fagenson (1992) studied protégés and nonprotégés and found that one's need for achievement and need for power were positively related to becoming a protégé, while need for affiliation and need for autonomy were not

significant in the study. The likelihood of being selected as a protégé was found to be positive for those with perceived ability/potential in informal mentoring (Allen, Poteet, & Russell, 2000). Gender of possible protégés has found mixed results. Smith and colleagues (2000), and Waldeck and colleagues (1997) found a positive relationship for females' likelihood to become protégés, but two other groups of researchers found no significant main effect of gender (O'Brien, Biga, Kessler, & Allen, 2010; Thomas, Hu, Gewin, Bingham, & Yanchus, 2005). Gender was not found to be significantly related to whether a mentoring relationship is formal or informal (Allen & Eby, 2003). Finally, race was found to be significantly related to likelihood to have an informal mentor rather than a formal mentor for black protégés (Viator, 2001), and negatively related for racial minorities to become a protégé (McDonald & Westphal, 2013). It was interesting to find that marital status was significant for women in the United States, in that they were less likely to become a protégé than single women, although marital status did not have an impact for Taiwanese women (Ramaswami, Huang, & Dreher, 2014). Regarding main effects of race, significant findings were not found by two research studies (Smith et al., 2000; Thomas et al., 2005). Finally, protégés' level of advancement expectations, proactive behaviors, and strength of promotional history were found to be positively related to becoming a protégé (Singh, Ragins, & Tharenou, 2009b).

### *Relationship initiated by protégé*

This antecedent has been solely studied for informal mentoring. Two groups of researchers have looked at relationships that have been initiated by the protégé, although they looked at several different IVs, with only two of them overlapping in the two studies. Emotional stability of the protégé was found to be positively related to protégé

initiation (Turban & Dougherty, 1994), while extroversion and Type A personality were not significantly related (Aryee et al., 1999). Both studies did find significant positive relationships with both internal locus of control and self-monitoring of the protégé in relation to the protégé initiating the relationship (Aryee et al., 1999; Turban & Dougherty, 1994). Several organizational or job-related constructs were also examined in this context. In a study of Chinese employees, an organization's culture of individual development and its information sharing norms were not found to significantly impact whether or not the mentoring relationship was initiated by the protégé, while opportunities for interactions on the job was found to positively impact the protégé initiation (Aryee et al., 1999).

#### *Likelihood of protégé to receive a white, male mentor*

One pair of researchers examined the likelihood of protégés to receive a white, male mentor, and found that there was a significant positive relationship for both males and for whites, each being analyzed separately (Dreher & Cox Jr, 1996). Another study found a negative relationship for black and Hispanic MBA students to receive a white, male mentor (Dreher & Chargois, 1998).

#### *Protégé desire for mentor of similar ethnicity*

Another pair of researchers found that, although Latinas' level of ethnic identity did not impact their overall willingness to be mentored, as reported above, there was a positive effect of their ethnic identity level on their desire for a similar mentor in terms of ethnicity (Gonzalez-Figueroa & Young, 2005). Also, another study found the desire for a similar mentor in participants that reported as being in an ethnic minority (Syed, Goza, Chemers, & Zurbriggen, 2012).

### *Protégés' perceptions of barriers to mentoring*

Finally, perceptions of barriers to mentoring have been examined. Females (Ragins & Cotton, 1991) and African Americans (Viator, 2001) have both been found to have significantly higher perceptions of these mentoring barriers. Another researcher did not find a significant relationship for gender, but did find a negative relationship for socioeconomic origin (Blickle, Schneider, Meurs, & Perrewé, 2010). In addition to these demographic issues, protégés' history has also significantly impacted their perceptions of these barriers. A protégé's length of employment and past mentoring experience have both been found to reduce these perceptions (Ragins & Cotton, 1991).

### *Mentor Findings*

Mentor characteristics have also been studied. Three broad areas have been examined in this area that relate to the entry point: 1) the characteristics that protégés seek in mentors; 2) what impacts experienced individuals' motivation to serve as mentors (Wanberg et al., 2003) and 3) perceived barriers to mentor.

### *Willingness to mentor*

A person's willingness to mentor has been studied extensively as researchers examined those that chose to become mentors in either formal or informal relationships. Several personality characteristics were positively related to one's willingness to mentor, including helpfulness (Allen, 2003), internal locus of control (Allen, Poteet, Russell, & Dobbins, 1997), other-oriented empathy (Allen, 2003), proactivity (Thomas et al., 2005) and upward striving (Allen, Poteet, Russell, et al., 1997), while a person's perception of job-induced stress was not found to significantly decrease one's willingness to become a mentor (Allen, Poteet, & Burroughs, 1997). Regarding mentors' demographics, studies



have looked at age, education, and gender. The age of the mentor has been found to have mixed results. One set of researchers did not find a significant relationship between age and willingness to mentor (Ragins & Cotton, 1993). Later, Allen and colleagues hypothesized that age would be positively related to willingness to mentor, but they found the opposite effect, that younger people were actually more willing to become mentors (1997). Education was found to have a positive effect on willingness to mentor (Allen, Poteet, Russell, et al., 1997). Gender, again, had mixed results in multiple studies. Two studies found gender to not have a significant effect on a person's willingness to become a mentor (Allen, Poteet, Russell, et al., 1997; Ragins & Cotton, 1993), while a later research study found that females were more willing to become mentors (Thomas et al., 2005). Previous experience as a mentor was found to be significantly positive toward willingness to mentor in one study (Allen, Poteet, Russell, et al., 1997), while past experience as a protégé was found significantly positive in two studies (Allen, Poteet, Russell, et al., 1997; Ragins & Cotton, 1993). A surprising find, contrary to hypothesis, was that length of employment of the mentor was negatively related to his/her willingness to become a mentor (Ragins & Cotton, 1993). As expected, the same study found that organizational rank had a positive impact on willingness to mentor (Ragins & Cotton, 1993). Finally, the quality of one's relationship with one's supervisor also had a significant positive impact on willingness to become a mentor (Allen, Poteet, Russell, et al., 1997).

### *Mentors' selection of particular protégés*

One group of researchers also examined reasons that mentors selected particular protégés. They found that the mentor's advancement aspirations had a positive impact on

the mentor's likelihood to select a protégé that was perceived to be in need of help (Allen et al., 2000). Protégés perceived to be higher in ability/potential were more likely to be chosen by mentors who perceived greater barriers to mentoring, but more likely to be chosen by female mentors (Allen et al., 2000).

Another group of researchers found that “rising stars” are more likely to be mentored than others, specifically looking at past promotion rates, advancement expectations, and engagement in proactive career behaviors (Singh et al., 2009b).

### *Mentors' perceptions of barriers to mentoring*

When considering becoming a mentor, perceptions of barriers to mentoring also play a part. Mentors' job-induced stress has been found to have a negative impact on their perception to mentoring barriers, while both mentors' internal locus of control and mentors' upward striving were found to have no effect (Allen, Poteet, Russell, et al., 1997). The impact of demographics has also been studied to affect willingness to mentor. Age has not been found to be a significant factor in a person's perceptions of barriers to mentor (Allen, Poteet, & Burroughs, 1997). Gender of the mentor has had mixed results; it was found not to be significantly related by one study (Allen, Poteet, Russell, et al., 1997), while females were found to perceive more barriers in another study (Ragins & Cotton, 1993).

All said, studies of the antecedents to mentoring programs have been extremely diverse in their choice of personality characteristics, demographics, history of the mentor and protégé, and organization/job characteristics.

### Mentoring Behavior Point

Tables 4 and 5 depict protégé and mentor findings at this point in the mentoring process, and I will discuss them below.

INSERT TABLES 4 AND 5 HERE

### *Protégé Findings*

Types and amounts of mentoring behaviors received as well as the quality of the relationship, role ambiguity and role conflict, and comfort sharing information with emotive female protégés, all as perceived by the protégé, are the main protégé dependent variables studied at this point. The protégé independent variables that have been studied include the protégé personality characteristics, protégé demographics, organizational factors, and dyad characteristics.

### *Amount or type of overall mentoring received*

Quite a few protégé personality characteristics were found not to be significant in terms of amount or type of mentoring received, including extroversion, internal locus of control, self-monitoring, and Type A personality (Aryee et al., 1999). Two other characteristics were found to be positively related to mentoring received; that of the protégé's willingness to be mentored (Gonzalez-Figueroa & Young, 2005) and the initiation of the mentoring relationship by the protégé (Turban & Dougherty, 1994).

Race of protégé has been found to impact the mentoring received, where black mentors resulted in more mentoring of black protégés (Barrett, Cervero, & Johnson-Bailey, 2004). While not significant, in opposition to the hypothesis, one researcher found that white female protégés received less mentoring than black females (Blake-Beard, 1999).

Characteristics of mentors have also been studied. One groups of researchers found that the level of the mentor's perceived organizational support was significantly positive to the mentoring received by the protégé (Hu, Wang, Yang, & Wu, 2014).

Organizational factors have also been found to impact the amount of mentoring received by protégés. An organization's individual development culture and information sharing norms have been found to positively affect mentoring received within it, while a protégé's opportunities for interactions on the job was not found to impact mentoring received (Aryee et al., 1999). Finally, dyad characteristics were studied. Homogeneous dyads in terms of race were found by Thomas to have a higher amount of mentoring received by the protégé (1990). Also, deep-level dissimilarity within the dyad had a significantly negative relationship to mentoring received (Hu, Wang, et al., 2014; Lankau, Riordan, & Thomas, 2005). Both actual and perceived demographic similarity within dyads have been found to be positively related to mentoring received (Lankau et al., 2005).

#### *Amount of specific mentoring received (psychosocial, career, role modeling, or other support)*

In addition to overall mentoring received, many researchers have looked at the demographics of the protégé as they relate to specific mentoring behaviors. Age has been examined, and younger protégés have been found to receive higher levels of career mentoring, although the level of role modeling received was not found to be significantly different (Finkelstein et al., 2003). Gender of the protégés has been studied, and significantly positive effects were found for females for psychosocial support and role modeling (Blake-Beard, Bayne, Crosby, & Muller, 2011; O'Brien et al., 2010), while significantly positive effects were found for male protégés in terms of career support

(O'Brien et al., 2010). Marital status of protégés was examined for protégés in the United States and Taiwan, and the only significant finding was that psychosocial support was positive for U.S. married males (Ramaswami et al., 2014). The level of liking by the protégé of the mentor was found to positively relate to vocational support offered, although it was not related to career support or role modeling (Lankau et al., 2005). Age diversity within the mentoring dyad was not found to significantly affect the amount of psychosocial support received (Finkelstein et al., 2003). Gender diversity within the dyad was found not to be significant throughout the specific types of support received; that of psychosocial support and career support for minority and female protégés (Smith et al., 2000), for psychosocial support for all protégés studied (Sosik & Godshalk, 2000), for role modeling (Blake-Beard et al., 2011; Ensher, Grant-Vallone, & Marelich, 2002; Sosik & Godshalk, 2000), and for vocational mentor support (Ensher et al., 2002). However, one study found a positive relationship for psychosocial support for dyads of the same gender (Blake-Beard et al., 2011) and another for all dyads (Ensher et al., 2002). Another study did not find a significant relationship between both the mentor's level of liking of the protégé onto the protégé's perception of psychological support, although and perceived deep level similarity within the dyad was found to be positively related to psychosocial support (Lankau et al., 2005). Attitude similarity within the dyads was studied and found to be positively related to psychosocial support (Ensher et al., 2002), role modeling, and vocational mentor support (Ensher et al., 2002). Race of protégés has been examined, and it was found that black protégés received less career support than white protégés in formal programs, but not informal programs (Viator, 2001). Black protégés were found to receive less psychosocial support from Caucasian formal mentors

(but not informal mentors), and were found to receive more psychosocial support from black mentors in both types of programs (Viator, 2001). Asian protégés were found to receive less psychosocial support and less role modeling than Caucasians (Blake-Beard et al., 2011). Mentoring for gay and lesbian protégés has also been studied, and there was a significantly positive relationship with psychosocial support from gay/lesbian mentors (Hebl, Tonidandel, & Ruggs, 2012), while career support was offered more to heterosexual protégés than to lesbian/bisexuals (Barratt, Bergman, & Thompson, 2014). Racial similarity within the dyad was studied, and one group found that there was a significant positive impact on amount of psychosocial support received and instrumental support received when both the mentor and protégé were of color (Ortiz-Walters & Gilson, 2005). However, these same researchers did not find a significant impact of racial similarity on networking support (Ortiz-Walters & Gilson, 2005). Other studies found positive relationships for psychosocial support, career support, and role modeling for dyads of the same race (Blake-Beard et al., 2011; Ensher et al., 2002). Ensher and colleagues also found a positive relationship between racial similarity and vocational mentor support (Ensher et al., 2002). Mentor's willingness to mentor was examined in light of protégé findings, and it was found that there was a positive relationship to psychosocial support, role modeling, and vocational support (Hartmann, Rutherford, Feinberg, & Anderson, 2014). Finally, interaction frequency was also found to have a positive relationship to psychosocial support (Eby et al., 2013).

### ***Role ambiguity and role conflict, and comfortable sharing of information***

One set of researchers found a negative relationship in levels of role ambiguity and conflict in mentored vs. non-mentored workers (Specht, 2013). Another study found a negative relationship for male mentors in comfort in sharing information with emotive female protégés (Leck & Orser, 2013).

#### *Protégé's perceived importance of amount of contact with mentor*

One group of researchers found a negative relationship for students of underrepresented minorities and Asian American students in matched-background mentoring relationships over white students (Dreher & Chargois, 1998).

#### *Protégé's liking of mentor*

A study (Lankau et al., 2005) found that deep-level similarity within a mentoring dyad is positively related to the protégé liking the mentor.

#### *Quality of mentoring relationship perceived by protégé*

Finally one group of researchers posited that older protégés would perceive a lower quality of the mentoring relationship, but the opposite was found, although the positive relationship was not significant (Finkelstein et al., 2003).

#### *Mentor Findings*

Characteristics of the mentor (personality, demographics, and experience, and actions) have also been examined as they relate to mentoring behaviors. The dependent variables in this area are overall, psychosocial, role modeling, and career mentoring provided, as well as the similarity of the mentors' and protégés' perceptions of mentoring, the protégés' perceptions of the mentors' role, and mentor satisfaction with the program.

### *Overall mentoring provided*

Regarding overall mentoring provided, age diversity within the mentoring dyad was found not to be significantly related, but both gender diversity and nationality diversity within the dyad had a significant, negative affect on overall mentoring provided (Feldman, Folks, & Turnley, 1999). The amount of time spent with the partner had a significant positive impact on overall mentoring, as did those relationships where the mentor had initiated the relationship (Mullen, 1998).

### *Amount of specific mentoring provided (psychosocial, career support, role modeling)*

Besides overall mentoring, the individual facets of mentoring were also studied, those of psychosocial, career mentoring, and role modeling. Mentor personality characteristics portrayed a mix of results in this area (Allen, 2003). Mentor helpfulness did not impact psychosocial mentoring, but positively impacted career mentoring. Intrinsic satisfaction and other-oriented empathy of the mentor had opposite results: both were positively significant in psychosocial mentoring but not significant for career mentoring. A mentor's self-enhancement motive, however, was found to be significantly positive in both psychosocial and career mentoring. A mentor's organizational commitment was also found to positively impact psychosocial mentoring and role modeling (Weinberg & Lankau, 2011). Gender also impacted two facets – gender tests indicated that female mentors were more likely to provide psychosocial mentoring, while male mentors were more likely to provide career mentoring in two separate studies (Allen & Eby, 2004; O'Brien et al., 2010). Another pair of researchers received similar results, where females were less likely to offer career mentoring (Sosik & Godshalk, 2000). Protégé gender also impacted types of mentoring provided. Female protégés were offered more psychosocial



mentoring overall; however, further analysis found that females received more psychosocial mentoring from female mentors and this relationship was not significant for male protégés and male mentors (Allen & Eby, 2004). The protégé gender did not significantly impact the amount of career mentoring provided by mentors (Allen & Eby, 2004). Racial similarity within the mentoring dyad was found to have a positive relationship with role modeling (Lankau et al., 2005). The protégé's perception of education similarity with the mentor was found to have a negative relationship with psychosocial mentoring, while liking of the mentor by the protégé was found to have a positive relationship with psychosocial mentoring (Lankau et al., 2005). However, there was a positive finding in protégé perception of the mentor role for female protégés and female mentors (Leck & Orser, 2013). Another group of researchers found that gender diversity within the mentoring dyad did not significantly impact psychosocial mentoring (Allen & Eby, 2004). The amount of time spent with the partner was found to positively impact the levels of psychosocial mentoring, career mentoring, and role modeling (Weinberg & Lankau, 2011). The duration of the mentoring relationship was also examined, and it was found to not be significantly related to the level of psychosocial mentoring offered, but it was positively related to career mentoring (Allen & Eby, 2004). This study was one of the rare studies that examined and compared both formal and informal programs. They found that the type of program (formal vs. informal) did not significantly impact the levels of either psychosocial or career mentoring provided (Allen & Eby, 2004). Prior experience as a mentor was positively related to career mentoring (Allen & Eby, 2004). Finally a study on mentor satisfaction with the program was published, indicating that role modeling actions had a significant positive impact, while

vocational mentoring actions were not found to be significant, and psychosocial actions had a negative impact (Weinberg & Lankau, 2011).

### *Similarity in perceptions of mentoring activities by protégé and mentor*

Mentors' and protégés' perceptions of mentoring were also measured in one study. Age diversity within the mentoring dyad was found to negatively impact the similarity of mentoring perceptions between the two members, while educational diversity and gender diversity did not have significant impact (Fagenson-Eland, Baugh, & Lankau, 2005). Finally, they found that diversity in tenure in the organization was negatively significant in the similarity of the members' perceptions of mentoring activities (Fagenson-Eland et al., 2005).

### *Quality of mentoring and mentorship learning as perceived by the mentor*

One study looked for links to a mentor's perception of mentoring quality. They were unable to find significant relationships of mentor gender, experience as a mentor, protégé gender, informal vs. formal relationship, gender diversity, or interaction frequency, on mentoring quality or on mentorship learning (Allen & Eby, 2003). They were also unable to find a significant relationship between formal vs. informal relationship and overall mentoring offered. However, they did find a positive relationship between perceived similarity within the dyad and mentoring quality as perceived by the mentor (Allen & Eby, 2003).

### *Mentors liking of their protégés*

One group of researchers looked at possible antecedents of mentors liking their protégés. They found a positive relationship for gender similarity and deep-level

similarity, but they found a surprising negative relationship for functional level similarity with the level of mentors liking their protégés (Lankau et al., 2005).

### *Protégé perceptions of mentor role*

Finally, one study examined how gender diversity affected protégés' acknowledgement of the mentor roles demonstrated through their mentoring relationships. They found that gender diversity negatively affected the protégés' reports of the mentor in a social role or providing the role modeling function, but this diversity had no significant effect on the protégés' reports of the mentor providing a friendship role (Ragins & McFarlin, 1990).

In this area, again, the IVs of personality, demographics, history, organization/job characteristics, and dyad characteristics are used in different combinations by different researchers. The dependent variables in the majority of studies in this section consist of the different functions of mentoring received (career, psychosocial, role modeling, other).

### Effects/Outcomes of Mentoring Point

Characteristics of the protégé, mentor, and dyad, as well as mentoring behavior have been studied at this point and are detailed in Table 6. At this level, there appears to be little if any consensus on what effects or outcomes of mentoring are important and should be measured. It is possible that researchers are still looking for a few areas where positive (or negative) impacts of the mentoring process come together. In the meantime, I will cover over 25 separate dependent variables that have been studied, including several types of satisfaction, compensation, intentions, and perceptions of both the mentor and the protégé.

INSERT TABLE 6 HERE

### *Protégé career advancement/career attainment*

Career advancement of protégés has been studied. Tharenou found that gender of the protégé has a significant effect in that career support increases female protégés' career advancement more than male protégés, and that psychosocial mentoring is significantly less related to their career advancement (2005). She also found that career-related mentoring was significantly higher for female protégés when the mentor was male rather than female (2005). A similar construct, career attainment of an employee, was found to be positively impacted by whether the employee had been mentored/was a protégé (Turban & Dougherty, 1994).

### *Protégé career commitment*

Career commitment of the protégé was found to be significantly positively related to the protégé's perception of the mentoring having been highly satisfying (Ragins et al., 2000).

### *Protégé career satisfaction and career progress satisfaction*

Protégé satisfaction with career and satisfaction with career progress have also been examined. Blake-Beard found there to be no moderation between mentoring and satisfaction with career progress by race, contrary to expectations (1999). Regarding career satisfaction, protégés' satisfaction has been found to be higher than non-protégés in two different studies (Allen, Eby, Poteet, Lentz, & Lima, 2004; Wallace, 2001). One of these went further to check two facets of mentoring, and found that career satisfaction was positively related to both career-related mentoring and psychosocial mentoring

received (Allen et al., 2004). The prestige of a mentor was found to have a positive effect on career satisfaction (Hu, Wang, et al., 2014), as was the amount of meetings between members and the level of collegiality between the members (DeCastro, Griffith, Ubel, Stewart, & Jagsi, 2014). Finally, the role of mentor gender was examined, and career satisfaction of female protégés was found to be positively related to having female mentors (Wallace, 2001).

### *Protégé commitment by mentor*

One study looked at the commitment by the mentor to the protégé and found that homogeneity of the dyad in that both people were of color was not significantly related to the commitment level (Ortiz-Walters & Gilson, 2005).

### *Protégé compensation/salary and satisfaction with compensation*

Not surprisingly, a large number of studies have examined the effects of mentoring on compensation or salary of the protégé. Several studies found that having been mentored has had a positive effect on a person's compensation (Allen et al., 2004; Dansky, 1996; Wallace, 2001). The gender of the mentor was found to be significant, also; when studying female protégés, those with male mentors had higher compensation than those with female mentors (Wallace, 2001). Also, race had an effect in that having a white mentor as opposed to one of color resulted in a positive change in compensation of the protégé (Dreher & Cox Jr, 1996) and African American university graduates had a positive relationship between having a white male mentor over no mentor (Dreher & Chargois, 1998). When looking at the race of the protégé, no moderation was found between mentoring and compensation (Blake-Beard, 1999). Finally, one study looked at the mentoring behaviors and found a positive impact between both the level of career-

related mentoring and the level of psychosocial mentoring on protégé compensation (Allen et al., 2004). One study also looked at protégé compensation satisfaction, and found no moderation between mentoring and compensation satisfaction by race of the protégé (Blake-Beard, 1999).

### *Protégé fulfillment of career expectations and career development*

One researcher studied the employee's perception of fulfillment of career expectations and found that the perceptions of protégés (vs. non-protégés) was positive, indicating one more value of having been mentored (Wallace, 2001). Another study found a positive relationship between having been mentored with the protégé's career development (Rueywei, Shih-Ying, & Min-Lang, 2014).

### *Interpersonal comfort of protégé and mentor*

One study examined interpersonal comfort of both the protégé and mentor in diverse and homogeneous pairs and found that homogeneity of the dyad (when both members were people of color) was positive for the protégé's interpersonal comfort, but was not significant for the mentor (Ortiz-Walters & Gilson, 2005).

### *Protégé intention to quit/intention to stay*

Employees' intention to quit (or to stay) has also been looked at by several different researchers, and they have found that simply being mentored may not be the ideal situation for employees that an organization wants to retain, but specifics of the dyad and relationship may be just as important. However, one study did find a negative relationship between being mentored and intention to quit (Richard, Ismail, Bhuian, & Taylor, 2009). One found a negative relationship between a protégé's perception of a

highly satisfying mentoring relationship and that protégé's intention to quit (Ragins et al., 2000). For female protégés, having a female mentor rather than a male mentor was found to positively impact the protégés' intention to stay (Wallace, 2001). Finally, another study found that the level of psychosocial mentoring received has a positive impact on a protégé's intention to stay (Allen et al., 2004).

### *Protégé job satisfaction and organizational commitment*

Employee job satisfaction has also been studied as an outcome of mentoring. One meta-analysis and one individual study found that having been mentored has a positive relationship with an employee's job satisfaction (Allen et al., 2004; Ghosh & Reio Jr, 2013) and a protégé's organizational commitment (Ghosh & Reio Jr, 2013). This same analysis found that the level of career-related mentoring received also has a positive impact on an employee's job satisfaction (Allen et al., 2004). Another study of employees being mentored found that a protégé's perception of having been involved in a highly satisfying mentoring experience was positively related to that protégé's job satisfaction (Ragins et al., 2000). This same study found a positive relation between a protégé's perception of a highly satisfying mentoring experience and that protégé's organizational commitment (Ragins et al., 2000). Yet another study found that for gays and lesbians, having gay mentors (over heterosexual mentors) was also positively related to their job satisfaction (Hebl et al., 2012). A study of grad students found no significant relationships between mentor demographics and the protégés' job satisfaction (Waldeck et al., 1997). Career-related mentoring had a positive impact on a mentor's and a protégé's organizational commitment (Chun, Sosik, & Yun, 2012), while psychosocial

mentoring also had a positive impact on a mentor's (Chun et al., 2012) and protégé's (Ghosh & Reio Jr, 2013) organizational commitment.

### *Protégé job title*

One researcher found that having been mentored is correlated with one's job title in a study of 88 participants in a company's group mentoring program (Dansky, 1996).

### *Protégé perception of career/professional success*

Protégé perception of career/professional success is another dependent variable that has been studied by multiple (three) different studies, although each study used different IVs. Turban and Dougherty found that having been mentored has a positive effect on employees' perceived career success (1994). Another study found a positive relationship between the amount of career-related mentoring received and the protégé's perceived career success (Allen et al., 2004). However, another study did not find a significant relationship between level of overall mentoring received and the protégé's perception of professional success (Gonzalez-Figueroa & Young, 2005).

### *Protégé learning*

Protégé learning has also been studied by different studies. One study found that the protégé's level of achievement orientation positively affected his/her reports of personal learning, as did the perceived influence of the mentor he/she had (Hirschfield, Thomas, & Lankau, 2006). This study also found a positive relationship between perceived influence of mentor and power enhancement of protégés (Hirschfield et al., 2006). Another study of international interns found that those mentored had higher learning about life as expatriates and higher learning about life in other cultures than non-



mentored interns (Feldman et al., 1999). These international interns that were mentored also had higher task mastery than those that were not mentored (Feldman et al., 1999). A different research team found a positive relationship between the level of role modeling received through mentorship and the protégé's personal skill development (Lankau & Scandura, 2002).

### *Protégé satisfaction with mentor and mentoring relationship*

Protégé satisfaction with both the mentor and the mentoring relationship/program has also been studied. One study did not find significant relationships between either the protégé's gender or race with his/her satisfaction with the mentoring relationship and/or program (Lyons & Oppler, 2004). This same study did not find a significant relationship between the gender of the mentor with the protégé satisfaction with the relationship or program when the protégés were female (Lyons & Oppler, 2004). These researchers did find that having the mentor selected by the protégé does have a positive impact on this satisfaction, but the racial composition of the dyad did not have a significant impact (Lyons & Oppler, 2004). However, for protégés of color, having a mentor who is also of color had a positive relationship with the protégés' satisfaction with the mentoring relationship or program (Ortiz-Walters & Gilson, 2005). The amount of meetings between the dyad also had a positive impact on the protégés' satisfaction with the program (Lyons & Oppler, 2004). A set of researchers looked at the mentoring experiences one had in the current relationship, and found that good experiences had a positive relationship to the protégé's satisfaction with the mentoring relationship, as well the fact that bad experiences had a negative impact on both protégé's and mentor's intention to stay in the mentoring relationship (Eby, Butts, Durley, & Ragins, 2010).

Finally, looking at specific mentoring behaviors through a meta-analysis, the level of psychosocial mentoring received positively impacted the protégés' program satisfaction (Allen et al., 2004). This same meta-analysis found positive relationships between two facets of mentoring behaviors (career-related and psychosocial) on the protégé's satisfaction with his or her mentor (Allen et al., 2004).

### *Mentor satisfaction with mentoring relationship*

One study looked at the mentor's satisfaction with the relationship when the protégé was a person of color, but did not find a significant effect of the mentor's race in this relationship (Ortiz-Walters & Gilson, 2005). However, another study found significant positive relationships with training received by the mentor and the mentor's confidence in his/her mentoring ability, with that mentor's satisfaction with the relationship (Martin & Sifers, 2012). A negative relationship between a mentor's bad mentoring experiences in the current mentoring relationship and a mentor's satisfaction with the mentoring relationship quality was also found (Eby et al., 2010).

### *Protégé promotion*

Studies have examined promotions of employees in regards to mentoring in several areas, those of promotion rate, promotion satisfaction, and promotional opportunities with generally positive results. For gays and lesbians, promotion rates were found to be related to their having a heterosexual mentor rather than a gay mentor (Hebl et al., 2012). A meta-analysis showed a positive relationship between having been mentored with promotion rate overall (Allen et al., 2004) as well as a later study (Hebl et al., 2012). Yet another study found a positive relationship between having been mentored and the protégé's promotion expectations (Singh, Ragins, & Tharenou, 2009a).

The meta-analysis found the same relationship when looking at two of the mentoring behaviors (career-related and psychosocial) and promotion rate (Allen et al., 2004). However, when a separate study looked at race, they did not find moderation between overall mentoring and promotion rate by race of protégé (Blake-Beard, 1999). A protégé's perception of having been involved in a highly satisfying mentoring program has been found to positively relate to that protégé's satisfaction with his/her promotions (Ragins et al., 2000). Finally, Wallace found that having been mentored has been positively related to female protégés' promotional opportunities (2001). However, for these female protégés, the relationship of promotional opportunities is not significantly affected by the gender of the mentor (Wallace, 2001).

### *Benefits to protégés*

One group of researchers studied the perceived influence of the mentor on benefits to protégés, and they found positive relationships between this perceived influence with both role modeling and work-related help to the protégé (Hirschfield et al., 2006). Another study examined expatriates that had mentors. The levels of career-related mentoring, role modeling, and psychosocial mentoring were all found to be positively related to those expatriates' levels of general adjustment, office interaction, and work adjustment (Shen & Kram, 2011; Zhuang, Wu, & Wen, 2013). Another study found career-related mentoring and role modeling to be positively related to a protégé's organizational citizenship behaviors (Kwan, Liu, & Yim, 2011).

## **5. FINDINGS OF QUALITATIVE RESEARCH**

### **Entry Point**

Allen and Poteet (1999) concentrated on the entry point when they interviewed 27 mentors, which resulted in a list of 20 dimensions of ideal mentor characteristics: Listening and communication skills; Patience; Knowledge of organization and industry; Ability to read and understand others; Honest/trustworthy; Genuine interest/self-motivation; People oriented; Structure/vision; Common sense; Self-confidence; Open to suggestions; Willing to share information; Leadership qualities; Allows protégé to learn on own; Versatility/flexibility; Has respect of others; Provides reasonable goals; Ability to teach; Willingness to give feedback; and Fairness/objectivity. Although meant for the area of academic medicine, a group of researchers came up with a list of desired characteristics of mentors through a review of qualitative research (Sambunjak, Straus, & Marusic, 2010). They came up with a listing of (1) personal characteristics (altruistic; understanding; patient; honest; responsive; trustworthy; nonjudgmental; reliable; active listener; and motivator), (2) relational characteristics (accessible; sincerely dedicated to developing an important relationships with the mentee; sincerely wants to offer help in mentee's best interest; able to identify potential strengths in their mentees; able to assist mentees in defining and reaching goals; holds a high standard for the mentee's achievements; and compatible ("good match") in terms of practice style, vision and personality, and (3) professional characteristics (senior and well-respected in their field; knowledgeable; and experienced) (Sambunjak et al., 2010).

### Mentoring Behavior Point

Allen and Poteet looked at mentoring and pulled together 12 techniques for making the most out of the mentoring relationship: Establish and open communication system with reciprocal feedback; Set standards, goals, and expectations; Trust; Care for

and enjoy each other; Allow mistakes; Take training programs; Willing participation; Be flexible; Be open and comfortable; Consider constraints to mentoring; Learn from others; and Work on common tasks (1999).

Thomas looked at 22 cross-race developmental relationships and examined how their strategies for dealing with the issue of race affected the kind of relationship that developed between them and whether the senior person became a sponsor or a full mentor (1993). The strategies for dealing with the racial difference were either denial and suppression or direct engagement. He did not find what he expected, that in order for cross-race relationships to become mentor-protégé relationships, the parties would need to discuss their racial differences; rather, he asserts that there is not one best way for people to manage diversity. When both parties preferred the same race strategy (denying and suppressing it, or discussing it openly) did the more supportive mentor-protégé relationship occur, rather than the relationship staying at the sponsorship level (Thomas, 1993).

The construct of trust in mentoring relationships was studied by Leck & Orser (2013). They found that gender had a role in that female mentors trusted their female protégés more. Women were more apt to rely on chemistry and trust immediately, while men stated they relied more on evidence and past successes.

### [Effects/Outcomes of Mentoring Point](#)

Eby and Lockwood interviewed 24 mentors and 39 protégés to discuss benefits from participating in mentoring programs (2005). Both mentors and protégés reported Learning as the most common benefit of participating in a formal mentoring relationship. Protégés reported Coaching, Psychosocial Support in the form of friendship, acceptance-

and-confirmation, and counseling, Exposure and Visibility within the organization, Role Modeling key behaviors, Sponsorship for promotions. Career Planning, and Networking Opportunities (Eby & Lockwood, 2005). Benefits unique to the mentors in this study included Developing a Personal Relationship, Personal Gratification, Enhanced Managerial Skills, and Self-Reflection (Eby & Lockwood, 2005). A separate study of 118 expatriates found a positive relationship between mentoring and the measured outcomes including job performance, intent to remain, and job satisfaction, among others (Feldman & Thomas, 1992).

## **6. DIVERSITY AND MENTORING**

Mentoring research has been covering many facets of diversity through many studies. Some of the facets of diversity within the mentoring dyad include: Age (Finkelstein et al., 2003); gender (Blake-Beard et al., 2011; Ensher et al., 2002; Smith et al., 2000); attitude (Ensher et al., 2002); actual and perceived demographic similarity (Lankau et al., 2005); race (Lyons & Oppler, 2004; Ortiz-Walters & Gilson, 2005; Thomas, 1990); and nationality (Feldman et al., 1999).

### **Mentoring Behavior Point**

Overall findings have been mixed for many of the dependent variables. At the mentoring behavior point, age diversity within the dyad was found to be not significant for amount of psychosocial support (Finkelstein et al., 2003), not significant for overall mentoring (Feldman et al., 1999), and negatively related to similar perceptions of mentoring activities within the dyad (Fagenson-Eland et al., 2005).

In relation to psychosocial support, gender diversity was found not significant by two studies (Smith et al., 2000; Sosik & Godshalk, 2000), but was found to be positively

significant by two other studies (Blake-Beard et al., 2011; Ensher et al., 2002). Gender diversity in the mentoring dyad was found to be not significant in other supports, also: career support (Smith et al., 2000), role modeling (Blake-Beard et al., 2011; Ensher et al., 2002; Sosik & Godshalk, 2000), psychosocial mentoring (Allen & Eby, 2004), and vocational mentor support (Ensher et al., 2002). Gender diversity and nationality diversity were both found to have a negative effect on overall mentoring (Feldman et al., 1999). Gender diversity was not found to be significantly related to similar perceptions of mentoring activities within the dyad (Fagenson-Eland et al., 2005). Gender diversity was studied as it relates to the protégés' perception of the mentor role. It was found not significantly related to perception of the friendship role, and negatively related to perception for the social role and role modeling function (Ragins & McFarlin, 1990). Gender diversity was not found to be significantly related to mentorship quality or mentorship learning (Allen & Eby, 2003), but gender similarity was found to be positively related to mentors liking their protégés (Lankau et al., 2005)

Actual demographic similarity and perceived demographic similarity were found to be positively related to mentoring received by one study (Lankau et al., 2005). Race similarity was found to be significantly related to mentoring received (Thomas, 1990), psychosocial support (Blake-Beard et al., 2011; Ensher et al., 2002; Ortiz-Walters & Gilson, 2005), career support (Blake-Beard et al., 2011), role modeling (Ensher et al., 2002), instrumental support for people of color (Ortiz-Walters & Gilson, 2005), and vocational mentor support (Ensher et al., 2002). However, race similarity was not significant for mentoring pairs of people of color for networking support (Ortiz-Walters & Gilson, 2005).

Deep-level similarity within the mentoring dyad has also been researched. Deep-level similarity was measured by similarity in personality, interests, work values, outlook on organizational issues, problem-solving approach, and personal values. This type of similarity was found to be significantly positively related to mentoring received (Hu, Baranik., & Wu, 2014; Lankau et al., 2005), to psychosocial support (Lankau et al., 2005), and to protégé liking of mentor (Lankau et al., 2005).

Although there are mixed findings throughout the research reviewed here, diversity remains an important construct to research in regards to mentoring.

### Effects/Outcomes of Mentoring Point

Dyad diversity has also been studied at the final point of mentoring. The homogeneity of dyad, where both mentor partners were people of color, was found to be not significantly related to commitment to protégé by mentor, not related to interpersonal comfort of the mentor, and not significant in the mentor's satisfaction with the relationship, but it was positively related to interpersonal comfort of the protégé and to protégé satisfaction with the mentoring relationship (Ortiz-Walters & Gilson, 2005). Racial composition of the dyad was not found to be significantly related to the protégé satisfaction with the mentoring relationship in another study (Lyons & Oppler, 2004).

## **7. REVIEW OF METHODS**

Of the 73 empirical studies included in this review, 67 used surveys or questionnaires. All of these were self-report instruments, which can lead to social desirability bias. However, most of the measures require self-reports, so this seems to be an accepted limitation to receive the measures needed (willingness to mentor, perceptions, satisfaction, personality characteristics, demographics). There were two meta-analyses



included. One case study was included in the review, as well as one experiment where the subjects were “mentors” and the possible “protégés” were manipulated. One qualitative review was reviewed. Eight articles that were qualitative in nature and included interviews were also used in this literature review.

As far as analysis, there is quite a number of different specific methods used in the empirical studies reviewed here. They are outlined in Table 7. Multiple regression, including logistic regression, hierarchical regression, ordinary least-squares regression, and mediation, is the analysis method most often used (57 times). Other regression techniques such as ANOVA, ANCOVA, MANOVA, and MANCOVA have also been used, particularly when comparing groups such as gender, race, or mentored vs. non-mentored. This indicates that virtually every empirical article reviewed here used some variation of regression in the analysis. For the qualitative studies, content analysis and factor analysis were the prime methods used to develop ideas from multiple interviews.

INSERT TABLE 7 HERE

More longitudinal studies are needed to study mentoring relationships throughout the relationship. These studies enable researchers to study dyads throughout the three mentoring points and look for causality as the relationship progresses.

## **8. CONCLUSION AND FUTURE RESEARCH POSSIBILITIES**

### **Entry Point**

Although there seems to be a plethora of studies about mentoring, there are areas that have been studied to a lesser degree. At the entry point, a large number of researchers have examined characteristics of protégés (Fagenson, 1992; Gonzalez-Figueroa &

Young, 2005; Ragins & Cotton, 1991), the characteristics of mentors (Allen, Poteet, & Burroughs, 1997; Allen et al., 2000; Ragins & Cotton, 1993), and organizational factors (Aryee et al., 1999). However, there may be characteristics of mentor, protégé, or organization that impact the formation of the mentoring relationship beyond those that have been studied to date, such as social intelligence subsets, self-efficacy, travel experiences, or number of diverse friends. It is up to the research community to decide which characteristics may have an impact on mentoring and to develop strong theoretical studies in this area.

### Mentoring Behaviors Point

Many studies examine constructs that impact mentoring behaviors of both the mentor and the protégé (Allen & Eby, 2004; Aryee et al., 1999; Finkelstein et al., 2003; Sosik & Godshalk, 2000; Viator, 2001). However, protégé behaviors are just beginning to be examined and operationalized, so this is an area that has the possibility of growth as findings are analyzed and built upon.

### Effects/Outcomes of Mentoring Point

This area, too, has had many researchers' input (Lyons & Oppler, 2004; Ragins et al., 2000; Tharenou, 2005; Turban & Dougherty, 1994; Wallace, 2001). The effects of mentoring that have been examined have been mostly those to the protégé. There are mentor benefits to mentoring, and as these have been studied less than the protégé benefits, it is possible that some important mentor benefits have not yet been found, such as mentor promotion, career satisfaction, and mentor compensation. Organizational benefits need to continue to be studied, too. Benefits to organizations that have been examined thus far include organizational attraction (Allen & O'Brien, 2007); employee

motivation, job performance, and retention rates (Wilson & Elman, 1990); and a positive organizational climate as well as a tool for building diversity (Green-Powell, 2007).

Although it would be difficult, a cost/benefit analysis of a formal mentoring program may increase the likelihood of even more organizations undertaking a mentoring program.

### Overall Topic

A finding of this literature review is that many reviews do not include social antecedents that relate to diverse mentoring. This is an area that could benefit from continued empirical studies. This study attempts to add to this topic. Another finding of this literature review is that most benefits of mentoring are benefits to the protégés. Although some studies include benefits to mentors, this is not the norm.

As organizations become more diverse, the issue of diverse mentoring has begun to merit more attention (Athey et al., 2000; Clutterbuck & Ragins, 2002; Hardy, 1998; Knouse et al., 2005; Ragins, 1997). However, with the multiple types of diversity between members, including age, race, socio-economic status, and gender, among others, this area of study has been scattered. A study investigating many of the types of diversity is an area that may warrant additional scrutiny. It is also possible that diversity outcomes through the points of a mentoring relationship differ by race of protégé.

The area of effects/outcomes is, indeed, broad in terms of both IVs and DVs. Here, I was unable to find any empirical studies that included cultural or emotional intelligence of mentors and/or protégés. The current study seeks to begin to fill this gap. I study the impact of CQ and EQ on perceived attitude homophily within the mentoring relationship, and the impact of CQ and EQ onto relationship quality as perceived by each

partner. Additionally, the study examines the possible mediating action of attitude homophily within the CQ/EQ/relationship quality connection.

**CHAPTER 3: THEORY DEVELOPMENT, MODEL, AND HYPOTHESES**

This study examines racially/ethnically diverse mentoring relationships and the factors that may contribute to the success of these relationships. In this chapter I introduce the theoretical model and develop the hypotheses. Specifically, I propose that cultural intelligence (CQ) and emotional intelligence (EQ) of the mentor/protégé will affect the perceived attitude homophily and quality of the relationship. These relationships are depicted in Figure 2.

INSERT FIGURE 2 HERE

The underlying theoretical rationale for the proposed model of diverse mentoring success stems from social information processing (SIP) theory.

In a seminal article, SIP is conceptualized as a broad and multifaceted theory made up of individuals' processing and actions when entering interpersonal situations where no immediately effective response is presented (D'Zurilla & Goldfried, 1971). The main component of SIP is the cognitive-behavioral process of generating potential solutions to the current social dilemma (D'Zurilla & Goldfried, 1971). Pfeffer summarized the SIP model as it relates to the work environment (1980). He stated that 1) an individual's social environment might provide cues as to which dimensions may be used to characterize his/her work environment, 2) the social environment might provide information on how the individual should weigh the various dimensions, 3) the social context provides cues concerning how others have evaluated the work environment on each of the selected dimensions, and 4) it is possible that the social context provides direct positive or negative evaluation of the work setting (Pfeffer, 1980). Another researcher summarized the SIP model in relation to children's social behavior. In this

model, Dodge proposed that when faced with a social situational cue, children engage in four mental steps before enacting social behaviors; 1) encoding of situational cues, 2) representation and interpretation of those cues, 3) mental search for possible responses to the situation, and 4) selection of a response (1986). SIP explicitly assumes that individuals are motivated to form impressions and develop relationships (Walther, 2008). As people enter into mentoring relationships, SIP should help to analyze their impressions of the relationship as well as behaviors enacted during the relationship. One model of SIP, the Crick and Dodge (1994) model, examines social development in children through the use of social cues to compose a response. This model may apply to new mentoring relationships, as the mentor and protégé develop new social roles when they enter the program. One study used this model to examine nurses' responses to patients and found that previous professional experiences with patients were relevant for response construction and selection in new situations (Sheldon & Ellington, 2008). One set of researchers included SIP in their study of perceptions of mentor support, indicating that SIP explains that consequences not only shape future behavior, but also beliefs about the current social context (Eby et al., 2006).

### **Social Intelligence and Perceived Attitude Homophily**

According to SIP theory, information acquisition and elaboration is a cognitive process that influences individuals' use of available information (Hamilton, Stroessner, & Driscoll, 1994). As an individual perceives an interaction with another, he/she interprets the meaning of that person's behaviors, makes inferences about that person's abilities, motives, and personality attributes, makes causal attributions of why events occurred, and reacts affectively to the person and events he/she observes (Hamilton, Sherman, &

Ruvolo, 1990). These processes are extremely important in social perceptions as they guide an individual's actions and interactions with that other person. As an individual interacts with others, he/she has expectancies about their behaviors based on stereotypes of the groups to which they belong (Hamilton et al., 1990). Stereotypes do help individuals in efficiency through contacts with numerous new persons on a daily basis, and they particularly pertain to the processing of visible, behavioral characteristics (Andersen, Klatzky, & Murray, 1990). Stereotypes are thought to perpetuate defiance between members of different groups and to engender misunderstanding among individuals with dissimilar backgrounds (Yzerbyt & Carnaghi, 2008). These stereotypic expectancies can be reduced if that individual attaches greater importance to information pertaining specifically to the person rather than the category (Hamilton et al., 1990). Indeed, there is some evidence that an individual is more likely to process information that is inconsistent with a stereotype as it is surprising and draws attention (Hamilton et al., 1994).

According to SIP theory, relationships are developmental; work groups, friendships, and other relatively lasting relationships do not simply appear out of nowhere, but rather are built over time (Walther, 2008). The SIP approach evolves from the fundamental premise that individuals adapt attitudes, behaviors, and beliefs to their social context and to their own past and present behaviors and situations (Salancik & Pfeffer, 1978). The social context an individual finds oneself in is likely to make some past activities and thoughts more salient and also provide norms and expectations (Salancik & Pfeffer, 1978). Throughout this process, an individual must have acknowledged past experiences in order for them



to be used cognitively to direct the individual in future actions. I propose that the social intelligences of CQ and EQ may help an individual look at another person as a unique individual as opposed to simply a member of a stereotypical group. These social intelligences will also assist an individual in correctly analyzing and assessing past experiences to choose current behaviors, and will also assist that individual in watching the outcome of the current behavior to influence the future relationship with the person.

The similarity-attraction paradigm states that an individual likes another person better if he/she perceives that other individual to be similar to himself/herself (Byrne, 1971). The similarity construct is being researched in diverse mentoring (Avery, Tonidanel, & Phillips, 2008; Brown, Zablah, & Bellenger, 2008; Lankau et al., 2005). In the next sections, I develop hypotheses for the effects of CQ and EQ on perception of attitude homophily by mentors and protégés, and relationship quality.

### Cultural Intelligence and Attitude Homophily

Scholars have begun to identify the important antecedents to effective diverse mentoring relationships, such as some mentor personality constructs, previous experience as a mentor or protégé, and perceived influence of the mentor, all on various DVs. Cultural intelligence (CQ) might be another important key in successful racially/ethnically diverse mentoring relationships. CQ is a different level of intelligence from that which is known as IQ, or rational and logic-based verbal and quantitative intelligence, and different also from emotional intelligence. CQ is defined by researchers as the seemingly natural ability to interpret an individual's unfamiliar and ambiguous gestures in just the way that person's compatriots and colleagues would, even to mirror

them (Earley & Mosakowski, 2004). Another group of researchers added that CQ is a person's effectiveness in drawing upon a set of knowledge, skills, and personal attributes in order to work successfully with other people from different national cultural backgrounds at home or abroad (Johnson, Lenartowicz, & Apud, 2006).

CQ enables a person to be effective when engaging in intercultural interactions. It is related to emotional intelligence (EQ), but Earley and Mosakowski state that CQ picks up where EQ leaves off (Earley & Mosakowski, 2004) when interacting with individuals from other cultures. According to these researchers, a person with high EQ is able to grasp what makes us human and at the same time decipher what makes each of us different from one another. They further state that a person with high CQ can somehow tease out of a person's behavior those features that would be true of all people and all groups, those peculiar to this person, and those that are neither universal nor idiosyncratic (Earley & Mosakowski, 2004).

There are four domains of CQ that are commonly discussed: cognitive, metacognitive, motivational, and behavioral. Metacognitive CQ includes the processes that individuals use to gain and understand cultural knowledge (Ang, Van Dyne, & Koh, 2006). Cognitive CQ is overall knowledge and knowledge constructions about culture, including religious beliefs, economic systems, and languages (Ang et al., 2006). Motivational CQ includes the magnitude and direction of an individual's energy applied toward learning about and successfully functioning in cross-cultural situations (Ang et al., 2006). Behavioral CQ is the capability to exhibit appropriate verbal and nonverbal actions when mingling with people from cultures other than one's home culture (Ang et al., 2006).

## INSERT TABLE 8 HERE

CQ does not cause a person to ignore differences from others, nor does it cause that person to become consumed by those differences and examine those differences in every interaction with a diverse other. Rather, CQ assists the individual to acknowledge those differences and react to them when they have an impact on the task at hand.

Literature exists regarding expatriates' experiences abroad and the importance of CQ in their adaptation to these new cultures. A commonality with diversity of other levels is that the culture, rules, norms and reward structure of organizations are developed by and for the majority group (Ragins, 2002). Ragins then compares this to the minority groups' feeling that they are a 'stranger in a strange land' where they don't understand the rules of the game or even that a game exists (2002). I compare the experience of diverse mentorship partners in organizations and the experience of expatriates in a foreign land as both diverse mentors and protégés (and expatriates) need to develop and maintain positive relationships with the mentoring partners (and host country nationals). It is possible that CQ facilitates interactions between diverse people in either situation.

CQ is especially relevant to diverse relationships (Earley & Mosakowski, 2004) and should assist mentors and protégés in relating successfully throughout their multicultural mentoring interactions. SIP theory suggests that past experiences influence current social interactions. Cultural intelligence is built upon past experiences, which can be used to smoothly interact with diverse others. A qualitative study of information technology offshore outsourcing projects found that higher levels of CQ led to the development of a negotiated culture, which is characterized, in part, by trust-based interpersonal relationships and shared understanding (Gregory, Prifling, & Beck, 2009).

Attitude homophily is defined as one's perception of similarity to another in attitude (McCroskey, 1975). The ability of the mentor/protégé to interact effectively should remove or lessen perceptions of interpersonal conflict and, therefore, result in a higher level of perception of attitude homophily with the partner, as these interactions will be used to develop a more positive cognitive impression of the interactions which should translate into perceptions of similarity of attitudes. CQ will allow the mentor/protégé to more deeply connect to their partner using past experience, as SIP theorizes that these past experiences will impact current actions, in this case, interactions with diverse others.

*Hypotheses 1a-d: a) The four domains of CQ of mentors, including (a) metacognitive, (b) cognitive, (c) motivational, and (d) behavioral, will be positively related to the mentors' perceptions of attitude homophily in diverse mentoring relationships.*

*Hypotheses 2a-d: The four domains of CQ of protégés, including (a) metacognitive, (b) cognitive, (c) motivational, and (d) behavioral, will be positively related to the protégés' perceptions of attitude homophily in diverse mentoring relationships.*

### Emotional Intelligence and Attitude Homophily

As mentioned briefly before, there are three connected but different intelligences: rational and logic-based verbal and quantitative intelligence (most know this as IQ), emotional intelligence (EQ), and cultural intelligence (CQ) (Alon & Higgins, 2005). EQ reflects a person's ability to understand and convey human emotion (Earley & Peterson, 2004). EQ is defined as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to

use this information to guide one's thinking and actions" (Salovey & Mayer, 1990, p. 189). This ability to manage social behaviors may come into play in interpersonal relationships.

There are four branches defined by Mayer and Salovey (1997), those of perceiving, facilitating, understanding, and managing emotions. The first branch of EQ of perceiving emotions includes abilities in properly identifying emotions in faces, voices, pictures, music, and other stimuli (Grewal & Salovey, 2005). This is often thought of as the most important branch as the other three depend on proper identification of emotions in others. This area has also been found to be an attribute that transcends cultures (Ekman, 1980), although perception levels vary across individuals. Facilitating emotions (or using emotions) is the ability to capture emotional information to assist in other cognitive activities (Grewal & Salovey, 2005). Certain moods are better for attempting certain tasks, such as creative tasks, and tackling those tasks under the most advantageous emotion may be helpful. Understanding emotions is the ability to comprehend relations between emotions, transitions between emotions, and to label emotions using emotion words (Grewal & Salovey, 2005). This area allows individuals to differentiate properly between related emotions, such as pride and joy. Differentiating between one's own emotional states has been found to be important for well-being (Feldman Barrett, Gross, Christensen, & Benvenuto, 2001). Finally, managing emotions is the most commonly identified aspect of EQ. This is the ability to manage one's emotions as well as others' emotions (Grewal & Salovey, 2005). Managing emotions does not relate only to regulate bad moods effectively. At times, holding on to a negative mood may be appropriate, and managing emotions comprises the knowledge of when this

would be appropriate (Grewal & Salovey, 2005). The perceiving and facilitating abilities form the area of experiential EQ, while understanding and managing emotions form the area of strategic EQ (Grewal & Salovey, 2005).

The link between EQ and mentoring has begun to be examined (Bennetts, 2002; Cherniss, 2007), although this author was unable to find any empirical studies of EQ and mentoring. Individuals with high EQ have been said to be likely to succeed at communicating in interesting ways and make others feel better in an organizational environment (Goleman, 1998). These skills should likely assist a mentor and protégé throughout their relationship. This study empirically tests the impact of EQ on relationship quality.

A person with high EQ is able to grasp what makes us human and at the same time decipher what makes each of us different from one another (Earley & Mosakowski, 2004). Here, too, someone with higher EQ will have paid attention to past experiences with others, both those similar and different, correctly deciphered them, and retained the lessons learned. Therefore, EQ should assist an individual to examine another person, in this case a diverse mentor/protégé, in a more deliberate manner than simple stereotyping. Essential steps in SIP include encoding a problem, interpreting cues in the social situation, clarifying goals, generating possible responses, selecting a response, and enacting the behavior (Crick & Dodge, 1994). High EQ would facilitate correct interpretation of cues in social situations, particularly the memories of results of exhibiting emotions within past interactions.

For mentors and protégés in a newer mentoring relationship, uncertainty is usually high. By their very nature, diverse mentoring relationships comprise less of a comfort

zone than homogenous relationships (Ragins, 2002). SIP indicates that in cases of uncertainty, social cues are important. At higher levels of EQ, mentors and protégés will examine and correctly interpret their partners' social cues properly, uncertainty will be reduced, and the relationship is more likely to result in perceived attitude homophily as the mentor/protégé looks for similarities with the partner.

***Hypotheses 3a-b: a) The EQ of mentors will be positively related to the mentors' perceptions of attitude homophily in diverse mentoring relationships; and b) The EQ of protégés will be positively related to the protégés' perceptions of attitude homophily in diverse mentoring relationships.***

### Attitude Homophily and Relationship Quality

Research using the similarity-attraction paradigm has shown that similarity leads to frequent communication, desire to maintain affiliation, and high social integration (Lincoln & Miller, 1979). These results should lead to a mentoring partner to look upon the relationship in a more positive light. Traditional theoretical literature suggests that homophily tends to increase attraction (Berger & Clatterbuck, 1976; Daly, McCroskey, & Falcione, 1976; McCroskey, McCroskey, & Richmond, 2006). Further, it has been posited that perceived dissimilarity can negatively impact interpersonal relationships (Ragins, 1997). A more general study found that participants in close relationships perceived greater attitude homophily (McCroskey et al., 2006). Another study found that perceived deep-level similarity (personality, interests, work values, outlook on organizational issues, problem-solving approach, and personal values)

was significantly associated with partner liking of both mentors and protégés (Lankau et al., 2005). Yet another study found that perceived attitudinal similarity (as measured by eight items from three different sources) was significantly associated with protégés' satisfaction with their mentors (Ensher et al., 2002), although this was not studied on the part of mentors' satisfaction with their protégés. Finally, a significantly positive relationship was found between perceived similarity and mentorship quality in a study (Allen & Eby, 2003). Therefore, perception of attitude homophily with one's mentoring partner should help raise the quality of the relationship in these data sets.

***Hypotheses 4a-b: a) The perceived attitude homophily of mentors will be positively related to the mentors' perceptions of relationship quality in diverse mentoring relationships; and b) The perceived attitude homophily of protégés will be positively related to the protégés' perceptions of relationship quality in diverse mentoring relationships.***

### **Cultural Intelligence and Relationship Quality**

As stated before, a person with high CQ can more easily tease out of a person's behavior those features that would be true of all people and all groups, those peculiar to this person, and those that are neither universal nor idiosyncratic (Earley & Mosakowski, 2004). Indeed, an important skill of CQ is knowing how to suspend judgment until enough information becomes available (Earley & Mosakowski, 2004). Those with higher CQ will be more satisfied with their interpersonal communications because of their cooperative behaviors (Ang et al., 2006). Individuals with higher CQ have more positive relationships with others in a multicultural setting (Earley & Ang, 2003). People with



higher CQ will have paid attention to past experiences with diverse others and will have retained the information gathered. Therefore, a mentoring partner's CQ within a diverse mentoring relationship will result in that partner more accurately perceiving the characteristics of his/her diverse partner as an individual rather than simply as a member of an outgroup. This would lead to each mentoring partner to be more willing to see the mentoring relationship in a positive light. According to SIP, this individual attribute of CQ will be positively related to the mentoring participants' perception of relationship quality (Salancik & Pfeffer, 1978). Earley & Ang stated that a high CQ person is able address relationship issues through an adaptation of an extant cognitive frame or to create a new frame that might be appropriate for the new multicultural circumstance (2003). SIP comes into play as the person searches past similar situations when confronted with an ambiguous social interaction.

The four domains of CQ should all impact relationship quality in a diverse mentoring relationship. The metacognitive domain, or the information gathering, is vital as an individual accumulates information that may be accessed in future encounters with dissimilar others. The cognitive domain, or the actual knowledge of other groups, is necessary as individuals gain knowledge of other cultures through study and past experiences and the ability to acknowledge differences between themselves and others as well as the knowledge of when the differences matter. The motivational domain also will have an impact on relationship quality as an individual that does not want to interact with a dissimilar other will not develop a quality relationship with that person. The behavioral domain also will impact relationship quality as each partner will be judging the quality of the relationship through the behaviors of an individual throughout contacts. As stated

before, a qualitative study found that higher CQ in offshore IT project members resulted in a negotiated culture, part of which is trust-based interpersonal relationships (Gregory et al., 2009). Individuals with higher CQ levels reported higher interpersonal trust toward culturally different others (Rockstuhl & Ng, 2008). Finally, IT engineers with higher CQ found more positive relationship perceptions than those with lower CQ (Tootoonchy, 2012).

*Hypotheses 5a-d: The four domains of CQ of mentors, including (a) metacognitive, (b) cognitive, (c) motivational, and (d) behavioral, will be positively related to the mentors' perceptions of relationship quality in diverse mentoring relationships.*

*Hypotheses 6a-d: The four domains of CQ of protégés, including (a) metacognitive, (b) cognitive, (c) motivational, and (d) behavioral, will be positively related to the protégés' perceptions of relationship quality in diverse mentoring relationships.*

### Emotional Intelligence and Relationship Quality

EQ will also help the mentors/protégés to view their partners as individuals, as EQ includes perception and understanding of one's own and others' emotions. EQ's four branches help build identification/perceived similarity with another person. Accurately identifying emotions in others and expressing emotions to others, understanding what others feel and the regulation of appropriate moods, understanding the complexity of emotions, and managing one's own and another's emotions (Mayer & Salovey, 1997) will result in less conflict within a relationship, thereby allowing differences to be mitigated and similarities to be cultivated. Correctly identifying emotions in others will

allow for a more positive relationship with another as one with high EQ will be able to identify a larger number of emotions in the partner, thus increasing the likelihood of a match in emotions. Properly expressing emotions to the mentoring partner will impact relationship quality in that miscommunications will be kept to a minimum during interactions. Understanding what the partner is feeling and the regulation of emotions will also result in higher relationship quality such that there will be less of a disconnect between the members. Understanding the complexity of emotions is important in a new relationship as situations and interactions come up and are attended to. Finally, managing one's own and the other's emotions will result in smoother interactions between the mentor and protégé. Past experiences will have provided learning opportunities for the mentor/protégé to more readily look for and find positive relationship qualities with his/her diverse partner, and those with higher EQ will have received more accurate lessons from those previous experiences. Two fairly recent studies found that levels of EQ of married participants were positively related to those participants' perception of marital quality (Schröder-Abé & Schütz, 2011; Zeidner & Kloda, 2013).

The EQ of each partner will impact his/her perception of relationship quality through appropriate and correct reading of the partner's emotions and emotional responses to actions within the relationship. SIP theory indicates that attitudes are cognitive products resulting from the information processing about the attitude object (mentoring relationship) and past behaviors (Salancik & Pfeffer, 1978). Given the social nature of the mentor-protégé exchange, EQ will allow each member to more effectively

interact within the mentoring relationship, correctly reading the partner's actions, resulting in more positive perceptions of relationship quality.

*Hypotheses 7a-b: a) The EQ of mentors will be positively related to the mentors' perceptions of relationship quality in diverse mentoring relationships; and b) The EQ of protégés will be positively related to the protégés' perceptions of relationship quality in diverse mentoring relationships.*

#### Attitude Homophily's Mediation in CQ/EQ/Relationship Quality Association

As stated before, diverse mentoring relationships have a higher uncertainty than homogenous relationships (Ragins, 2002). This greater uncertainty associated with dealing with dissimilar others can be threatening (Schroeder, Penner, Dovidio, & Pilivian, 1995). Further, it has been speculated that perceived dissimilarity can negatively impact interpersonal relationships (Ragins, 1997). Prior research using the similarity-attraction paradigm has shown that similarity leads to frequent communication, desire to maintain affiliation, and high social integration (Lincoln & Miller, 1979). CQ and EQ should enable the mentors and protégés to look for and find deep-level similarity (or differences) rather than focus on the surface-level differences inherent in racial/ethnic diversity, and should enable them to more accurately remember past experiences that may relate to the current relationship. Both CQ and EQ should help mentors and protégés to pay attention to their partners as individuals, and correctly remember those past experiences, rather than a stereotype of the racial/ethnic group to which the partners identify. This should lessen the uncertainty within the relationship,

which may be the process that attitude homophily shares in the perceptions of the relationship. Indeed, a study found that perceived attitude homophily had negative relationship with perception of uncertainty in relationships (Prisbell & Andersen, 1980). Therefore, CQ and EQ should result in perception of attitude homophily with one's mentoring partner, which in turn should help raise the quality of the relationship. Indeed, Allen and Eby (2003) found a significant relationship between perceived similarity (values, interests, and personality) and mentorship quality. This relationship may be the mediating relationship between mentors'/protégés' CQ/EQ and relationship quality.

***Hypotheses 8a-d: Attitude homophily will mediate the relationship between all four domains of CQ of mentors, including (a) metacognitive, (b) cognitive, (c) motivational, and (d) behavioral, and Relationship Quality***

***Hypotheses 9 a-d: Attitude homophily will mediate the relationship between all four domains of CQ of protégés, including (a) metacognitive, (b) cognitive, (c) motivational, and (d) behavioral, and Relationship Quality.***

***Hypotheses 10a-b: a) Attitude homophily will mediate the relationship between mentors' EQ and Relationship Quality; and b) Attitude homophily will mediate the relationship between protégés' EQ and Relationship Quality.***

The model in Figure 2 led to the hypotheses above. Each relationship was tested separately in the data set of mentors and again in the data set of protégés. The hypotheses that have been delineated above became the basis for testing the

ideas. In the next chapter, I will discuss the methods, including sample and data collection, measures used, and analyses.

## CHAPTER 4: METHODS

In this chapter, I will discuss the method used to test the hypotheses, including the sample and data collection procedure, measures, analyses, and results.

## 1. SAMPLE AND DATA COLLECTION

I used an established online survey site called StudyResponse to find participants that self-reported as being mentors or protégés in a racially/ethnically diverse mentoring relationship. No other screening criteria were used. StudyResponse has not responded to multiple requests for the number of people who received the original screening criteria emails of “being in mentoring relationship (formal or informal)” and “racially or ethnically diverse mentoring relationship (where the mentor and the protégé are racially and/ethnically different)”. However, all respondents to that original request received an email inviting them to participate in the survey in groups of declining numbers until the target response rate was reached. A copy of the email that was sent to StudyResponse participants who self-identified as eligible with the survey link is in Appendix 2. After I received enough responses and alerted StudyResponse, they closed the link for any members who had not yet begun answering.

The survey began with the following text for mentors (the protégé survey reversed the terms protégé and mentor): “This study is about your relationship with a protégé. Protégés (also called mentees) are individuals who receive personal and career-related support from their mentors, who have advanced experience and knowledge. Your protégé may or may not be in your organization and you may or may not be his/her immediate supervisor. A mentoring relationship may develop spontaneously and informally, or may be part of a formal mentoring program. In formal



mentoring programs, mentors and protégés are matched or assigned in some way. This study includes both formal and informal mentoring relationships.

However, this survey is intended only for people involved in a racially or ethnically diverse mentoring relationship (where the mentor and the protégé are racially and/or ethnically different). An example of this would be a Caucasian mentor and an Asian protégé, or an American Indian mentor and an African American protégé. Please confirm that you are eligible for this survey by indicating below whether you are a mentor in such a mentoring relationship.”

The survey went on to ask for their StudyResponse ID number, so that they could be identified by StudyResponse for payment. I did not receive any identifying information other than responses to the demographics. The survey then spelled out mentoring with the following text for protégés (the text for mentors switched the terms mentor and protégé): “Dear Participant: A mentoring pair includes the person being mentored (you) that is called a PROTÉGÉ, and the person doing the mentoring called a MENTOR. We will be using these terms throughout the survey.

Through this survey, we want to learn more about you and your mentoring experiences. We are particularly interested in a particular relationship where you are being mentored by someone who is of a different race or ethnicity, which we define as a diverse mentoring relationship. If you are involved in more than one diverse mentoring relationship, please choose one relationship and answer all questions regarding that one mentoring relationship. Thank you for participating in this survey.”

Although I did not require the participants to be employed, all reported themselves as being employed with the exception of two mentors and two protégés. It is

unknown how many of their participants responded to an original email asking who was involved in a racially/ethnically diverse mentoring relationship. Those that replied received the email from StudyResponse that included a link to the online assessment briefly describing the study, ensuring confidentiality. Some participants completed the survey, but their data needed to be eliminated as they indicated through the items that their mentoring relationship was not diverse, or they did not provide enough data to indicate that their mentoring relationship was diverse. The online assessment collected CQ and EQ of the mentor/protégé, demographic data of both partners, attitude homophily perceptions, relationship quality perceptions, and controls listed below. These mentors and protégés are not matched data, in that they were not a mentor and protégé from the same mentoring dyad. I tested the model on both sets of data (mentors and protégés). This survey information was collected in Summer, 2014.

I applied to the UWM IRB division and received approval for data collection. Each qualifying participant received an Amazon.com gift card worth US \$20 as a thank you directly from StudyResponse.

I used the A-priori Sample Size Calculator for Multiple Regression (Soper, 2013) software to determine the necessary sample size with an alpha level of .05, power of .8, and a small effect size of .2, two-tailed, with 2 predictors. I received a result of 51 for each set of data (mentors and protégés).

I had received 152 completed mentor surveys and 156 completed protégé surveys through UWM's Qualtrics system. I needed to eliminate those surveys that indicated that the mentor and protégé were of the same race and ethnicity, along with those surveys that did not indicate the race and ethnicity of both the mentor and the protégé. This lowered

my usable responses to 116 qualifying mentors and 95 qualifying protégés. I tested the hypotheses on these groups of mentors and groups of protégés. I will report the results of the study on each group separately.

The mentor group was 51% male, with an average age of 43. They reported that their protégés were 56% male with an average age of 31. Mentors self-reported as 85% white/Caucasian; 7% black or African American; 3% American Indian, Native American, or Alaska Native; 3% Asian; and 2% Native Hawaiian or other Pacific Islander, with 89% reporting as non-Spanish/Hispanic/Latino. They reported that their protégés were 29% black or African American; 25% white/Caucasian; 22% Asian; 7% Native Hawaiian or other Pacific Islander; 6% American Indian, Native American, or Alaska Native; and 11% unknown, and 58% of their protégés are Spanish/Hispanic/Latino. Ninety eight percent of the mentors are employed, and the average tenure in their present position is eight years. Mentors self-reported that 40% had a bachelor's degree; 22% had a master's or law degree; 18% had a PhD/DBA or MD; 15% had some college or an associate's degree. Seventy three percent of mentors in this study were reporting on a formal (vs. informal) relationship with an average duration of 18 months. The question these mentors responded positively to was: "Regarding the mentoring relationship you will be reporting on, is it a FORMAL mentoring program (such as at school or work), where you were matched with a protégé either by assignment or choice? Or is your protégé an INFORMAL protégé where you and your protégé simply decided to form a relationship where you would mentor him/her?" The average number of total contacts (face-to-face plus electronic) was 48 separate times in the previous calendar year (2013). The majority (63%) were direct supervisors of their protégés. The question they responded positively

to was “are you a direct supervisor of your protégé in your current job?” The majority of mentors (56%) said that the mentoring relationship will likely continue in the future; 29% said that they would stay in contact with their protégés even though the mentoring relationship will likely end soon; 12% said that they would likely remain in contact with their protégés; 3% said that they do not plan to stay in contact with their protégés in the future; and no mentors stated that they would definitely not stay in contact with their protégés.

The protégé group was 63% male, with an average age of 35. They reported that their mentors were 68% male with an average age of 46. Protégés self-reported as 55% white/Caucasian; 23% Asian; 11% black or African American; 7% American Indian, Native American, or Alaska Native; and 4% Native Hawaiian or other Pacific Islander, with 86% reporting as non-Spanish/Hispanic/Latino. They reported that their mentors were 48% white/Caucasian; 24% black or African American; 14% Asian; 9% American Indian, Native American, or Alaska Native; 2% Native Hawaiian or other Pacific Islander; and 3% unknown, and 51% of their mentors are Spanish/Hispanic/Latino. Ninety eight percent of the protégés are employed, and the average tenure in their present position is 5 years. Protégés self-reported that 45% had a bachelor’s degree; 37% had a master’s or law degree; 13% had a PhD/DBA or MD; and 6% had some college or an associate’s degree. Seventy four percent of protégés in this study were reporting on a formal (vs. informal) relationship with an average duration of 28 months. The question regarding formal/informal relationship in the survey was: “Regarding the mentoring relationship you will be reporting on, is it a FORMAL mentoring program (such as at school or work), where you were matched with a mentor either by assignment or choice?”

Or is your mentor an INFORMAL mentor, where you and your mentor simply decided to form a relationship where s/he would mentor you?” The average number of total contacts (face-to-face plus electronic) was 43 separate times in the previous calendar year (2013). The majority (65%) were reporting on a mentoring relationship where the mentor was their direct supervisor. The question they responded positively to indicate this fact was: “Is your mentor your direct supervisor in your current job?” The majority of protégés (63%) said that the mentoring relationship will likely continue in the future; 26% said that they would stay in contact with their mentors even though the mentoring relationship will likely end soon; 10% said that they would likely remain in contact with their mentors; 1% said that they do not plan to stay in contact with their mentors in the future; and no protégés stated that they would definitely not stay in contact with their mentors.

## 2. MEASURES

I used measures that have been developed and validated by researchers. All items are listed in the appendix. I collected demographics, CQ, EQ, attitude homophily, and relationship quality from mentors and protégés, as well as control variables.

### Cultural Intelligence

I tested mentors’/protégés’ levels of cultural intelligence, using the Cultural Intelligence Scale (CQS) developed and validated by Ang and colleagues (Ang et al., 2007). This self-report scale is composed of 20 items that can be separated into the four components of cultural intelligence. These 20 items can also be totaled to obtain a person’s overall measure of cultural intelligence. The four factors follow. A sample item for metacognitive cultural intelligence ( $\alpha=.82$  for mentors;  $\alpha=.85$  for protégés) is “I am conscious of the cultural knowledge I use when interacting with people with different

cultural backgrounds”. A sample item for cognitive cultural intelligence ( $\alpha=.85$  for mentors;  $\alpha=.88$  for protégés) is “I know the legal and economic systems of other cultures”. A sample item for motivational cultural intelligence ( $\alpha=.86$  for mentors;  $\alpha=.86$  for protégés) is “I enjoy living in cultures that are unfamiliar to me”. A sample item for behavioral cultural intelligence ( $\alpha=.84$  for mentors;  $\alpha=.88$  for protégés) is “I vary the rate of my speaking when a cross-cultural situation requires it” (Ang et al., 2006). The item-to-total correlations for each of the four subscale (.47-.71) demonstrated strong relationships between items and their scales, supporting internal consistency (Ang et al., 2007). These authors assessed equivalence of the CQS in a U.S. sample compared to a Singapore sample; this assessment demonstrated the same four factor structure holds across the two countries. Items dropped for this study are discussed under the analysis. This variable was assessed with a seven-point Likert scale from 1=Strongly Disagree to 7=Strongly Agree.

### Emotional Intelligence

I tested mentors’/protégés’ levels of emotional intelligence using the Emotional Intelligence Scale (EIS) from Schutte, et al. (1998). This 33-item self-report measure is designed to measure emotional intelligence based on the model of EQ developed by Salovey and Mayer (1990). Since EQ is generally thought to be a somewhat enduring trait-like characteristic (Goleman, 1994; Mayer & Salovey, 1997; Salovey & Mayer, 1990), Schutte and colleagues compared the EIS to the measure of the big five personality dimensions. When looking at discriminant validity of this measure, although higher scores on the EIS were significantly related to greater openness to experience, it was not found to be significantly related to the other four dimensions. Expected

between-group differences were found (Schutte et al., 1998). Internal consistency of .87 and .90 and a test-retest reliability of .78 were reported by Riley and Schutte (2003). I needed to drop some items from this measure, which will be discussed in the analysis section following. The Cronbach's alpha for this study is .92 for mentors and .90 for protégés. A sample item for this measure is "When my mood changes, I see new possibilities". This variable was assessed with a five-point Likert scale from 1=Strongly Disagree to 5=Strongly Agree.

### Perceived Attitude Homophily

Perceived similarity is measured as homophily. I used the 15-item McCroskey et al. measurement tool for attitude homophily (2006). This measure tests the perceived similarity of the attitudes between two people. Internal reliability estimates range from .55 to .81 for individual items (McCroskey et al., 2006). Items dropped for this study are discussed under the analysis. The alpha reliability of this scale was .85 for mentors and .88 for the protégé sample. A sample item for attitude homophily is "My mentor/protégé thinks like me". This variable was assessed with a seven-point Likert scale from 1=Strongly Disagree to 7=Strongly Agree.

### Relationship Quality

Measurement of relationship quality was measured using a portion of a measure derived by Allen and Eby (2003). The original measure was for relationship effectiveness and included relationship quality and learning from relationship. I used the five items that were to measure relationship quality. This measure was initiated for mentors, but I also used it for protégés, changing the word protégé to mentor. Items dropped for this study are discussed under the analysis. The alpha for the quality

measure is .86 for mentors and .87 for protégés. A sample item for relationship quality is “I am very satisfied with the mentoring relationship my protégé/mentor and I developed”. This variable was assessed with a five-point Likert scale from 1=Strongly Disagree to 5=Strongly Agree.

### Controls

In addition to the above measures, I included questions to capture gender, race, ethnicity, age, prior experience as either a mentor and/or protégé in a mentoring relationship, educational level, length of time in the relationship, type of mentoring relationship (formal/informal), and the number of mentoring contacts within the past calendar year to use as control variables. Gender has been studied and found to be significant regarding mentoring received and career satisfaction. Participants’ age has been found to significantly affect relationship quality. Past experience as a protégé has been found to be significant as far as career attainment, salary, and job satisfaction in previous studies. I asked each participant to indicate whether or not he/she had been a protégé in any mentoring relationship in the past. Prior experience as a mentor has been found to significantly impact the type of mentoring received. I asked each participant to indicate whether or not he/she had been a mentor in any mentoring relationship in the past. Education level has been found to be significantly related to willingness to mentor. I asked for the category of the highest level of educational achievement, choosing from: high school, some college/associate’s degree, bachelor’s degree, master’s or law degree, or PhD/DBA or MD. Relationship length has been found to significantly impact the mentoring received (I asked for



the length in years and months, which I calculated in total months), while the total number of contacts has been found to be significantly related to the protégé's satisfaction with the mentoring relationship in a previous study. For total contacts, I added the number of separate times the mentor and protégé met face-to-face in 2013 to the number of separate times they met electronically (phone, Skype, e-mail, etc.) in 2013.

### 3. ANALYSIS

#### Preliminary Analyses

Normality test – Before testing the model, I tested the eight main constructs (all four domains of CQ, EQ, attitude homophily, and relationship quality) for normality. To test for univariate normality, I checked the data to ensure the skewness indices were between -2.0 and 2.0 (the data resulted in numbers between -.07 and .78 for mentors; between -1.26 and .10 for protégés) and the kurtosis indices were between 7.0 and -7.0 (the data resulted in numbers between -.64 and 1.91 for mentors; between -.77 and 2.26 for protégés). These indices showed that all data were within the acceptable range, indicating all data were normally distributed.

Confirmatory Factor Analyses – After collecting the data, I saw there was high correlation and collinearity in both sets of data using all constructs. I performed confirmatory factor analyses (CFA) on both sets of data, using all main constructs and items. These included all four domains of CQ (metacognitive with 4 items, cognitive with 6, motivational with 5, and behavioral with 5), EQ (33 items), attitude homophily (15 items), and relationship quality (5 items).

My original model's CFA with seven constructs (4 CQ domains, EQ, attitude homophily, and relationship quality) resulted in the following scores: RMSEA = .092 and Condition = 40.883 for mentors; RMSEA = .111 and Condition = 103.2 for protégés. Using this model, I then followed suggested deletions of individual items from the constructs. When I dropped items, the same items were dropped from both sets of data (mentors and protégés). The items I dropped from the analysis are noted in Appendix A with a (D). My final CFAs resulted in RMSEA = .0835, Condition Number = 19.032,

and CFI = .947 for mentors, and RMSEA = .0785, Condition Number = 15.685, and CFI = .938 for protégés. The RMSEA indicated fair fit of the model, as  $<.05$  indicates close fit,  $.05$  to  $.08$  indicates fair fit, and  $>.1$  indicates poor fit (Hu & Bentler, 1998). The Condition Number should be less than 30 to avoid multicollinearity (Cohen, Cohen, Aiken, & West, 2003).

Descriptive statistics and scale reliabilities – I calculated the means, standard deviations, and Cronbach’s alpha coefficients for each scale used in this study (with modified scales per the CFA findings). These are shown in Tables 9 and 10. Table 9 is for the mentor participants, and Table 10 is for the protégé participants. All scales showed good internal reliability with alphas greater than  $.70$  (the lowest alpha in this study is  $.82$ ). The correlations between all variables in each data set are also shown in Tables 9 and 10. The directions of all correlations were consistent with the hypotheses herein. There were many significant correlations between variables, however, using the CFA analyses above, the adapted and original measures in Appendix A were used.

INSERT TABLES 9 AND 10 HERE

### Hypothesis Testing

To test the direct effect hypotheses, I used multiple hierarchical regression. To test for mediation, I used a bootstrapping approach suggested by Preacher and Hayes (2008). This method is used to construct confidence intervals for the indirect effect. A set of researchers had compared bootstrapping to the commonly used Baron and Kenny process, and Sobel process, and they recommend bootstrapping (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Preacher and Hayes suggest a test that uses a 95% confidence interval based on a 10,000 bootstrapping sample (2008). This new method

has two advantages over Baron and Kenny, and Sobel. Rather than arbitrarily requiring that the standard error of the indirect effect has a normal distribution, this process generates bias-corrected confidence intervals for the standard errors that can be used in nonparametric tests. It also offers a direct test of the indirect effect (Preacher & Hayes, 2008).

Hypotheses 1a-d predicted that the CQ of mentors will be positively related to their perceptions of attitude homophily, controlling for participant's gender, race, ethnicity, age, past protégé experience, past mentorship experience, relationship length, formal vs. informal relationship status, and total number of contacts in the previous year. All future findings will include the controls listed here. As shown in Model 2 in Table 11, Hypotheses 1a-d were not supported ( $\beta=.14$  and  $p=.32$  for metacognitive,  $\beta=.14$  and  $p=.33$  for cognitive,  $\beta=.15$  and  $p=.32$  for motivational, and  $\beta=.13$  and  $p=.56$  for behavioral CQ). Hypotheses 2a-d predicted that the CQ of protégés will be positively related to their perceptions of attitude homophily. As shown in Model 2 in Table 12, Hypotheses 2a-d were also not supported ( $\beta=-.22$  and  $p=.36$  for metacognitive,  $\beta=.04$  and  $p=.80$  for cognitive,  $\beta=.35$  and  $p=.11$  for motivational, and  $\beta=.21$  and  $p=.22$  for behavioral CQ).

#### INSERT TABLES 11 AND 12 HERE

Hypothesis 3 predicted that the EQ of a) mentors and b) protégés will be positively related to their perceptions of attitude homophily. As shown in Model 2 in Table 11, Hypothesis 3a was supported for mentors ( $\beta=.31$ ,  $p=.0113$ ). Hypothesis 3b (for protégés) was not supported ( $\beta=.14$ ,  $p=.77$ ), shown in Model 2 in Table 12.

The fourth hypotheses predicted that the perceived attitude homophily of a) mentors and b) protégés will be positively related to their perceptions of relationship quality. As shown in Model 5 in Tables 11 and 12, Hypothesis 4a for mentors was supported ( $\beta=.27$  and  $p<.0001$ ). Hypothesis 4b (for protégés) was also supported for ( $\beta=.39$  and  $p<.0001$ ).

Hypotheses 5a-d predicted that the CQ of mentors will be positively related to their perceptions of relationship quality. As shown in Model 4 in Table 11, Hypothesis 5a was supported for metacognitive CQ ( $\beta=.25$ ,  $p<.0001$ ), but Hypotheses 5b-d were not supported for the other three domains ( $\beta=-.04$  and  $p=.50$  for cognitive,  $\beta=.11$  and  $p=.08$  for motivational, and  $\beta=-.10$  and  $p=.08$  for behavioral CQ). Hypotheses 6a-d predicted that the CQ of protégés will be positively related to their perceptions of relationship quality. All parts of this hypothesis were not supported ( $\beta=.05$  and  $p=.59$  for metacognitive,  $\beta=.06$  and  $p=.30$  for cognitive,  $\beta=.14$  and  $p=.06$  for motivational, and  $\beta=.07$  and  $p=.35$  for behavioral CQ) as shown in Model 4 in Table 12.

The seventh hypothesis predicted that the EQ of a) mentors and b) protégés will be positively related to their perceptions of relationship quality. As shown in Model 4 in Table 11, Hypothesis 7a was supported for mentors ( $\beta=.41$ ,  $p=.0019$ ). Hypothesis 7b (for protégés) was also supported ( $\beta=.45$ ,  $p=.0146$ ) as shown in Model 4 in Table 12.

Hypotheses 8a-d predicted that attitude homophily will mediate the relationship between mentors' four CQ domains and their perceptions of relationship quality. Hypotheses 9a-d predicted that attitude homophily will mediate the relationship between protégés' four CQ domains and their perceptions of relationship quality. The tenth hypothesis predicted that attitude homophily will mediate the relationship between a) mentors' EQ and b) protégés' EQ and their perceptions of relationship quality. For both

mentors and protégés, attitude homophily did not prove to be a mediator between CQ or EQ with relationship quality, as the 95% confidence intervals included zero for all five IVs (see Tables 13 and 14). Therefore, Hypotheses 12a-d, 13a-d, and 14a-b are not supported.

INSERT TABLES 13 AND 14 HERE

The results of all hypotheses are included for reference. See Table 15.

INSERT TABLE 15 HERE

### Post Hoc Analyses

#### MENTORS WITHOUT EQ:

Because the four dimensions of CQ were so highly correlated with attitude homophily, relationship quality, and EQ, I ran the regression analyses of CQ onto the DVs and checked the mediation, all without the construct of EQ.

When regressing the four CQ dimensions onto attitude homophily (along with the control variables used throughout this study), my results showed that motivational CQ was significantly related to attitude homophily ( $\beta=.32$ ,  $p=.0279$ ). However, the other three domains were not significantly related to attitude homophily: metacognitive CQ ( $\beta=.27$ ,  $p=.06$ ), cognitive CQ ( $\beta=-.09$ ,  $p=.52$ ), and behavioral CQ ( $\beta=-.04$ ,  $p=.76$ ).

I then regressed the four CQ dimensions onto relationship quality (along with the control variables used throughout this study). My results showed that both metacognitive CQ and motivational CQ were significant in the regression on relationship quality: metacognitive CQ ( $\beta=.31$ ,  $p<.0001$ ), and motivational CQ ( $\beta=.20$ ,  $p=.0013$ ). However,

the other two domains were not significant: cognitive CQ ( $\beta=-.02$ ,  $p=.78$ ), and behavioral CQ ( $\beta=-.08$ ,  $p=.16$ ).

#### PROTÉGÉS WITHOUT EQ:

I regressed the four CQ dimensions onto attitude homophily (along with the control variables used throughout this study), and my results still showed that none of the dimensions were significantly related to attitude homophily: metacognitive CQ ( $\beta=-.24$ ,  $p=.29$ ), cognitive CQ ( $\beta=.33$ ,  $p=.83$ ), motivational CQ ( $\beta=.33$ ,  $p=.10$ ), and behavioral CQ ( $\beta=.19$ ,  $p=.34$ ).

I then regressed the four CQ dimensions onto relationship quality (along with the control variables used throughout this study). My results showed that motivational CQ was significantly related to relationship quality ( $\beta=.22$ ,  $p=.0046$ ). However, the other three domains were not significant: metacognitive CQ ( $\beta=.12$ ,  $p=.17$ ), cognitive CQ ( $\beta=.08$ ,  $p=.18$ ), and behavioral CQ ( $\beta=.11$ ,  $p=.17$ ).

#### MENTORS WITHOUT CQ:

Again, because the EQ was so highly correlated with attitude homophily, relationship quality, and the four dimensions of CQ, I ran the regression analyses of EQ onto the DVs and checked the mediation, all without the constructs of the CQ dimensions.

I regressed EQ onto attitude homophily (along with the control variables used throughout this study), and my results showed that EQ was significantly related to attitude homophily ( $\beta=.97$ ,  $p<.0001$ ).

I then regressed the EQ onto relationship quality. My results showed that EQ was significantly related to relationship quality ( $\beta=.72$ ,  $p<.0001$ ).

#### PROTÉGÉS WITHOUT CQ:

I regressed EQ onto attitude homophily (along with the control variables used throughout this study), and my results showed that EQ was not significantly related to attitude homophily ( $\beta=.32$ ,  $p=.23$ ).

I then regressed the EQ onto relationship quality. My results showed that EQ was significantly related to relationship quality ( $\beta=.90$ ,  $p<.0001$ ).

Therefore, there were no changes in the regression relationships between EQ and attitude homophily/relationship quality when CQ was removed from the analyses.

The next chapter will include discussion of this study, including limitations, implications for future research, implications for HR managers, contributions, and conclusion.



## CHAPTER 5: DISCUSSION AND CONCLUSION

### Discussion

As the workforce becomes more diverse throughout the world, diverse mentoring pairs will become more common, and the success of these mentoring pairs will become more important to overall success and competitive advantage. This study looked at mentors and protégés (unmatched) in ethnically and/or racially diverse mentoring relationships to investigate the importance of cultural intelligence and emotional intelligence to those relationships.

This study found that mentors' EQ was significantly related to their perceptions of attitude homophily in a racially/ethnically diverse mentoring relationship. Protégés' EQ did not have a significant effect when regressed on attitude homophily. High levels of EQ should enable a person to have read past experiences more accurately, which should lead to more appropriate actions in the current relationship, which he/she is also reading more accurately than one with lower EQ. This only proved to be true for mentors in racially/ethnically diverse mentoring relationships, possibly because protégés with lower levels of power did not sense similarity with their mentors.

Although CQ did not result in significant regression results on attitude homophily, three domains of mentors (all except for behavioral) were significantly correlated to attitude homophily.

It is possible that some other individual characteristic could be playing an important role in these relationships that I did not include in my model. It is possible that self-esteem would enable a participant to relax and examine the new relationship in a clearer light, and that characteristic might be an independent variable, or a moderator. Higher self-esteem may result in people's better identifying cues in the environment, which SIP

states aids them as they encounter new relationships. In the same light, neuroticism/emotional stability, extroversion, and agreeableness may play a part in the beginning of relationships as new partners try to read cues in situations where no immediately effective response is clear (D'Zurilla & Goldfried, 1971).

In the full model (including EQ), the direct effects of the four domains of CQ within the racially/ethnically diverse mentoring relationships studied were not found to be significant in the regressions on perceived attitude homophily. When looking at CQ's impact on relationship quality, only metacognitive CQ was found to be significant in regression, and that was only in the mentor data. From the regression results, it appears that cultural intelligence may not come into play within mentoring relationships where the level of diversity is race and ethnicity, rather than national culture. Another explanation could have been that because CQ and EQ are so highly correlated, that CQ's effects on attitude homophily are being overridden by EQ in this study. However, when EQ was removed from the regression model, the findings were still minimal. Motivational CQ was significantly related to attitude homophily for mentors, and both metacognitive CQ and motivational CQ were significantly related to relationship quality. Therefore, EQ did not grossly affect the regression findings of CQ on attitude homophily or relationship quality in this study. However, the correlations do show significant and positive correlations between the four domains of CQ and relationship quality for both groups. These high correlations could become important when putting together a formal, diverse mentoring program.

The hypothesis that mentors' EQ will be positively related to their perceptions of attitude homophily with their mentees in a diverse mentoring relationship, was confirmed

by this study. However the paired hypothesis that protégés' EQ would positively relate to attitude homophily, was not supported through regression. Social Information Processing (SIP) indicates that in times of uncertainty social cues are important. Diverse mentoring relationships have less of a comfort zone than homogenous relationships (Ragins, 2002). Thus, higher levels of EQ should lower this uncertainty, and this study showed they are related to higher perceptions of attitude homophily for mentors only, when controlling for demographic and relationship items. It is possible that, for protégés, other factors are important to attitude homophily, or attitude homophily is more difficult to form for protégés. Indeed, the regression indicates that whether the relationship is formal or informal has the most significance in the regression on attitude homophily for protégés, with informal relationships being most significant ( $p=.0038$ ) with increased attitude homophily. Again, though, the correlations between EQ and relationship quality for both groups is positive and significant, as is the correlation between EQ and attitude homophily for mentors. This may indicate an important relationship for EQ within diverse mentoring relationships in this study.

The hypothesis that mentors' and protégés' EQ will be positively related to their perceptions of relationship quality in diverse mentoring relationships, was confirmed by this study for both mentors and protégés. Higher EQ should result in more thoughtful interchanges with the partner and did, in this study, relate to perceptions of higher relationship quality in their diverse mentoring pairs.

The hypothesis that perceived attitude homophily would be positively related to relationship quality was supported for both the mentors and the protégés in this study. This relationship of attitude homophily and liking or relationship quality had been found

in previous research (Berger & Clatterbuck, 1976; Daly et al., 1976; Ensher et al., 2002; Lincoln & Miller, 1979) and this study resulted in the same significant findings. The similarity-attraction paradigm indicates that perceived similarity should lead to a mentoring partner to look upon the relationship in a more positive light, and this was the case in this study. It had been suggested previously that perceived dissimilarity can negatively impact interpersonal relationships (Ragins, 1997), and a significant relationship was found between perceived similarity and mentorship quality (Allen & Eby, 2003). These earlier findings were confirmed in this mentoring study.

The mediation hypotheses were that the perceived attitude homophily of mentors and protégés will mediate the relationship between the mentors' or protégés' CQ (and EQ) and their perceptions of the relationship quality; they were not supported in any of the regressions by this study.

The regression results of this study, overall, indicated that CQ of mentors and protégés in diverse mentoring relationships is not significantly positively related to the outcome of perceptions of attitude homophily with their partners or perceived relationship quality in regression analyses, with the exception of metacognitive CQ being significantly positively related to relationship quality in the mentor data set only. Emotional intelligence, however, does seem to play a positive relational role to attitude homophily for mentors, and to relationship quality in both mentors and protégés in these mentoring relationships. In addition, perceived attitude homophily has been found to be positively significantly related to relationship quality in both regression analyses and in correlations, consistent with previous studies.

### Limitations

As with all studies, the results of this research must be considered in light of limitations of the study. First, the fact exists that the respondents completed a survey after they followed a link to it, so the researcher cannot be sure that the surveys were completed by the person who was originally solicited through StudyResponse; another person could have completed the online survey. StudyResponse contacted their constituents that indicated that they were involved in a mentoring relationship involving racially/ethnically diverse partners. The award of a \$20 gift certificate may have affected responses so that unqualified participants replied that they were, indeed, qualified. Along these lines, I had received 152 completed mentor surveys and 156 completed protégé surveys through UWM's Qualtrics system. I needed to eliminate those surveys that indicated that the mentor and protégé were of the same race and ethnicity, along with those surveys that did not indicate the race and ethnicity of both the mentor and the protégé. This lowered my usable responses to 116 mentors and 95 protégés.

As with any self-report survey, the possibility of social desirability affecting the answers is an issue. However, respondents were assured of confidentiality and were told that responses would only be reported in an aggregate manner to try to limit this effect. Insofar as both our dependent and independent measures are self-reported data, the problem of common method variance (CMV) was tested. To test for the potential of common method bias, I followed Lindell and Whitney (2001) to introduce a marker variable. They state that a marker should be measured by the same instrument as the scales used in the analysis and should be theoretically unrelated to the substantive variables in the study. I selected the marker ethnicity that was measured by the question of, "Are you Spanish/Hispanic/Latino?" (1=yes; 2=no). Although this variable was used

in my analyses as a control, this variable was not expected to have a theoretical relationship to the other substantive variables. An inspection of the partial correlations between all main variables, controlling for ethnicity, showed that all significant correlations in Tables 9 and 10 remained significant. This provides confidence that common method bias is not an important issue in this study.

The fact that the sample was a combination of people involved in mentoring relationships that were a mix of formal and informal, was not ideal in collecting this data, although findings would have been less likely in such a mix. However, I did use the formal/informal variable as a control variable in all regression models.

Another limitation is that the data gathered was not matched pair data. Matched pair data would have allowed for richer analyses, particularly cross-dyad relationships, and this is an area for possible future research.

Generalizability is an area that is often a limitation of empirical studies. The participants in this study were in a mix of formal and informal relationships (see above), a mix of ages, genders, and years of experience in their current employment and were employed in various, unknown organizations. It would be interesting to see if comparable results would be reached in another collection of unmatched mentors and protégés. However, the data is the beginning of research of racially and/or ethnically diverse mentoring participants.

### **Implications for Future Research**

Implications for researchers can be found in this study. Cultural intelligence has been studied to a large degree using expatriates and with people from different countries. This study examined CQ of a largely US group and the diversity categories were racial and

ethnic. This study does not, through regression analyses, indicate the importance of studying CQ as people deal with racially and/or ethnically diverse others in mentoring relationships within their own home country, a situation that is happening more often in this globally connected world. Although there were positive, significant correlation relationships, the only significant regression finding was mentor CQ on relationship quality in the complete model.

This study has found the usefulness of EQ of both mentors and protégés involved in a racially/ethnically diverse mentoring relationship. Future studies of the implications of EQ of people in diverse mentoring relationships may lead to interesting and beneficial findings, both socially and economically. EQ may, indeed, be a factor that strengthens the SIP theory and allows participants to draw on larger numbers of memories that have been thoroughly considered, which then allows them to enter new relationships in a more positive manner, leading to both higher levels of perceived attitude homophily and relationship quality.

This study also confirms previous studies that attitude homophily is significantly important when studying mentors' and protégés' perception of mentoring relationship quality when that mentoring relationship is diverse. This may be important as members in a diverse relationship might be looking for some areas of similarity, which has been found to be significantly associated with partner liking of both mentors and protégés (Lankau et al., 2005). Correctly recognizing more issues of attitude homophily will make the new relationship a bit more comfortable so that the mentor/protégé will see the benefits of the relationship earlier than those with lower levels of attitude homophily.

As stated earlier, SIP leads to other variables being examined in mentoring studies, particularly those of self-esteem, neuroticism/emotional stability, and agreeableness of both partners.

It is possible that studying matched pairs of mentors and protégés within the same study may either strengthen or dispute the findings of this study. A matched pair study would enable the researchers to study cross-dyad relationships, such as if the CQ/EQ of a mentor related to perception of relationship quality by the protégé and vice versa.

An additional analysis of each mentoring partner's level of identity to his/her ethnic or racial group may prove interesting.

### Implications for HR Managers

Implications for practitioners are also found from this study. Since people from underrepresented classes generally receive mentors who are racially/ethnically different from themselves, training EQ to both mentors and protégés may make the mentoring relationship more beneficial to each of them and to the company or organization setting up the mentoring program. People can be trained in EQ. One group of researchers did an experiment with a control group receiving no training and another group receiving four sessions of two and a half hours each of EQ training over a four-week period (Nelis, Quoidbach, Mikolajczak, & Hansenne, 2009). Those receiving training showed a significant increase in EQ, as well as sustained increase.

Another implication of this finding would be that those who are interested in becoming involved in a formal mentoring program might be screened for levels of EQ. This screening might assist an organization to choose those people who would have a higher likelihood of a positive outcome, which would be those with high EQ. Testing and



training employees, especially those likely to become involved in diverse mentoring, in EQ could really make a positive impact in an organization that believes or has found that mentoring is important to its success.

Also, it may be beneficial for organizations that are setting up diverse mentoring relationships to encourage the mentoring pairs to discuss their attitudes and values in order to trigger a higher level of attitude homophily within the relationship. This higher level of attitude homophily might result in higher levels of relationship quality within those diverse pairs.

### Contributions

For future research, the fact that this study examined unmatched mentors and protégés raises the point that it would be interesting to study these constructs among matched mentoring pairs. Although it would be difficult to identify matched pairs while still retaining anonymity, confidentiality could still be offered. Further study on the information gathered in this study may include investigating data where the mentor is of the majority group of Caucasian, looking at differences between genders, splitting those in formal vs. informal mentoring relationships, splitting off those where the mentor is (or isn't) a direct supervisor of the protégé, and breaking up the participants by ethnic and/or racial background. Also, future studies may look at other results of mentoring relationships, such as that of partner satisfaction.

### Conclusion

In this study, I analyzed some important relationships between CQ, EQ, attitude homophily, and relationship quality within diverse mentoring relationships. This study

was comprised of participants who self-identified as being either a mentor or a protégé in a mentoring relationship with a racially/ethnically diverse partner. Diversity remains an important (and growing) issue in the U.S., and an organization's commitment to diversity may assist them in better utilizing minority members of their workforce. Social information processing theory may be used to examine these types of mentoring relationships as they add a level of discomfort as they begin.

Integrating social information processing, CQ, EQ, and mentoring literatures, I make several contributions to research and to the practice of management. One contribution has to do with my focus on racially/ethnically diverse mentoring relationships. For this group, my findings indicate that when organizations set up formal mentoring programs that will include diverse partnerships, EQ levels of both partners should be taken into consideration. For organizations using mentoring, a contribution of this study has to do with the importance of EQ and the provision of appropriate training to their employees. This study shows that organizations can enhance their mentoring programs by assessing and training those involved in EQ. Organizations may also want to help build perceptions of attitude homophily among members of mentoring relationships by getting them to discuss values and beliefs in order for them to find similarities among themselves.

Another contribution is studying attitude homophily of both mentoring partners and confirming its positive impact on perceptions of relationship quality. This may be a construct that could be added to existing research models to strengthen the studied constructs. Attitude homophily could be used as an independent or dependent variable in

mentoring studies, alongside current DVs. It could also be used as a mediator, similar to this study, when examining antecedents and results of mentoring.

## REFERENCES

- Allen, T. D. (2003). Mentoring others: A dispositional and motivational approach. *Journal of Vocational Behavior, 2003 FEB, Vol.62(1), P.134-154, 62(1), 134-154.* doi: 10.1016/s0001-8791(02)00046-5
- Allen, T. D., & Eby, L. T. (2003). Relationship effectiveness for mentors: Factors associated with learning and quality. *Journal of Management, 29(4), 469-486.* doi: 10.1016/s0149-2063\_03\_00021-7
- Allen, T. D., & Eby, L. T. (2004). Factors related to mentor reports of mentoring functions provided: Gender and relational characteristics. *Sex Roles, 50(1/2), 129-139.*
- Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for proteges: A meta-analysis. *Journal of Applied Psychology, 89(1), 127-136.*
- Allen, T. D., & O'Brien, K. E. (2007). Formal mentoring programs and organizational attraction. *Human Resource Development Quarterly, 2006, Vol.17(1), P.43-58, 17(1), 43-58.* doi: 10.1002/hrdq.1160
- Allen, T. D., & Poteet, M. L. (1999). Developing effective mentoring relationships: strategies from the mentor's viewpoint. *Career Development Quarterly, 48(1), 59-73.*
- Allen, T. D., Poteet, M. L., & Burroughs, S. M. (1997). The mentor's perspective: A qualitative inquiry and future research agenda. *Journal of Vocational Behavior, 51(1), 70-89.*

- Allen, T. D., Poteet, M. L., & Russell, J. E. A. (2000). Protege selection by mentors: What makes the difference? *Journal of Organizational Behavior, 21*(3), 271.
- Allen, T. D., Poteet, M. L., Russell, J. E. A., & Dobbins, G. H. (1997). A field study of factors related to supervisors' willingness to mentor others. *Journal of Vocational Behavior, 50*, 1-22.
- Alon, I., & Higgins, J. M. (2005). Global leadership success through emotional and cultural intelligence. *Business Horizons, 48*(6), 12.
- Andersen, S. M., Klatzky, R. L., & Murray, J. (1990). Traits and social stereotypes: Efficiency differences in social information processing. *Journal of Personality and Social Psychology, 59*(2), 192-201. doi: 10.1037/0022-3514.59.2.192
- Ang, S., Van Dyne, L., & Koh, C. (2006). Personality correlates of the four-factor model of cultural intelligence. *Group & Organization Management, 31*(1), 100-123.
- Ang, S., Van Dyne, L., Koh, C., Ng, K.-Y., Templer, K. J., Tay, C., & Chandrasekar, N. A. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance. *Management and Organization Review, 3*(3), 335.
- Aryee, S., Lo, S., & Kang, I.-L. (1999). Antecedents of early career stage mentoring among Chinese employees. *Journal of Organizational Behavior, 20*(5), 563.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review, 14*(1), 20.
- Athey, S., Avery, C., & Zemsky, P. (2000). Mentoring and diversity. *American Economic Review, 90*(4), 765-786.

- Avery, D. R., Tonidandel, S., & Phillips, M. G. (2008). Similarity on sports sidelines: How mentor-protege sex similarity affects mentoring. *Sex Roles, 58*(1-2), 72-80.
- Barratt, C., Bergman, M., & Thompson, R. (2014). Women in Federal law enforcement: The role of gender role orientations and sexual orientation in mentoring. *Sex Roles, 71*(1-2), 21-32. doi: 10.1007/s11199-014-0388-2
- Barrett, I. C., Cervero, R. M., & Johnson-Bailey, J. (2004). The career development of black human resource developers in the United States. *Human Resource Development International, 7*(1), 85-100.
- Bennetts, C. (2002). Traditional mentor relationships, intimacy, and emotional intelligence. *International Journal of Qualitative Studies in Education, 15*(2), 155-170.
- Berger, C. R., & Clatterbuck, G. W. (1976). *Attitude similarity and attributional information as determinants of uncertainty reduction and interpersonal attraction*. Paper presented at the International Communication Association, Portland, OR.
- Blake-Beard, S. D. (1999). The costs of living as an outsider within: An analysis of the mentoring relationships and career success of black and white women in the corporate sector. *Journal of Career Development, 26*(1), 21-36.
- Blake-Beard, S. D., Bayne, M. L., Crosby, F. J., & Muller, C. B. (2011). Matching by race and gender in mentoring relationships: Keeping our eyes on the prize. *Journal of Social Issues, 67*(3), 622-643. doi: 10.1111/j.1540-4560.2011.01717.x
- Blickle, G., Schneider, P. B., Meurs, J. A., & Perrewé, P. L. (2010). Antecedents and consequences of perceived barriers to obtaining mentoring: A longitudinal

- investigation. *Journal of Applied Social Psychology*, 40(8), 1897-1920. doi: 10.1111/j.1559-1816.2010.00644.x
- Boyatzis, R. E. (2006). Intentional change theory from a complexity perspective. *Journal of Management Development*, 25, 607-623.
- Boyatzis, R. E. (2007). Mentoring for intentional behavior change. In B. R. Ragins & K. E. Kram (Eds.), *The handbook of mentoring at work: Theory, research, and practice* (pp. 447-470). Thousand Oaks: Sage Publications, Inc.
- Brown, B. P., Zablah, A. R., & Bellenger, D. N. (2008). The role of mentoring in promoting organizational commitment among black managers: An evaluation of the indirect effects of racial similarity and shared racial perspectives. *Journal of Business Research*, 61(7), 732-738.
- Byrne, D. (1971). *The attraction paradigm*. New York: Academic Press.
- Carvin, B. N. (2011). The hows and whys of group mentoring. *Industrial & Commercial Training*, 43(1), 49-52.
- Chao, G. T., Walz, P. M., & Gardner, P. D. (1992). Formal and informal mentorships: A comparison on mentoring functions and contrast with nonmentored counterparts. *Personnel Psychology*, 45(3), 619-636.
- Cherniss, C. (2007). The role of emotional intelligence in the mentoring process. In B. R. Ragins & K. E. Kram (Eds.), *The Handbook of Mentoring at Work*. Thousand Oaks, CA: Sage Publications.
- Chun, J. U., Sosik, J. J., & Yun, N. Y. (2012). A longitudinal study of mentor and protégé outcomes in formal mentoring relationships. *Journal of Organizational Behavior*, 33(8), 1071-1094. doi: 10.1002/job.1781

- Clawson, J. G., & Kram, K. E. (1984). Managing cross-gender mentoring. *Business Horizons*, 27(3), 22.
- Clutterbuck, D., & Ragins, B. R. (2002). *Mentoring and diversity: An international perspective*. Oxford: Butterworth-Heinemann.
- Cohen, J., Cohen, P., Aiken, L. S., & West, G. (2003). *Applied multiple regression -- Correlation analysis for the behavioral sciences* (3rd ed.). Mahway, N.J.: Lawrence Erlbaum.
- Cox. (1991). The multicultural organization. *Academy of Management Executive*, 5(2), 34-47.
- Cox, T. (1991). The multicultural organization. *Academy of Management Executive*, 5(2), 34-47.
- Cox, T. J., & Nkomo, S. M. (1990). Invisible men and women: A status report on race as a variable in organization behavior research. *Journal of Organizational Behavior* (1986-1998), 11(6), 419.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulatino of social informatoin-processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115(1), 74-101.
- D'Zurilla, T. J., & Goldfried, M. R. (1971). Problem solving and behavior modification. *Journal of Abnormal Psychology*, 78(1), 107-126. doi: 10.1037/h0031360
- Daly, J. A., McCroskey, J. C., & Falcione, R. L. (1976). *Homophily-heterophily and the prediction of supervisor satisfaction*. Paper presented at the International Communication Association Conference, Portland, OR.



- Dansereau, F. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior and Human Performance*, 1975, Vol.13(1), P.46-78, 13(1), 46-78. doi: 10.1016/0030-5073(75)90005-7
- Dansky, K. H. (1996). The effect of group mentoring on career outcomes. *Group & Organization Management*, 21(1), 5-21.
- DeCastro, R., Griffith, K., Ubel, P., Stewart, A., & Jagsi, R. (2014). Mentoring and the career satisfaction of male and female academic medical faculty *Academic Medicine*, 89(2), 301-311.
- Dodge, K. A. (1986). A social information processing model of social competence in children. In M. Perimutter (Ed.), *The Minnesota Symposium on Child Psychology* (Vol. 18, pp. 77-125). Hillsdale, NJ: Erlbaum.
- Dreher, G. F., & Chargois, J. A. (1998). Gender, mentoring experiences, and salary attainment among graduates of an historically black university. *Journal of Vocational Behavior*, 53(3), 401-416. doi: <http://dx.doi.org/10.1006/jvbe.1997.1622>
- Dreher, G. F., & Cox Jr, T. H. (1996). Race, gender, and opportunity: A study of compensation attainment and the establishment of mentoring relationships. *Journal of Applied Psychology*, 81(3), 297-308.
- Earley, P. C., & Ang, S. (2003). *Cultural intelligence : Individual interactions across cultures*. Stanford, CA: Stanford University Press.
- Earley, P. C., & Mosakowski, C. (2004). Cultural intelligence. *Harvard Business Review*, 82(10), 139.

- Earley, P. C., & Peterson, R. S. (2004). The elusive cultural chameleon: Cultural intelligence as a new approach to intercultural training for the global manager. *Academy of Management Learning & Education*, 3(1), 100.
- Eby, Allen, T. D., Hoffman, B. J., Baranik, L. E., Sauer, J. B., Baldwin, S., . . . Evans, S. C. (2013). An interdisciplinary meta-analysis of the potential antecedents, correlates, and consequences of protégé perceptions of mentoring. *Psychological Bulletin*, 139(2), 441-476. doi: 10.1037/a0029279
- Eby, Butts, M. M., Durley, J., & Ragins, B. R. (2010). Are bad experiences stronger than good ones in mentoring relationships? Evidence from the protégé and mentor perspective. *Journal of Vocational Behavior*, 77(1), 81-92. doi: <http://dx.doi.org/10.1016/j.jvb.2010.02.010>
- Eby, Lockwood, & Butts. (2006). Perceived support for mentoring: A multiple perspectives approach. *Journal of Vocational Behavior*, 68(2), 267-291. doi: <http://dx.doi.org/10.1016/j.jvb.2005.07.003>
- Eby, & Lockwood, A. (2005). Proteges' and mentors' reactions to participating in formal mentoring programs: A qualitative investigation. *Journal of Vocational Behavior*, 67, 441-458.
- Eddy, E., Tannenbaum, S., Alliger, G., D'Abate, C., & Givens, S. (2001). Mentoring in industry: The top 10 issues when building and supporting a mentoring program: Naval Air Warfare Training Systems Division.
- Ekman, P. (1980). *The face of man: Expressions of universal emotions in a New Guinea village*. New York, NY: Garland STPM Press.

- Ensher, E. A., Grant-Vallone, E. J., & Marelich, W. D. (2002). Effects of perceived attitudinal and demographic similarity on protégés' support and satisfaction gained from their mentoring relationships. *Journal of Applied Social Psychology, 32*(7), 1407-1430.
- Fagenson, E. A. (1992). Mentoring: Who needs it? A comparison of proteges' and non-proteges' needs for power, achievement, affiliation, and autonomy. *Journal of Vocational Behavior, 48*, 48-60.
- Fagenson-Eland, E. A., Baugh, S. G., & Lankau, M. J. (2005). Seeing eye to eye: A dyadic investigation of the effect of relationship demography on perceptions of mentoring activities. *Career Development International, 10*(6/7), 460-477.
- Feldman Barrett, L., Gross, J., Christensen, T., & Benvenuto, M. (2001). Knowing what you're feeling and knowing what to do about it: Mapping the relation between emotion differentiation and emotion regulation. *Cognition and Emotion, 15*, 713-724.
- Feldman, D. C., Folks, W. R., & Turnley, W. H. (1999). Mentor-protege diversity and its impact on international internship experiences. *Journal of Organizational Behavior, 20*(5), 597.
- Feldman, D. C., & Thomas, D. C. (1992). Career management issues facing expatriates. *Journal of International Business Studies, 23*(2), 271.
- Finkelstein, L. M., Allen, T. D., & Rhoton, L. A. (2003). An examination of the role of age in mentoring relationships. *Group & Organization Management, 28*(2), 249-281.

- Ghosh, R., & Reio Jr, T. G. (2013). Career benefits associated with mentoring for mentors: A meta-analysis. *Journal of Vocational Behavior*, 83(1), 106-116. doi: <http://dx.doi.org/10.1016/j.jvb.2013.03.011>
- Goleman, D. (1994). *Emotional Intelligence*. New York, NY: Bantam Books.
- Goleman, D. (1998). *Working with emotional intelligence*. New York, NY: Bantam Books.
- Gonzalez-Figueroa, E., & Young, A. M. (2005). Ethnic identity and mentoring among Latinas in professional roles. *Cultural Diversity and Ethnic Minority Psychology*, 11(3), 213-226.
- Green-Powell, P. (2007). The many rewards of mentoring. *NAAAS Conference Proceedings*, 408.
- Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, 33(1), 64.
- Gregory, R., Prifling, M., & Beck, R. (2009). The role of cultural intelligence for the emergence of negotiated culture in IT offshore outsourcing projects. *Information Technology & People*, 22(3), 223-241. doi: <http://dx.doi.org/10.1108/09593840910981428>
- Grewal, D., & Salovey, P. (2005). Feeling Smart: The Science of Emotional Intelligence. *American Scientist*, 93(4), 330-339.
- Hamilton, D. L., Sherman, S. J., & Ruvolo, C. M. (1990). Stereotype-based expectancies: Effects on information processing and social behavior. *Journal of Social Issues*, 46(2), 35-60.

- Hamilton, D. L., Stroessner, S. J., & Driscoll, D. M. (1994). Social cognition and the study of stereotyping. In P. G. Devine, D. L. Hamilton, & T. M. Ostrom (Eds.), *Social cognition: Impact on social psychology*. (pp. 291-321). San Diego, CA US: Academic Press.
- Hardy, L. C. (1998). Mentoring: A long-term approach to diversity. *HR Focus*, 75(7), S11.
- Hartmann, N. N., Rutherford, B. N., Feinberg, R., & Anderson, J. G. (2014). Antecedents of mentoring: Do multi-faceted job satisfaction and affective organizational commitment matter? *Journal of Business Research*, 67(9), 2039-2044. doi: <http://dx.doi.org/10.1016/j.jbusres.2013.10.006>
- Hebl, M. R., Tonidandel, S., & Ruggs, E. N. (2012). The impact of like-mentors for gay/lesbian employees. *Human Performance*, 25(1), 52-71.
- Hirschfield, R. R., Thomas, C. H., & Lankau, M. J. (2006). Achievement and avoidance motivational orientations in the domain of mentoring. *Journal of Vocational Behavior*, 68, 524-537.
- Hogg, M. A. (2006). Social identity theory. In P. J. Burke (Ed.), *Contemporary Social Psychological Theories* (pp. 111-136). Stanford, CA: Stanford University Press.
- Hu, Baranik., & Wu. (2014). Antidotes to dissimilar mentor–protégé dyads. *Journal of Vocational Behavior*, 85(2), 219-227. doi: <http://dx.doi.org/10.1016/j.jvb.2014.07.002>
- Hu, & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3(4), 424-453. doi: 10.1037/1082-989x.3.4.424

- Hu, Wang, Yang, & Wu. (2014). When mentors feel supported: Relationships with mentoring functions and protégés' perceived organizational support. *Journal of Organizational Behavior*, 35(1), 22-37. doi: 10.1002/job.1851
- Hu, C., Baranik, L. E., & Wu, T.-Y. (2014). Antidotes to dissimilar mentor–protégé dyads. *Journal of Vocational Behavior*, 85(2), 219-227. doi: <http://dx.doi.org/10.1016/j.jvb.2014.07.002>
- Hu, C., Wang, S., Yang, C.-C., & Wu, T.-y. (2014). When mentors feel supported: Relationships with mentoring functions and protégés' perceived organizational support. *Journal of Organizational Behavior*, 35(1), 22-37. doi: 10.1002/job.1851
- Jackson, S. E., Brett, J. F., Sessa, V. I., Cooper, D. M., Julin, J. A., & Peyronnin, K. (1991). Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions, and turnover. *Journal of Applied Psychology*, 76(5), 675-689. doi: 10.1037/0021-9010.76.5.675
- Johnson, J. P., Lenartowicz, T., & Apud, S. (2006). Cross-cultural competence in international business: Toward a definition and a model. *Journal of International Business Studies*, 37(4), 525.
- Kaye, B. (1999). Reinventing the mentoring process. *Human Resource Planning*, 22(1), 23-24.
- Knouse, S. B., Hill, V. D., & Webb, S. C. (2005). Surrogate sages: Mentoring alternatives for members of underrepresented groups of professionals. *Diversity Factor*, 13(2), 11-17.
- Kram, K. E. (1983). Phases of the mentor relationship. *Academy of Management Journal*, 26(4), 608-625.

- Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life*. Glenview, IL: Scott, Foresman and Company.
- Kwan, H. K., Liu, J., & Yim, F. H.-k. (2011). Effects of mentoring functions on receivers' organizational citizenship behavior in a Chinese context: A two-study investigation. *Journal of Business Research*, 64(4), 363-370. doi: <http://dx.doi.org/10.1016/j.jbusres.2010.04.003>
- Lankau, M. J., Riordan, C. M., & Thomas, C. H. (2005). The effects of similarity and liking in formal relationships between mentors and proteges *Journal of Vocational Behavior*, 67, 252-265.
- Lankau, M. J., & Scandura, T. A. (2002). An investigation of personal learning in mentoring relationships: Content, antecedents, and consequences. *Academy of Management Journal*, 45(4), 779-790.
- Lawrence, B. S. (1987). An organizational theory of age effects. In S. Bacharach & N. DiTomaso (Eds.), *Research in the sociology of organizations* (Vol. 5, pp. 37-71). Greenwich, CT: JAL.
- Lawrence, B. S. (1988). New wrinkles in the theory of age: Demography, norms, and performance ratings. *Academy of Management Journal*, 31, 309-337.
- Leck, J., & Orser, B. (2013). Fostering trust in mentoring relationships: an exploratory study. *Equality, Diversity and Inclusion: An International Journal*, 32(4), 410-425. doi: <http://dx.doi.org/10.1108/EDI-01-2010-0007>
- Lincoln, J. R., & Miller, J. (1979). Work and friendship ties in organizations: A comparative analysis of relational networks. *Administrative Science Quarterly*, 24(2), 181-199.

- Lyons, B. D., & Oppler, E. S. (2004). The effects of structural attributes and demographic characteristics on protégé satisfaction in mentoring programs. *Journal of Career Development, 30*(3), 215-229.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods, 7*(1), 83-104. doi: 10.1037/1082-989x.7.1.83
- Martin, S. M., & Sifers, S. K. (2012). An evaluation of factors leading to mentor satisfaction with the mentoring relationship. *Children and Youth Services Review, 34*(5), 940-945. doi: <http://dx.doi.org/10.1016/j.chilyouth.2012.01.025>
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: educational implications*. New York, NY: Basic Books.
- McCroskey, McCroskey, & Richmond. (2006). Analysis and improvement of the measurement of interpersonal attraction and homophily. *Communication Quarterly, 54*(1), 1-31.
- McCroskey, J. C. (1975). The development of a measure of perceived homophily in interpersonal communication. *Human Communication Research, 1*(4), 323-332.
- McCroskey, L. L., McCroskey, J. C., & Richmond, V. P. (2006). Analysis and improvement of the measurement of interpersonal attraction and homophily. *Communication Quarterly V. 54 No. 1 (February 2006) P. 1-31, 54*(1), 1-31. doi: 10.1080/01463370500270322
- McDonald, M. L., & Westphal, J. D. (2013). Access denied: Low mentoring of women and minority first-time directors and its negative effects on appointments to



- additional boards. *Academy of Management Journal*, 56(4), 1169-1198. doi: 10.5465/amj.2011.0230
- Milliken, F. J., & Martins, L. L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, 21(2), 402-433.
- Mullen, E. J. (1998). Vocational and psychosocial mentoring functions: Identifying mentors who serve both. *Human Resource Development Quarterly*, 9(4), 319-331.
- Nelis, D., Quoidbach, J., Mikolajczak, M., & Hansenne, M. (2009). Increasing emotional intelligence: (How) is it possible? *Personality and Individual Differences*, 47(1), 36-41. doi: <http://dx.doi.org/10.1016/j.paid.2009.01.046>
- Noe, R. A. (1988). Women and mentoring: A review and research agenda. *Academy of Management Review*, 13(1), 65-78.
- O'Brien, K. E., Biga, A., Kessler, S. R., & Allen, T. D. (2010). A meta-analytic investigation of gender differences in mentoring. *Journal of Management*, 36(2), 537-554.
- Ortiz-Walters, R., & Gilson, L. L. (2005). Mentoring in academia: An examination of the experiences of proteges of color. *Journal of Vocational Behavior*, 67, 459-475.
- Pfeffer, J. (1980). A partial test of the social information processing model of job attitudes. *Human Relations*, 3, 457-476.
- Phillips, K. W., Mannix, E. A., Neale, M. A., & Gruenfeld, D. H. (2004). Diverse groups and information sharing: The effects of congruent ties. *Journal of Experimental Social Psychology*, 40(4), 497-510.

- Preacher, K., & Hayes, A. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879-891. doi: 10.3758/brm.40.3.879
- Prisbell, M., & Andersen, J. F. (1980). The importance of perceived homophily, level of uncertainty, feeling good, safety, and self-disclosure in interpersonal relationships. *Communication Quarterly, 28*(3), 22-33.
- Ragins, B. R. (1995). Diversity, power, and mentorship in organizations: A cultural, structural, and behavioral perspective. In M. M. Chemers, M. A. Costanzo, & S. Oskamp (Eds.), *Diversity in organizations: New perspectives for a changing workplace* (pp. 91-132). Newbury Park, CA: Sage.
- Ragins, B. R. (1997). Diversified mentoring relationships in organizations: A power perspective. *Academy of Management Review, 22*(2), 482.
- Ragins, B. R. (2002). Understanding diversified mentoring relationships: Definitions, challenges and strategies. In D. Clutterbuck & B. R. Ragins (Eds.), *Mentoring and Diversity, An International Perspective*. Oxford: Butterworth-Heinemann.
- Ragins, B. R. (2007). Diversity and workplace mentoring relationships: A review and positive social capital approach. In T. D. Allen & L. T. Eby (Eds.), *Blackwell Handbook of Mentoring: A Multiple Perspective Approach*. Oxford: Blackwell Publishing.
- Ragins, B. R. (2011). Relational mentoring: A positive approach to mentoring at work. In K. Cameron & G. Spreitzer (Eds.), *The handbook of positive organizational scholarship*. New York, NY: Oxford University Press.

- Ragins, B. R., & Cotton, J. L. (1991). Easier said than done: Gender differences in perceived barriers to gaining a mentor. *Academy of Management Journal*, 34(4), 939-951.
- Ragins, B. R., & Cotton, J. L. (1993). Gender and willingness to mentor in organizations. *Journal of Management*, 19(1), 97.
- 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(6), 1177-1194.
- Ragins, B. R., & Gonzalez, J. A. (2003). Understanding diversity in organizations: Getting a grip on a slippery construct. In J. Greenberg (Ed.), *Organizational behavior: The state of the science* (2nd ed., pp. 125-163). Mahwah, NJ: Lawrence Erlbaum.
- Ragins, B. R., & Kram, K. E. (2007). The roots and meaning of mentoring. In B. R. Ragins & K. E. Kram (Eds.), *The handbook of mentoring at work: Theory, research, and practice*. Los Angeles, CA: Sage Publications.
- Ragins, B. R., & McFarlin, D. B. (1990). Perceptions of mentor roles in cross-gender mentoring relationships. *Journal of Vocational Behavior*, 37, 321-339.
- Ragins, B. R., & Scandura, T. A. (1997). The way we were: Gender and the termination of mentoring relationships. *Journal of Applied Psychology*, 1997, Vol. 82(6), P.945-953, 82(6), 945-953. doi: 10.1037/0021-9010.82.6.945
- Ragins, B. R., & Verbos, A. K. (2007). Positive relationships in action: Relational mentoring and mentoring schemas in the workplace. In J. E. Dutton & B. R.

- Ragins (Eds.), *Exploring Positive Relations at Work*. Mahwah, NJ: Lawrence Erlbaum & Associates.
- Ramaswami, A., Huang, J.-C., & Dreher, G. F. (2014). Mentoring across cultures: The role of gender and marital status in Taiwan and the U.S. *Journal of Business Research*, 67(12), 2542-2549. doi: <http://dx.doi.org/10.1016/j.jbusres.2014.03.013>
- Richard, O. C., Ismail, K. M., Bhuian, S. N., & Taylor, E. C. (2009). Mentoring in supervisor-subordinate dyads: Antecedents, consequences, and test of a mediation model of mentorship. *Journal of Business Research*, 62(11), 1110-1118. doi: <http://dx.doi.org/10.1016/j.jbusres.2008.09.007>
- Rockstuhl, T., & Ng, K. Y. (2008). The effects of cultural intelligence on interpersonal trust in multicultural teams. In S. Ang & L. Van Dyne (Eds.), *Handbook of Cultural Intelligence: Theory, Measurement, and Applications* (pp. 206-220). Armonk, NY: M.E. Sharpe, Inc.
- Rueywei, G., Shih-Ying, C., & Min-Lang, Y. (2014). Career outcome of employees: The mediating effect of mentoring. *Social Behavior & Personality: an international journal*, 42(3), 487-501.
- Rueywei, G., Shih-Ying, C., & Shin-Lung, L. E. E. (2011). Does mentoring work? The mediating effect of mentoring in China. *Social Behavior & Personality: an international journal*, 39(6), 807-824.
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23(2), 224-253.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, 9, 185-211.

- Sambunjak, D., Straus, S. E., & Marusic, A. (2010). A systematic review of qualitative research on the meaning and characteristics of mentoring in academic medicine. *JGIM: Journal of General Internal Medicine*, 25(1), 72-78.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40(3), 437-453.
- Schroeder, D. A., Penner, L. A., Dovidio, J. F., & Pilivian, J. A. (1995). *The psychology of helping and altruism*. New York: McGraw-Hill.
- Schröder-Abé, M., & Schütz, A. (2011). Walking in each other's shoes: Perspective taking mediates effects of emotional intelligence on relationship quality. *European Journal of Personality*, 25(2), 155-169. doi: 10.1002/per.818
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25(2), 167-177. doi: [http://dx.doi.org/10.1016/S0191-8869\(98\)00001-4](http://dx.doi.org/10.1016/S0191-8869(98)00001-4)
- Sheldon, L. K., & Ellington, L. (2008). Application of a model of social information processing to nursing theory: How nurses respond to patients. *Journal of Advanced Nursing*, 64(4), 388-398. doi: 10.1111/j.1365-2648.2008.04795.x
- Shen, Y., & Kram, K. E. (2011). Expatriates' developmental networks: network diversity, base, and support functions. *Career Development International*, 16(6), 528-552. doi: <http://dx.doi.org/10.1108/13620431111178317>
- SHRM. (2006). Outcomes of Diversity Initiatives. Retrieved November 11, 2007, 2007, from [http://www.shrm.org/research/briefly\\_published/Workplace%20Diversity%20Series%20Part%20II\\_%20Outcomes%20of%20Diversity%20Initiatives.asp](http://www.shrm.org/research/briefly_published/Workplace%20Diversity%20Series%20Part%20II_%20Outcomes%20of%20Diversity%20Initiatives.asp)

- Singh, R., Ragins, B. R., & Tharenou, P. (2009a). What matters most? The relative role of mentoring and career capital in career success. *Journal of Vocational Behavior*, 75(1), 56-67. doi: <http://dx.doi.org/10.1016/j.jvb.2009.03.003>
- Singh, R., Ragins, B. R., & Tharenou, P. (2009b). Who gets a mentor? A longitudinal assessment of the rising star hypothesis. *Journal of Vocational Behavior*, 74(1), 11-17. doi: 10.1016/j.jvb.2008.09.009
- Smith, J. W., Smith, W. J., & Markham, S. E. (2000). Diversity issues in mentoring academic faculty. *Journal of Career Development*, 26(4), 251-262.
- Soper, D. S. (2013). A-priori sample size calculator for multiple regression software. Retrieved 5/21/13, 2013, from <http://www.danielsoper.com/statcalc>
- Sosik, J. J., & Godshalk, V. M. (2000). The role of gender in mentoring: Implications for diversified and homogenous mentoring relationships. *Journal of Vocational Behavior*, 57, 102-122.
- Specht, J. A. (2013). Mentoring relationships and the levels of role conflict and role ambiguity experienced by novice nursing faculty. *Journal of Professional Nursing*, 29(5), e25-e31. doi: <http://dx.doi.org/10.1016/j.profnurs.2013.06.006>
- Syed, M., Goza, B. K., Chemers, M. M., & Zurbriggen, E. L. (2012). Individual differences in preferences for matched-ethnic mentors among high-achieving ethnically diverse adolescents in STEM. *Child Development*, 83(3), 896-910. doi: 10.1111/j.1467-8624.2012.01744.x
- Tajfel, H. (1981). *Human groups and social categories*. New York, NY: Cambridge University Press.

- Tharenou, P. (2005). Does mentor support increase women's career advancement more than men's? The differential effects of career and psychosocial support. *Australian Journal of Management, 30*(1), 77-109.
- Thomas. (1990). The impact of race on managers' experiences of developmental relationships (mentoring and sponsorship): An intra-organizational study. *Journal of Organizational Behavior, 11*(6), 479-492.
- Thomas. (1993). Racial dynamics in cross-race developmental relationships. *Administrative Science Quarterly, 38*(2), 169-194.
- Thomas, Hu, C., Gewin, A. G., Bingham, K., & Yanchus, N. (2005). The roles of protege race, gender, and proactive socialization attempts on peer mentoring. *Advances in Developing Human Resources, 7*(4), 540-555.
- Thomas, D. A. (1990). The impact of race on managers' experiences of developmental relationships (mentoring and sponsorship): An intra-organizational study. *Journal of Organizational Behavior, 11*(6), 479-492.
- Thomas, D. A. (1993). Racial dynamics in cross-race developmental relationships. *Administrative Science Quarterly, 38*(2), 169-194.
- Tootoonchy, M. (2012). *Conflict and communication among engineers*. (Master of Business (Research)), Queensland University of Technology, Queensland.
- Tsui, A. S., Egan, T. D., & O Reilly, C. A., III. (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly, 37*(4), 549.
- Turban, D. B., & Dougherty, T. W. (1994). Role of protege personality in receipt of mentoring and career success. *Academy of Management Journal, 37*(3), 688.

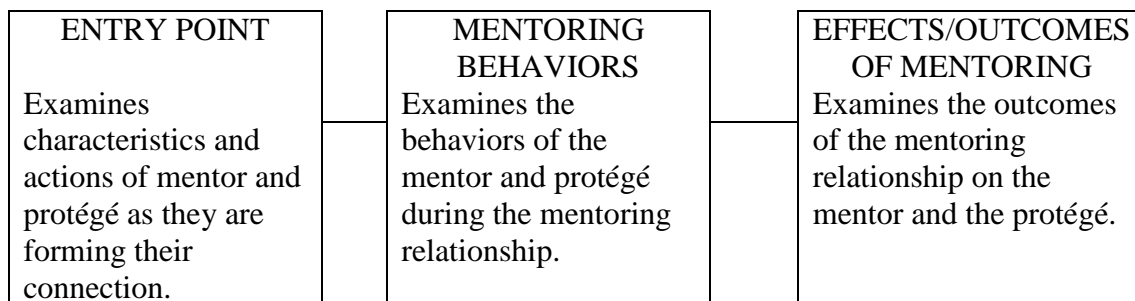
- Viator, R. E. (2001). An examination of African Americans' access to public accounting mentors: Perceived barriers and intentions to leave. *Accounting, Organizations and Society*, 26(6), 541.
- Waldeck, J. H., Orrego, V. O., Plax, T. G., & Kearney, P. (1997). Graduate student/faculty mentoring relationships: Who gets mentored, how it happens, and to what end. *Communication Quarterly*, 45(3), 93-109. doi: 10.1080/01463379709370054
- Wallace, J. E. (2001). The benefits of mentoring for female lawyers. *Journal of Vocational Behavior*, 58, 366-391.
- Walther, J. B. (2008). Social information processing theory. In L. A. Baxter & D. O. Braithewaite (Eds.), *Engaging theories in interpersonal communication: Multiple perspectives*. (pp. 391-404). Thousand Oaks, CA US: Sage Publications, Inc.
- Wanberg, C. R., Welsh, E. T., & Hezlett, S. A. (2003). Mentoring research: A review and dynamic process model. *Research in Personnel and Human Resources Management*, 22, 39-124.
- Weinberg, F. J., & Lankau, M. J. (2011). Formal mentoring programs: A mentor-centric and longitudinal analysis. *Journal of Management*, 37(6), 1527-1557.
- Wilson, J. A., & Elman, N. S. (1990). Organizational benefits of mentoring. *The Executive*, 4(4), 88-94.
- Yzerbyt, V., & Carnaghi, A. (2008). Stereotype change in the social context. In Y. Kashima, K. Fiedler, & P. Freytag (Eds.), *Stereotype dynamics: Language-based approaches to the formation, maintenance, and transformation of stereotypes*. (pp. 29-57). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.



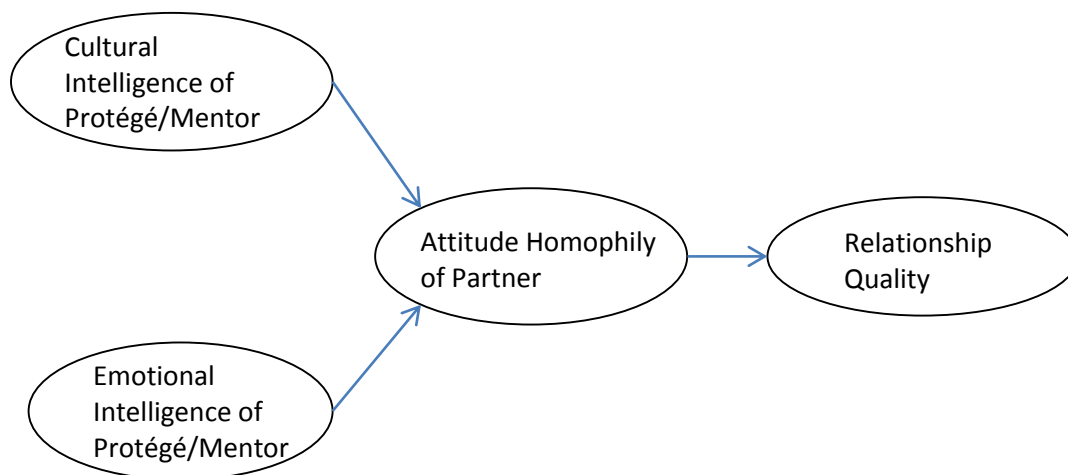
Zeidner, M., & Kloda, I. (2013). Emotional intelligence (EI), conflict resolution patterns, and relationship satisfaction: Actor and partner effects revisited. *Personality and Individual Differences, 54*(2), 278-283. doi:

<http://dx.doi.org/10.1016/j.paid.2012.09.013>

Zhuang, W.-L., Wu, M., & Wen, S.-L. (2013). Relationship of mentoring functions to expatriate adjustments: comparing home country mentorship and host country mentorship. *International Journal of Human Resource Management, 24*(1), 35-49. doi: 10.1080/09585192.2012.669784

**FIGURE 1: MENTORING POINTS**

**FIGURE 2: MODEL OF CQ AND EQ ON MENTOR/PROTÉGÉ ATTITUDE HOMOPHILY AND RELATIONSHIP QUALITY IN DIVERSE MENTORING RELATIONSHIPS**



**TABLE 1: Mentoring Functions and Definitions \*(Kram, 1985) and  
\*\*(Ragins, 2011)**

MENTOR FUNCTION	DEFINITION*
Career/Sponsorship	Actively supports an individual for lateral transfers and promotions
Career/Protection	Shields an individual from potentially damaging contact with key senior figures in the organization
Career/Exposure and Visibility	Gives an individual assignments that require written and personal contact with key senior figures
Career/Challenging Assignments	Helps an individual prepare for greater responsibility by providing challenging work along with technical training and ongoing feedback that encourages skills development and enables a sense of accomplishment
Career/Coaching	Shares advice, information, strategies, and ideas that help an individual attain objectives, achieve recognition, and achieve career aspirations
Psychosocial/Friendship	Shares informal work and social experiences resulting in mutual liking and understanding
Psychosocial/Counseling	Uses active listening to enable an employee to talk openly about personal concerns about self and career, offering alternative perspectives and helping to resolve problems
Psychosocial/Acceptance and/or Confirmation	Conveys positive regard, providing support and encouragement

**TABLE 1: Mentoring Functions and Definitions \*Kram 1985 and \*\*Ragins 2011  
(Continued)**

MENTOR FUNCTION	DEFINITION*
Psychosocial/Role Modeling	Serves as a model for the junior colleague to emulate and respect
Psychosocial/Parent	Either/both members construe the relationship as a parent/child relationship
Psychosocial/Social	Participates in informal, one-on-one social activities outside of work

**TABLE 1: Mentoring Functions and Definitions \*Kram 1985 and \*\*Ragins 2011  
(Continued)**

MENTOR AND PROTÉGÉ FUNCTION	DEFINITION**
Relational/Personal Learning and Growth	Partners share information and knowledge as well as personal growth and development
Relational/Inspiration	Partners see possibilities through each other, leading to a fresh perspective and new behaviors
Relational/Affirmation of Selves	Partners view each other in terms of their ideal selves and help their partners engage in behaviors that are aligned with their ideal selves
Relational/Reliance on communal norms	Both focus on their partner's well-being, and take actions in response to their partner's needs without expecting repayment; both take responsibility for their partner's welfare
Relational/Shared influence and mutual respect	Both are influenced by their partner's perspectives and are interdependent; relationship includes admiration, appreciation, and encouragement from both sides
Relational/Trust and commitment	Partners trust each other based on commitment to the relationship and to the partner

**TABLE 2: Protégé Findings at Entry Point**

Independent Variable	Dependent Variable			
	Willingness to be Mentored	Likely to Become a Protégé (vs. nonprotégés)	Likely to be Selected as a Protégé	Likely to have Informal Mentor
<b>PERSONALITY</b>				
Emotional stability				
(Latinas') Ethnic identity	Not significant (Gonzalez-Figueroa & Young, 2005)			
Extroversion				
Internal locus of control				
Need for achievement		Positive (Fagenson, 1992)		
Need for affiliation		Not significant (Fagenson, 1992)		
Need for autonomy		Not significant (Fagenson, 1992)		
Need for power		Positive (Fagenson, 1992)		
Perceived ability/potential			Pos. (Allen et al., 2000)	
Self-monitoring				
Type A personality				
Advancement expectations		Positive (Singh et al., 2009b)		
Proactive career behaviors		Positive (Singh et al., 2009b)		
<b>DEMOGRAPHIC</b>				
Gender		Positive for females (Smith et al., 2000) Positive for females (Waldeck et al., 1997) Not significant (O'Brien et al., 2010)	Not significant (Thomas et al., 2005)	
Race		Not significant (Smith et al., 2000) Negative for racial minorities (McDonald & Westphal, 2013)	Not significant (Thomas et al., 2005)	Negative for blacks (Viator, 2001)
Marital Status		Negative for married U.S. women (Ramaswami et al., 2014)		

**TABLE 2: Protégé Findings at Entry Point (Continued)**

Independent Variable	Dependent Variable			
	Willingness to be Mentored	Likely to Become a Protégé (vs. nonprotégés)	Likely to be Selected as a Protégé	Likely to have Informal Mentor
<b>HISTORY</b>				
Length of employment				
Past mentoring experience				
Strength of promotional history		Positive (Singh et al., 2009b)		
<b>ORGANIZATION/JOB</b>				
Individual development culture				
Information sharing norms				
Opportunities for interactions on the job				



**TABLE 2: Protégé Findings at Entry Point (Continued)**

Independent Variable	Dependent Variable			
	Relationship Initiated by Protégé	Likely to Receive a White, Male Mentor	Likely to Desire Similar Mentor	Perceptions of Barriers to Mentoring
PERSONALITY				
Emotional stability	Positive (Turban & Dougherty, 1994)			
(Latinas') Ethnic identity			Positive (Gonzalez-Figueroa & Young, 2005)	
Extroversion	Not significant (Aryee et al., 1999)			
Internal locus of control	Positive (Aryee et al., 1999) Positive (Turban & Dougherty, 1994)			
Need for achievement				
Need for affiliation				
Need for autonomy				
Need for power				
Perceived ability/potential				
Self-monitoring	Positive (Aryee et al., 1999) Positive (Turban & Dougherty, 1994)			
Type A personality	Not significant (Aryee et al., 1999)			

**TABLE 2: Protégé Findings at Entry Point (Continued)**

Independent Variable	Dependent Variable				
	Relationship Initiated by Protégé	Likely to Receive a White, Male Mentor	Likely to Desire Similar Mentor	Perceptions of Barriers to Mentoring	Formulation of Relationship
<b>DEMOGRAPHIC</b>					
Gender		Positive for males (Dreher & Cox Jr, 1996)		Positive for females (Ragins & Cotton, 1991) Not significant (Blickle et al., 2010)	Not significant for informal relationships (Allen & Eby, 2003)
Race		Positive for whites (Dreher & Cox Jr, 1996) Negative for Black and Hispanic MBAs (Dreher & Chargois, 1998)	Positive for ethnic minorities (Syed et al., 2012)	Positive for African Americans (Viator, 2001)	
Socioeconomic Origin				Negative (Blickle et al., 2010)	
<b>HISTORY</b>					
Length of employment				Negative (Ragins & Cotton, 1991)	
Past mentoring experience				Negative (Ragins & Cotton, 1991)	
<b>ORGANIZATION/JOB</b>					
Individual development culture	Not significant (Aryee et al., 1999)				
Information sharing norms	Not significant (Aryee et al., 1999)				
Opportunities for interactions on the job	Positive (Aryee et al., 1999)				

**TABLE 3: Mentor Findings at Entry Point**

Independent Variable	Dependent Variable		
	Willingness to Mentor	Perceived Barriers to Mentor	Likely to Select Protégés Based On...
<b>PERSONALITY</b>			
Advancement aspirations			Positive for Protégés Perceived to be in need of help (Allen et al., 2000)
Helpfulness	Positive (Allen, 2003)		
Internal locus of control	Positive (Allen, Poteet, Russell, et al., 1997)	Not significant (Allen, Poteet, Russell, et al., 1997)	
Job-induced stress	Not significant (Allen, Poteet, & Burroughs, 1997)	Negative (Allen, Poteet, Russell, et al., 1997)	
Other-oriented empathy	Positive (Allen, 2003)		
Perceive greater barriers to mentoring			Negative for protégés perceived to be higher in ability/potential (Allen et al., 2000)
Proactivity	Positive (Thomas et al., 2005)		
Upward Striving	Positive (Allen, Poteet, Russell, et al., 1997)	Not significant (Allen, Poteet, Russell, et al., 1997)	
<b>DEMOGRAPHICS</b>			
Age	Negative (Allen, Poteet, & Burroughs, 1997) Not significant (Ragins & Cotton, 1993)	Not significant (Allen, Poteet, & Burroughs, 1997)	
Education	Positive (Allen, Poteet, Russell, et al., 1997)		
Gender	Not significant (Allen, Poteet, Russell, et al., 1997) Not significant (Ragins & Cotton, 1993) Positive for females (Thomas et al., 2005)	Not significant (Allen, Poteet, Russell, et al., 1997) Positive for females (Ragins & Cotton, 1993)	Significant for female mentors for protégés' perceived ability (Allen et al., 2000)

**TABLE 3: Mentor Findings at Entry Point (Continued)**

HISTORY	Willingness to Mentor	Perceived Barriers to Mentor	Likely to Select Protégés Based On...
Experience as mentor	Positive (Allen, Poteet, Russell, et al., 1997)		
Experience as protégé	Positive (Allen, Poteet, Russell, et al., 1997) Positive (Ragins & Cotton, 1993)		
Length of employment	Negative (Ragins & Cotton, 1993)		
Organizational rank	Positive (Ragins & Cotton, 1993)		
Quality of relationship with supervisor	Positive (Allen, Poteet, Russell, et al., 1997)		

**TABLE 4: Protégé Findings at Mentoring Behavior Point**

Independent Variable	Dependent Variable				
	Mentoring Received	Psychosocial Support	Career Support	Role Modeling	Other Support
<b>PERSONALITY</b>					
Extroversion	Not significant (Aryee et al., 1999)				
Internal locus of control	Not significant (Aryee et al., 1999)				
Self-Monitoring	Not significant (Aryee et al., 1999)				
Type A personality	Not significant (Aryee et al., 1999)				
Willingness to be mentored	Positive (Gonzalez-Figueroa & Young, 2005)				
<b>DEMOGRAPHICS</b>					
Age			Negative (Finkelstein et al., 2003)	Not significant (Finkelstein et al., 2003)	
Race	Positive for blacks (Barrett et al., 2004) Not significant but Negative for whites (Blake-Beard, 1999)	Negative for blacks from Caucasian formal mentors only (Viator, 2001) Positive for blacks from black mentors (Viator, 2001) Negative for Asians (Blake-Beard et al., 2011)	Negative for blacks with formal mentors only (Viator, 2001)	Negative for Asians (Blake-Beard et al., 2011)	
Gender		Positive for females (O'Brien et al., 2010) Positive for females (Blake-Beard et al., 2011)	Positive for males (O'Brien et al., 2010)	Positive for females (Blake-Beard et al., 2011)	

**TABLE 4: Protégé Findings at Mentoring Behavior Point (Continued)**

Independent Variable	Dependent Variable				
	Mentoring Received	Psychosocial Support	Career Support	Role Modeling	Other Support
DEMOGRAPHICS, cont.					
Gay/lesbian		Positive for gay/lesbian mentors (Hebl et al., 2012)	Positive for heterosexual rather than lesbian/bisexual (Barratt et al., 2014)		
Marital Status		Positive for U.S. males only (Ramaswami et al., 2014)			
ORGANIZATION/JOB					
Individual development culture	Positive (Aryee et al., 1999)				
Information sharing norms	Positive (Aryee et al., 1999)				
Opportunities for interactions on the job	Not significant (Aryee et al., 1999)				
DYAD CHARACTERISTIC					
Age Diversity		Not significant (Finkelstein et al., 2003)			
Gender Diversity		Not significant for minority and female protégés (Smith et al., 2000) Not significant (Sosik & Godshalk, 2000) Positive for same gender (Blake-Beard et al., 2011) Positive (Ensher et al., 2002)	Not significant for minority and female protégés (Smith et al., 2000)	Not significant (Sosik & Godshalk, 2000) Not significant (Blake-Beard et al., 2011) Not significant (Ensher et al., 2002)	Not significant for vocational mentor support (Ensher et al., 2002)

**TABLE 4: Protégé Findings at Mentoring Behavior Point (Continued)**

Independent Variable	Dependent Variable				
	Mentoring Received	Psychosocial Support	Career Support	Role Modeling	Other Support
DYAD CHARACTERISTIC					
Attitude Similarity		Positive (Ensher et al., 2002)		Positive (Ensher et al., 2002)	Positive for vocational mentor support (Ensher et al., 2002)
Actual Demographic Similarity	Positive (Lankau et al., 2005)				
Perceived Demographic Similarity	Positive (Lankau et al., 2005)				
Mentor level of liking protégé		Not significant (Lankau et al., 2005)			
Protégé level of liking mentor			Not significant (Lankau et al., 2005)	Not significant (Lankau et al., 2005)	Positive for vocational support (Lankau et al., 2005)

**TABLE 4: Protégé Findings at Mentoring Behavior Point (Continued)**

Independent Variable	Dependent Variable				
	Mentoring Received	Psychosocial Support	Career Support	Role Modeling	Other Support
DYAD CHARACTERISTIC					
Race Similarity	Positive for homogeneous relationship (D. A. Thomas, 1990)	Positive for pair of people of color (Ortiz-Walters & Gilson, 2005) Positive (Blake-Beard et al., 2011) Positive (Ensher et al., 2002)	Positive for same race (Blake-Beard et al., 2011)	Positive (Ensher et al., 2002)	Positive for instrumental support for pair of people of color (Ortiz-Walters & Gilson, 2005) Not significant for networking support for pair of people of color (Ortiz-Walters & Gilson, 2005) Positive for vocational mentor support (Ensher et al., 2002)
Deep-level dissimilarity within dyad	Negative (C. Hu, Baranik, & Wu, 2014)				
Deep-level similarity within dyad	Positive (Lankau et al., 2005)	Positive (Lankau et al., 2005)			
Mentored (vs. nonmentored)					
Initiation of mentoring relationship by protégé	Positive (Turban & Dougherty, 1994)				
Mentor's willingness to mentor		Positive (Hartmann et al., 2014)		Positive (Hartmann et al., 2014)	Positive for vocational support (Hartmann et al., 2014)
Mentor's Perceived Organizational Support	Positive (C. Hu, S. Wang, C.-C. Yang, & T.-y. Wu, 2014)				
Interaction Frequency		Positive (Eby et al., 2013)			



**TABLE 4: Protégé Findings at Mentoring Behavior Point (Continued)**

Independent Variable	Dependent Variable			
	Quality of Relationship	Role Ambiguity/ Role Conflict	Comfortable sharing info with emotive female protégé	Protégé perceived importance of amount of contact with mentor
<b>PERSONALITY</b>				
Extroversion				
Internal locus of control				
Self-Monitoring				
Type A personality				
Willingness to be mentored				
<b>DEMOGRAPHICS</b>				
Age	Not significant, but positive (Finkelstein et al., 2003)			
Race				Negative for underrepresented racial minorities in matched-background mentors than White students (Dreher & Chargois, 1998)
Gender			Negative for male mentors (Leck & Orser, 2013)	
Extroversion				
Internal locus of control				
Self-Monitoring				
Gay/lesbian				
Marital Status				
<b>ORGANIZATION/JOB</b>				
Individual development culture				
Information sharing norms				
Opportunities for interactions on the job				

**TABLE 4: Protégé Findings at Mentoring Behavior Point (Continued)**

Independent Variable	Dependent Variable			
	Quality of Relationship	Role Ambiguity/ Role Conflict	Comfortable sharing info with emotive female protégé	Protégé liking of mentor
Age Diversity				
Gender Diversity				
Race Diversity				
Deep-level Similarity within dyad				Positive (Lankau et al., 2005)
Mentored (vs. nonmentored)		Negative (Specht, 2013)		
Initiation of mentoring relationship by protégé				
Mentor's willingness to mentor				
Mentor's Perceived Organizational Support				
Interaction Frequency				

**TABLE 5: Mentor Findings at Mentoring Behavior Point**

Independent Variable	Dependent Variable				
	Overall Mentoring	Psychosocial Mentoring	Career Mentoring	Role Modeling	Perceptions of Mentoring
<b>PERSONALITY</b>					
Helpfulness		Not significant (Allen, 2003)	Positive (Allen, 2003)		
Intrinsic satisfaction		Positive (Allen, 2003)	Not significant (Allen, 2003)		
Other-oriented empathy		Positive (Allen, 2003)	Not significant (Allen, 2003)		
Self-enhancement motive		Positive (Allen, 2003)	Positive (Allen, 2003)		
Organizational Commitment		Positive (Weinberg & Lankau, 2011)		Positive (Weinberg & Lankau, 2011)	
<b>DEMOGRAPHIC</b>					
Gender		Positive for females (Allen & Eby, 2004) Positive for females (O'Brien et al., 2010)	Positive for males (Allen & Eby, 2004) Negative for females (Sosik & Godshalk, 2000) Positive for males (O'Brien et al., 2010)		
<b>HISTORY</b>					
Experience as mentor			Positive (Allen & Eby, 2004)		
<b>PROTÉGÉ GENDER</b>		Positive for females (Allen & Eby, 2004) Positive for females by female mentors (Allen & Eby, 2004) Not significant for males by male mentors (Allen & Eby, 2004)	Not significant (Allen & Eby, 2004)		

**TABLE 5: Mentor Findings at Mentoring Behavior Point (Continued)**

Independent Variable	Dependent Variable			
	Protégé Perception of Mentor Role	Mentor Satisfaction with Program	Mentorship Quality	Mentorship Learning
PERSONALITY				
Helpfulness				
Intrinsic satisfaction				
Other-oriented empathy				
Self-enhancement motive				
Organizational Commitment				
DEMOGRAPHIC				
Gender			Not significant (Allen & Eby, 2003)	Not significant (Allen & Eby, 2003)
HISTORY				
Experience as mentor			Not significant (Allen & Eby, 2003)	Not significant (Allen & Eby, 2003)
PROTÉGÉ GENDER	Positive for females by female mentors (Leck & Orser, 2013)		Not significant (Allen & Eby, 2003)	Not significant (Allen & Eby, 2003)
RELATIONSHIP				
Formal vs. informal			Not significant (Allen & Eby, 2003)	Not significant (Allen & Eby, 2003)
Interaction frequency			Not significant (Allen & Eby, 2003)	Not significant (Allen & Eby, 2003)

**TABLE 5: Mentor Findings at Mentoring Behavior Point (Continued)**

Independent Variable	Dependent Variable				
	Overall Mentoring	Psychosocial Mentoring	Career Mentoring	Role Modeling	Similar Perceptions of Mentoring Activities
DYAD CHARACTERISTICS					
Age Diversity	Not significant (Feldman et al., 1999)				Negative (Fagenson-Eland et al., 2005)
Education Diversity					Not significant (Fagenson-Eland et al., 2005)
Gender Diversity	Negative (Feldman et al., 1999)	Not significant (Allen & Eby, 2004)			Not significant (Fagenson-Eland et al., 2005)
Nationality Diversity	Negative (Feldman et al., 1999)			Positive for racial similarity (Lankau et al., 2005)	
Tenure in Organization Diversity					Negative (Fagenson-Eland et al., 2005)
Duration of Relationship		Not significant (Allen & Eby, 2004)	Positive (Allen & Eby, 2004)		
Amount of time spent with partner	Positive (Mullen, 1998)	Positive (Weinberg & Lankau, 2011)	Positive (Weinberg & Lankau, 2011)	Positive (Weinberg & Lankau, 2011)	
Mentor initiated relationship	Positive (Mullen, 1998)				
Type of program (formal vs. informal)	Not significant (Allen & Eby, 2003)	Not significant (Allen & Eby, 2004)	Not significant (Allen & Eby, 2004)		
Protégé perception of educational similarity		Negative (Lankau et al., 2005)			
Liking by protégé of mentor		Positive (Lankau et al., 2005)			

**TABLE 5: Mentor Findings at Mentoring Behavior Point (Continued)**

Independent Variable	Dependent Variable					
	Protégé Perception of Mentor Role	Mentor Satisfaction with Program	Mentorship Quality	Mentors Liking Their Protégés	Vocational Support	Mentorship Learning
Age Diversity						
Education Diversity						
Gender Diversity	Not significant for friendship role (Ragins & McFarlin, 1990) Negative for social role (Ragins & McFarlin, 1990) Negative for role modeling function (Ragins & McFarlin, 1990)		Not significant (Allen & Eby, 2003)	Positive for gender similarity (Lankau et al., 2005)		Not significant (Allen & Eby, 2003)
Role Modeling actions		Positive (Weinberg & Lankau, 2011)				
Vocational actions		Not significant (Weinberg & Lankau, 2011)				
Psychosocial actions		Negative (Weinberg & Lankau, 2011)				
Perceived similarity			Positive (Allen & Eby, 2003)			
Deep-level Similarity				Positive (Lankau et al., 2005)		
Functional Level Similarity				Negative (Lankau et al., 2005)		

**TABLE 6: Findings at Effects/Outcomes Mentoring Point**

Independent Variable	Dependent Variable					
PROTÉGÉ CHARACTERISTICS	Career Advancement	Career Attainment	Career Commitment	Career Progress Satisfaction	Career Satisfaction	Career Development
PERSONALITY Achievement Orientation						
DEMOGRAPHICS Gender  Race	Career support increases women's career advancement more than men's (Tharenou, 2005)			No moderation b/w mentoring and sat. with career progress (Blake-Beard, 1999)		
HISTORY Having been mentored		Positive (Turban & Dougherty, 1994)			Positive (Allen et al., 2004) Positive (Wallace, 2001)	Positive (Rueywei, Shih-Ying, & Shin-Lung, 2011)
Protégé's perception of highly satisfying mentoring			Positive (Ragins et al., 2000)			
MENTOR CHARACTERISTICS						
PERSONALITY Achievement Orientation						
Perceived Influence of Mentor						

**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable				
	Commitment to Protégé by Mentor	Compensation/Salary	Compensation Satisfaction	Fulfillment of Career Expectations	Interpersonal Comfort
PROTÉGÉ CHARACTERISTICS					
PERSONALITY Achievement Orientation					
DEMOGRAPHICS Gender					
Race		No moderation between mentoring and compensation (Blake-Beard, 1999)	No moderation between mentoring and compensation satisfaction (Blake-Beard, 1999)		
HISTORY Having been mentored		Positive (Allen et al., 2004) Positive (Wallace, 2001) Correlated (Dansky, 1996)		Positive (Wallace, 2001)	
Protégé's perception of highly satisfying mentoring					
MENTOR CHARACTERISTICS					
PERSONALITY Achievement Orientation					
Perceived Influence of Mentor					



**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable				
	Intention to Quit	Intention to Stay	Job Satisfaction	Job Title	Organizational Commitment
PROTÉGÉ CHARACTERISTICS					
PERSONALITY Achievement Orientation					
DEMOGRAPHICS Gender  Race  Gay/Lesbian			Positive for gay mentors over heterosexual mentors (Hebl et al., 2012)		
HISTORY Having been mentored	Negative (Richard et al., 2009)		Positive (Allen et al., 2004) Positive (Ghosh & Reio Jr, 2013)	Correlated (Dansky, 1996)	Positive (Ghosh & Reio Jr, 2013)
Protégé's perception of highly satisfying mentoring	Negative (Ragins et al., 2000)		Positive (Ragins et al., 2000)		Positive (Ragins et al., 2000)
MENTOR CHARACTERISTICS					
PERSONALITY Achievement Orientation					
Perceived Influence of Mentor					

**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable					
	Perceived Career Success	Personal Learning	Power Enhancement	Protégé Satisfaction with Mentor	Protégé Sat. w/ Mentoring Relationship/Program	Promotion Expectations
PROTÉGÉ CHARACTERISTICS						
PERSONALITY Achievement Orientation		Positive (Hirschfield et al., 2006)				
DEMOGRAPHICS Gender					Not significant (Lyons & Oppler, 2004)	
Race					Not significant (Lyons & Oppler, 2004)	
HISTORY Having been mentored	Positive (Turban & Dougherty, 1994)					Positive (Singh et al., 2009a)
Protégé's perception of highly satisfying mentoring						
MENTOR CHARACTERISTICS						
PERSONALITY Achievement Orientation						
Perceived Influence of Mentor		Positive (Hirschfield et al., 2006)	Positive (Hirschfield et al., 2006)			

**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable				
PROTÉGÉ CHARACTERISTICS	Promotion Rate	Promotion Satisfaction	Promotional Opportunities	Role Modeling	Work-Related Help
PERSONALITY Achievement Orientation					
DEMOGRAPHICS Gender  Race  Gay/Lesbian	No moderation between mentoring and promotion rate (Blake-Beard, 1999)  Positive for heterosexual mentors than gay (Hebl et al., 2012)				
HISTORY Having been mentored	Positive (Allen et al., 2004) Positive (Hebl et al., 2012)		Positive for females (Wallace, 2001)		
Protégé's perception of highly satisfying mentoring		Positive (Ragins et al., 2000)			
MENTOR CHARACTERISTICS					
PERSONALITY Achievement Orientation					
Perceived Influence of Mentor				Positive (Hirschfield et al., 2006)	Positive (Hirschfield et al., 2006)

**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable					
MENTOR CHARACTERISTICS	Career Advancement	Career Attainment	Career Commitment	Career Progress Satisfaction	Career Satisfaction	Career Development
DEMOGRAPHICS Gender  Race  Mentor Prestige					Positive for female protégés with female mentors (Wallace, 2001)  Positive (C. Hu, S. Wang, et al., 2014)	
DYAD CHARACTERISTICS						
Mentor Selected by Protégé  Racial Composition  Homogeneity of dyad – both people of color						



**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable				
<b>MENTOR CHARACTERISTICS</b>	Intention to Quit	Intention to Stay	Job Satisfaction	Job Title	Organizational Commitment
<b>DEMOGRAPHICS</b> Gender  Race		Positive for female protégés with female mentors (Wallace, 2001)	Demographics of mentor not significant (Waldeck et al., 1997)		
<b>DYAD CHARACTERISTICS</b>					
Mentor Selected by Protégé  Racial Composition  Homogeneity of dyad – both people of color					

**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable				
	Perceived Career Success	Personal Learning	Power Enhancement	Protégé Satisfaction with Mentor	Protégé Sat. w/ Mentoring Relationship/Program
<b>MENTOR CHARACTERISTICS</b>					
<b>DEMOGRAPHICS</b>					
Gender					Not significant for female protégés (Lyons & Oppler, 2004)
Race					
<b>DYAD CHARACTERISTICS</b>					
Mentor Selected by Protégé					Positive (Lyons & Oppler, 2004)
Racial Composition					Not significant (Lyons & Oppler, 2004)
Homogeneity of dyad – both people of color					Positive (Ortiz-Walters & Gilson, 2005)

**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable					
MENTOR CHARACTERISTICS	Promotion Rate	Promotion Satisfaction	Promotional Opportunities	Satisfaction w/relationship by mentor	Role Modeling	Work-Related Help
<b>DEMOGRAPHICS</b> Gender  Race  Mentor Training Received  Mentor's Confidence in mentoring ability			Not significant for female protégés (Wallace, 2001)	Positive (Martin & Sifers, 2012)		
<b>DYAD CHARACTERISTICS</b>						
Mentor Selected by Protégé  Racial Composition  Homogeneity of dyad – both people of color				Not significant (Ortiz-Walters & Gilson, 2005)		



**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable					
MENTORING RECEIVED	Career Advancement	Career Attainment	Career Commitment	Career Progress Satisfaction	Career Satisfaction	Career Development
Career-Related Mentoring  Overall Mentoring  Role Modeling  Psychosocial Mentoring	Positive for female protégés when mentor is male rather than female (Tharenou, 2005)    Less related for female protégés than career support (Tharenou, 2005)				Positive (Allen et al., 2004)    Positive (Allen et al., 2004)	
Mentoring of Overseas Interns						
Amount of Meetings Between Members					Positive (DeCastro et al., 2014)	
Collegiality between members					Positive (DeCastro et al., 2014)	

**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable				
MENTORING RECEIVED	Commitment to Protégé by Mentor	Compensation/Salary	Compensation Satisfaction	Fulfillment of Career Expectations	Interpersonal Comfort
Career-Related Mentoring Overall Mentoring Role Modeling Psychosocial Mentoring		Positive (Allen et al., 2004)  Positive (Allen et al., 2004)			
Mentoring of Overseas Interns					
Amount of Meetings Between Members					

**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable				
MENTORING RECEIVED	General Adjustment of Expatriates	Office Interaction of Expatriates	Work Adjustment of Expatriates	Mentor Satisfaction with Mentoring Relationship Quality	Protégé Organizational Citizenship Behaviors
Career-Related Mentoring	Positive (Zhuang et al., 2013)	Positive (Zhuang et al., 2013)	Positive (Zhuang et al., 2013)		Positive (Kwan et al., 2011)
Overall Mentoring	Positive (Zhuang et al., 2013)	Positive (Zhuang et al., 2013)	Positive (Zhuang et al., 2013)		Positive (Kwan et al., 2011)
Role Modeling	Positive (Zhuang et al., 2013)	Positive (Zhuang et al., 2013)	Positive (Zhuang et al., 2013)		
Psychosocial Mentoring	Positive (Zhuang et al., 2013)	Positive (Zhuang et al., 2013)	Positive (Zhuang et al., 2013)		
Mentoring of Overseas Interns					
Amount of Meetings Between Members					
Mentoring Experiences in Current Relationship				Negative for bad experiences by mentor (Eby et al., 2010)	

**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable				
	Intention to Quit	Intention to Stay	Job Satisfaction	Job Title	Organizational Commitment
MENTORING RECEIVED					
Career-Related Mentoring			Positive (Allen et al., 2004)		Positive for mentor (Chun et al., 2012) Positive for protégés (Chun et al., 2012)
Overall Mentoring					
Role Modeling					
Psychosocial Mentoring		Positive (Allen et al., 2004)			Positive for mentors (Chun et al., 2012) Positive for protégés (Ghosh & Reio Jr, 2013)
Mentoring of Overseas Interns					
Amount of Meetings Between Members					

**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable					
MENTORING RECEIVED	Perceived Career Success	Personal Learning	Power Enhancement	Protégé’s Personal Skill Development	Protégé Satisfaction with Mentor	Protégé Sat. w/ Mentoring Relationship/Program
Career-Related Mentoring  Overall Mentoring  Role Modeling  Psychosocial Mentoring	Positive (Allen et al., 2004)  Not significant for professional success (Gonzalez-Figueroa & Young, 2005)			Positive (Lankau & Scandura, 2002)	Positive (Allen et al., 2004)  Positive (Allen et al., 2004)	Positive (Allen et al., 2004)
Mentoring of Overseas Interns		Positive for learning about life as expatriates (Feldman et al., 1999) Positive for learning about life in other cultures (Feldman et al., 1999)				
Amount of Meetings Between Members						Positive (Lyons & Oppler, 2004)
Mentoring Experiences in Current Relationship						Positive for good experiences (Eby et al., 2010)

**TABLE 6: Findings at Effects/Outcomes Mentoring Point (Continued)**

Independent Variable	Dependent Variable						
MENTORING RECEIVED	Promotion Rate	Promotion Satisfaction	Promotional Opportunities	Role Modeling	Task Mastery	Work-Related Help	Intention to Stay in Mentoring Relationship
Career-Related Mentoring  Overall Mentoring  Role Modeling  Psychosocial Mentoring	Positive (Allen et al., 2004)    Positive (Allen et al., 2004)						
Mentoring of Overseas Interns					Positive (Feldman et al., 1999)		
Amount of Meetings Between Members							
Mentoring Experiences in Current Relationship							Negative for bad experiences for protégés and mentors (Eby et al., 2010)

**TABLE 7: Methods Used in Empirical Papers Reviewed**

Method	Number of Papers*
Regression, including multiple regression and mediation	31
Hierarchical regression	20
Logistic regression	3
Ordinary least-squares regression	3
Correlations	5
T-tests and paired T-tests	5
Mean tests	2
Chi-square	3
del tests (similar to Chi-square)	1
ANOVA	8
ANCOVA	2
MANOVA	4
MANCOVA	3
Content analysis	6
Data coding	2
Pattern analysis	1
Factor analysis	9
Constant comparative method	1
Relative weights analysis	1

\*These numbers total more than the 79 empirical papers reviewed as many papers used more than one method of analysis.

**TABLE 8: Cultural Intelligence Domains and their Relationship to Diverse Mentoring**

Domain	Connection to Diverse Mentoring Relationship
Metacognitive	Mental processes used to acquire and understand knowledge of diverse partner, including control over individual through processes throughout contacts with mentor/protégé.
Cognitive	Knowledge that differences exist as well as the ability to decide the importance of these differences at any time throughout interactions.
Motivational	Incentive possessed by an individual to make an effort to successfully interact with a diverse other within a mentoring relationship.
Behavioral	Abilities to positively interact with a diverse other, manifested by both overt and obscure actions, chosen words, and body language.



**TABLE 9: Means, Standard Deviations, Reliabilities, and Inter-correlations for Mentors**

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1 Relationship Quality	4.06	.64	(.86)									
2 Attitude Homophily	4.55	1.20	.50***	(.85)								
3 CQ Met	5.48	1.07	.57***	.26**	(.82)							
4 CQ Cog	4.97	1.00	.28**	.14	.46***	(.85)						
5 CQ Mot	5.51	1.06	.52***	.26**	.52***	.45***	(.86)					
6 CQ Beh	5.16	.96	.16	.10	.38***	.29**	.36***	(.84)				
7 EQ	3.98	.54	.62***	.38***	.61***	.44***	.68***	.37***	(.92)			
8 Protégé Gender	1.49	.50	.16	.00	.22*	-.06	.18*	.10	.26**			
9 P. Race	1.89	.32	.01	.00	.02	.07	.00	-.06	.01	.15		
10 P. Ethnicity	4.61	1.00	.03	-.07	.14	-.10	.06	.03	.01	.02	.11	
11 P. Age	31.11	9.20	.11	-.10	.20*	.08	.23*	.06	.14	.04	.14	.17
12 Past Protégé	1.47	.50	.08	.02	.01	.04	.03	-.12	.00	-.02	-.04	-.11
13 Past Mentor	1.47	.50	.18	.09	.08	.08	.24**	-.15	.17	-.02	-.01	-.11
14 Education	3.33	1.09	-.13	.02	.16	.19*	-.13	.08	-.03	-.03	.08	.04
15 Relationship Length	18.10	14.37	-.06	-.04	.07	.00	-.11	.06	-.05	-.02	.09	.11
16 Formal/ Informal	1.27	.45	.25**	.05	.16	-.01	.13	.00	.21*	.20*	.14	.10
17 Total Contacts	48.34	48.88	.10	.09	.19	.02	.12	.05	.10	.10	-.03	.06

Notes: N = 116; \* p < .05, \*\* p < .01, \*\*\* p < .001

Reliabilities (Cronbach's alpha) are indicated along the diagonal.

For gender, 1=male, 2=female; For ethnicity, 1=Hispanic, 2=not; For past protégé and past mentor, 1=yes, 2=no; Relationship length is in months; For formal/informal, 1=formal, 2=informal

**TABLE 9: Means, Standard Deviations, Reliabilities, and Inter-correlations for Mentors Continued**

Variables	M	SD	11	12	13	14	15	16
1 Relationship Quality	4.06	.64						
2 Attitude Homophily	4.55	1.20						
3 CQ Met	5.48	1.07						
4 CQ Cog	4.97	1.00						
5 CQ Mot	5.51	1.06						
6 CQ Beh	5.16	.96						
7 EQ	3.98	.54						
8 Protégé Gender	1.49	.50						
9 P. Race	1.89	.32						
10 P. Ethnicity	4.61	1.00						
11 P. Age	31.11	9.20						
12 Past Protégé	1.47	.50	.13					
13 Past Mentor	1.47	.50	.03	.62***				
14 Education	3.33	1.09	-.26**	-.28**	-.29**			
15 Relationship Length	18.10	14.37	-.03	-.03	-.04	.13		
16 Formal/ Informal	1.27	.45	.36***	.08	.04	-.15	-.12	
17 Total Contacts	48.34	48.88	.12	.10	.12	.00	.20*	.00

Notes: N = 116; \* p < .05, \*\* p < .01, \*\*\* p < .001

For gender, 1=male, 2=female; For ethnicity, 1=Hispanic, 2=not; For past protégé and past mentor, 1=yes, 2=no; Relationship length is in months; For formal/informal, 1=formal, 2=informal

**TABLE 10: Means, Standard Deviations, Reliabilities, and Inter-correlations for Protégés**

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1 Relationship Quality	3.95	.71	(.87)									
2 Attitude Homophily	4.41	1.40	.44***	(.88)								
3 CQ Met	5.55	1.12	.61***	.07	(.85)							
4 CQ Cog	5.15	1.17	.50***	.08	.59***	(.88)						
5 CQ Mot	5.40	1.04	.63***	.19	.71***	.52***	(.86)					
6 CQ Beh	5.26	1.01	.52***	.19	.70***	.44***	.51***	(.88)				
7 EQ	3.95	.53	.70***	.14	.76***	.55***	.75***	.62***	(.90)			
8 Protégé Gender	1.37	.48	-.03	-.12	.07	-.21*	.07	.03	.06			
9 P. Race	3.76	1.49	.04	-.08	-.10	.08	-.10	-.04	.00	-.15		
10 P. Ethnicity	1.86	.35	-.08	.20	-.08	-.16	-.08	-.03	-.07	-.01	.02	
11 P. Age	34.56	6.59	.05	.04	.04	.02	-.01	.08	.10	.12	.14	-.05
12 Past Protégé	1.44	.50	.02	-.02	-.03	-.02	-.02	-.06	-.03	.02	.02	.17
13 Past Mentor	1.56	.50	-.06	-.01	-.04	-.03	-.01	.05	-.10	.15	-.05	.14
14 Education	3.55	.80	.14	.10	.14	.11	.09	.16	.11	-.06	-.08	.00
15 Relationship Length	27.68	28.33	.10	.16	-.11	-.01	.05	-.12	.06	.05	-.11	.09
16 Formal/ Informal	1.26	.44	.15	.30**	-.05	-.14	.01	.14	.07	.29**	-.02	.17
17 Total Contacts	43.36	56.72	.19	.05	.24*	.04	.18	.17	.20*	.07	.02	-.03

Notes: N = 95; \* p < .05, \*\* p < .01, \*\*\* p < .001

Reliabilities (Cronbach's alpha) are indicated along the diagonal.

For gender, 1=male, 2=female; For ethnicity, 1=Hispanic, 2=not; For past protégé and past mentor, 1=yes, 2=no; Relationship length is in months; For formal/informal, 1=formal, 2=informal

**TABLE 10: Means, Standard Deviations, Reliabilities, and Inter-correlations for Protégés Continued**

Variables	M	SD	11	12	13	14	15	16
1 Relationship Quality	3.95	.71						
2 Attitude Homophily	4.41	1.40						
3 CQ Met	5.55	1.12						
4 CQ Cog	5.15	1.17						
5 CQ Mot	5.40	1.04						
6 CQ Beh	5.26	1.01						
7 EQ	3.95	.53						
8 Protégé Gender	1.37	.48						
9 P. Race	3.76	1.49						
10 P. Ethnicity	1.86	.35						
11 P. Age	34.56	6.59						
12 Past Protégé	1.44	.50	-.18					
13 Past Mentor	1.56	.50	-.25*	.66***				
14 Education	3.55	.80	.18	-.11	-.16			
15 Relationship Length	27.68	28.33	.40***	-.07	-.08	.07		
16 Formal/ Informal	1.26	.44	.11	.05	.05	-.14	.07	
17 Total Contacts	43.36	56.72	-.10	.29**	.24*	-.10	.02	.08

Notes: N = 95; \* p < .05, \*\* p < .01, \*\*\* p < .001

For gender, 1=male, 2=female; For ethnicity, 1=Hispanic, 2=not; For past protégé and past mentor, 1=yes, 2=no; Relationship length is in months; For formal/informal, 1=formal, 2=informal

**TABLE 11: Results of Regression Analyses for Mentors**

Predictor	Standardized Regression Coefficients*				
	Attitude Homophily		Relationship Quality		
	Model 1	Model 2	Model 3	Model 4	Model 5
<b>Controls</b>					
Mentor Gender	-.09	-.41*	.15	-.09	.18*
M. Race	.03	.06	-.02	-.04	-.03
M. Ethnicity	-.22	-.34	.05	.11	.12
M. Age	-.02	-.03*	.00	-.10	-.01
Past Protégé	-.09	.18	-.10	.08	-.07
Past Mentor	.23	-.19	.25	-.09	.19
Education	.03	-.00	-.03	-.10*	-.04
Relationship Length	.00	.00	.00	.00	.00
Formal/Informal	.30	.13	.30	.18	.22
Total Contacts	.00	.00	.00	.00	.00
<b>Independent Variables</b>					
CQ Met		.14		.25***	
CQ Cog		.14		-.04	
CQ Mot		.15		.11	
CQ Beh		.13		-.10	
EQ		.31**		.41**	
<b>Mediator</b>					
Attitude Homophily					.27***
Overall R Squared	.05	.23	.12	.53	.36
Adjusted R Squared	-.04	.11	.04	.45	.30
$\Delta R^2$		.15		.41	.26
Overall F	.56	1.94	1.46	7.40	5.38
df	10, 105	15, 100	10, 105	15, 100	11, 104

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**TABLE 12: Results of Regression Analyses for Protégés**

Predictor	Standardized Regression Coefficients*				
	Attitude Homophily		Relationship Quality		
	Model 1	Model 2	Model 3	Model 4	Model 5
<b>Controls</b>					
Protégé Gender	-.68*	-.67*	-.10	-.10	.05
P. Race	-.08	-.05	.03	.04	.04
P. Ethnicity	.53	.59	-.24	-.12	-.36
P. Age	.00	.00	-.01	-.01	.00
Past Protégé	-.23	-.12	.08	.13	.13
Past Mentor	.14	.04	-.13	-.10	-.16
Education	.23*	.18	.16	.06	.10
Relationship Length	.01	.01	.00	.00	.00
Formal/Informal	1.12**	1.04**	.18	.26*	.06
Total Contacts	.00	.00	.00	.00	.00
<b>Independent Variables</b>					
CQ Met		-.22		.05	
CQ Cog		.04		.06	
CQ Mot		.35		.14	
CQ Beh		.21		.07	
EQ		.14		.45*	
<b>Mediator</b>					
Attitude Homophily					.39***
Overall R Squared	.20	.25	.12	.58	.28
Adjusted R Squared	.11	.11	.01	.51	.18
$\Delta R^2$		.00		.50	.17
Overall F	2.14	3.23	1.11	7.41	2.90
df	10, 84	15, 79	10, 84	15, 79	11, 83

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**TABLE 13: Mediation Results of Bootstrapping for Mentors**

Mediation of the Effect of Mentors' CQ (four domains) and EQ on Relationship Quality through Attitude Homophily

Independent Variable	Point Estimate	Standard Error	Percentile 95% Confidence Interval	
			Lower	Upper
CQ Metacognitive	.0033	.0098	-.0154	.0264
CQ Cognitive	.0040	.0091	-.0118	.0260
CQ Motivational	.0013	.0111	-.0217	.0265
CQ Behavioral	-.0018	.0081	-.0209	.0139
EQ	.0220	.0313	-.0259	.0995

**TABLE 14: Mediation Results of Bootstrapping for Protégés**

Mediation of the Effect of Mentors' CQ (four domains) and EQ on Relationship Quality through Attitude Homophily

Independent Variable	Point Estimate	Standard Error	Percentile 95% Confidence Interval	
			Lower	Upper
CQ Metacognitive	.0004	.0091	-.0197	.0208
CQ Cognitive	.0015	.0144	-.0282	.0318
CQ Motivational	-.0017	.0169	-.0382	.0338
CQ Behavioral	.0011	.0131	-.0254	.0310
EQ	.0041	.0406	-.0793	.0921



**TABLE 15: Overall Results of Hypotheses**

Hypothesis	Short Description	Result
1a 1b 1c 1d	CQ on AH, Mentors	Not Supported Not Supported Not Supported Not Supported
2a 2b 2c 2d	CQ on AH, Protégés	Not Supported Not Supported Not Supported Not Supported
3a 3b	EQ on AH, Mentors and Protégés	SUPPORTED Not Supported
4a 4b	AH on RQ, Mentors and Protégés	SUPPORTED SUPPORTED
5a 5b 5c 5d	CQ on RQ, Mentors	SUPPORTED Not Supported Not Supported Not Supported
6a 6b 6c 6d	CQ on RQ, Protégés	Not Supported Not Supported Not Supported Not Supported
7a 7b	EQ on RQ, Mentors and Protégés	SUPPORTED SUPPORTED
8a 8b 8c 8d	AH mediating CQ on RQ, Mentors	Not Supported Not Supported Not Supported Not Supported
9a 9b 9c 9d	AH mediating CQ on RQ, Protégés	Not Supported Not Supported Not Supported Not Supported
10a 10b	AH mediating EQ on RQ, Mentors and Protégés	Not Supported Not Supported

## APPENDIX 1 – Measures

### Cultural Intelligence

Responses were on a seven-point Likert scale from 1=Strongly Disagree to 7=Strongly Agree. D = Dropped from final analysis

1. I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.
2. I am conscious of the cultural knowledge I apply to cross-cultural interactions.
3. I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me. (D)
4. I check the accuracy of my cultural knowledge as I interact with people from different cultures.
5. I know the legal and economic systems of other cultures.
6. I know the values and religious beliefs of other cultures.
7. I know the marriage systems of other cultures.
8. I know the arts and crafts of other cultures.
9. I know the rules (e.g., grammar) of other languages. (D)
10. I know the rules for expressing non-verbal behaviors in other cultures.
11. I enjoy interacting with people from different cultures. (D)
12. I enjoy living in cultures that are unfamiliar to me. (D)
13. I am confident that I can socialize with locals in a culture that is unfamiliar to me.
14. I am confident that I can get accustomed to the shopping conditions in a different culture.
15. I am sure I can deal with the stresses of adjusting to a culture that is new to me.
16. I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it.
17. I change my non-verbal behavior when a cross-cultural situation requires it.
18. I use pause and silence differently to suit different cross-cultural situations.
19. I vary the rate of my speaking when a cross-cultural situation requires it.
20. I alter my facial expressions when a cross-cultural interaction requires it.

Metacognitive = Items 1-4

Cognitive = Items 5-10

Motivational = Items 11-15

Behavioral = Items 16-20

## Emotional Intelligence

Responses were on a five-point Likert scale from 1=Strongly Disagree to 5=Strongly Agree. R=Reverse Coded; D=Dropped from final analysis

1. I know when to speak about my personal problems to others. (D)
2. When I am faced with obstacles, I remember times I faced similar obstacles and overcame them. (D)
3. I expect that I will do well on most things I try.
4. Other people find it easy to confide in me. (D)
5. I find it hard to understand the non-verbal messages of other people. (R) (D)
6. Some of the major events of my life have led me to re-evaluate what is important and not important. (D)
7. When my mood changes, I see new possibilities. (D)
8. Emotions are one of the things that make my life worth living. (D)
9. I am aware of my emotions as I experience them.
10. I expect good things to happen.
11. I like to share my emotions with others.
12. When I experience a positive emotion, I know how to make it last. (D)
13. I arrange events others enjoy.
14. I seek out activities that make me happy. (D)
15. I am aware of the non-verbal messages I send to others.
16. I present myself in a way that makes a good impression on others.
17. When I am in a positive mood, solving problems is easy for me.
18. By looking at their facial expressions, I recognize the emotions people are experiencing.
19. I know why my emotions change.
20. When I am in a positive mood, I am able to come up with new ideas.
21. I have control over my emotions. (D)
22. I easily recognize my emotions as I experience them.
23. I motivate myself by imagining a good outcome to tasks I take on.
24. I compliment others when they have done something well. (D)
25. I am aware of the non-verbal messages other people send.
26. When another person tells me about an important event in his or her life, I almost feel as though I have experienced this event myself. (D)
27. When I feel a change in emotions, I tend to come up with new ideas. (D)
28. When I am faced with a challenge, I give up because I believe I will fail. (R) (D)
29. I know what other people are feeling just by looking at them. (D)
30. I help other people feel better when they are down.
31. I use good moods to help myself keep trying in the face of obstacles.
32. I can tell how people are feeling by listening to the tone of their voice.

### Attitude Homophily

Responses were on a seven-point Likert scale from 1=Strongly Disagree to 7=Strongly Agree. D = Dropped from final analysis

My mentor/protégé:

1. thinks like me. (D)
2. doesn't behave like me. (R)
3. is different from me. (R) (D)
4. shares my values. (D)
5. is like me. (D)
6. treats people like I do. (D)
7. doesn't think like me. (R)
8. is similar to me. (D)
9. doesn't share my values. (R)
10. behaves like me. (D)
11. is unlike me. (R)
12. doesn't treat people like I do. (R)
13. has thoughts and ideas that are similar to mine. (D)
14. expresses attitudes different from mine. (R) (D)
15. has a lot in common with me. (D)

R = Reverse coded

### Relationship Quality

Responses were on a five-point Likert scale from 1=Strongly Disagree to 5=Strongly Agree. D = Dropped from final analysis

1. The mentoring relationship between my mentor/protégé and me is very effective.
2. I am very satisfied with the mentoring relationship my mentor/protégé and I developed.
3. I was effectively utilized as a protégé/mentor by my mentor/protégé.
4. My mentor/protégé and I enjoy a high-quality relationship.
5. Both my mentor/protégé and I benefited from the mentoring relationship. (D)

## APPENDIX 2 – Email to Participants from StudyResponse

Dear StudyResponse Project Participant:

We are requesting your assistance with a study conducted by a researcher at the University of Wisconsin – Milwaukee. The purpose of this study is to better understand how personal characteristics of mentors and protégés impact the quality of the mentoring relationship.

We are inviting you to participate in this study because you have indicated to **be involved in a protégé relationship involving racially or ethnically diverse partners**. The survey will take approximately 15 minutes to complete. If you choose not to respond within the first week, we will send you a reminder in one week. Note that instructions on how to discontinue your participation in StudyResponse and stop receiving emails from us appear at the end of this message.

This study is anonymous, so please do not enter any identifying information into the research instrument except your StudyResponse ID, which is XXXXXX. The researcher has pledged to keep your data confidential and only to report aggregated results in any published scientific study. Survey participation is on a first come first served basis. We are always interested in your opinions but please be aware that the survey might fill up fast.

As a token of our appreciation, you will receive an electronic gift certificate to Amazon.com in the value of \$20 after completing the survey. Please be advised that monetary compensation will depend on the proper completion of all the survey items. Responses that are found to be non-purposeful and incomplete surveys will not be

eligible to receive the compensation. The gift certificates will be sent to you by email from StudyResponse approximately two weeks after the researchers receive the completed survey.

Note that your **StudyResponse ID number is XXXXXX** and that you must enter that number into the survey to be eligible for the direct payment.

Follow this link to participate:

<http://studyresponse.net/srredir.asp?srid=235734&i=4129&scode=6998>

Participation in this study is voluntary and you may withdraw from participation at any time. If you have any questions you may contact the researcher:

Gloria J. Miller

University of Wisconsin – Milwaukee

[gjm@uwm.edu](mailto:gjm@uwm.edu)

We very much appreciate your participation in the StudyResponse project and your willingness to consider completing this study.

## CURRICULUM VITAE

Gloria J. Miller

Place of birth: Milwaukee, WI

Education:

B.B.A., University of Wisconsin – Milwaukee, May 2006

Major: Human Resources & Labor Relations MHRLR

Dissertation Title: The Effect of Cultural and Emotional Intelligence on Mentor and Protégé Perceptions of Attitude Homophily and Relationship Quality in Culturally Diverse Mentoring Relationships

### HONORS AND AWARDS

Golden Gov Award, Most Helpful, Fall 2014

Student Accessibility Center Excellence Award, Spring 2013

UWM Gold Star Teaching Award, Fall 2012

Competitive Research Grant for Empirical Research on Cultural Intelligence, April 2012

Lubar Business Advisory Council Scholarship, Summer 2009

UWM Gold Star Teaching Award, Spring 2008

### RESEARCH INTERESTS

Cultural intelligence, diversity, cross-cultural mentoring.

### PUBLICATION

Shaffer, M. A., & Miller, G. J. (2008). Cultural Intelligence: A Key Success Factor for Expatriates. In S. Ang & L. Van Dyne (Eds.), *Handbook of Cultural Intelligence: Theory, Measurement, and Applications*. Armonk, NY: M.E. Sharpe, Inc.

## CERTIFICATIONS

Cultural Intelligence (CQ) Certified Facilitator, Levels 1 and 2, by the Cultural Intelligence Center, East Lansing, MI.

## CONFERENCE PRESENTATIONS

Volker, J.X. & Miller, G.J. (2015). *5+5 and Recall*. Accepted and will be presented at Innovative Educator Conference, March 2015.

Miller, G.J. (2014). *The Impact of Cultural Intelligence on Employee Selection*. Presented at Society of Business Research International Conference Nashville.

Hsu, Y., Luk, D., Dimitrova, M., Miller, G.J., & Shaffer, M.A. (2013). *The Interplay Between Personal, Role, and Collective Identities in the Work-Family Interface*. Presented at 2013 Academy of Management annual conference.

Miller, G.J. (2012). *How CQ And EQ Affect The Perceived Success Of The Relationship Between Mentors and Protégés in Diverse Mentoring Relationships*. Presented at 2012 Cultural Intelligence Research Forum, San Diego, CA, April 2012.

Miller, G.J. (2011). *Impact of Cultural Intelligence and Emotional Intelligence on Mentor and Protégé Behaviors in Diverse Mentoring Relationships*. Presented at 2011 Mentoring Conference, annual conference of The Mentoring Institute, Albuquerque, NM, October 2011.

Ren, H., Fodchuk, K., & Miller G.J. (2010). *A Proactive Perspective on Expatriate Retention*. Symposium: "More than Once in a Lifetime: Individual Transitions across Role, Career and Geographical Boundaries". Presented at the August 2010, Academy of Management annual conference.

Hsu, Y, Shaffer, M.A. & Miller G.J. (2009). *Cultural Intelligence and the Work-Family Interface: The Experience of Asian American Professionals*. Professional Development Workshop: Cultural Intelligence in the Global Leadership Context. Presented at the August 2009, Academy of Management annual conference.

Miller, G.J., Luk, D., Hsu, Y, & Shaffer, M.A. (2009). *Cultural Intelligence's Moderating Role on the Fit of Asian American Employees: A Social Exchange View*. Interactive Presentation. Presented at the June 2009, annual conference of the Academy for International Business.

Luk, D., Shaffer M.A. & Miller, G.J. (2008). *The Moderating Role of Cultural Intelligence on the Fit of Asian Americans in the Workplace*, presented at Academy of Management annual conference, August 2008.



Miller, G.J. and 18 other doctoral institute participants (2008). *Your Mind Has Been Blown, Now Use What You've Been Shown*, presented at Organization Behavior Teaching College conference in Boston, MA, June 2008.

Miller, G.J. & Shaffer, M.A. (2008). *Effects of Cultural Intelligence on Expatriate Success*. Interactive Poster Presentation: Expatriates Go Back Home. Presented at April 2008, Society of Industrial and Organizational Psychologists (SIOP) conference in San Francisco.

Freeman, S., Miller, G.J., Price, M. (2007). *A Case Study of a Youth Development Organization* presented to UWM Nonprofit Colloquium, May 2007.

### **CONFERENCES/CONSORTIA ATTENDED**

Attended Society of Business Research International Conference, Nashville, TN, October 2014.

Attended OBTC conference, Nashville, TN, June 2014.

Attended Delta Dental's Corporate Citizenship Workshop, Nashville, TN, June 2014.

Attended CQ Facilitator's Roundtable, Toronto, ON, Canada, May 2014. Led a breakout group on Research.

Attended first annual CQ Global Summit and CQ Train-the-Trainer Level II, Los Angeles, January 2013.

Attended 2012 Cultural Intelligence Research Forum, Marina del Ray, CA, April 2012.

Attended Academy of Management conferences August 2012, August 2011, August 2010, August 2009.

Attended 2011 Mentoring Conference, Albuquerque, NM, October 2011.

Selected for and attended HR Doctoral Consortium at Academy of Management conference August 2011.

Selected for and attended Internationalizing Doctoral Education and Research conference at CIBER at University of Wisconsin – Madison, July 2011.

Attended CQ Train-the-Trainer Level I Seminar, Chicago, IL, May 2010.

Attended AIB conference, San Diego, CA, June 2009.

Attended OBTC conference, Boston, MA, June 2008.

Doctoral Institute, Organizational Behavior Teaching Society. Selected participant. In connection with 35<sup>th</sup> National Organizational Behavior Teaching Conference, Boston, MA, June 2008.

Attended SIOP conference, San Francisco, CA, April 2008.

Attended Southern Management Association (SMA) conference, Nashville, TN, November 2007.

Doctoral Consortium, SMA. Selected participant. In connection with annual SMA conference, above.

Attended UWM Nonprofit Colloquium, Milwaukee, WI, May 2007.

### **ACADEMIC SERVICE**

Faculty Advisor of APSU AKPsi Zeta Phi chapter, 2015.

Presented review sessions to graduating seniors for the College of Business Major Field Test, Spring 2014-Spring 2015.

Member of APSU E<sup>3</sup> General Taskforce Committee, 2014-2015.

Member of APSU E<sup>3</sup> Grant Selection Committee, 2014-2015.

Member of APSU E<sup>3</sup> Learning Opportunity (TLE) Committee, 2014-2015.

Reviewer of one paper for Journal of Advancements in Business Education, 2015.

Reviewer of two papers for International Journal of Emerging Markets, 2014-2015.

Volunteer at APSU Freshman Welcome Wagon, Fall 2014.

Participating Mock Interviewer at “Perfecting Your Interviewing Skills” Workshop administered by APSU Student Life and Engagement, April 2014.

Member of Management Instructor Search Committee, Spring 2014.

Chaperone of Dean’s Ambassador Trip to Memphis Businesses, Spring 2014.

Participating Mock Interviewer at “Perfecting Your Interviewing Skills” Workshop administered by APSU Student Life and Engagement, November 2013.

Member of MSM AoL/Curriculum Committee at Austin Peay 2013-2015.

Facilitator in Pizza and a Book Club, reading *Decisive* by Heath & Heath, September-November 2013.

Reviewer of four papers and two symposia for AOM August 2013, conference.

Reviewer of two papers and one symposium for AOM August 2012, conference.

Led a break out group on research at the 2012 Cultural Intelligence Research Forum, April 2012.

Presentation at UWM New Teaching Assistant Orientation, entitled "Learning From Experience: Discussions with Experienced TAs", August 2011.

Reviewer of eight papers for AOM August 2011, conference.

Presentation at UWM New Teaching Assistant Orientation, entitled "Learning From Experience: Discussions with Experienced TAs", August 2010.

University representative at PhD Project conference, Chicago, November 2009.

Reviewer of three papers for AOM August 2009, conference.

Reviewer of two papers for AIB June 2008, conference.

Mentor to two Teaching Assistants and two Project Assistants through UWM Teaching Assistant Mentor Program 2008-2009.

Secretary to The PhD Management Doctoral Students' Association 2006-2009.

Presentation at UWM New Teaching Assistant Orientation, entitled "Learning From Experience: Discussions with Experienced TAs", August 2008.

Reviewer of three papers for AOM August 2008, conference.

Mentor to two Teaching Assistants through UWM Teaching Assistant Mentor Program 2007-08.

Judged entries for exceptional staff for UWM, April 2005.

**ACADEMIC ASSISTANTSHIPS AND TEACHING EXPERIENCE**

Taught one online section of MGT 3210, Human Resource Mgmt., APSU, Spring 2015

Taught one online section of MGT 5080, Human Resource Issues for Managers, APSU, Spring 2015, Spring 2014

Taught one section of MGT 3010, Principles of Management & Organizational Behavior, APSU, Spring 2015, Summer 2014, Spring 2014, Fall 2013

Taught one section of independent study of MGT 3110, Organizational Behavior and Theory, APSU, Summer 2014

Taught one section of MGT 3110, Organizational Behavior and Theory, APSU, Fall 2014, Spring 2014, Fall, 2013

Taught one section of MGT 3210, Human Resource Management, APSU, Spring 2015, Fall 2014, Spring 2014, Fall 2013

Taught one online section of MGT 5070, Legal Issues in Human Resource Management, APSU, Fall 2014, Fall 2013

Taught one section of Organizations course and one section of MBA course, 706, Managing in a Dynamic Environment, independently, UWM, Spring 2013

Taught one section of Organizations course independently, UWM, Fall 2012

Taught Human Resources sessions for Future Success Program, UWM, July 2012  
Six hours of class to high school students

Covered three sessions of BusAdm 330 – Organizations course, UWM, for absent professor, December 2011

Taught Human Resources sessions for Future Success Program, UWM, July 2011  
Six hours of class to high school students

Covered two sessions of BusMgt444 – Human Resources course, UWM, June 2011  
For absent professor

Was co-leader for a study abroad class of 12 students to China, 17 days, June 2011

Independently taught MBA course 706, Managing in a Dynamic Environment, UWM, Spring 2011, Fall 2010

Covered two sessions of MBA course 706 for absent professor, UWM, August 2010

Taught Human Resources sessions for Future Success Program, UWM, June 2010  
Four hours of class to high school students

Taught one section of Organizations course independently, UWM, Spring 2010.

Guest Lecturer, Global Customers and Cultures MBA class, MSOE, September 2009  
Presented “Cultural Intelligence”

Taught Human Resources sessions for Future Success Program, UWM, June 2009  
Four hours of class to high school students

Taught one section of Organizations course independently, UWM, Fall 2008

Project Assistant for Margaret Shaffer, UWM, Fall 2008 – Summer 2012

Taught Human Resources sessions for Future Leaders Program, UWM, June 2008  
Four hours of class to high school students

Teaching Assistant, Organizations, with Maureen Bezold, UWM, Spring 2008

Project Assistant for Romila Singh, UWM, Fall 2007

Research Assistant for Margaret Shaffer, UWM, Summer 2007

Teaching Assistant, Organizations, with Kelly Ottman, UWM, Fall 2006 - Spring 2007

Research Assistant, for Sarah Freeman, Ph.D., UWM, Spring-Fall 2006

Guest Lecturer, Organizations Course, Presented “Applied Human Resources”, UWM,  
April 2012, Dec. 2011, Nov. 2011, Dec. 2010, May 2010, April 2010, Dec. 2009,  
May 2008, April 2008, March 2007

Guest Lecturer, Organizations Course, UWM, April 2012, Dec. 2011  
Presented “Cultural Intelligence”

## **PROFESSIONAL AFFILIATIONS**

Alpha Kappa Psi, Zeta Phi Chapter  
Clarksville Area Chapter of Society for Human Resource Management  
Society for Human Resource Management