WISDOM FROM A MENTOR IN A MATTER OF MINUTES: INVESTIGATING A
PROPOSED MODEL OF FLASH MENTORSHIP IN STUDENT-ALUMNI INTERACTIONS

By

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ABSTRACT

WISDOM FROM A MENTOR IN A MATTER OF MINUTES: INVESTIGATING A
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Mentoring is an age-old practice that proves meaningful for protégés across contexts and program designs. Because both mentoring practice and mentoring research take place in a wide variety of domains and with seemingly limitless program details, it has become difficult to define or execute with any precision. Mentoring practitioners and researchers would benefit greatly from a mentorship model to inform their program designs and selection of mentoring type best-suited to the situation.

In recent years, a type of mentoring that has gained popularity is flash mentorship. This short-term, one-time interaction is desirable because of the limited commitment required for everyone involved. However, little is known about the effectiveness of this type of mentorship. The current work sought to develop a model of effective flash mentorship with the broader goal of establishing best practices for pairing mentors with protégés in meaningful ways.

A proposed model of flash mentorship posited that relationship quality and advice quality predicted protégé situational satisfaction. Antecedents of relationship quality were posited to include attraction and deep-level similarity. Antecedents of advice quality were posited to include message features and mentor expertise. Although all causal links posited by the model were of sufficient magnitude to be consistent with predictions, the fit of the model proved insufficient. Limitations of the findings and recommendations for future research are discussed.

I dedicate this dissertation to my children - Olivia and Caleb.
You are the brightest souls I have ever known.
I love you, Olivia.
I love you, Caleb.

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INTRODUCTION

Mentoring is an ancient concept. Its origin is commonly credited to Homer's *The Odyssey* in which the Mentor cares for Odysseus' son during his decades-long absence. Nagy (2017), a classics professor at Harvard University, says that the interpretation from Homer's work indicates that a mentor is a person who 'instills a heroic mentality' in another. Over the past 3,000 years, the mentoring construct has taken on many different meanings. Although some mentors may intend to instill a heroic mentality in their protégés, most people likely have much less ambitious goals for their mentoring experiences. With mentor relationships existing in a wide variety of contexts serving different types of people with varied goals, the definition of mentorship has become much less clear than it once was.

The absence of a common definition and conceptualization of mentorship is a problem faced by mentorship researchers and practitioners alike. Nearly three decades ago, Jacobi (1991) discussed this issue as well as the lack of theoretical or methodological approaches in mentoring research. After thirty years of robust growth in mentoring literature, these deficiencies remain (Bozeman & Feeney, 2007; Crisp & Cruz, 2009; Eby et al., 2012; Raposa et al., 2019; Tinoco-Giraldo, Torrecilla Sánchez, García-Peñalvo, 2020; Underhill, 2006). Most mentoring research consists of studies with small sample sizes and limited scope which report correlational rather than experimental findings (Bozeman & Feeney, 2007). These studies are largely atheoretical and lack quantitative research designs which would allow for external validity testing (Crisp & Cruz, 2009).

A primary problem with the current state of mentoring research, is that it offers little explanatory depth or breadth (Bozeman & Feeney, 2007). Rather, mentoring studies are scattered across disciplines and contexts resulting in a cumulation of information that lacks much utility

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(Merriam, 1983). As a result, researchers and practitioners have struggled to find a common definition of the construct (Crisp & Cruz, 2009). The lack of a conceptual definition and theoretically driven scholarship leaves researchers lacking direction when designing mentoring studies because they have little basis for predicting outcomes. For practitioners, this means that each new mentoring program is designed based on potentially flawed information which is neither generalizable nor predictive (Gigerenzer, 1991).

Furthermore, traditional long-term mentoring relationships are giving way to shorter-term flash mentoring experiences (Mangan, 2012; Quinnell, 2017; Ilesanmi Oladele Ayodeji, Osogbo, Lasisi, Fatai Adebayo, 2015; Waljee, Chopra, & Saint, 2020). Flash mentoring is a quick alternative to lengthy mentorships, taking less than one hour and typically only occurring once (Mangan, 2012). Though this type of mentorship varies wildly from its traditional counterpart, it, too, lacks a common conceptual definition and theoretically driven scholarship (Ilesanmi Oladele Ayodeji, Osogbo, Lasisi, Fatai Adebayo, 2015).

The goal of the current work is to develop a model of successful flash mentorship. The primary purpose of such a model is to better understand the predictors of positive outcomes for individuals engaged in these types of short-term mentoring relationships. In flash mentorship practice, knowledge of these predictors would lead to more effective mentor recruitment, better mentor-mentee pairings, and, ultimately, more rewarding mentoring experiences. In flash mentorship research, a model of flash mentoring would be useful for designing empirical studies and broadening the understanding of these short-term mentoring interactions.

A model of flash mentorship may or may not be useful in predicting traditional mentorship outcomes, but it could provide a starting point. In addition to testing such a model in the short-term mentorship space, researchers could test the model across mentoring types and

domains. This could possibly lead to more predictive and explanatory mentoring research

overall. The following sections include a literature review, a proposed model of successful flash

mentorship, study design, results, and discussion.

CHAPTER 1: LITERATURE REVIEW

Mentoring research has spanned decades and reported on mentorship in a multitude of contexts (T. D. Allen & Eby, 2007; Bozionelos, Bozionelos, Panagiotis, Kostantinos, 2014; Ellis, 1992; Jacobi, 1991; Kram, 1985; Nakkula & Harris, 2005; Ragins & Cotton, 1999; Raposa et al., 2019; Rhodes, 2005; Tennanbaum, Crosby, & Gliner, 2001; Tinoco-Giraldo, Torrecilla Sánchez, García-Peñalvo, 2020). The three primary contexts in which mentoring research takes place are youth, academic, and workplace (Eby et al., 2012).

Youth mentoring research assumes that nonparental adult mentors can influence youth protégés in ways that promote educational successes and pro-social lifestyle choices (DuBois et al., 2011). Academic mentoring occurs in academic and university settings and typically focuses on faculty mentorship of student protégés with the goal of positively influencing academic outcomes (Jacobi, 1991; W. B. Johnson, 2007). Additionally, academic mentoring research has begun to investigate the impact of alumni-student mentorship programs on college student outcomes (Chi et al., 2012; Crisp & Cruz, 2009; Dougherty et al., 2013; Priest & Donley, 2014). Lastly, workplace mentoring takes place in organizational settings, is typically formalized, and is designed to impact protégés workplace performance, socialization, and career outcomes (Allen & Eby, 2007; Allen & O'Brien, 2006; Cai, Liu, Liu, Yao, & Jia, 2021; Kram,1985; Ragins & Cotton, 1999; Ragins & Kram, 2007a; Weinberg & Lankau, 2011).

Across these three contexts, most of the mentoring literature is focused on protégé experiences and outcomes (Avery et al., 2008; Ensher, 2002; Nora & Crisp, 2007;), a smaller percentage of studies focus on mentor experiences and outcomes (Allen & Eby, 2003; Lankau et al., 2005), and an even smaller percentage report the effects experienced by both protégés and

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mentors involved in mentoring relationships with one another (Ensher & Murphy, 1997; Wanberg, Kammeyer-Mueller, & Marchese, 2006).

Mentorships appear to offer strong relational benefits through protégé perceptions of social support (Jacobi, 1991; Kram, 1985). Another sentence about social support? Protégé outcomes are too numerous and varied to list but range from improved self-esteem and improved attitudes to increases in pay and decreases in delinquency and reoffending (Eby et al., 2012). Universally, mentoring researchers agree that the value in mentoring lies in the positive outcomes experienced by protégés (e.g., Cohen, 1993; Crisp & Cruz, 2009; Eby et al., 2012; Underhill, 2006). Though mentors may perceive mentoring relationships as beneficial, the primary goal is to advise and further develop the protégé, (Jacobi, 1991; Kram, 1985; Levinson et al., 1978). For this reason, the present work will investigate antecedents of satisfactory mentorships for protégés.

Defining Mentoring

Many researchers have attempted to define the concept of mentoring (Bozionelos et al., 2014; Bozeman & Feeney, 2007; Crisp & Cruz, 2009; Eby et al., 2012; Tinoco-Giraldo, Torrecilla Sánchez, García-Peñalvo, 2020; Underhill, 2006). The challenge most researchers face is defining the concept broadly enough to encompass its variety of contexts and desired outcomes while also providing sufficient conceptual boundaries. As a result, definitions of mentoring tend to lack depth or breadth, but often lack both. Definitions of mentoring tend to include concepts such as transmission of knowledge, guidance, advice, learning opportunities, instrumental and psychosocial support provided by an individual (the mentor) who is more experienced or knowledgeable than the mentee.

Bozeman and Feeney (2007) offer a definition that encompasses many of these concepts but is focused on mentoring in the workplace that takes place over a sustained period. This scope limits the use of their definition by excluding mentoring in other contexts (e.g., academic, youth) as well as mentoring that takes place over shorter durations of time.

> Mentoring (is) a process for the informal transmission of knowledge, social capital, and psychosocial support perceived by the recipient as relevant to work, career or professional development; mentoring entails informal communication, usually face-to-face and over a sustained period of time, between a person who is perceived to have greater relevant knowledge, wisdom or experience (the mentor), to a person who is perceived to have less (the protégé). (p. 731)

Bonzionelos et al. (2014) offer a definition that encapsulates many important concepts but is constrained to organizational mentorship and the outcomes associated with career-related growth. Again, these characteristics limit the use of their definition by excluding mentoring in other contexts as well as mentoring designed for purposes other than career-related outcomes (e.g., youth, academic).

> Mentoring in the workplace is a developmental relationship between two individuals, the mentor and the protégé. Within that relationship the mentor provides a variety of career-related (e.g., challenging assignments, exposure and visibility, and coaching) and socioemotional (e.g., friendship, counseling, and role modeling) functions for the protégé. (p. 171)

In their efforts to offer a more holistic definition of mentoring, Eby et al. (2012) provide meaningful summaries of earlier research. However, their definition fails to mention quality

advice which is an empirically supported aspect of successful mentoring. Additionally, their

definition does not address outcomes. According to the authors:

> Mentoring is a developmentally oriented relationship between a younger or less
> experienced individual (the protégé) and an older or more experienced individual (Jacobi,
> 1991; Kram, 1985; Rhodes, 2005). It is a unique, idiosyncratic relationship marked by an
> emotional bond between mentor and protégé, where the mentor offers guidance and new
> learning opportunities to the protégé (DuBois & Karcher, 2005; Eby, Rhodes, & Allen,
> 2007)." (p. 1)

Mentoring as Social Support

One aspect contributing to the field's difficulty in defining mentoring may be the role

perceived social support plays in each mentee's experience. Cobb (1976) defined social support

as "information leading the subject to believe that he is cared for and loved, esteemed, and a

member of a network of mutual obligations" (p. 300). More broadly, social support can be

thought of as "resources and assistance exchanged through social relationships and interpersonal

interactions" (Strine et al., 2008, p. 151) or as "a social fund from which people draw"

particularly when dealing with difficult situations (Thoits, 1995, p. 64).

Social support is often characterized by social networks (size, type, and frequency of

contact) and the functional support provided by these networks (Cohen & Syme, 1985; Cohen &

Wills, 1985; Seeman & Berkman, 1988). Functional support takes many forms: emotional (e.g.,

love, sympathy, understanding, care and concern), instrumental (e.g., help accomplishing tasks),

financial (e.g., economic support), informational (e.g., providing necessary information, giving

advice), and appraisal (e.g., help evaluating a situation, social comparison) (Barth, Schneider, &

von Kanel, 2010; Cohen, 1988; Thoits, 1995). Furthermore, functional support can be

categorized as either received (actual support received from the network) or perceived (the belief that this support is available) (House, 1981; House & Kahn, 1985).

Research suggests that perceived emotional support has some particularly beneficial effects. The *perception* that emotional support is available, rather than the actual *receipt* of support, has yielded greater benefits (Dunkel-Shetter & Bennett, 1990, Wethington & Kessler, 1986). Furthermore, when social support is considered multi-dimensionally, emotional support is more beneficial than informational support (Seeman, Berkman, Blazer, & Rowe, 1994). These findings suggest that, regardless of *received* social support, when an individual *perceives* that s/he is emotionally supported, profound benefits emerge.

Types of Mentoring

In addition to the challenge of context, and the complexity of mentee perceptions of social support, another difficulty in defining mentorship is the variety of mentoring dynamics that exist. Depending on the level of relational familiarity, length of relationship, number of interactions, and types of people involved, mentoring can take on many different forms beyond which is considered traditional. The types of mentoring discussed in current research include flash, micro, virtual, group, peer, reverse, situational, and supervisory (Quinnell, 2017; Waljee, Chopra, & Saint, 2020).

>*Flash mentoring* is defined as brief, one-time exchanges typically lasting less than one hour (Mangan, 2012).

>*Micromentoring* involves frequent, rapid meetings that offer fast responses to a narrow scope of topics (Waljee, Chopra, Saint; 2020).

>*Virtual mentoring* takes place electronically and can supplement or replace face-to-face mentoring (Mangan, 2012; Tinoco-Giraldo, Torrecilla Sánchez, García-Peñalvo, 2020).

Group mentoring occurs when "one or several mentors work with several protégés at one time" (Mangan, 2012, p. 1324).

Peer mentoring happens among equals. Mangan defines peer mentoring as "the interaction of individuals who are at about the same place/ level in their careers" (2012, p. 1324).

Reverse mentoring is when a younger or junior person mentors an older or senior person. Mangan (2012)

Situational mentoring "is usually a short-term interaction for an express purpose providing 'the right help at the right time,' but can evolve into a longer-term connection" (Mangan, 2012, p. 1324).

Supervisory mentoring is when their direct supervisor advises the mentee (Bynum, 2015).

The Value of Flash Mentoring

Mentoring researchers find that the time commitment involved in traditional mentorship programs is one of the most common objections faced when recruiting volunteer mentors (Fornari, Murray, Menzin, Woo, Clifton, Lombardi & Shelov; 2014). Though traditional mentoring typically describes a lengthy relationship that is developmental in nature (Hansman, 2002), a less time-intensive alternative called flash mentoring is gaining traction among academics and professionals (Ilesanmi Oladele Ayodeji, Osogbo, Lasisi, Fatai Adebayo, 2015). Flash mentoring involves a much shorter time commitment for both the mentor and protégé. Typically, these meetings are one-time interactions lasting for one hour or less (Mangan, 2012).

Although this less-demanding style of mentorship may be an attractive option for mentorship program coordinators, mentors, and protégés, limited empirical evidence exists to

support its utility. However, in the research that does exist, flash mentoring appears to result in robust protégé outcomes (Mwaura, Odero-Wanga, and Mulu-Mutuku, 2015). To understand and predict outcomes of flash mentoring, the current work seeks to develop a theoretically driven model of successful flash mentorship. This model could, with future research, lead to the development of a more comprehensive and universally applicable model and understanding of the mentoring construct.

CHAPTER 2: A PROPOSED MODEL OF FLASH MENTORING

To develop a model of flash mentorship, a review of literature is provided alongside predictions of the variables associated with mentoring success. As mentioned earlier, positive protégé outcomes are a central focus of most mentoring research (Eby et al., 2012). For this reason, reviews of literature supporting the inclusion of variables related to protégé perceptions will be discussed.

In their interdisciplinary meta-analysis of mentoring, Eby et al. (2012) investigated variables associated with protégé perceptions of the mentoring experience. This work was an extension of three existing meta-analyses that also focused on protégé perceptions (T. D. Allen et al., 2004; Kammeyer-Mueller & Judge, 2008; O'Brien, Biga, Kessler, & Allen; 2010). Study inclusion required that the research involved youth, academic, or workplace mentoring and included protégé perceptions of mentoring. Of the 173 independent samples included in the meta-analysis, 14 focused on youth mentoring, 36 on academic mentoring, and 117 on workplace mentoring, and six were some combination of academic and workplace. Due to the rigorous empirical approach of this meta-analysis, several predictions can be made about the variables associated with successful mentorship based on their findings alone.

Mentorship Success: Protégé Situational Satisfaction

Outcomes of mentorship programs are disparate and numerous (Eby et al., 2012). Researchers and practitioners generally measure some combination of attitudinal, behavioral, career-related, and health-related outcomes. Protégés may receive tangible or intangible benefits from the relationship including, but certainly not limited to, promotions, raises, empowerment, improved grades, increased knowledge, access to the mentor's network, and more. While all positive outcomes are desirable, most require time to manifest. The simplest and most

straightforward outcome measure in the context of a short-term interaction, like flash mentorship, also happens to be the most widely measured mentorship outcome: situational satisfaction (Eby et al., 2012).

Protégés who are impacted positively by mentorship, report higher levels of satisfaction with the experience. Higher reports of situational satisfaction are considered a measure of program success, regardless of context. Due to its regular use as well as its utility in the short-term space, the model of successful flash mentoring will treat protégé situational satisfaction as the dependent variable.

Situational satisfaction is typically an outcome of longer-term, more traditional mentoring designs. Limited research exists for flash mentorships in general and outcomes tend to be specific effectiveness measures related to the flash mentoring program being studied (Forbes & Roberts, 2021; Mwaura, Odero-Wanga, and Mulu-Mutuku, 2015). For instance, Mwaura, Odero-Wanga, and Mulu-Mutuku (2015) treated youth empowerment as their dependent variable. In the study, flash mentorship did lead to increased experiences of youth empowerment. But the authors did not measure situational satisfaction. Forbes and Roberts (2021) measured program effectiveness and the overall appeal of flash mentoring. They found that flash mentorship did lead to program effectiveness and protégés reported that the model of flash mentorship was appealing. However, they did not ask respondents to rate situational satisfaction. This begs the question of whether protégés will experience high enough levels of satisfaction for this type of short-term mentorship to be considered useful?

RQ1: Will protégé reports of situational satisfaction be higher than scale mid-point (indicating satisfaction or strong satisfaction was achieved)?

In the next section, independent variables *relationship quality* and *advice quality* and their proposed antecedents are discussed in detail and predictions are made about the nature of each variable's relationship to mentoring success as measured by situational satisfaction.

Protégé Perceptions of Relationship Quality

Mentoring involves the development of a unique interpersonal relationship between the mentor and protégé (Austin, 2002; Garvey & Alred, 2003; Jacobi, 1991). Researchers define perceived relational quality as evaluative feelings toward the relationship, relational satisfaction, satisfaction with mentor, overall perceptions of relational quality, and liking. (Allen & Eby, 2003; Kram, 1985; Nakkula & Harris, 2005; Rhodes, 2005). Self-reports of relational quality are often used as an indicator of mentoring relationship success (Hinde, 1997; Kram, 1985). To understand the effectiveness of mentorship, the measurement of protégé perceptions of perceived relationship quality is important (Kram, 1985). Not surprisingly, previous mentoring research suggests that higher quality relationships lead to more effective mentoring outcomes (Kram, 1985). For this reason, protégé perceptions of relationship quality will be treated as an independent variable in the model.

H1: Protégé perceptions of relationship quality will predict mentoring outcomes such that situational satisfaction will increase as relationship quality increases.

Relationship quality antecedents. Two prominent antecedents of relationship quality present in interpersonal relationship literature are attraction and similarity (Berscheid & Walster, 1978; Byrne, 1971; Byrne & Nelson, 1965; Festinger, Schachter, & Back, 1950).

Attraction. Social attraction, also called "interpersonal attraction," indicates how much an individual likes another person, wants to be around them, and is inclined to be physically near them (Byrne, 1971). In the context of a self-report survey or laboratory setting, attraction often is

measured by how much an individual verbally expresses that they like another person (Lindzey & Byrne, 1968). However, in real-life settings, attraction is often expressed less directly (Byrne, 1971). Individuals may verbally indicate a desire to increase time spent with another person (e.g., "would you like to go to the movies together?"). Additionally, they may communicate attraction through nonverbal means such as increased eye contact, physical touch, facial expression, and propinquity. Whether directly or indirectly communicated, our attraction to another person increases our perceptions of relational quality. For this reason, measures of perceived protégé social attraction toward the mentor is expected to predict relational quality.

H2: Protégé self-reports of social attraction will predict relationship quality such that increases in social attraction will result in increased reports of relationship quality.

People are attracted to others who are like them (Byrne, 1971). The more similarities two individuals share, the more pronounced their attraction to one another will be (e.g., Byrne, 1971; Byrne & Nelson, 1965). This relationship is positive and linear in nature. Most commonly, this similarity-attraction effect is explained as a function of an individual's desire to validate his/her own views (Fehr, 2001). By interacting with similar others, little conflict of ideas, values, or interests are likely to arise. Of important note, this similarity-attraction effect is a function of perceived rather than actual similarity (Hoyle, 1993; Klohnen & Luo, 2003).

Similarity. Perceived similarity appears to be a powerful predictor of initial assessments of relational quality and beliefs about the long-term potential of relationships (Huston & Burgess, 1979). Allen & Eby (2003) assessed mentor perceptions of similarity with mentee based on values, interests, and personality. They found that perceived similarity related significantly to mentor perceptions of relational quality. Interestingly, they found the strongest relationship between similarity and relational quality in mentorships of shorter duration.

Specifically, Eby et al. (2012) found that positive protégé perceptions were most strongly associated with similarity in attitudes, values, beliefs, and personality with their mentors. The authors refer to this as *deep-level similarity* (Eby et al., 2012). Meta-analysis found that as deep-level similarity increased, so did protégé perceptions of support and relational quality. For this reason, the model of effective mentoring will treat deep-level similarity as an antecedent of perceived relationship quality. For these reasons, protégé perceptions of deep-level similarity with the mentor are expected to predict relationship quality.

H3: Protégé self-reports of perceived deep-level similarity with the mentor will predict relationship quality such that increases in deep-level similarity will result in increased reports of relationship quality.

Protégé Perceptions of Advice Quality

Throughout mentoring research, the term 'advice' is ubiquitous (e.g., Boice, 2000; Gerdes, 2003; Lipscomb, 2010; Phillips-Jones, 1983; Son & Kim, 2013). Whether referring to mentor support behaviors of giving advice or referring to protégé willingness to accept advice, the concept is mentioned regularly (Allen, 2004; Allen, Poteet, & Burroughs, 1997; Kram, 1985; Son & Kim, 2013). Due to its sheer number of mentions in the research, advice is clearly a central component of mentoring relationships (Allen & Eby, 2007; Passmore, Peterson, & Freire, 2013), and yet it has received little research attention by mentoring scholars (MacGeorge, Feng, Guntzviller, 2016).

Interpersonal advice is characterized by scholars as both social support and social influence (MacGeorge, Feng, Butler, & Budarz, 2004; Wilson & Kunkel, 2000). As such, receiving advice can make a person feel better while simultaneously being persuaded toward certain problem-solving actions (MacGeorge, Guntzviller, Hanasono, & Feng, 2013).

MacGeorge et al. (2013) defined advice as "messages that make recommendations about what to do, think, or feel in response to a problematic situation" (p. 6). While not all mentoring conversations require advice directed at solving a problem, advice giving implies that the "adviser has knowledge or insight that the advisee lacks" (Vehvilainen, 2012, p. 32). Advice, by definition, aligns with the central purpose of a mentoring relationship. Protégé perceptions of advice quality will, therefore, be treated as an independent variable in the model.

H4: Protégé perceptions of advice quality will predict situational satisfaction such that favorable outcomes will increase as advice quality increases.

Advice quality antecedents. Advice research is often focused on the potential for negative advice outcomes due to its potential to threaten "negative face" (Goldsmith, 1999; Wilson & Kunkel, 2000). These concerns are grounded in Politeness Theory (Brown & Levinson, 1987) and emphasize the need to attend to the advice recipients' perceptions of advice givers as "butting in" and constraining their autonomy (Feng & MacGeorge, 2010; Goldsmith & Fitch, 1997; MacGeorge, Guntzviller, Hanasono, & Feng, 2013). However, "prior research has emphasized that advice requests position the speaker as an advice-recipient prior to advice delivery. Thereby, many of the dilemmas of advising are eliminated and the advice is more likely to be accepted" (Vehvilainen, 2012, p. 32). In the case of voluntary mentoring relationships, protégés are naturally positioned as the advice-recipient, thus potentially eliminating the concern for negative face threats.

Understanding what influences protégé perceptions of advice quality is important to the development of a flash mentoring model. Feng and MacGeorge (2010) proposed the advice response theory (ART) which examines advice message features and the effects of source characteristics, both of which are discussed below.

Message features. Advice which attends to the recipient's face needs (facework), will solve or alleviate the recipient's problem (efficacy), and can be performed by the recipient (feasibility) is consistently viewed as higher in quality (Feng & Burleson, 2008; Feng & MacGeorge, 2010; Hung & Feeley, 2005; MacGeorge et al., 2004). In Feng and MacGeorge's (2010) work, politeness, response efficacy, and feasibility were all strong predictors of all advice outcomes. For this reason, the model of effective flash mentoring will treat these message features as antecedents of protégé perceptions of advice quality.

H5: Advice message features will predict protégé perceptions of advice quality such that greater reports of facework, efficacy, and feasibility, will result in higher ratings of advice quality.

Mentor expertise. An important dimension of source credibility is perceived expertise (Berlo, Lemert, & Mertz, 1969; Hovland, Janis, & Kelley, 1953; Pornpitakpan, 2004; Whitehead, 1968). Perceived expertise is defined as the receiver's perception of the speaker's ability to make correct assertions. Perceived expertise was found to be a strong predictor of advice recipients' perceptions of advice quality (Feng & MacGeorge, 2010). For this reason, the model of effective mentoring will treat this variable as another antecedent to protégé perceptions of advice quality.

H6: Protégé perceptions of mentor expertise will predict perceptions of advice quality such that increases in perceived expertise will result in increased perceptions of advice quality.
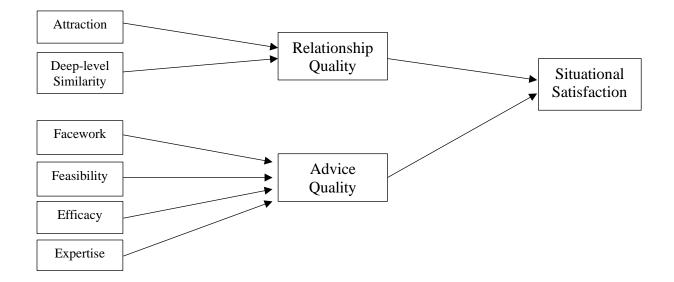
Summary of Variables

Based on a review of mentoring and advice literature, the model of successful flash mentorship will treat protégé reports of situational satisfaction as the dependent variable. Mediating variables are protégé perceptions of relationship quality and advice quality.

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Antecedents of these variables include attraction, deep-level similarity, advice message features

(facework, feasibility, efficacy), and perceived mentor expertise.

**FIGURE 1: Predicted Model of Protégé Satisfaction
with Flash Mentoring**

CHAPTER 3: METHODS

Participants

Undergraduate student participants of the Alumni Wisdom Project were surveyed via online questionnaire. Participants received extra course credit in exchange for participation.

Background Information

The Alumni Wisdom Project is a formal alumni-student flash mentorship program at Michigan State University's Broad College of Business. Undergraduate business students enrolled in MKT 250 (Business Communication) are required to participate in this short-term alumni mentorship program as a portion of their overall grade in this required class. The assignment is one of many and accounts for 5% of the course grade. Participation in the research study, however, was optional and was incentivized with nominal extra credit which accounted for 0.3% of the final course grade.

Broad College graduates are recruited to serve as volunteer alumni mentors. Their commitment is to communicate with students for a short interaction lasting less than one hour. These interactions may be in-person or via mediated channels such as video conference or phone call. Mentors are informed that the interaction will involve an advice-giving session led by their student protégé.

Students are given explicit instructions with a series of questions which they are required to ask their mentors (see Appendix A). The questions are designed to elicit an interactive conversation about the mentor's life experiences (e.g., "Can you tell me about a turning point or pivotal moment in your life?" and "What was one of your most meaningful MSU moments?") as well as advice from the mentor (e.g., "What do you wish you had done differently while you were in college?" and "What advice do you have for me?"). If time remains after the formal

portion of the interview, students are encouraged to ask additional questions to further the conversation with their mentors.

Following the interview, students are expected to follow up with a thank-you message within 12-24 hours. Then, they write an advice "blog post" for college students. These "blog posts" are not actually posted to the internet but are evaluated as if they are. Once the students receive peer feedback and coaching on their blog posts, they are required to send the final written product to their alumni mentors for review.

Measures

An online survey was conducted to measure protégé self-reported perceptions of relationship quality, advice quality, attraction, deep-level similarity, mentor expertise, advice message features (i.e., facework, feasibility, and efficacy), situational satisfaction, and demographic information (see Appendix B for complete list of items).

Dependent variable. A scale for protégé situational satisfaction does not currently exist. One salient definition of this attitudinal outcome is "satisfaction with one's university, department, program, academic courses, professor, job in general, specific job attributes (e.g., supervisor, coworkers, pay, benefits), or career; positive attitude toward work or university environment; academic satisfaction." (Eby et al., 2012, p. 8). Items to measure protégé self-reports of situational satisfaction were designed using this definition. The following items were asked of participants: "as a result of the mentoring program, I am more satisfied with my university," "as a result of the mentoring program, I am more satisfied with this course," "as a result of the mentoring program, I have a more positive attitude about my major," and "as a result of the mentoring program, I am happier with my college." Items were measured on a five-

point Likert scale ranging from "strongly disagree" to "strongly agree." Participant responses were averaged to form a composite score.

Mediating variables. The key indicators of protégé situational satisfaction were predicted to be relationship quality and advice quality. Measurement scales and related adaptations are discussed.

Relationship quality. Perceived relational quality is described as evaluative feelings toward the relationship, relational satisfaction, satisfaction with mentor, overall perceptions of relational quality, and liking. (Allen & Eby, 2003; Kram, 1985; Nakkula & Harris, 2005; Rhodes, 2005). To encompass this definition in its entirety, a combination of measures was used. An adapted version of Rubin's (1970) Liking Scale was used with the word "friend" changed to "my mentor." Additionally, three unrelated items were removed. The item "when I am with [friend], we are almost always in the same mood" was removed due to its irrelevance in the study context wherein protégés do not regularly interact with their mentors. A second item was removed because of its redundancy with the value similarity scale ("I think that [friend] and I are quite similar to each other.") Lastly, a third item was removed due to its lack of salience to the study participants ("I would vote for [friend] in a class or group election.") All items were measured on a five-point Likert scale ranging from strongly agree to strongly disagree. Participant responses were averaged to form a composite score.

Four additional items addressed protégé evaluations of their satisfaction with the mentor and mentor relationships. Ensher and Murphy (1997) used the following items for this purpose: "I effectively utilized my mentor to help me develop," "My mentor met my expectations," "I felt satisfied with my mentor," and "How likely do you think it is that you will stay in contact with your mentor after the program is over?" The first three items were measured on a five-point

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Likert scale ranging from strongly agree to strongly disagree. The fourth item was measured on a five-point scale ranging from very unlikely to very likely.

Three additional items addressed protégé overall perceptions of the relationship. These items were developed by Ragins, Cotton, and Miller (2000). "My mentor has been effective in his/her role," "my mentor failed to meet my needs" (reversed), and "I was disappointed in my mentor" (reversed).

Advice quality. Gino, Brooks, and Schweitzer (2012) developed a scale to measure advice quality (α=.90). On a seven-point Likert scale ranging from very unlikely to very likely, they asked the following four questions: "To what extent is the advice likely to be accurate?" "To what extent is the advice likely to be of good quality?" "How likely is the advice to be the right answer in your situation?" "How likely is it that the advice indicates the correct answer?"

Relationship quality antecedents. The antecedents of relationship quality were predicted to be attraction and deep-level similarity. Measurement scales and related adaptations are discussed. All items were measured on a five-point Likert scale ranging from strongly agree to strongly disagree.

Attraction. An adapted version of the scale for measuring social attraction (McCroskey et al., 2006) was used to evaluate protégé self-reports of social attraction toward mentors. Items were adjusted to read "my mentor" in place of the original scale's generic wording "he/she" and "this person." One item which is intended to evoke the anticipation of meeting the person ("It would be difficult to meet and talk with her/him") was removed due to its irrelevance in the study context wherein protégés have already interacted with their mentors.

Deep-level similarity. An adapted version of the scale for measuring similarity of values (McCroskey et al., 2006) was used to evaluate protégé self-reports of perceived deep-level

similarity shared with their mentors. Items were adjusted to read "my mentor" in place of the original scale's generic wording "this person."

Advice quality antecedents. The antecedents of advice quality were predicted to be message features (i.e., facework, response efficacy, and feasibility) and mentor expertise. Measurement scales and related adaptations are discussed.

Message features. The scale for advice in supportive interactions was used to assess facework, response efficacy, and feasibility (MacGeorge, Feng, Butler, & Budarz, 2004). Seven items designed to measure positive and negative face include items such as "the advice made it clear that I could choose whether or not to take it." Six items designed to measure response efficacy include items such as "the advice I received was applicable to my situation." Three items designed to measure feasibility include items such as "the advice given was something I could do."

Mentor expertise. Ohanian's (1990) Source Credibility scale was used to measure protégé perceptions of mentor expertise. Five semantic differential items such as "expert – not an expert" and "knowledgeable – unknowledgeable" were included.

CHAPTER 4: RESULTS

Properties of the Sample

The age of those participating in this study ranged from 18 to 42. The vast majority were 19-21 (96.1%) with 52.1% being 19, 32.4% being 20, and 11.6% being 21. Sophomores comprised 63.7% of the sample, juniors 33.2%, and seniors 3.1%. Most of the sample was in the sophomore year (63.7%) with 33.2% being juniors, and 3.1% being seniors. Males comprised 53.7% of the sample. Approximately 74.1% of participants identified themselves as white, 18.5% as Asian, 4.4% as African American, and 2.9% as a different ethnicity. The breakdown of participants' majors included 29.3% in Finance, 26.6% in Supply Chain Management, 18.5% in Marketing, 17.2% in Accounting, 5.2% in Management, and 3.1% in Human Resource Management. English was the first language for 85.9% of the participants.

Properties of the Measures

Situational satisfaction scores ranged from 1.44 to 5.00 with a mean of 4.02 and a standard deviation of 0.67. The distribution of scores was skewed negatively and leptokurtic. The reliability coefficient was estimated as, $\alpha=.92$.

Relational quality scores ranged from 1.73 to 5.00 with a mean of 4.34 and a standard deviation of 0.60. The distribution of scores was skewed negatively and leptokurtic. The scale reliability was estimated as, $\alpha=.93$.

Advice quality scores ranged from 2.60 to 5.00 with a mean of 4.31 and a standard deviation of 0.62. The distribution of scores was approximately bimodal with modes at 3.60 (22.2% of the cases) and 5.00 (33.6% of the cases). No other category received more than 8.9% of the responses. The reliability was estimated as, $\alpha=.80$.

The distribution of attraction scores was skewed negatively. Scores ranged from 2.00 to 5.00 with a mean of 4.25 and a standard deviation of 0.61. The reliability was estimated as α=.86.

Deep-level similarity scores approximated closely the normal distribution. They ranged from 1.00 to 5.00 with a mean of 3.74, a standard deviation of 3.70, and an estimated reliability of α=.92.

Facework scores ranged from 2.29 to 5.00 with a mean of 4.08, a standard deviation of 0.58, and an estimated reliability of α=.87. The distribution of scores showed that few subjects gave low ratings. Almost ¾ of the ratings (71.2%) were 3.86 and higher.

Feasibility scores were skewed negatively. They ranged from 2.33 to 5.00 with a mean of 4.44, a standard deviation of 0.54, and α=.83.

Response efficacy scores ranged from 2.50 to 5.00 with a mean of 4.48, a standard deviation of 0.52, and α=.93. The distribution of these scores was skewed negatively.

Perceptions of mentor expertise were skewed negatively and leptokurtic. These scores ranged from 2.00 to 5.00 with a mean of 4.68 and a standard deviation of 0.41. Coefficient α=.85.
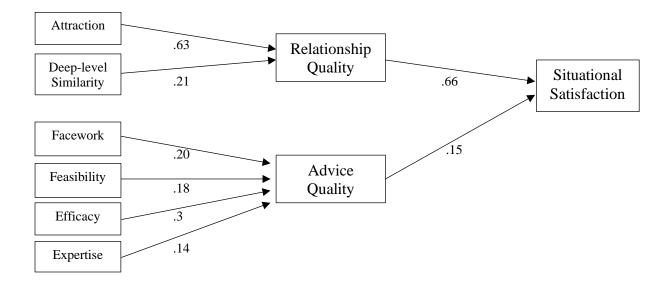
Tests of Model Predictions

The model presented in Figure 2 asserts that both relational quality and advice quality predict situational satisfaction. The results of linear multiple regression analysis (N=518) indicate that relational quality was a powerful predictor of situational satisfaction, β=.66, β'=.70, p<.001, and that advice quality was a more modest predictor, β=.15, β'=.15, p<.001. Taken together, these two variables predicted situational satisfaction very accurately, $R = .75$, $R' = .81$, $F (2, 515) = 332.77$, p<.001.

The model also posited that attraction and deep level similarity were important predictors of relational quality. The results of the linear multiple regression analysis (N=518) showed that attraction served as a powerful predictor of relational quality, β=.63, β'=.81, p<.001; whereas deep-level similarity was a more modest, yet statistically significant, predictor, β=.21, β'=.08, p<.001. Together, these two variables predict relational quality very accurately, R = .79, R' = .87, F (2, 515) = 432.10, p<.001.

The model also claimed that facework, feasibility, efficacy, and expertise served as antecedents of advice quality. The results of the linear multiple regression analysis (N=518) showed that each of the four antecedents was a modest predictor of advice quality. The pertinent statistics are: for facework, β=.20, β'=.21, p<.001; for feasibility, β=.18, β'=.24, p<.001; for efficacy, β=.30, β'=.29, p<.001; and for expertise, β=.14, β'=.17, p<.001. Taken together, the four predicted advice quality well, R = .66, R' = .76, F (4, 513) = 96.99, p<.001.

Although the causal links posited by the model depicted in Figure 2 were all of sufficient magnitude to be consistent with the hypotheses that the antecedents served as causes of their consequents, the fit of the model proved disappointing. Specifically, the root mean squared error of the model equaled .13, much too high a figure to fail to reject the model when N=518. Subsequent attempts to revise the model did not yield substantially better fit. In each instance the observed errors were positive, indicating that the obtained correlations exceeded those predicted by the model. This outcome suggests the possibility that identifying the additional antecedents of situational satisfaction would be required to produce an adequately fitting causal model of this process.

**FIGURE 2: Resulting Model of Protégé Satisfaction
with Flash Mentoring**

CHAPTER 5: DISCUSSION

For decades, mentoring researchers and practitioners have sought clarity around the definition of mentoring and the variables that best predict positive outcomes. Although most mentoring research reports correlational findings, the current study attempted to provide evidence for causality. The overall proposed model for successful flash mentorship proved insufficient, but the predicted relationships between variables were confirmed. The findings from this study offer a small step in the direction of developing a causal model of mentoring and provides insight for researchers and practitioners alike.

This study was designed to test a proposed model of successful flash mentoring. Different from its traditional predecessor, flash mentoring is a short interaction, typically less than one hour, which occurs one time. Due to the short duration of flash mentoring interactions, one might question the utility of this type of program. To address this issue, the study asked the question: "*Will protégé reports of situational satisfaction be higher than scale midpoint (indicating satisfaction or strong satisfaction)?*" The answer to this question is a strong 'yes'. The average response was well above average, indicating that participants' reports of situational satisfaction were generally positive. This finding supports the utility of flash mentoring programs of research and practice. Further research is necessary to determine the contexts in which flash mentorship is more (or less) useful than traditional mentoring.

To determine the variables that positively affect protégé situational satisfaction, a review of mentoring literature was conducted. This search revealed two important variables – *relational quality and advice quality* – that are positively related to protégé situational satisfaction. Though, one might expect that the transactional nature of a flash mentoring experience would mean that advice quality would become more important than relational quality, they would be incorrect.

Surprisingly, relational quality was a stronger predictor than advice quality, though both were strongly related to positive outcomes. The predicted antecedents of relational quality were *attraction* and *deep-level similarity*. Both proved useful in predicting relational quality.

Researchers and practitioners can benefit from knowing that relational quality is a strong predictor of success even in one-time, short mentorship interactions. To improve mentoring outcomes, program coordinators could invest time and resources into training mentors and protégés how to develop effective relationships with one another. This would likely prove especially useful for those participating in flash mentorships wherein the time to do so is limited. Also, explaining to mentors and protégés the importance of relationship development in the mentorship process has the potential to boost outcomes.

Additionally, more positive outcomes can be achieved by considering attraction and deep-level similarity when designing mentoring programs. When matching mentors and protégés, it may be useful to ask protégés to select prospective mentors. Doing this would tap a surface-level social attraction that could potentially increase reports of relational quality. Furthermore, by considering items of deep-level similarity, program coordinators could match mentors and protégés based on the commonalities shown to have the greatest impact on relational outcomes. To further test the impact of these variables, participants could be randomized into "matched" and "mismatched" dyads.

Advice quality was not as strong a predictor of situational satisfaction as was relational quality, but it did positively predict outcomes. Additionally, antecedents of advice quality – *message features and mentor expertise* – were useful in predicting reports of advice quality. Mentoring programs could benefit from training mentors to improve advice quality. This training could include information about facework and the ways to attend to negative face needs during

mentoring interactions, ways to offer more feasible and efficacious advice, and tips for bolstering their expertise by helping the protégé understand why they are well-poised to be offering the advice. Future research would benefit from a study that is more conducive to advice-giving.

Limitations and Future Research

This study suffers from several limitations. First, this non-experimental design was conducted with a narrow subset of students who are primarily white, middle class business students at a major university. The sample is not representative enough to make these findings generalizable to the greater population. Notably, the number of non-white students in the sample is far too small to draw any meaningful conclusions about how non-white students' experiences may have differed from their white counterparts' experiences. This is especially important given that the alumni population is also dominantly white. Future research must consider more diverse populations and experimental designs. Such populations might include a variety of mentor-mentee relationships in youth, academic, and professional settings across race, age, class, and education levels. An example of an experimental design to test these differences could involve pairing protégés with mentors who are either very much like them or very much unlike them.

Second, this study only looked at flash mentoring without a comparison group. Because of this limitation, it is impossible to know if reports of protégé situational satisfaction would have been higher or lower if students had more time and more interactions with their mentors. Future research would benefit from the inclusion of a comparison group. An example of this design might include randomizing mentorship assignments to either include a one-time, short interaction after which the mentor and protégé cease communication as compared to a long-term interaction that takes place over several months.

Third, the findings are constrained by the short duration of the study. Participants interacted with their mentors and reported about their experience within a month's time. To determine if feelings of satisfaction is fleeting or if it persist over time, a longitudinal design must be implemented.

Fourth, the context of the study was limited to alumni-student interactions, which may not be representative of other contexts in which mentoring research is conducted. Future research must consider additional contexts such as youth and professional mentorship.

Finally, behavioral indicators of the success or failure of mentoring relationships could prove beneficial for the mentorship field. While participants may indicate satisfaction with their mentors, do their behaviors coincide with their evaluations? Do participants act on the advice given by mentors? Do they find the advice to ultimately be useful? Mentorship is presumed to be useful, but a better understanding of post-mentorship behaviors is necessary to truly understand the long-term impact of these interactions – particularly regarding flash-mentoring interactions.

Conclusion

Homer's *The Odyssey* is said to have introduced people to the concept of mentorship. Clearly, protégés benefit from the relationships with and advice provided by mentors. Even when the interaction is very short and only happens once, protégé outcomes are robust. Understanding which variables predict positive outcomes will help flash mentoring researchers and practitioners design and conduct more beneficial programs. With future research, the field of mentorship can continue to refine this understanding, develop a predictive model, and ultimately impact protégé outcomes around the world. Homer would be so proud.

APPENDICES

APPENDIX A: Wisdom Project Questions

1. "Please tell me about yourself."
2. "At this point in your life, are you doing what you thought you'd be doing?"
3. "Can you tell me about a turning point or pivotal moment in your life?"
4. "What was one of your most meaningful MSU moments?"
5. "How did your college experience prepare you for what you've done professionally?"
6. "On a scale of 1-10 (with 10 being the highest) how important do you think effective communication is in the workplace?"
   a. Tell me why you think that is.
   b. Can you give me any specific examples?
7. "What do you wish you had done differently while you were in college?"
8. "What advice do you have for me?"

Demographic Items
1. Gender
2. Race
3. Ethnicity
4. Age
5. Year in Program
6. Major

Relationship Quality Items
Higher scores indicate greater relationship quality
1. I think that my mentor is unusually well-adjusted.
2. I would highly recommend my mentor for future mentorships with students.
3. I have great confidence in my mentor's good judgment.
4. Most people would react very favorably to my mentor after a brief acquaintance.
5. I think that my mentor is one of those people who quickly wins respect.
6. I feel that my mentor is an extremely intelligent person.
7. My mentor is a very likeable person.
8. My mentor is the sort of person who I myself would like to be.
9. It seems to me that it would be very easy for my mentor to gain admiration.
10. I effectively utilized my mentor to help me develop.
11. My mentor met my expectations.
12. I felt satisfied with my mentor.
13. How likely is it that you will stay in contact with your mentor after the program is over?
14. My mentor was effective in his/her role as my mentor.
15. My mentor failed to meet my needs. (reversed)
16. I was disappointed in my mentor. (reversed)

Advice Quality Items
Higher scores indicate greater advice quality
1. To what extent is the advice you received from your mentor likely to be accurate?
2. Regarding the advice your mentor gave you, how likely is it to be the right answer in your situation?
3. How likely is it that your mentor's advice is wrong? (reversed)
4. How likely is it that the advice your mentor gave you the correct answer?

Attraction Items
Higher scores indicate higher levels of attraction
1. I think my mentor could be a friend of mine.
2. I would like to have another conversation with my mentor.
3. My mentor and I could never establish a personal friendship with each other. (reversed)
4. My mentor just wouldn't fit into my circle of friends. (reversed)
5. My mentor would be pleasant to be with.
6. I would not like to spend time socializing with my mentor. (reversed)
7. I could become close friends with my mentor.
8. My mentor is easy to get along with.
9. My mentor is unpleasant. (reversed)
10. My mentor is very friendly.

Deep-level Similarity Items
Higher scores indicate higher levels of deep-level similarity
1. My mentor thinks like me.
2. My mentor doesn't behave like me. (reversed)
3. My mentor is different from me. (reversed)
4. My mentor shares my values.
5. My mentor is like me.
6. My mentor treats people like I do.
7. My mentor doesn't think like me. (reversed)
8. My mentor is similar to me.
9. My mentor doesn't share my values. (reversed)
10. My mentor behaves like me.
11. My mentor doesn't treat people like I do. (reversed)
12. My mentor has thoughts and ideas that are similar to mine.
13. My mentor expresses attitudes different from mine. (reversed)
14. My mentor has a lot in common with me.

Message Features Items
Higher scores indicate more positive perceptions of message features
Facework sub-items:
1. My mentor's advice made me feel liked and accepted.
2. My mentor's advice made me feel good about myself.
3. My mentor's advice left me free to do what I wanted.
4. My mentor's advice made it clear that I could choose whether or not to take it.
5. My mentor's advice showed that my abilities were evaluated highly.
6. My mentor's advice was respectful of my right to make my own decisions.
7. My mentor's advice made me feel understood and identified with.

Feasibility sub-items:
1. My mentor advised me to do something I was not capable of accomplishing. (reversed)
2. My mentor's advice was something I could do.
3. My mentor's advice recommended an action that is impossible for me to do. (reversed)

Response efficacy sub-items:
1. I understood the advice my mentor gave me.
2. The advice my mentor gave me was irrelevant to my situation. (reversed)
3. The advice my mentor gave me was applicable to my situation.
4. I was able to make sense of the advice my mentor gave me.
5. The advice my mentor gave me was suited to my current situation.
6. I was unable to comprehend the advice my mentor gave me. (reversed)

Mentor Expertise Items
Higher scores indicate higher levels of protégé perceptions of mentor expertise
My mentor is:
1. Expert – Not an expert
2. Experienced – Inexperienced
3. Knowledgeable – Unknowledgeable
4. Qualified – Unqualified
5. Skilled – Unskilled

Situational Satisfaction Items
Higher scores indicate higher levels of situational satisfaction
1. As a result of the mentoring program, I am more satisfied with my university.
2. As a result of the mentoring program, I am more satisfied with this course.
3. As a result of the mentoring program, I have a more positive attitude about my major.
4. As a result of the mentoring program, I am happier with my college.
5. I felt satisfied with my mentor.
6. My mentor met my expectations.

REFERENCES

REFERENCES

Allen, T. D., (2004). Protégé selection by mentors: Contributing individual and organizational factors. *Journal of Vocational Behavior*, 65, 469–483. doi: 10.1016/j.jvb.2003.07.003

Allen, T. D., & Eby, L. T. (2003). Relationship Effectiveness for Mentors: Factors Associated with Learning and Quality. *Journal of Management*, *29*(4), 469–486. https://doi.org/10.1016/S0149-2063_03_00021-7

Allen, T. D., & Eby, L. T. (2007). Common bonds: An integrative perspective on mentoring. In T.D. Allen & L. T. Eby (Eds.), The Blackwell handbook of mentoring: *A multiple perspectives approach* (pp. 397–419). Oxford, England: Blackwell. doi:10.1111/b.9781405133739.2007.00024.x

Allen, T. D., & Eby, L. T. (2008). Mentor commitment in formal mentoring relationships. *Journal of Vocational behavior*, *72*(3), 309-316.

Allen, T. D., & O'Brien, K. E. (2006). Formal mentoring programs and organizational attraction. *Human Resource Development Quarterly*, *17*(1), 43-58.

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, 70–89. doi:10.1006/jvbe.1997.1596

Austin, A. E. (2002). Preparing the next generation of faculty. *Journal of Higher Education*, 73, 94–122. doi:10.1353/jhe.2002.0001

Avery, D. R., Tonidandel, S., & Phillips, M. G. (2008). Similarity on Sports Sidelines: How Mentor–Protégé Sex Similarity Affects Mentoring. *Sex Roles*, *58*(1–2), 72–80. https://doi.org/10.1007/s11199-007-9321-2

Barrera, M. (1986). Distinctions between social support concepts, measures, and models. *American Journal of Community Psychology,* 14(4), 413-445.

Barth, J., Schneider, S., & Von Känel, R. (2010). Lack of social support in the etiology and the prognosis of coronary heart disease: a systematic review and meta-analysis. *Psychosomatic medicine*, *72*(3), 229-238.

Berlo, D. K., Lemert, J. B., & Mertz, R. J. (1969). Dimensions for evaluating the acceptability of message sources. *Public Opinion Quarterly,* 33, 563-576.

Berscheid, E., & Walster, G.W. (1978). *Equity: Theory and Research.* Boston, MA: Allyn & Bacon.

Boice, R. (2000). *Advice for new faculty members: Nihil Nimus.* Needham Heights, MA, US: Allyn & Bacon.

Bozeman, B., & Feeney, M. K. (2007). Toward a Useful Theory of Mentoring: A Conceptual Analysis and Critique. *Administration & Society*, *39*(6), 719–739. https://doi.org/10.1177/0095399707304119

Bozionelos, N., Bozionelos, G., Polychroniou, P., & Kostopoulos, K. (2014). Mentoring receipt and personality: Evidence for non-linear relationships. *Journal of Business Research*, *67*(2), 171–181. https://doi.org/10.1016/j.jbusres.2012.10.007

Brown, P., Levinson, S. C., & Levinson, S. C. (1987). *Politeness: Some universals in language usage* (Vol. 4). Cambridge university press.

Bynum, Y. P. (2015). The power of informal mentoring. *Education*, *136*(1), 69-73.

Byrne, D. (1971). *The attraction paradigm.* New York, NY: Academic Press.Byrne, D., & Nelson, D. (1965). Attraction as a linear function of proportion of positive reinforcements. *Journal of personality and social psychology*, *1*(6), 659.

Cai, D., Liu, S., Liu, J., Yao, L., & Jia, X. (2021). Mentoring and newcomer well-being: a socialization resources perspective. *Journal of Managerial Psychology*.

Chao, G. T., O'Leary-Kelly, A. M., Wolf, S., Klein, H. J., & Gardner, P. D. (1994). Organizational socialization: Its content and consequences. *Journal of Applied Psychology*, *79*(5), 730–743. https://doi.org/10.1037/0021-9010.79.5.730

Chi, H., Jones, E. L., & Grandham, L. P. (2012). Enhancing Mentoring Between Alumni and Students via Smart Alumni System. *Procedia Computer Science*, *9*, 1390–1399. https://doi.org/10.1016/j.procs.2012.04.153

Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic medicine*.

Cohen, N. H. 1993. *The development and validation of the principles of adult mentoring scale for faculty mentoring in higher education* Philadelphia, PA Unpublished doctoral dissertation, Temple University

Cohen, S. (1988). Psychosocial models of the role of social support in the etiology of physical disease. *Health psychology*, *7*(3), 269.

Cohen, S. E., & Syme, S. I. (1985). *Social support and health*. Academic Press.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310-357. doi:10.1037/0033-2909.98.2.310

Crisp, G., & Cruz, I. (2009). Mentoring College Students: A Critical Review of the Literature Between 1990 and 2007. *Research in Higher Education*, *50*(6), 525–545. https://doi.org/10.1007/s11162-009-9130-2

Cutrona, C.E., & Russell, D.W. (1990). Type of social support and specific stress: Toward a theory of optimal matching. *Social support: An interactional view* (Sarason B.R, Sarason I.G. & Pierce G.R. eds). John Wiley & Sons, New York, pp. 319-366.

Cai, D., Liu, S., Liu, J., Yao, L., & Jia, X. (2021). Mentoring and newcomer well-being: a socialization resources perspective. Journal of Managerial Psychology, 36(3), 285-298. https://doi-org.proxy2.cl.msu.edu/10.1108/JMP-08-2019-0485

Dougherty, T. W., Dreher, G. F., Arunachalam, V., & Wilbanks, J. E. (2013). Mentor status, occupational context, and protégé career outcomes: Differential returns for males and females. *Journal of Vocational Behavior*, *83*(3), 514–527. https://doi.org/10.1016/j.jvb.2013.08.001

DuBois, D. L., & Karcher, M. J. (Eds.). (2005). *Handbook of youth mentoring.* Thousand Oaks, CA: Sage.

DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest*, 12, 57–91. doi:10.1177/1529100611414806

Dunkel-Schetter, C., & Bennett, T. L. (1990). The availability of social support and its activation in times of stress. *Social support: An interactional view*, *1*.

Eby, L. T. de T., Allen, T. D., Hoffman, B. J., Baranik, L. E., Sauer, J. B., Baldwin, S., … Evans, S. C. (2012). An interdisciplinary meta-analysis of the potential antecedents, correlates, and consequences of protégé perceptions of mentoring. *Psychological Bulletin*, *139*(2), 441–476. https://doi.org/10.1037/a0029279

Eby, L. T., Rhodes, J. E., & Allen, T. D. (2007). Definition and evolution of mentoring. In T. D. Allen & L. T. Eby (Eds.), *The Blackwell handbook of mentoring: A multiple perspectives approach* (pp. 7–20). Oxford, England: Blackwell. doi:10.1111/b.9781405133739.2007.00002.x

Ellis, H. C. (1992). Graduate education in psychology: Past, present, and future. *American Psychologist*, 47, 570 –576. doi:10.1037/0003-066X.47.4.570

Ensher, E. A., Grant-Vallone, E. J., & Marelich, W. D. (2002). Effects of Perceived Attitudinal and Demographic Similarity on Proteges' Support and Satisfaction Gained From Their Mentoring Relationships. *Journal of Applied Social Psychology*, *32*(7), 1407–1430. https://doi.org/10.1111/j.1559-1816.2002.tb01444.x

Ensher, E. A., & Murphy, S. E. (1997). Effects of Race, Gender, Perceived Similarity, and Contact on Mentor Relationships. *Journal of Vocational Behavior*, *50*(3), 460–481. https://doi.org/10.1006/jvbe.1996.1547

Fehr, B. (2001). The life cycle of friendship. In C. Hendrick & S. S. Hendrick (Eds.), *Close relationships: A sourcebook* (pp. 71–82). Thousand Oaks, CA: Sage.

Feng, B., & Burleson, B. R. (2008). The effects of argument explicitness on responses to advice in supportive interactions. *Communication Research, 35*, 849-874. doi:10.1177/0093650208324274

Feng, B., & MacGeorge, E. L. (2010). The influences of message and source factors on advice outcomes. *Communication Research, 37*, 576-598. doi: 10.1177/0093650210368258

Festinger, L., Schachter, S., & Back, K. (1950). *Social pressures in informal groups; a study of human factors in housing.* Oxford, England: Harper.

Flaxman, E., Ascher, C., & Harrington, C. (1988). *Youth mentoring: Programs and practices.* New York, NY: ERIC Clearinghouse on Urban Education, Institute for Minority Education, Teachers College, Columbia University.

Forbes, M. H., & Roberts, C. A. (2021, July). Exploring a New Mentorship Model: From One-on-One to Flash Mentoring. In *2021 ASEE Virtual Annual Conference Content Access*.

Fornari, A., Murray, T. S., Menzin, A. W., Woo, V. A., Clifton, M., Lombardi, M., & Shelov, S. (2014). Mentoring program design and implementation in new medical schools. *Medical education online*, *19*(1), 24570.

Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology, 21*(6), 1016-1024. doi: 10.1037/0012-1649.21.6.1016

Garvey, B., & Alred, A. (2003). An introduction to the symposium on mentoring: Issues and prospects. British Journal of Guidance and Couselling, 31(1), pp. 3-9. doi:10.1080/0306988031000086125

Gerdes, E. P. (2003). Do It Your Way: Advice from Senior Academic Women. *INNOVATIVE HIGHER EDUCATION*, 23.

Ghosh, R. (2014). Antecedents of mentoring support: A meta-analysis of individual, relational, and structural or organizational factors. *Journal of Vocational Behavior*, *84*(3), 367–384. https://doi.org/10.1016/j.jvb.2014.02.009

Gigerenzer, G. (n.d.). *From Tools to Theories: A Heuristic of Discovery in Cognitive Psychology*. 14.

Gino, F., Brooks, A. W., & Schweitzer, M. E. (n.d.). *Anxiety, Advice, and the Ability to Discern: Feeling Anxious Motivates Individuals to Seek and Use Advice*. 63.

Goldsmith, D. J. (1999). Content-based resources for giving face-sensitive advice in troubles talk episodes. *Research on Language and Social Interaction, 32*, 303-336.

Goldsmith, D. J., & Fitch, K. (1997). The Normative Context of Advice as Social Support. *Human Communication Research*, *23*(4), 454–476. https://doi.org/10.1111/j.1468-2958.1997.tb00406.x

Gottlieb, B.H. (1978). The development and application of a classification scheme of informal helping behaviors. *Canadian Journal of Behavioral Science* 10, pp. 105-115.

Hansman, C. A. (2002). Diversity and power in mentoring relationships. *Critical perspectives on mentoring: Trends and issues*, 39-48.

Hinde, R. A. (1981). The bases of a science of interpersonal relationships. In S. Duck & R. Gilmour (Eds.). *Personal relationships: 1. Studying relationships*, (pp. 1–22). London, England: Academic Press.

House, J. S. (1981). *Work stress and social support.* Reading, MA: Addison-Wesley.

House, J. and Kahn, R. (1985). 'Measures and concepts of social support'. In: Cohen, S. and Syme, S. (Eds) *Social Support and Health,* Academic Press, Orlando.

Hovland, C., Janis, I., & Kelley, H. (1953). *Communication and persuasion.* New Haven, CT: Yale University Press.

Hoyle, R. H. (1993). Interpersonal attraction in the absence of explicit attitudinal information. *Social Cognition,* 11, 309–320.

Hung, H. Y., & Feeley, T. H. (2005). Evaluating advice in supportive social interaction: A. replication of MacGeorge, Feng, Butler, and Budarz (2004). Paper presented at the International Communication Association, New York.

Huston, T. L., & Burgess, R. L. (1979). Social exchange in developing relationships: An overview. In T. L. Huston & R. L. Burgess (Eds.), *Social exchange in developing relationships* (pp. 3–28). New York, NY: Academic Press.

Ilesanmi Oladele Ayodeji, Osogbo, Lasisi, Fatai Adebayo, (2015). 'Role of Mentoring in Business Development in Nigeria'. Global Journal of Human Resource Management Vol.3, No.3, pp. 17-38. ISSN 2053-5686(Print), ISSN 2053-5694

Waljee, J. F., Chopra, V., & Saint, S. (2020). Mentoring millennials. *Jama*, *323*(17), 1716-1717.

Jacobi, M. (1991). Mentoring and undergraduate academic success: A literature review. *Review of educational research*, *61*(4), 505-532.

Johnson, W. B. (2007). Student-faculty mentoring outcomes. In T. D. Allen & L. T. Eby (Eds.), *The Blackwell handbook of mentoring: A multiple perspectives approach* (pp. 189–210). Oxford, England: Blackwell. doi:10.1002/9780470691960.ch12

Kammeyer-Mueller, J. D., & Judge, T. A. (2008). A quantitative review of mentoring research: Test of a model. *Journal of Vocational Behavior*, *72*(3), 269–283. https://doi.org/10.1016/j.jvb.2007.09.006

Kram, K. E. (1985). *Mentoring at work*. Glenview, IL: Scott Foresman.

Klohnen, E. C., & Luo, S. (2003). Interpersonal attraction and personality: What is attractive--self similarity, ideal similarity, complementarity or attachment security?. *Journal of personality and social psychology*, *85*(4), 709.

Lankau, M. J., Riordan, C. M., & Thomas, C. H. (2005). The effects of similarity and liking in formal relationships between mentors and protégés. *Journal of Vocational Behavior*, *67*(2), 252–265. https://doi.org/10.1016/j.jvb.2004.08.012

Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. A., & McKee, B. (1978). *The seasons of a man's life.* New York, NY: Knopf. doi:10.1177/105960117900400214

Lindzey, G., & Byrne, D. (1968). Measurement of social choice and interpersonal attractiveness. *The handbook of social psychology*, *2*, 452-525.

Lipscomb, R. (2010). Instant Mentoring: Sharing Wisdom and Getting Advice Online with E-Mentoring. *Journal of the American Dietetic Association*, *110*(8), 1148–1155. https://doi.org/10.1016/j.jada.2010.06.019

MacGeorge, E. L., Feng, B., Butler, G. L., & Budarz, S. K. (2004). Understanding Advice in Supportive Interactions. *Human Communication Research*, *30*(1), 42–70. https://doi.org/10.1111/j.1468-2958.2004.tb00724.x

MacGeorge, E. L., Feng, B., & Guntzviller, L. M. (2016). Advice: Expanding the Communication Paradigm. *Annals of the International Communication Association*, *40*(1), 213–243. https://doi.org/10.1080/23808985.2015.11735261

MacGeorge, E. L., Guntzviller, L. M., Hanasono, L. K., & Feng, B. (2013). Testing Advice Response Theory in Interactions with Friends. *Communication Research*, *43*(2), 211–231. https://doi.org/10.1177/0093650213510938

Mangan, L. (2013). The many modes of mentoring: new spins on the classic relationship. *Journal of the Academy of Nutrition and Dietetics*, *113*(5 Suppl), S38-S41.

McCroskey, L. L., McCroskey, J. C., & Richmond, V. P. (2006). Analysis and improvement of the measurement of interpersonal attraction and homophily. *Communication Quarterly*, *54*(1), 1-31.

Merriam, S. (1983). Mentors and Protégés: A Critical Review of the Literature. *Adult Education*, *33*(3), 161–173. https://doi.org/10.1177/074171368303300304

Mwaura, K. W., Odero-Wanga, D. A., & Mulu-Mutuku, M. (2015). Influence of type of mentoring relationship on youth empowerment in secondary schools in Njoro sub-county, Nakuru county, Kenya. *International Journal of Innovation and Applied Studies*, *10*(1), 15.

Nakkula, M. J., & Harris, J. T. (2005). Assessment of mentoring relationships. In. D. L. DuBois & M. J. Karcher (Eds.), *Handbook of youth mentoring* (pp. 100–117). Thousand Oaks, CA: Sage.

Nagy, G. (2017). 'Diachronic Homer and a Cretan Odyssey', Oral Tradition 31: 3–50.

Noe, R. A. (1988). An Investigation of the Determinants of Successful Assigned Mentoring Relationships. *Personnel Psychology*, *41*(3), 457–479. https://doi.org/10.1111/j.1744-6570.1988.tb00638.x

Nora, A., & Crisp, G. (2007). Mentoring Students: Conceptualizing and Validating the Multi-Dimensions of a Support System. *Journal of College Student Retention: Research, Theory & Practice*, *9*(3), 337–356. https://doi.org/10.2190/CS.9.3.e

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, 537–554. doi:10.1177/0149206308318619

Ohanian, R. (1990). Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness, and Attractiveness. *Journal of Advertising*, *19*(3), 39–52. https://doi.org/10.1080/00913367.1990.10673191

Passmore, J., Peterson, D. B., & Freire, T. (Eds.). (2013). *The Wiley-Blackwell handbook of the psychology of coaching and mentoring*. Malden, MA: Wiley-Blackwell.

Phillips-Jones, L. (1983). Establishing a formalized mentoring program. *Training & Development Journal*, *37*(2), 38–42.

Pornpitakpan, C. (2004). The Persuasiveness of Source Credibility: A Critical Review of Five Decades' Evidence. *Journal of Applied Social Psychology*, *34*(2), 243–281. https://doi.org/10.1111/j.1559-1816.2004.tb02547.x

Priest, K. L., & Donley, S. (2014). Developing Leadership for Life: Outcomes from a Collegiate Student-Alumni Mentoring Program. *Journal of Leadership Education*, 11.

Quinnell, K. (2017). Mentoring organically. In *Beyond Mentoring* (pp. 5-18). Chandos Publishing.

Ragins, B. R., & Cotton, J. L. (1991). Easier Said Than Done: Gender Differences in Perceived Barriers to Gaining a Mentor. *Academy of Management Journal; Briarcliff Manor*, *34*(4), 939.

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*. https://doi.org/10.5465/1556344

Ragins, B. R., & Kram, K. E. (Eds.). (2007a). *The handbook of mentoring at work: Theory, research, and practice* (pp. 197–222). Thousand Oaks, CA: Sage. doi:10.4135/9781412976619

Raposa, E. B., Rhodes, J. E., Stams, G. J. J. M., Card, N., Burton, S., Schwartz, S. E. O.

Hussain, S. B. (2019). The effects of youth mentoring programs: a meta-analysis of outcome studies. Journal of Youth and Adolescence. https://doi.org/10.1007/s10964-019- 00982-8.

Rhodes, J. E. (2005). A model of youth mentoring. In D. L. DuBois & M. J. Karcher (Eds.), *Handbook of youth mentoring* (pp. 30–43). Thousand Oaks, CA: Sage.

Rubin, Z. (1970). Measurement of romantic love. *Journal of Personality and Social Psychology,* 16, 265-273.

Seeman, T. E., & Berkman, L. F. (1988). Structural characteristics of social networks and their relationship with social support in the elderly: who provides support. *Social science & medicine*, *26*(7), 737-749.

Seeman, T. E., Berkman, L. F., Blazer, D., & Rowe, J. W. (1994). Social ties and support and neuroendocrine function: The MacArthur studies of successful aging. *Annals of Behavioral Medicine*, *16*(2), 95-106.

Son, S., & Kim, D.-Y. (2013). What Makes Protégés Take Mentors' Advice in Formal Mentoring Relationships? *Journal of Career Development*, *40*(4), 311–328. https://doi.org/10.1177/0894845312455507

Spencer, R. (2007). Naturally occurring mentoring relationships involving youth. In T. D. Allen & L. T. Eby (Eds.), *The Blackwell handbook of mentoring: A multiple perspectives approach* (pp. 99–117). Oxford, England: Blackwell. doi:10.1002/9780470691960.ch7

Strine, T. W., Chapman, D. P., Balluz, L., & Mokdad, A. H. (2008). Health-related quality of life and health behaviors by social and emotional support. *Social psychiatry and psychiatric epidemiology*, *43*(2), 151-159.

Tenenbaum, H. R., Crosby, F. J., & Gliner, M. D. (2001). Mentoring relationships in graduate school. *Journal of Vocational Behavior*, 59, 326–341. doi:10.1006/jvbe.2001.1804

Thoits, P. A. (1995). Stress, coping, and social support processes: Where are we? What next?. *Journal of health and social behavior*, 53-79.

Tilden V.P. & Gaylen R.D. (1987) Cost and conflict: The darker side of social support. *Western Journal of Nursing Research* 9(1), 9–18

Tinoco-Giraldo H, Torrecilla Sánchez EM, & García-Peñalvo FJ. (2020). E-Mentoring in higher education: A structured literature review and implications for future research. *Sustainability*, 12(11), 4344. https://doi.org/10.3390/su12114344

Underhill, C. M. (2006). The effectiveness of mentoring programs in corporate settings: A meta-analytical review of the literature. *Journal of Vocational Behavior*, *68*(2), 292–307. https://doi.org/10.1016/j.jvb.2005.05.003

Vehviläinen, S. (2012). Chapter 2. Question-prefaced advice in feedback sequences of Finnish academic supervisions. In H. Limberg & M. A. Locher (Eds.), *Pragmatics & Beyond New Series* (Vol. 221, pp. 31–52). https://doi.org/10.1075/pbns.221.04veh

Wanberg, C. R., Kammeyer-Mueller, J., & Marchese, M. (2006). Mentor and protégé predictors and outcomes of mentoring in a formal mentoring program. *Journal of Vocational Behavior*, *69*(3), 410–423. https://doi.org/10.1016/j.jvb.2006.05.010

Weinberg, F. J., & Lankau, M. J. (2011). Formal mentoring programs: A mentor-centric and longitudinal analysis. *Journal of Management*, *37*(6), 1527-1557.

Wethington, E., & Kessler, R. C. (1986). Perceived support, received support, and adjustment to stressful life events. *Journal of Health and Social behavior*, 78-89.

Whitehead, J. L., Jr. (1968). Factors of source credibility. *Quarterly Journal of Speech,* 54, 59-63.

Wilson, S. R., & Kunkel, A. W. (2000). Identity implications of influence goals: Similarities in perceived face threats and facework across sex and close relationships. *Journal of Language and Social Psychology,* 19, 195–221.