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Key components of an effective mentoring relationship: a qualitative study

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Abstract

Background—Despite the recognized importance of mentoring, little is known about specific mentoring behaviors that result in positive outcomes.

Objective—To identify key components of an effective mentoring relationship identified by protégés-mentor dyads in an academic setting.

Methods—In this qualitative study, purposive sampling resulted in geographic diversity and representation of a range of academic disciplines. Participants were from 12 universities in three regions of the U.S. (South, n=5; Northeast, n=4; Midwest, n=2) and Puerto Rico (n=1). Academic disciplines included natural sciences (51%), nursing/health sciences (31%) engineering (8%), and technology (1%). Twelve workshops using the Technology of Participation© method were held with 117 mentor-protégé dyads. Consensus was reached regarding the key components of an effective mentoring relationship.

Results—Conventional content analysis, in which coding categories were informed by the literature and derived directly from the data, was employed. Eight themes described key components of an effective mentoring relationship: (1) open communication and accessibility; (2) goals and challenges; (3) passion and inspiration; (4) caring personal relationship; (5) mutual respect and trust; (6) exchange of knowledge; (7) independence and collaboration; and (8) role modeling. Described within each theme are specific mentor-protégé behaviors and interactions, identified needs of both protégé and mentor in the relationship, and desirable personal qualities of mentor and protégé.

Conclusions—Findings can inform a dialogue between existing nurse mentor-protégé dyads as well as student nurses and faculty members considering a mentoring relationship. Nurse educators can evaluate and modify their mentoring behaviors as needed, thereby strengthening the mentor-protégé relationship to ensure positive outcomes of the learning process

Keywords

Mentoring; Mentor-Protégé Dyads; Nursing Students; Nursing Education; Qualitative Research

BACKGROUND

Socializing students into the world of science and nursing has evolved from the traditional master-apprentice relationship (Goran, 2001; Kohler, 2008) to programs focused on mentoring (Crisp & Cruz, 2009; Oyewole, 2001). Successful mentoring programs socialize students to a set of high expectations of academic progress (Campbell & Campbell, 1997; Smedley et al., 2001).

Early nursing studies of mentoring in the 1970's and 1980's focused on novice nurses in practice settings, or professionals in academic or managerial positions (Poronsky, 2012). In the 1990's, literature addressed mentoring of nursing students in clinical settings (Jokelainen et al., 2011). Recently, the focus is on mentoring nurses and students in other professional programs by faculty in academic settings (Bray & Nettleton, 2007; Lev et al., 2012).

The social science literature contains over 50 definitions of mentoring, emphasizing the lack of conceptual clarity (Crisp & Cruz, 2009). Early studies identified two mentoring functions: psychosocial functions (role modeling, acceptance/confirmation, counseling, and friendship), and career functions (sponsorship, exposure/visibility, coaching, protection, and challenging assignments) (Kram, 1983; Schockett & Haring-Hidore, 1985). Career-related functions foster protégés' professional development; psychosocial functions increase self-efficacy, self-worth and professional identity (Eby et al., 2010). Crisp (2009) identified four domains of mentoring: (1) psychological/emotional support; (2) support for goal setting and career choice; (3) academic support; and (4) role modeling.

Two US studies described results of focus groups with novice (N=23) and expert nurse educators (N=11) in a formal mentoring program (White et al., 2010; Wilson et al., 2010). Protégés identified aspects of successful mentoring: a reciprocal relationship with open communication; guidance and support in role transition; and planned mentoring activities (White et al., 2010). Mentors also identified communication and connectedness, and planned activities as well as collegiality and sharing their wisdom as aspects of successful mentoring. Mentors noted challenges of mentoring were maintenance of an egalitarian relationship and lack of time. International studies of mentoring in practice settings reported similar findings. In a longitudinal study of 17 nursing student protégés in Scotland, qualities of a good mentor were supporter (advisor and friend), guide and teacher, supervisor and assessor (Gray & Smith, 2000). In a study of nurse mentors (N=110) and student protégés (N=174) in England, mentors identified teacher, supporter, and role model as the most important roles of mentors in a clinical setting. Protégés identified teacher and supporter as most important (Bray & Nettleton, 2007). Mentors (N=112) in clinical settings in Belgium identified important qualities of a mentor, including providing feedback, experience, availability, positive attitude, patience, enthusiasm, trustworthiness, guidance and problem solving (Huybrecht et al., 2011). Although conducted with varied samples, including nurse educators, student protégés and expert clinician mentors, these international studies identified characteristics of good mentors congruent with Crisp's (2009) domains.

In a retrospective study of 152 alumni protégés and 42 of their mentors, Haggard and Turban (2012) identified mentor and protégé functions based on the psychological mentoring contract. This contract consists of perceived obligations on the part of mentors and protégés, including relational and transactional obligations. Relational obligations of mentors include availability; encouragement; acceptance and trust; and advising. Relational

obligations of protégés include loyalty, respect, friendship, support and deference. Transactional obligations of mentors include career support; networking opportunities; intervening on behalf of the protégé; and, providing challenges. Transactional obligations of protégés include project assistance; willingness to learn; high performance; and, information.

Although mentoring is effective in developing skills, promoting careers, increasing job satisfaction, and reducing job stress, there is little known about specific behaviors that result in positive outcomes (Fuller, 2001; Murillo et al., 2006; Oyewole, 2001; Records & Emerson, 2003). One reason for this may be mentor-protégé dyads have not been studied during the mentoring experience.

The purpose of this study was to investigate the mentor-protégé relationship during the mentoring experience in an academic setting to discover factors protégés and their mentors perceive to be key components of an effective mentoring relationship.

METHODS

Study Sample and Design

The qualitative study described here is part of a larger intervention study with mentor-protégé dyads, which consist of a mentor who is a faculty member and their protégé who is a student. The intervention in the larger study is designed to increase protégés' research self-efficacy.

Purposive sampling resulted in geographic diversity and representation of a range of academic disciplines. A total of 117 mentor-protégé dyads, four mentors whose protégés were not present and one protégé whose mentor was not present (N=239) participated in the study. Participants were recruited with assistance from the Reinvention Center, a research university consortium, and the Council on Undergraduate Research, which promotes undergraduate student-faculty collaborative research. Both organizations emailed letters describing the study to their members. Eligible were faculty conducting research in the sciences/social sciences, technology, engineering and math (STEM disciplines) and their undergraduate or first year graduate student protégés. The mentoring relationship was one in which the protégé, under the mentor's guidance, participated in the mentor's research. Institutional Review Board approval was obtained from the authors' (LE and EL) university, and also from participating universities when required.

Data Collection

Participants took part in a single workshop that lasted four hours. Workshops were led by a professional facilitator using the Technology of Participation (ToP) ® Consensus Workshop method (The Institute of Cultural Affairs, nd). The goal is for the group to have a comprehensive, focused discussion and reach consensus on the topic of interest, which, in this case, was the identification of key components of an effective mentoring relationship.

Workshops were conducted according to the five-step ToP® method. First, *context* was established with a focus question: "What are the key components of an effective mentoring relationship?" In the second step, *brainstorming*, mentors and protégés broke out into separate groups and wrote answers to the focus question. Answers consisted of brief phrases. Color coding was used to distinguish mentor and protégé responses. In the third step, *clustering*, the facilitator guided participants in grouping the brief phrases into similar clusters. In the fourth step, *naming*, participants titled each cluster of ideas. In the fifth step, *resolving*, the group determined whether anything was left out and if ideas generated were

complete. In the workshops during the first year of the study (N=4), group discussions during *brainstorming*, *clustering*, *naming* and *resolving* were audiotaped.

Data Analysis

Audiotaped data were transcribed verbatim. Data were analyzed using qualitative analysis software (ATLAS.ti. Version 6.2). Conventional content analysis, in which coding categories were informed by the literature and derived directly from transcribed and workshop data, was employed (Hsieh, 2005). Content analysis revealed codes, patterns and themes that emerged from participants' dialog, their responses to the focus question, and their naming of ideas. Regular research team meetings were held to analyze data using the constant comparative method (Lincoln & Guba, 1985). Verification was used in each step of the inquiry to ensure congruence with the question asked and analysis of data (Morse et al., 2002).

Methodological rigor was ensured by establishing trustworthiness (credibility, auditability, confirmability and transferability) of findings (Lincoln & Guba, 1985). Credibility was achieved by member checking. After each workshop, a summary of results was sent to participants for review and comments. To establish auditability, findings were discussed with mentoring experts, who determined that findings were congruent with workshop discussions. The workshop process established confirmability. During each workshop, mentors and protégés engaged in wide ranging deliberations until consensus was reached. Academic and geographic diversity of study participants contributed to thick descriptions of the phenomenon in rich detail, supporting transferability of findings.

RESULTS

Participants were from 12 universities in three regions of the U.S. (South, n=5; Northeast, n=4; Midwest, n=2) and Puerto Rico (n=1). Academic disciplines included natural sciences (51%), nursing/health sciences (31%) engineering (8%), and technology (1%). Demographic data are shown in Table 1.

Findings revealed eight themes describing key components of an effective mentoring relationship. These included (1) open communication and accessibility; (2) goals and challenges; (3) passion and inspiration; (4) caring personal relationship; (5) mutual respect and trust; (6) exchange of knowledge; (7) independence and collaboration; and (8) role modeling (see Figure 1). Themes are presented in the order of frequency with which they appeared in workshop data. All themes were present in at least five workshops. As described earlier, participants' written responses to the focus question "What are the key components of an effective mentoring relationship" consisted of brief phrases. Those phrases, as well as comments gleaned from audiotapes of workshop discussions, are quoted below.

Open Communication and Accessibility

Protégés stated that communication with mentors helps them gain confidence in their skills and motivates them to develop their potential. Phrases used by protégés indicated that mentors should provide "frequent, open communication" and "be open to questions." Protégés wanted "freedom of expression," mentors whom are "easy to communicate with," and "access to frequent interactions." One protégé said, "Mentors should be accessible beyond office hours via email and phone." Another stated "The mentor should be willing to make time even when he's busy."

Protégés' highlighted the need for "supportive feedback." They wanted mentors who were "honest but not harsh," "always encouraging the mentee," and "approachable and non-

judgmental.” One protégé said, “It’s so easy for a mentor to correct a student rather than figuring out the questions to ask so that the student can learn from the experience.”

Mentors also addressed communication, accessibility and feedback. Mentors said there should be “regular participation in team meetings,” “routine open communication” and “consistent communication and meetings for feedback.” Mentors agreed that “the mentor should be accessible and available for questions” and there should be “frequent interactions.” One mentor stated, “The protégé should be able to admit that he or she doesn’t understand.”

Mentors’ statements regarding their feedback to protégés indicated that it could be positive or negative. They noted that mentors need to provide “critical constructive feedback,” “constructive criticism that is proactive and honest,” and “praise and critique.” One mentor noted “Mentors should provide regular communication of what is and what isn’t going well,”

Goals and Challenges

Phrases used by protégés noted the importance of “clear/precise goals and expectations,” “goal setting and new opportunities” and mentors “raising the bar to go beyond your own expectations.” One protégé stated, “I need to be challenged by new experiences.” Another noted “Protégés need mutually established goals, clear expectations and identified milestones.”

Time was important in relation to goals, with protégés noting the importance of “setting an appropriate pace” and “time management and flexibility.” Protégés also identified the importance of mentors’ recognition of protégés’ individual needs with “personalized, active learning,” Protégés’ focus on future career goals was evident in several phrases used. They noted that mentors should “foster the protégé’s educational and professional development,” “have a willingness to invest in the protégé,” and “provide opportunities to advance the protégé’s career.”

Mentors also had a strong focus on goals and challenges. They noted the importance of “setting high and attainable goals” and “facilitating realistic, exciting challenges.” One mentor said, “I think it’s important to expose (students) to things a wee bit more difficult than they thought they could cope with.” Another noted that “Mentors should challenge students to go beyond their limitations.”

The importance of time in relation to goals was evident in mentors’ statements. They noted the need for mentors’ “accountability, time management and promise-keeping,” and protégés’ “setting timelines for achieving goals and meeting expectations.” Mentors’ recognition of student individuality was important, as protégés noted the need for mentors to “recognize and promote the protégé’s potential” and “understand the student’s learning style.” One mentor stated “Mentors should meet the students where they are.” A focus on the students’ future goals included the importance of “guidance for career development,” “paying attention to professional development,” and “planning for protégé’s development.”

Passion and Inspiration

Phrases used by protégés indicated that they wanted mentors to “inspire critical thinking, creativity and confidence,” and “strike a spark of interest in the student.” One protégé stated, “It’s important for the mentor to convey his passion for research.” Another stated, “It’s important to see the mentor loves what he’s doing so that he transmits that to you so you know if they love what they are doing maybe you’ll love doing it as well.”

Mentors noted that there should be “shared and infectious enthusiasm and passion for the work.” One mentor stated, “A mentor should open the student’s imagination to what is possible.”

Caring Personal Relationship

Protégés identified the importance of “mutual friendship and a supportive relationship” “caring,” and “nurturing.” One protégé stated, “My mentor really cares whether or not I succeed.” Another said, “Mentors should spend quality time and take a personal interest in students outside the research setting.” They added that mentors and protégés should “care for and understand each other” and “have a relationship outside the academic.” The importance of a personal connection was evident in the statement by one protégé that “They should have a lifelong relationship.”

The importance of relationship and caring was also evident in phrases from mentors, who said that protégés and mentors should “have mutual good chemistry” and should “spend formal and informal time together.” They added that the mentor should “pay attention to the whole person,” “provide psychological support to their students,” and “show interest and care.”

Mutual Respect and Trust

Protégés noted that it was important to “respect, trust and appreciate each other.” Phrases used to describe important qualities of mentors included the words “honest,” “trusting,” and “respectful.” One protégé stated, “Mentors should believe in the student and trust the student’s ability.” Another said, “When professors respect me I work a lot harder because I don’t want to let them down.”

Phrases used by mentors indicated that “honesty, mutual trust, respect and integrity” were necessary. Others said that mentors and protégés should have “two-way confidence and respect for one another,” and “mutual respect for each other’s ideas and points of view.” One mentor stated, “We must build trust between mentor and mentee.” Another said, “I try to remember that my student is forging her own path and she can learn from me but I’m not trying to make my student my duplicate.”

Exchange of Knowledge

Both protégés and mentors thought the mentoring relationship should build research skills and knowledge. Phrases used by protégés indicated that mentors should “ensure that students’ skills and knowledge expand,” “convey knowledge in interesting ways,” and “improve our skills.” It was important to students that knowledge gained have a “real world connection.” They noted the importance of the “ability to apply classroom theory to real world experiences.”

Phrases used by mentors indicated that students “should be taught the process of idea development,” “how to do science,” and learn “skill sets, system politics and research.” Mentors thought the mentoring experience should “instill ethics,” and give students “a big picture view of the importance of the research.” One mentor stated, “Mentors should encourage immersion in the field and curiosity.” Another stated, “Students should have the confidence to make a research presentation.”

Independence and Collaboration

Protégés and mentors believed that it was important to foster both protégé independence and collaboration. Phrases used by protégés indicated that they wanted an “increasing sense of responsibility” and “to have opportunities to think independently and abstractly.” One

protégé stated, “The mentor should give the mentees freedom to make mistakes.” Protégés wanted to “be part of a team, with a valuable role,” and “make it a group effort.” One protégé noted, “Having a mentor who introduced me to professional meetings that went over my head helped me to see how the research project fit into the science of the discipline.”

Phrases used by mentors indicated that it was important for them to foster protégés’ “independence and interdependence,” and “allow independence and provide insight.” They addressed the need for collaboration by stating that mentors should “be team players,” “provide opportunities for co-authorship,” and “provide for interactions within the larger community.” One noted that, “Mentors should identify the mentee as a colleague.”

Role modeling

Phrases used by protégés indicated that they wanted mentors to “lead by example,” “model interactions with others” and “share struggles, historic and present, to reduce the intimidation factor.” One protégé said “The mentor should be a role model and guide rather than just a teacher and boss.”

Mentors said that they should “provide role modeling for leadership,” “model ethical behavior” and demonstrate “the purpose and importance of research.”

DISCUSSION

In this qualitative study with 117 mentor-protégé dyads, a consensus opinion of the key components of an effective mentoring relationship was reached. Our findings revealed some commonalities with previous mentoring studies as well as some new information.

Expanding on previous knowledge, for each of the eight themes identified, we described specific protégé and mentor behaviors and qualities deemed important by students and faculty currently engaged in a mentoring relationship.

Based on identification, throughout the literature, of career-related and psychosocial functions of mentoring, three of the eight themes fit the “career-related” category, while five could be categorized as “psychosocial,” highlighting the importance to both mentors and protégés of a supportive mentoring relationship (Kram, 1983; Schockett & Haring-Hidore, 1985).

The most common theme was *communication and accessibility*. This finding is consistent with other studies. Crisp and Cruz (2009) noted that active, empathic listening was an important element of mentoring. Nurse educator protégés and mentors also identified open communication and availability as important qualities of a mentor (Huybrecht et al., 2011; White et al., 2010; Wilson et al., 2010). Haggard and Turban (2012) identified mentors’ availability to talk with protégés as a relational obligation of the relationship.

In our study, protégés focused on their need for positive feedback, while mentors emphasized their need to provide both positive and negative feedback. This difference highlights the vulnerability of protégés and their desire for a safe environment where mentors can listen without criticism. Ehrich et al. (2004) reported that mentors who were “critical” resulted in problematic protégé outcomes. Haggard and Turban (2012) identified acceptance as a relational obligation of the mentor. Huybrecht et al., (2011) noted that providing feedback to protégés is an important mentor function. Although we did not ask participants to identify problems with mentoring, our findings suggest that criticism from mentors may have been problematic for some of the dyads in the study.

Study participants addressed the importance of *goals and challenges*, including clear mutual goals and expectations and new challenges along the way. Time management, the setting of timelines as well as individualizing the work based on protégés' learning needs were all components of goal setting. According to Crisp and Cruz (2009), *goal setting and career paths* is a major domain of the concept of mentoring. Bandura (1997) noted that goals serve as a means for developing a sense of personal efficacy. Guiding people to progressively more difficult situations after they demonstrate effective functioning contributes to increased capabilities and sustained ability over time. Mentors who help students master increasingly difficult challenges contribute to students' growth. Encouraging students to solve their own problems may also assist students to achieve greater skill acquisition (Bandura, 1997).

A majority of workshop groups discussed the importance of shared enthusiasm and passion, and protégés' need for inspiration. While the mentoring literature is clear about the role of support, encouragement and skill-building in mentoring relationships, little has been written about inspiration and passion. In a first-hand account of his experience as a protégé, Pinnock (2007) noted that mentors should provide inspiration in addition to support, guidance and friendship.

A *caring personal relationship* with long-term support and guidance from mentors was a strong theme that engendered a great deal of discussion in most groups. In our study, protégés used the term "friendship" while mentors did not. In fact, one group of mentors addressed the need for healthy personal boundaries. Nurse educator mentors noted that "reciprocal relationships" were essential for successful mentoring, while nurse educator protégés discussed "meaningful relationships" (White, 2010), however neither used the term "friendship." Ehrich et al. (2004) reported "friendship" as a positive outcome for protégés in education studies. Medical students also identified "friendship" as an essential component of mentoring (Hauer, Teherani, Deche & Aagaar, 2005). In Haggard and Turban's study (2012), protégés identified friendship as a mentoring relational obligation, but mentors did not. It may be that the personal relationship is perceived differently by mentors and protégés.

Mutual respect and trust, with protégés treated as colleagues, was a theme. Trust and respect were identified by mentors and protégés as relational obligations of their relationship (Haggard & Turban, 2012). Nurses in Sherman's (2005) study identified honesty and trust as the most important qualities in a mentor. In focus groups with medical students, support and trust were the most frequent themes that emerged in response to questions regarding what mentors could do for medical students (Hauer et al., 2005). Mentors who were "untrusting" resulted in problematic protégé outcomes (Ehrich et al., 2004).

Exchange of knowledge was a theme in many workshops. Several groups addressed the need for mentors to provide "real world" knowledge and focus on "the big picture." Early mentoring studies as well as recent reviews of the literature identified career/vocational functions of mentoring, which included educating, sharing ideas, knowledge and skills (Ehrich et al., 2004; Lechuga, 2011). Support for academic subject knowledge and academic success was one of four domains of mentoring (Crisp, 2009).

Independence and collaboration were important to study participants. Protégés wanted freedom to make mistakes, and to be treated as part of a team. Mentors believed in fostering independence and interdependence. Lechuga (2011) noted that mentors should expect and provide protégés' independence.

Role modeling, a theme in several workshops, is in keeping with the importance of mentor as role model identified in other studies. Role modeling was described as a psychosocial

function of the mentoring relationship (Kram, 1983), and one of four domains of mentoring (Crisp, 2009). Self-disclosure by the mentor was identified as an element of role modeling (Crisp & Cruz, 2009). We observed this in our study as protégés identified the importance of mentors' willingness to share their own struggles.

Two common problems reported by both mentors and protégés are mentors' lack of time, and mentor-protégé mismatch in personality or professional expertise (Ehrich et al., 2004; Huybrecht, 2011). Although we did not ask participants to identify problems with mentoring, one of the most frequent topics of discussion in workshops was the need for mentors to be accessible and make time for their protégés. One participant noted, "I don't know that anybody views mentoring as a priority." This suggests that mentors' lack of time may have been problematic for some of the dyads in the study. None of the participants brought up the topic of mismatch. Since mentors and their protégés were present in the same workshop, this may have been too sensitive a topic for either group to address.

Limitations

Selection bias may have affected study outcomes. Mentors and protégés in the study may have differed from those who declined participation.

Responses from participants identified only positive characteristics because they were asked to identify key components of an effective mentoring relationship. Mentor-protégé dyads were present at the workshops, potentially preventing the expression of negative experiences. Future researchers should question each group separately about both positive and negative components of the mentoring relationship.

The sample in this study lacked racial/ethnic diversity. Future studies should ascertain how diversity affects the mentoring relationship, and should explore the mentoring relationship in mentor-protégé dyads with racial/ethnic and gender concordance and discordance.

CONCLUSIONS

In this study, protégés and mentors achieved consensus in identifying key components of an effective mentoring relationship. Previous research studied both groups separately, and categorized the functions and dimensions of the mentoring relationship. This study adds to our knowledge by providing a consensus opinion and further describing key components perceived to result in a fruitful mentor-protégé relationship. Key components include specific mentor-protégé behaviors and interactions, identified needs of both protégé and mentor in the relationship, and desirable personal qualities of mentor and protégé. Findings can be used to inform a dialogue between existing nurse mentor-protégé dyads as well as student nurses and faculty members who are considering entering into a mentoring relationship. Nurse educators can evaluate and modify their mentoring behaviors as needed, thereby strengthening the mentor-protégé relationship to ensure positive outcomes of the learning process.

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Figure 1.
Key components of an effective mentoring relationship.

Table 1

Demographic data of study participants (N=239)

	Mentors	Protégés
	N=121	N=118
	Mean (SD)	Mean (SD)
	Min-Max	Min-Max
Age	47.6 (12.0)	25.4 (5.6)
	26-77	19-56
	N (%)	N (%)
Gender		
Male	70 (58%)	41 (35%)
Female	51 (42%)	77 (65%)
Race		
White	104 (86%)	80 (68%)
Asian	12 (10%)	13 (11%)
Black or African American	5 (4%)	17 (14%)
American Indian/Alaskan Native	0	5 (4%)
Native Hawaiian/Pacific Islander	0	4 (3%)