Conceptualizing and Measuring the Quality of the Mentoring Relationship

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Abstract

This paper proposes a theoretical model of the relationship between different features of mentoring and outcomes, based on both the existing research literature in education and other disciplines and on qualitative data of teachers' experiences with mentoring in their first year of teaching. The proposed framework for mentoring quality distinguishes between precursors to successful mentoring, processes of successful mentoring, and outcomes that indicate successful mentoring. Precursors include both features of the mentoring relationship and program and characteristics of both the mentor and mentee that exist prior to establishment of the mentoring relationship. Processes include both the level of engagement and amount of interaction between mentors and mentees, and also the types of activities and supports that occur during mentoring interactions. Outcomes include the results of mentoring for mentors, mentees, and the students of the mentees.

Conceptualizing and Measuring the Quality of the Mentoring Relationship

In the past couple of decades, the number of teachers receiving induction supports has risen substantially as part of a nationwide effort to reduce teacher turnover and improve the quality of teaching. In the 2003-2004 school year, 86% of first-year teachers participated in some type of induction program, up from about half of new teachers in 1990-1991 (2008). These programs vary widely in terms of activities and supports for teachers, but the majority include some type of mentoring in the first year of teaching. Smith and Ingersoll define mentoring as "the personal guidance provided, usually by seasoned veterans, to beginning teachers in schools," (2004, p. 683). In 2003-2004, about 70% of recently hired teachers were helped by a mentor in their first year (Rockoff, 2008). The growing popularity of mentoring is supported by some empirical evidence that participation in mentoring is related to increased teacher retention, job satisfaction, positive classroom experiences, and/ or teaching quality (Ingersoll & Kralik, 2004; Kapadia & Coca, 2007; Villar & Strong, 2007).

Research in education, business management, and other disciplines suggests that some mentoring programs are more effective than others, however. Mentoring itself varies widely in terms of mentoring program features, mentor characteristics, and mentoring processes and amount of interaction (Fideler & Haselkorn, 1999; Rockoff, 2008; SRI International, 2004). A number of studies have identified particular features of mentoring that are related to positive outcomes for mentees (the recipients of mentoring). For example, some studies find that having a mentor with a teaching background in the same subject as the mentee is related to better outcomes (Grossman & Thompson, 2004;

T. M. Smith & Ingersoll, 2004). Training and guidance for mentors is also important in some studies (Evertson & Smithey, 2000; Wanberg, Kammeyer-Mueller, & Marchese, 2006). Still others find that the frequency of mentoring interactions is related to positive outcomes (Kapadia & Coca, 2007; SRI International, 2004).

Yet these studies look at only piecemeal characteristics of mentoring. The education mentoring literature lacks an overarching framework to characterize the flow of program features and processes that are expected to lead to desired outcomes. As the prevalence of mentoring-based induction programs continues to grow, such an overarching framework or logic model is needed to help schools design optimal mentoring programs. This article addresses this gap by proposing a theoretical model of the relationship between different features of mentoring and outcomes, based on both the existing research literature in education and other disciplines and on qualitative data of teachers' experiences with mentoring in their first year of teaching.

Methods

The conceptual model presented in this paper is informed by existing literature on mentoring and on interviews with first-year middle school mathematics teachers about their mentoring experiences. First, the existing mentoring literature was identified. This paper is part of a larger study on teacher induction and mentoring, and study researchers had previously identified recent research on induction and mentoring specific to the teaching profession. The research team wrote summaries of all identified articles that identified the research questions, data and methods, key variables, and findings. These summaries were reviewed to identify those that pertain specifically to mentoring or mentor teachers to review for this paper. Some of the articles were research reviews (e.g.,

Ingersoll & Kralik, 2004; SRI International, 2004; Wang, Odell, & Schwille, 2008). Articles in the references of identified articles were also included. Given the relative lack of rigorous research on education mentoring due to the recent focus on this topic, not all of the articles identified were empirical. Some were written by proponents of teacher mentor programs outlining what mentoring is and why it is important.

The study team's previous process of article identification focused on mentoring research within the education field. Yet researchers in the management field have also investigated the characteristics and effects of mentoring in other careers. To find research in these other disciplines, journals in management, psychology, business, and human resources were reviewed for recent research on mentoring and mentors. This process identified individual articles and published literature reviews (e.g., Hale, 2000; O'Neill, 2002). Articles directly identified or identified in the bibliography of other articles were included for review for this paper.

While reviewing the research for the framework—either in the education or management fields—attention was focused on the conceptual distinctions made in the articles, how key concepts and variables were defined, conditions that preceded these variables, and the relationships between them. An initial model of mentoring quality was created by outlining these key concepts and their relationships. Although the concepts were highlighted based upon whether they were used in either the education or management literature—or both—the initial model did not give more weight to one particular disciplinary perspective.

The second stage of model development involved analyzing interviews with 23 first-year seventh and eighth grade mathematics teachers. These teachers were

interviewed in both the fall and spring of their first year of teaching. They work in eight districts in two southern states. The fall interview focused on the teachers' background, hiring process, participation in an orientation program, and initial experiences in the school. The spring interview focused on challenges they experienced and supports for those challenges, interactions with their mentors, interactions with their school administrators, professional development, professional community and collaboration with colleagues, experiences with the district or school mentoring program, and career plans. The spring interviews were transcribed and coded in NVIVO software using an open coding approach (Strauss & Corbin, 1990) to identify main themes in the mentor-mentee relationship and components associated with positive or negative mentoring experiences. This coding process did not begin with the concepts in the initial model so that the conceptual categories would instead emerge from the data. After initially open coding the interviews, the emergent coding scheme was compared to the initial model of mentoring quality developed from the literature. The coding scheme identified some additional concepts important in mentoring quality and outlined some of the relationships between concepts. The framework was thus revised by incorporating what new teachers considered to be important about their mentoring experiences in the interviews described above.

Framework of Mentoring Quality

The proposed framework for mentoring quality (see Figure 1) distinguishes between precursors to successful mentoring, processes of successful mentoring, and outcomes that indicate successful mentoring, as identified in the research literature from multiple disciplines or through interviews with first-year middle school mathematics

teachers. Precursors include both features of the mentoring relationship and program, and also characteristics of both the mentor and mentee, that exist prior to establishment of the mentoring relationship. Processes include both the level of engagement and amount of interaction between mentors and mentees, and also the types of activities and supports that occur during mentoring interactions. Outcomes include the results of mentoring for mentors, mentees, and the students of the mentees. The bar across the top of Figure 1 emphasizes that the mentoring relationship can change over time and that mentors and mentees interact for a lengthy period of time.

Precursors

In theory, precursors should set the stage for a successful mentoring relationship by creating optimal conditions for high-quality mentoring processes that, in turn, may lead to better outcomes for mentees and also, possibly, for mentors and students of the mentees. Precursors are divided into features of the mentoring program and pre-mentoring characteristics of the mentor and mentee relationship, including characteristics of the mentor, the match between mentor and mentee characteristics (referred to as the dyad match), and the way the relationship is established.

Many education researchers argue that good program design for new teacher mentoring is a key ingredient for success. Effective training for mentors, on topics such as adult learning and observing a mentee, fosters better interactions between the mentor and the mentee (Danielson, 1999; Evertson & Smithey, 2000; Stansbury & Zimmerman, 2002), and has been found to increase mentee satisfaction with the mentoring experience (Allen, Eby, & Lentz, 2006a; Wanberg et al., 2006). Furthermore, an experimental evaluation of a training program for mentors, which entailed four days of training for

mentors on new teacher guidance, effective mentoring, adult learning, and observation strategies, found that mentees of the trained mentors had better classroom practices, and that their students were more engaged than mentees of untrained mentors (Evertson & Smithey, 2000). While the importance of training for mentors is well established, studies have not determined thresholds for the amount of training time needed in specific training topics.

Other features of mentoring program design are also important. Rockoff (2008) found that lower mentor caseloads and more mentoring time are important, and Danielson (1999) argues that mentors must be well compensated, either financially or through other benefits such as release time or status, to ensure their engagement in the mentoring process. Stansbury and Zimmerman (2002) recommend providing release time for both mentors and mentees to allow enough time for mentoring interactions to occur, and they also recommend having structured time set aside on a regular basis for mentoring to take place. Also, there is some evidence supporting mentoring programs designed for the teacher's specific topic area (Luft, Roehrig, & Patterson, 2003).

The teacher interview data confirm many of the program features identified as important in the research literature, especially the importance of release time and dedicated time for mentoring to occur. The interviews also reveal other characteristics of mentoring programs that are important, such as whether the mentor is based within the school or at another location like the district office. For example, a white female teacher in an urban district identifies strengths in both types of mentors, explaining that "the difference would be of course [that school-based mentors] understand the kids that we're working with because they're here in the building… [but the outside mentor] was

unbiased being outside of the building." The interview data also suggests that having too many assigned mentors, rather than one or a small number, may be overwhelming for the mentee. Both the interview data and the research literature indicate that mentoring program design features are important precursors to successful mentoring.

Qualities of the mentor, and of the match between mentor and mentee, have also been shown to be important for establishing a positive mentoring relationship, both in the education and management research literatures. Demographic characteristics of the mentor, such as gender and race, and previous mentoring experience may influence the style of mentoring provided (Allen, Eby, Poteet, Lentz, & Lima, 2004; Ragins, 1997; W. J. Smith, Howard, & Harrington, 2005). Mentor personality traits, such as proactiveness, sensitivity, willingness to collaborate and share, and interpersonal skills, also influence the provision of mentoring (Allen, Eby, & Lentz, 2006b; Kyle, Moore, & Sanders, 1999; W. J. Smith et al., 2005). The interview data also suggest that some teachers appreciate a mentor who is honest and straightforward.

Features of the dyad match, or the alignment of characteristics between the mentor and mentee, are also important precursors of successful mentoring. Matching according to subject area and/ or grade level facilitates mentoring interactions (Allen et al., 2006a; Grossman & Thompson, 2004; SRI International, 2004; Villar & Strong, 2007), and may also have some relationship with teacher retention (T. M. Smith & Ingersoll, 2004). Findings are mixed on how much demographic matches, including gender and race, influence the mentoring experience or outcomes, but some studies do find that demographically matched dyads may be more comfortable with each other, possibly fostering more engagement in the mentoring relationship (Allen et al., 2004;

Lankau, Riordan, & Thomas, 2005; O'Neill, 2002; Ragins, 1997; Rockoff, 2008; Tillman, 2001). Having similar personalities or values may also be important to a good dyad match (Hale, 2000; Kyle et al., 1999; Lankau et al., 2005). There is evidence that formal mentoring differs from informal mentoring, but that this difference is less important than the mentee's satisfaction with the mentoring relationship (Ragins, Cotton, & Miller, 2000) or allowing dyad members to have input into the matching process (Allen et al., 2006a; Wanberg et al., 2006).

Teachers who participated in the interviews offered a lot of commentary on the importance of the dyad match. Teachers who felt they were well matched with their mentors in terms of personality or teaching styles spoke with enthusiasm about the mentoring relationship, while mismatches seemed to hamper the mentoring experience. Teachers seemed to especially value having a mentor with experience teaching in the same grade or grade range. For example, a white female teacher in a mid-sized suburban district explained, "I think [my mentor] has a good understanding of seventh graders and the transition that they're going through… I feel like I can go to her and she has an understanding of what I'm dealing with or what I'm facing." Teachers who did not have a subject match with the formal mentor reported this as a detriment to the mentoring experience, and often sought subject-area support from other mentors or sources. Additionally, several teachers mentioned that it was helpful to have a mentor who was familiar with the children or type of children in the school, and many teachers reported that they ended up relying especially on teachers who were in close proximity to them, especially those with classrooms in the same hallway, for mentoring support, whether formal or informal. A female teacher in a large urban school summed up the importance

of proximity and a good dyad match, saying, “I can’t imagine going through this process with somebody in a different building or in a different subject area even in the building.” Also, the interview data support the finding by Ragins and colleagues (2000) that the strength of the mentor-mentee relationship is more important than whether the mentoring relationship was established through formal or informal channels.

In summary, the research literature and the data provide support for the precursors of a successful mentoring relationship that are included in the mentoring quality framework. Precursors include features of the mentoring program design, characteristics of the mentor, the mentor- mentee dyad match, and the way the relationship is established. These precursors are expected to be associated with better mentoring processes, which in turn should be related to better mentoring outcomes.

Processes

Precursors are hypothesized to be important as they influence interactions between mentors and mentees. The content, context, and characteristics of these interactions constitute the processes of mentoring. The content of mentoring is conceptualized as focusing on career development, instructional support, and psychosocial support. Most of the research on the career development function of mentoring comes from the general employment literature, which distinguishes between the career development and psychosocial functions of mentoring. Given the centrality of instructional support and improvement in the teacher-specific mentoring literature, the model presented here makes a distinction between career development functions and instructional support. The context and characteristics of mentor-mentee interactions

considers how mentors and mentees engage in the mentoring process and characteristics of their relationship.

Instructional support consists of interactions between mentors and mentees that focus on the core classroom practices and are meant to improve those practices. Focusing teacher mentoring relationships on instruction-related support is key to improving teachers' practices rather than perpetuating traditional practice (Evertson & Smithey, 2000; Feiman-Nemser, Carver, Schwille, & Yusko, 2000; Stansbury & Zimmerman, 2002). Activities that enable this instructional support include having the mentor support mentees in a critical reflection of their practice, focusing on student learning, advising on classroom management and teaching strategies, analyzing student work together, observing and providing feedback on their teaching, and planning student assessments (Kapadia & Coca, 2007; Stansbury & Zimmerman, 2002; Wang et al., 2008). Although the management literature does not focus on instructional support, it does include mentoring functions such as training, coaching and providing challenge for mentees to help them get better at their core job functions (Allen et al., 2006b; W. J. Smith et al., 2005).

The interview data indicate mentees would get advice about pacing and time management, teaching standards, and curriculum content from their mentors. For example, a white female teacher in a high-performing suburban school said, "I asked her if she was going to cover every single portion of a chapter that we just did, you know when we were going to skip two parts, two sections of it. You know I couldn't tell whether those were part of the standards or not and so she said no I'm not covering them either because they're not part of the standards for this year." This instructional support

may be specific to mathematics instruction or focus on more general instructional issues, such as classroom management, designing classroom assessments, and individualized instruction. Mentees would also engage in co-teaching or collaborative lesson planning with their mentors, receive feedback from instructional observations, and observe their mentors in their own classrooms.

The management literature considers career development a primary function of mentoring (Allen et al., 2006a; Allen et al., 2004; Noe, 1988; W. J. Smith et al., 2005). Career development mentoring consists of mentors sponsoring their mentees for particular tasks or promotions, protecting them from other forces, and exposing them to other colleagues (Allen et al., 2006b; Ragins, 1997). Mentors may serve as an activist for their mentees—intervening and helping them navigate the field or employer (W. J. Smith et al., 2005). While instructional support helps mentees improve their classroom practices, career development helps them navigate school policies and procedures, such as the teacher evaluation system and student assessment (Kapadia & Coca, 2007). For example, a white female teacher in a suburban school said,

> When [my principal] was supposed to observe me and stuff, like I didn't realize that there was paperwork-, I mean nobody has told me that. So when I realized that I was really panicked because I'd set up a thing with [my principal] for him to come in and observe me and what was this paperwork? I didn't know, and they sat me down and they showed me exactly what I was supposed to do and helped me prepare for it.

Thus the career development function of mentoring helps mentees reach career success milestones such as promotion and tenure (Tillman, 2001).

The third content of mentoring, psychosocial support, receives different attention from the education and management literatures. The education literature recognizes that

emotional or psychosocial support is a significant part of mentoring—indeed one new teacher in the interview study, when asked what type support she gets from her mentor, responded, “Emotional really….It’s funny how when a kid acts up-, I hear the same students being talked about by other teachers and they’re doing the exact same things. It’s kind of a relief to know it’s not just me.” Yet the education literature also argues for teacher mentoring to be more than personal support to focus on teacher learning through instructional support (Evertson & Smithey, 2000; Feiman-Nemser et al., 2000; Stansbury & Zimmerman, 2002). The management literature, in contrast, does not consider psychosocial support to be less valuable than other forms of mentoring (Allen et al., 2006a, 2006b; Noe, 1988; W. J. Smith et al., 2005), although they may be linked to different types of outcomes (Allen et al., 2006b; Allen et al., 2004). Further, research on psychosocial mentoring demonstrates the relationship between mentoring precursors and processes, as the amount of psychosocial support received by mentees varies by the race and gender composition of the mentor-mentee dyad (Allen et al., 2004; Noe, 1988; O'Neill, 2002; Ragins, 1997; Tillman, 2001).

While knowing the content of mentoring interactions elucidates what mentors and mentees do together, mentoring is primarily about a relationship (Hale, 2000). Indeed, this relationship can change over time. Thus it is also important to consider the context of mentoring interactions and characteristics other than content. The personal relationship between the mentor and mentee, such as the degree of trust, personal affinity, and respect, are important characteristics (Hale, 2000; Lankau et al., 2005; W. J. Smith et al., 2005). The frequency and number of hours of mentoring are associated with improved outcomes (Allen et al., 2006a; Rockoff, 2008; SRI International, 2004). Likewise, mentoring

relationships that began at the start of the year are more effective than those that begin later in the semester (SRI International, 2004). Mentors who were more committed to the mentoring program were rated more highly by their mentees (Wanberg et al., 2006). Although mentors may focus on several topics, the form of their interactions should include guiding their mentees to focus on particular issues and active listening (Evertson & Smithey, 2000; Wang et al., 2008). How mentors and mentees engage in the mentoring process can mediate between precursors and processes. For example, the similarities between the mentor and mentee (dyad match) fosters a relationship of trust, which then facilitates interactions (Hale, 2000). Likewise, the frequency of interaction mediates between dyad match and mentoring outcomes (Allen et al., 2006a).

Outcomes

In the mentoring quality framework, outcomes are the indicators of successful mentoring, including more proximal mentee and mentor outcomes and more distal, or indirect, student outcomes. Mentee outcomes are typically the primary goal of mentoring programs, since the teacher is the recipient of the mentoring intervention. The education and management literature reviewed for the mentoring quality framework involved a number of outcome categories for mentees, including improvements in mentee attitudes, behaviors, performance, and knowledge and insight, and also in compensation and promotions (Allen et al., 2004; Hale, 2000; Rockoff, 2008; T. M. Smith & Ingersoll, 2004; SRI International, 2004). Teacher behaviors include both attendance rates and turnover; job retention is perhaps the most common measure of mentoring outcomes in the education literature, although it is considerably less common in the management literature (Ingersoll & Kralik, 2004; Kapadia & Coca, 2007; Ragins, 1997; Rockoff,

2008; T. M. Smith & Ingersoll, 2004; SRI International, 2004; Villar & Strong, 2007). Improving teaching performance is an important goal of many teacher mentoring programs (Evertson & Smithey, 2000; Feiman-Nemser et al., 2000; Stansbury & Zimmerman, 2002), but classroom practices are difficult and costly to measure. As a result, only two of the studies reviewed, both in the education field, measured performance as an outcome.

Attitude outcomes are common in studies of mentoring programs in both types of literature, and include measures such as satisfaction with the mentoring experience, career satisfaction, and intention to continue in the current job (Allen et al., 2006a, 2006b; Allen et al., 2004; Ingersoll & Kralik, 2004; Kapadia & Coca, 2007; Ragins, 1997; Ragins et al., 2000; Rockoff, 2008; Stansbury & Zimmerman, 2002; Wanberg et al., 2006). These measures are not themselves the primary goal of mentoring programs for teachers, but serve as proxy measures for more concrete outcomes such as reduced teacher turnover and improvements in classroom practices. Teacher attitude outcomes may be prevalent in part because they are easily measured by researchers, since they do not require a longitudinal study design and because they can be collected through simple survey instruments. About a third of the publications reviewed for this article measured mentee attitude outcomes.

Mentor outcomes are not usually the main focus of mentoring programs for new teachers, but may include both career-related effects, such as job rejuvenation and recognition, and satisfaction, such as a sense of fulfillment (Allen et al., 2006a, 2006b; Kyle et al., 1999; Ragins, 1997; Wanberg et al., 2006). Students are affected only indirectly by the mentoring of their teachers, but improved student outcomes are still an

ultimate goal of many mentoring programs for teachers. Student outcomes of successful teacher mentoring may include achievement, engagement in school, attendance, and graduation rates (Evertson & Smithey, 2000; Rockoff, 2008; Villar & Strong, 2007). Since the measurable effect of a teacher mentoring program on the mentee's students is likely to be small, relatively few studies collected this data.

Discussion and Conclusion

This framework provides a tool to enhance the early teacher professional continuum, allowing teacher educators and district administrators to identify the components over which they have influence to improve supports for new teachers. The framework also highlights the different stages of the mentoring relationship, by categorizing features of mentoring programs into precursors of mentoring success, which can set the stage for high quality mentoring, and processes of successful mentoring that can lead to desired outcomes. The teacher induction field will benefit from this tool to analyze how various components of mentoring programs relate to outcomes for new teachers (Ingersoll & Kralik, 2004).

The mentoring quality framework (Figure 1) is supported by evidence from the education literature, the management literature, and qualitative interviews with first-year teachers who participated in induction programs with a mentoring component. As a next step, we intend to empirically test the various relationships in the model using two years of quantitative data from the same study of middle school teacher induction that provided the teacher interview data used in the framework development. We will assess the direct effects of precursor measures on process measures and of process measures on outcome

measures, and we will also assess the indirect effects of precursor measures on outcome measures.

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Figures

Figure 1. Framework of Mentoring Quality