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Peer Coaching and the Perceived Impact on Fostering Positive Relationships, Knowledge Creation and Sharing Among Nursing Personnel

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PEER COACHING AND THE PERCEIVED IMPACT ON FOSTERING
POSITIVE RELATIONSHIPS, KNOWLEDGE CREATION AND
SHARING AMONG NURSING PERSONNEL

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Dissertation Abstract

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Creating a team on which caregivers consistently deliver safe and compassionate care requires ongoing developmental attention, not just for excellent technical skills, but also for exceptional interpersonal, relational, and service skills. Supportive and encouraging peer-developmental relationships have the potential to augment the role of a nurse manager in addressing "soft skill" learning and development needs.

The specific construct of peer coaching represents a small but emerging focus in the scholarly literature. In the healthcare setting, there are relatively few studies of the use of peer coaching outside the classroom setting. There are no scholarly reports documenting the study of peer coaching in a hospital setting for the intended purpose of supporting service, communication, and interpersonal-skill development. It was the intent of the study to explore whether peer coaches trained in an intentionally positive model of peer coaching were perceived as facilitating high-quality connections with their coachees, and to determine if the peer-coaching process was perceived as benefiting team knowledge, skills, and innovation with regard to patient/family-centered interpersonal communication, relational, and service skills.

This was a mixed-methods descriptive and correlational study using a nonexperimental, cross-sectional survey design with intact groups. The practice being

investigated was receiving training in positive peer coaching. Two preexisting survey instruments were adapted and modified for the study setting and combined into one instrument that also included study-specific and participant-specific questions. The instrument was made available to volunteer participants who received positive peer-coaching training, their managers, and the nursing-staff participants of the coaching groups (coachees), and included open-ended questions and 3 subscales. The survey period followed training in peer coaching and a subsequent period of practical experience.

Data collected from 187 participants provided empirical evidence, from both a quantitative and qualitative standpoint, that despite some reported constraints such as time and availability, the majority of peer coaches, managers, and coachees perceived the experience of peer coaching to be both positive and effective. Beneficial impacts were perceived for the team as a whole, the individual participants, and for the patients and their families. There was a strong and direct correlation between perceived positive peer-coaching competencies and the development of high-quality connections. Both were also directly and strongly correlated to knowledge creation and sharing among the team.

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Chapter I

The Research Problem

Statement of the Problem

Despite large-scale organizational efforts to improve patient satisfaction, patients

still continue to report dissatisfaction with detachment, disinterest, and sometimes,

uncaring behaviors from caregivers (Chang et al., 2006; Graber & Mitcham, 2004; Jha,

Orav, Zheng, & Epstein, 2008; Press, 2002; Shaffer & Tuttas, 2008; Studer, 2003). Even

Berwick, the newly appointed administrator for Medicare and Medicaid Services (CMS),

and a lifelong researcher in reducing medical error, stated that what is feared the most

about being a patient is not the technical care but the lack of caring. Berwick (2009)

states

> What chills my bones is indignity. It is the loss of influence on what happens to
> me. It is the image of myself in a hospital gown, homogenized, anonymous,
> powerless, no longer myself. It is the sound of a young nurse calling me
> "Donald," which is a name I never use –it's "Don," or, for him or her, "Dr.
> Berwick," It is the voice of the doctor saying, "We think… "instead of, "I
> think…, and thereby placing that small verbal wedge between himself as a person
> and myself as a person…That's what scares me: to be made helpless before my
> time, to be made ignorant when I want to know, to be made to sit when I wish to
> stand, to be alone when I need to hole my wife's hand, to eat what I do not wish
> to eat, to be named, what I do not wish to be named, to be told when I wish to be
> asked to be awoken when I wish to sleep. (p. w564)

Creating a team in which caregivers consistently deliver safe and compassionate

care requires ongoing developmental attention not just for excellent technical skills but

also for exceptional interpersonal, relational, and service skills. Such skills are essential

for generating an empathetic, caring patient/family experience, in addition to maintaining

a team atmosphere of collaboration and positivity. Yet, in today's complex and

demanding healthcare environment, a gap can exist between the ongoing learning and

developmental needs of nursing personnel and the time and attention that a nurse

manager is able to provide. The problem can be especially significant for the longer-term investment required for behavioral versus technical skills. Multiple daily demands and competing priorities can reduce the amount of unfilled time that is available for providing individualized coaching for a large, diverse staff, all of whom work a variety of shift schedules (Shirey, 2006). Supportive and encouraging peer developmental relationships, in the form of peer-to-peer coaching, may have the potential to augment the role of the nurse manager and help address a learning and development need.

Outside the field of education and the classroom, there is scant literature specifically on peer coaching. Coaching is often described as a developmental behavior subsumed within the context of mentoring (Grossman, 2007; McDougall & Beattie, 1997). However, mentoring and management scholars, Parker, Hall, and Kram (2008), recently introduced the concept of peer coaching as a specifically defined relational process. They intentionally distinguished peer coaching from the related concepts of mentoring and peer mentoring and defined peer coaching as a "voluntary, non-evaluative relationship with two or more people of similar experience and which is mutually and reciprocally beneficial from both a process and emotional aspect" (Parker et al., 2008 p. 499).

In healthcare, peer developmental relationships often take the form of a mentor or preceptor and are usually defined as a more experienced nurse assigned to provide clinical instruction and support to student nurses, new graduates, or new employees (Bensfield, Solari-Twadell, & Sommer, 2008; Fagan & Fagan, 1983). Thus, peer coaching, as an explicitly defined developmental relationship, is relatively new in healthcare, with only a few studies reported; these studies are limited to nursing, medical,

or patient education (Broscious & Saunders, 2001; Sekerka & Chao, 2003, Waddell & Dunn, 2005). Broscious and Saunders (2001) reported benefits from the use of peer coaching to augment the faculty role with university nursing students. Waddell and Dunn (2005) reported positive results in the use of peer coaches for supplementing the role of continuing-education trainers for clinical breast examination skills. Sekerka and Chao (2003) used peer coaching as a platform to study professional development for physicians in the clinical ambulatory-care setting. Although Parker et al. reported "soft skill" development of MBA students as a side benefit in their 2008 study, there are no reported studies to date, in management or healthcare, using the concepts of peer coaching for the specific purpose of interpersonal-communication, relational, and service-skill development.

Coaching for "soft skills" has not been a mainstream responsibility nor within the comfort level of a peer (Kowalski & Casper, 2007). Indeed, managers themselves often express a lack of comfort in addressing the delicate issues of relational and social skills (Patterson, Grenny, McMillan, & Switzler, 2002). Therefore, a particular need exists for a peer-coaching model that is non evaluative and grounded in a positive relational theory.

Background and Need

The past decades of tumultuous social, political, and economic times have resulted in a current business environment that is characterized by growing volatility, competition, and change. Megatrends of mergers, acquisitions, flattened organizational structures, and technologic innovation have been accompanied by increased levels of stress, anxiety, internal competiveness, and uncertainty for managers and employees alike (Ashkanasy, Hartel & Zerbe, 2000; Ashkanasy & Holmes, 1995; Friedman, 2005;

Holbeche, 1996; Marshall, Barnett, & Sayer, 1997; Senge et al., 1999). Such, major social, economic, and technologic change has furthered the need for a highly adaptable workforce that has a different set of career skills from those of previous decades (Friedman, 2005; Parker et al., 2008).

The importance of learning, as a foundation for growing or sustaining an organization and a career has taken on new significance and priority in today's chaotic economic environment (Nair, 2001; Parker et al., 2008; Senge et al., 1999). For both the individual and the organization to flourish in such a highly competitive milieu, managers in all fields of business and professions are challenged to meet all the knowledge acquisition, skills, and developmental needs of their individual employees (Friedman, 2005; Guindon & Richmond, 2005). Furthermore, organizations continue to be challenged in successfully implementing large-scale change initiatives and consistently diffusing innovation and best practices throughout their workforce (Kotter, 1995; Rangachari, 2010; Senge et al., 1999). In this context, the concepts of peer developmental relationships, such as peer mentoring and coaching, have recently received increased attention in the scholarly management literature as a useful method to augment the role of an organization and its leaders for providing employee support, motivation, knowledge, and skill acquisition (Bryant, 2005; Bryant & Terborg, 2008; Parker et al., 2008).

As in the business world, contemporary healthcare managers and employees have also experienced unprecedented change over the past few decades. In addition to major technologic innovation and transformation, healthcare organizations and hospitals face a healthcare-reform environment that includes growing competition, economic uncertainty,

heightened consumer awareness, and increased external and governmental regulation. All of these factors have placed hospital management and staff under increased pressure and stress for both organizational and individual performance (Nelson et al., 2002; Shirey, 2006). Measurement of performance in clinical, safety, and service outcomes are now mandated for public reporting and comparison. Additionally, beginning in 2012, the Centers for Medicare and Medicaid Services (CMS) will begin their "value-based purchasing" proposal in which reimbursement will be tied to both clinical outcomes and patient-satisfaction survey results (U.S. Department of Health and Human Services, 2011a, para 3). Therefore, along with obvious altruistic reasons, hospitals have a growing economic incentive for improving technical care, as well as the caring experience.

The overall performance of an organization in both clinical care and patient satisfaction is heavily dependent on the events that take place at the individual clinical-unit level. In turn, a unit's performance is dependent on the behaviors and interactions of the individual team members (Nelson et al., 2002). These clinical units are under the leadership of a nurse manager and one or more assistants who have the leadership and management responsibility for, on average, 65 to 100 or more diverse nursing personnel (Doran et al., 2004; Shirey, 2006; Shirey, Ebright, & McDaniel, 2008). These staff work a variety of shifts in a 24-hour, 7-day a week operation, making it a challenge for the management team to have extended opportunity for face-to-face interaction and individualized development of each employee (Doran et al., 2004; Shirey, 2006; Shirey et al., 2008). In addition to handling budgeting, staffing, and other administrative duties, much of the nursing-management interface with staff is prioritized around issues of a

technical, clinical, or regulatory nature (Joint Commission on Accreditation of Healthcare Organizations, 2010; Shirey, 2006). Little time can often remain for coaching and developing of the "soft skills" required for patient/family-centered communication and high-quality relational skills (Larrabee et al., 2004; Shirey, 2006). Yet, it is the quality of these small, daily, human-to-human interactions that patients often remember most (Crocker & Johnson, 2006; Gerteis, Edgman-Levitan, Daley, & Delbanco, 1993; Press, 2002; Watson, 1988).

Furthermore, for many clinical staff, contemporary customer/patient service, high-quality communication, and relational skills may include emerging, underdeveloped or forgotten competencies requiring more individualized developmental learning than can be achieved through a one-time educational training session (Flowers, 2005; Goleman, 2006; Goleman, Boyatzis & McKee, 2002; Graber & Mitcham, 2004; Lankau & Scandura, 2002). In addition, the work of nursing can be physically and emotionally demanding, making caregivers potentially susceptible to service and/or "compassion fatigue" without the necessary restorative and encouraging relational support (Ashkanasy et al., 2000; Johnson, 1992; Kahn, 1993; Knobloch-Coetzee & Klopper, 2010).

Improving the patient/family experience of care. Following the Institute of Medicine's groundbreaking report *To Err is Human* (Kohn, Corrigan, & Donaldson, 2000) and their second report *Crossing the Quality Chasm: A New Health System for the 21st Century* (Institute of Medicine, 2001), a heightened awareness on the part of the public and the payers demanded greater transparency and accountability from providers for a safer, more effective, compassionate, and patient-centered system of care.

As such, the United States Department of Health and Human Services' Agency for Healthcare Research and Quality initiated the development and implementation of publically available comparison sites, such as the website for the Center for Medicare and Medicaid Services (U.S. Department of Health and Human Services, 2011b) and the State of California (CalHospitalCompare.org, 2011) website. These sites compare and contrast outcome measures among providers for core clinical measures as well as the patient's perception of their experience of care. In addition to competition and marketing consequences of these comparison reports, hospital reimbursement incentives are tied to performance (Giordano, Elliot, Goldstein, Lehrman, & Spencer, 2010).

Until the 2005 completion of the nationally standardized Hospital Consumer Assessment of Healthcare Providers and Systems patient-satisfaction survey tool, reporting of patient-satisfaction survey data has varied by survey-instrument tool (Elliot et al., 2010). Hospitals often used "home-grown" survey instrument tools as well as nationally recognized surveys from proprietary companies such as Press Ganey (2007) or from the Picker survey from the nonprofit Picker Institute. As a result, true national comparison data has only been available since 2008 (Elliot et al., 2010). As shown in Table 1, some modest improvements have occurred in all measures except for doctor's communication.

However, despite these modest gains, improvements are still warranted. One quarter of the 98,000 Medicare patients responded that they did not think staff always treated them with respect (Elliot et al., 2010). Furthermore, information from both Picker and Press Ganey (2007) surveys showed that although patient's value expertise in clinical care and the latest technology, they also highly appreciate and value humanized,

personalized, compassionate, patient-centric caring (Gerteis et al., 1993; Press, 2002). As

the data in Table 2 demonstrates, for the Press Ganey survey, overall satisfaction scores

are highly correlated with line-item survey questions that reflect nursing personnel's

communication, relational, and service skills.

Table 1

Mean Percentage of Most Positive Responses on Hospital Consumer Assessment of Healthcare Providers and Systems Measures for Participating Hospitals 2008–2009

	% Most positive ("always")		
Response category	March 2008	March 2009	Difference
Nurse Communication	72.7	73.1	0.4*
Doctor Communication	79.1	79.0	-0.1*
Responsiveness of Hospital Staff	59.9	60.8	0.9*
Pain Management	67.1	67.5	0.4*
Communication about Medicines	57.5	58.0	0.5*
Cleanliness	67.9	68.3	0.4*
Quietness	53.6	54.5	0.8*
Discharge Information	79.1	79.9	0.8*
Recommendation	67.1	67.4	0.3**

Note. Data is from the HCAHPS survey submitted from 2,774 hospitals for the public report of March 2008 and March 2009, *$p < 0.05$, **$p < 0.001$. Adapted from "Hospital Survey Shows Improvement in Patient Experience," by M. N. Elliot, W. G. Lehrman, M. K. Goldstein, L. A. Giordana, M. K. Beckett, C. W. Cohea, & P. D. Cleary, 2010, *Health Affairs, 29*, p. 2064.

In addition, some studies suggest that improving empathy and positive

communication skills of caregivers can have a positive clinical affect on patient care

outcomes, including improvement of wound healing, reduction in morbidity and

mortality, faster recovery of cardiovascular surgical patients, and increased clinical safety

during key critical caregiver hand-offs (Chang et al., 2006; Fredrickson & Levenson,

1998; Leonard, Graham, & Bonacum, 2004; Meterko, Wright, Lin, Lowry, & Cleary,

2010).

Table 2

Sample of Nursing Staff Communication/Interpersonal Skills Related Line Items and
Correlation Coefficients from Press Ganey Patient Satisfaction Survey

Communication/interpersonal/relational skill line item	*r*-level
Staff addressed emotional needs	.80
Response to concerns and complaints	.78
Staff worked together to care for you	.75
Staff includes you in decisions regarding your treatment	.75
Nurses kept you informed	.74
Staff concerned for you privacy	.73
Staff attitude toward visitors	.73
Explanations: happen during tests and treatments	.68
Attention to special/personal needs	.68
Nurses attitude toward requests	.68
Friendliness/courtesy of the nurses	.66
Instructions for care at home	.66
Promptness response to call-light	.61

Note. Out of 37 line-item questions on a standard Press Ganey survey, this table shows 13 (35%) questions
that are affected by communication, relational, and service behaviors/skills of nursing personnel. From
Guide to Interpreting, by Press Ganey, 2007, retrieved from http://www.pressganey.com/Documents
/pg_gti.pdf?viewFile

Caring competencies and support for the caregivers. As more and more

national data becomes available, it is clear that both nursing care and caring

communication are major predictors of hospital-patient satisfaction (Elliot et al., 2010;

Kutney-Lee et al., 2009; Larrabee et al., 2004). Leininger (1984), Watson (1988), and

other nursing theorists have long recognized that caregivers should have a holistic set of

competencies. However, most of the training and development in the hospital

environment for front-line staff has been generally prioritized to address clinical,

operational, and technical issues (Graber & Mitcham, 2004; Joint Commission on

Accreditation of Healthcare Organizations, 2010).

Graber and Mitcham (2004) argued that American hospitals in the mid- to late-20th century, during an era of aggressive downsizing and mergers, switched organizational priorities away from a focus on caring and compassion to an emphasis on technical and clinical professional skills. Knowledge dissemination and skills training were prioritized first to address the pace of new technology, clinical procedures, protocols, infection control practices, medication management, and critical safety requirements (Graber & Mitcham, 2004; Institute of Medicine, 2001). Although there is a growing recognition of the importance of developing more patientcentric behaviors on the part of clinicians, nursing and medical education continues to be focused on clinical and technical curriculum (Flowers, 2005).

For some clinical and nursing staff the current emphasis on patient-centered culturally sensitive communication and relational skills may include new, emerging, or forgotten competencies. Hence, enhancing emotional and social-behavioral skills requires a more individualized and longer-term developmental learning approach than can be otherwise achieved through a one-time educational-training session (Goleman, 2006; Goleman et al., 2002; Graber & Mitcham, 2004). Therefore, coaching and developing staff for high-quality, patient-centered communication and relational skills remains a priority for management (Colmers, 2007; Nelson et al., 2002; Shaffer & Tuttas, 2008).

However, the day-to-day operational environment that a nurse manager faces is more complex and time consuming than ever before (Shirey, 2006). In fact, the role of the nurse manager is considered to be one of the most stressful positions in healthcare (Shirey, 2006). Contemporary pressures and competing priorities include a broader span

of control in the post reengineering era, staffing in the context of a national nursing

shortage; management of an increasingly diversified staff in culture, gender, and age; the

advent of short-term traveling workers, tighter budgets following the economic downturn,

growing accreditation and governmental regulations; and a consumer savvy clientele

(Cathcart et al., 2004; Shirey, 2006). As a result, nurse managers are challenged to find

the time and opportunity to meet all the knowledge acquisition, skills, learning, and

motivational needs of their employees.

Management scholars have suggested that in order to meet the developmental

needs of the contemporary knowledge worker in the professional workforce, managers

should spend up to 30% to 40% of their time in coaching (Hargrove, 1995). However,

other demands, scarcity of time, and lack of face-to-face opportunity can make it difficult

for the nurse manager from providing the sustained, individualized mentoring and

coaching that is necessary for motivating and sustaining positive behavioral changes

(Doran et al., 2004; Goleman et al. 2002; Graber & Mitcham, 2004; Parker et al., 2008;

Shirey, 2006).

Moreover, there is a relationship between caregiver satisfaction and patient

satisfaction and vice versa. In a four-state cross-sectional survey involving 430 acute-

care hospitals and 20,984 staff nurse respondents, Kutney-Lee and colleagues (2009)

found that "better" work environments were associated with higher patient satisfaction

outcomes by four percentage points than "mixed" results, and eight percentage points

than hospitals rating "poor" in work environment. Press Ganey and Associates studied,

76 hospitals, in which both patient and employee satisfaction were measured; a

statistically significant relationship ($r = .46$, $p < .001$) existed between the two (Press,

2002). Atkins, Stevenson-Marshall, and Javalgi (1996) studied patient loyalty measured by the patient's likelihood to recommend or to return for further services, and found a strong relationship ($r = .63$, $p < .005$) between nursing-personnel satisfaction and patient satisfaction.

Behavioral scientist Goleman suggested, "Just as they share a mission of caregiving, those who give the care, need to look after one another" (2006, p. 257). Although nurses have a duty to compassionately care for their patients, the intensity of the emotional work can create susceptibility to "burn-out" and "compassion fatigue" which is a state where the compassionate energy that is expended has surpassed the restorative process (Ashkanasy et al., 2000). Nursing researchers, Knobloch-Coetzee and Klopper (2010) argued that establishing a peer network is an important helping strategy to identify early warning signs, deal with the emotional burden of the work, and provide relational support before recovery power is lost.

Developmental relationships at work. More recently, mentoring scholars have argued that lateral or peer developmental relationships can provide organizations and employees with similar benefits to traditional mentoring (Kram & Isabella, 1985; McDougall & Beattie, 1997). Studies of peer mentoring show that this type of developmental relationship can serve as a source for short-term and long-term personal learning, collaborative learning, creating and disseminating knowledge, stimulating innovation, and building intellectual and human capital (Allen & Eby, 2003; Bryant, 2005; Eddy, Tannenbaum, Lorenset, & Smith-Jentsch, 2005; Hezlett, 2005; Higgens & Kram, 2001; Lankau & Scandura, 2002; Mullen & Noe, 1999; Ostroff & Kozlowski, 1993; Swap, Shields, & Abrams, 2001).

Although peer coaching as a specific developmental relationship has been described in teacher education for the past 20 years (Lam, Yim, & Lam, 2002; Murray, Ma, & Mazur, 2009; Showers & Joyce, 1996), it has been relatively unstudied outside of education or the classroom setting (Parker et al., 2008; Waddell & Dunn, 2005). Beyond the field of education, the study of peer coaching as a specific construct has been hampered by a lack of clarity in terminology that exists throughout the management and healthcare literature (D'Abate, Eddy, & Tannenbaum, 2003). Further, in a meta-analysis of the literature, D'Abate and colleagues found that both researchers and practitioners frequently interchanged "mentoring" and "coaching" as constructs.

However, as previously stated, mentoring and management scholars Parker et al. (2008) recently introduced the concept of peer coaching as a specifically defined relational process. They intentionally distinguished it from the related concepts of mentoring and peer mentoring. Parker and colleagues defined peer coaching as a voluntary, nonevaluative relationship with two or more people of similar experience; one which is mutually and reciprocally beneficial from both a process and emotional aspect. In a mixed-methods study of 150 MBA students, Parker et al. found that peer coaching fostered personal learning and leadership development among peer-coaching dyads.

As mentioned above, relationships often take the form of a mentor or preceptor and are defined as a more experienced nurse assigned to provide clinical instruction and support to student nurses, new graduates, or new employees (Bensfield et al., 2008). Peer coaching, as a specifically defined developmental relationship, is relatively new in healthcare and only a few studies are reported (Broscious & Saunders, 2001; Sekerka & Chao, 2003; Waddell & Dunn, 2005). Broscious and Saunders (2001) reported benefits

from the use of peer coaching to augment the faculty role with university nursing students. Waddell and Dunn (2005) also reported positive results in the use of peer coaches to supplement the role of continuing-education trainers in clinical breast-examination skills. Sekerka and Chao (2003) used peer coaching as a platform to study professional development for physicians in the clinical ambulatory-care setting. In their study of 13 physician coaches they found that peer coaching was associated with a positive impact with both the coaches group and those who received coaching. Positive impacts included increased reflection time, personal learning, and change (Sekerka & Chao, 2003). To date, there are no studies in management or healthcare using the concepts of peer coaching for the specific purpose of "soft skill"—interpersonal-communication and relational-skill—development.

An intentionally positive approach. As stated, coaching for "soft skills" such as interpersonal-communication, relational, and caring-service skills has not been a mainstream responsibility nor has it been within the comfort level of a peer (Kowalski & Casper, 2007). Indeed, managers themselves often express a lack of comfort in addressing the delicate issues of relational and social skills (Patterson et al., 2002).

Therefore, in the context coaching for enhanced interpersonal-communication, relational, and service skills, a particular need exists for the coaching model to be nonevaluative and grounded in a positive relational theory. Positive organizational scholars, Dutton and Heaphy (2003), defined relations and human connections as high-quality, or "life giving" versus low-quality or "life depleting" (p. 263). A high-quality connection creates safety for both parties, is nonevaluative, respectful, reciprocal, and intentionally appreciative and positive (Dutton & Heaphy, 2003). Further, positive

behavioral psychologist Fredrickson's research suggested a benefit for studying an intentionally positive approach to coaching. Fredrickson found that when positive emotions such as interest, joy, serenity, love, and amusement are elicited, an effect is generated that Fredrickson referred to as the "broaden and build" theory (2001). Positive emotions generate increased openness, which in turn, generates intrinsic motivation and creativity (Fredrickson, 1998). An upward spiral of emotion occurs that facilitates learning and creativity and enhances problem solving (Fredrickson, 1998, 2001, 2009). Edmondson (1999) found a positive association between psychological safety and learning behaviors in teams. Furthermore, in a time lag study of 212 part-time students who hold full-time jobs in a variety of industries including healthcare, researchers Carmeli, Brueller, and Dutton (2008) found that high-quality relationships (HQR), cultivated perceptions of greater psychological safety at Time 1, which was then associated with increased learning behaviors at Time 2.

Although there are anecdotal reports from the field, to date, no empirical research exists using an intentional positive relational connection and/or appreciative approach in peer coaching. However, Orem, Binkert and Clancy (2007) recently introduced a formal appreciative coaching model for executive coaching by combining concepts from appreciative inquiry (AI), positive organizational scholarship (POS), and positive psychology (PP). In their qualitative case studies of five clients, they report effectiveness of the process as defined by client satisfaction and through external coding, confirming the AI construct (Orem et al., 2007).

Purpose of the Study

The purpose of this research was to extend the literature about peer-to-peer developmental relationships in the work environment, specifically defined as peer coaching. It was the intent of the study to explore whether peer coaches who received training in an intentionally positive model of peer coaching were perceived as developing high-quality connections (HQCs) with their coachees, and to determine if the peer-coaching process was perceived as benefiting team knowledge, skills, and innovation in patient/family-centered interpersonal-communication, relational, and service skills. Finally, it was the intent of the study to contribute to the emerging body of knowledge in POS, positive relationships at work (PRW) and AI.

Research Questions

This study was guided by four main research questions. Following training and a period of practice implementation of the positive peer-coaching process,

1. What were the perceptions of the peer coaches about their coaching practices, the peer-coaching process, their ability to develop HQC, and their ability to facilitate knowledge, skills, and innovation among their coachees?

2. What were the perceptions of the coachees about the coaching practices, the peer-coaching process, their ability to develop HQC, and the ability to facilitate knowledge, skills, and innovation among the team?

3. What were the perceptions of the nurse managers about coaching practices, the peer-coaching process, the ability to develop HQC, and the ability to facilitate knowledge, skills, and innovation among coaches and their coachees?

4. What were the relationships among the perceived effectiveness of the peer-coaching process, the coaching relationships, and how the team manages knowledge, skills, and innovation?

Significance of the Study

This study was significant for a variety reasons. In addition to the altruistic imperative of improving the patient/family experience of care, there is a growing economic incentive for hospitals to perform. Publically reported data in both clinical- and patient-satisfaction outcomes has resulted in increased attention and pressure from top management on the performance of the nurse manager and staff at the unit level. Evidence exists that staff require ongoing, individualized developmental support for improvements in interpersonal, communication, and caring competencies. Yet, evidence also exists that the role of the nurse manager is one of the most stressful, demanding positions in healthcare today (Shirey, 2006; Shirey et al., 2008). A critical significance of this study was to provide evidence that developmental relationships, in the form of peer coaching, can effectively augment the role of the nurse manager in developing enhanced service, relational, and communication skills.

Further, the daily work on an inpatient-nursing unit can be physically, mentally, and emotionally demanding. Thus, nursing staff can be susceptible to emotional and compassion fatigue. This study was significant in that it addressed a method to provide an additional support structure for staff.

Finally, this study is significant in its contribution to organizational knowledge. It advocates for PRW and the benefit of using intentionally positive methods such as POS and AI.

Delimitations

This research was limited to a single-site study where positive peer-coaching training was implemented to enhance interpersonal-communication, relational, and service skills among nursing personnel. The single-site location was an adult medical-surgical academic medical center with advanced professional nursing Magnet® status. As a result, the findings cannot be generalized to other organizations. The study was confined and limited to those nursing units and participants who had already participated in the training program. Further, the use of self-report data and the cross-sectional design was a further limitation.

The use of a small convenience sample selected from one major academic teaching hospital with designated Magnet® certification status limited the study findings and thus, they cannot be generalized to other settings. Institutions with Magnet® certification status have demonstrated they have a culture that is favorable to mentoring and therefore, to the related concepts of peer coaching. The survey sample, in general terms, reflected the diversity of the nursing population regarding culture, gender, and age, but may have been limited by response rate.

Theoretical Rationale

The overarching theoretical rationale that supported this study was POS (Cameron, Dutton, & Quinn, 2003). POS is a generative, interdisciplinary lens that links organizational, relational, and positive theory and practice (Cameron et al., 2003). POS is informed by the correlates of AI and PP (Cooperrider, Barrett, & Srivastva, 1995, Fredrickson, 1998; Seligman & Csikszentmihalyi, 2000. Furthermore, all three correlates are rooted in multiple foundational and complimentary philosophical, educational,

biological, relational, sociocultural and organizational theories (Cameron et al., 2003).

Some of the underlying theories that are embedded in POS include social construction

and enactment, social-exchange theory, the nonlinear dynamics of positive change, the

Aristotelian concept of authentic goodness, and theories of power and narrative (Bushe,

2011; Freire, 1970; Morgan, 2006; Ozman & Craver, 2008; Ricoeur, 1992; Wheatley,

1999). Moreover, this perspective is furthered and unified by the theory of

transformational leadership (Bass & Riggio, 2006; Burns, 2003) and the associated

postmodern values and relational-based leadership concepts of positive leadership

(Cameron, 2008), authentic leadership (Luthans & Avolio, 2003), and exemplary

leadership (Kouzes & Posner, 2007).

POS is concerned with the study of especially positive outcomes, processes,

relationships, and attributes of organizations and their members (Cameron et al., 2003).

POS does not represent a single theory, but focuses on dynamics that are typically

described by words such as excellence, thriving, flourishing, abundant, resilient, and

virtuous. It encompasses attention to the "enablers, motivations, and the outcomes or

effects associated with positive phenomena" (Cameron et al., 2003, p. 4). In seeking to

understand what represents and approaches the best of the human condition, POS has

three biases: seeking understanding of positive states, in an organizational context, and

scholarship with empirical credibility and theoretical explanations (Cameron et al., pp. 4–

6).

With POS as the lens, a new way of approaching organizational and individual

change also emerges from the theories and methods of AI. AI is an intentionally positive

approach to change (Cooperrider & Sekerka, 2006). Although, AI has been associated

with action research as a central methodological process for organizational development, action research is considered a diagnostic intervention and involves a problem-focused approach. In contrast, AI has an intentionally positive-seeking focus (Egan & Lancaster, 2005).

The process of AI is accomplished through a designed interview and resultant narrative storytelling methodology that builds on the postmodern theories of social construction and enactment of reality (Bushe, 2000, 2011; Bushe & Kassam, 2005; Whitney & Trosten-Bloom, 2003). Organizational psychologist Weick (2000), in an explanation of the theory of enactment, emphasized the proactive role of the individual in making sense of realities. Organizational theory scholar, Morgan (2006) referred to the theories of social construction and the enactment view of culture, describing organizations as, "in essence socially constructed realities that are as much in the minds of their members as they are in concrete structures, rules, and relations" (p. 137). Further, Morgan stated, "Organizations end up being what they think and say, as their ideas and visions realize themselves" (2006, p. 140). Organizational development and AI scholar Bushe (2000) summarized these theories and the impact on organizational change when suggesting that is it is only the imagination and collective will that limits the ability to create new and better organizations.

The focus, therefore, in the AI method is on creating image and realities through interviewing and generating stories of the positive extreme or positive deviance of when organizations, teams, and individuals are at their peak. AI is based on a generative theory Cooperrider and Srivastva described as the heliotropic hypothesis (1990). Cooperrider posited that organizations and individuals will move toward their most prominent

conscious and unconscious collective images of themselves, like a plant toward light (Cooperrider & Srivastva, 1990). Thus, in the dual framework that "words create worlds," individuals and organizations learn and grow toward an implicit/explicit focus. The inquiry includes a series of premeditated, provocatively and intentionally positive questions designed to facilitate discovery of an organization's or an individual's positive core. The questions are usually based contextually on the past, the present, and future (Hammond, 1998).

The theoretical framework of POS is furthered by contributions from the field of PP. This field has an intentional focus on experiences that generate positive emotions such as joy, interest, pride contentment, gratitude and love (Seligman, 2002). Contributions have emerged from this field of study, such as those from positive behavioral scientist and researcher, Fredrickson. Frederickson's broadened and built theory suggested that positive emotions open people's processes of thinking, creating, and acting, thereby creating an upward spiral of positive emotion that sparks individual and organizational flourishing (Fredrickson, 2001, 2009).

Finally, the POS perspective embraces the Aristotelian viewpoint that such virtues such as goodness, wisdom, gratitude, and strength are freely chosen authentic states of being and lead to human fulfillment, prosocial behavior, motivation, and performance (Cameron et al., 2003). This viewpoint is in concert and supports Burns's theory of authentic transforming leadership in which transforming leaders empower, champion, and inspire followers in a participatory and democratic way, so that they might becomes leaders themselves (Burns, 2003).

These positive, relational, and interconnected concepts of POS lay the theoretical foundation for the study. This postmodern viewpoint underscores the study of the nature and quality of positive interactions between people in organizations that can create the opportunity and energy for solving problems, creating improvements, and generating transformational change at both the individual and the organizational level.

Definition of Terms

For the purpose and use in this research study, the following terms are defined as follows, and will be used to provide a common language through which to consider the study.

Appreciative inquiry (AI): AI is an organizational-development and change process that fosters change through an intentionally positive process of inquiry. AI is based on a four-step process: discovery, dream, design, and destiny (Whitney & Trosten-Bloom, 2003).

Authentic transformational leadership: Authentic transformational leadership is a form of transformational leadership, specific to the concepts of POS and used to describe the desired type of leadership for both management and peer coaches. Transformational leadership is in concert with Magnet® principles (American Nurses Credentialing Center, 2011b; Burns, 2003; Cameron et al., 2003; Kouzes & Posner, 2007; Luthans & Avolio, 2003).

C-ICARE: A service-behaviors acronym first developed by UCLA Medical Center and then adopted by Stanford Hospital and Clinics, meaning C-connect, I-introduce yourself, A-ask permission and how you can help, R-respond, E- exit courteously (Michelli, 2011).

Coachees: Coachees are employees who are members of a peer-coaching group lead by a designated peer coach. They participate in a mutually responsible relationship for learning (Garvey, Stokes, & Megginson, 2009; Parsloe & Leedham, 2009).

Degree of connectivity: Degree of connectivity captures a relationship's measure of openness to new ideas and influences and the capacity to deflect behaviors that hinder or shut down creative thinking and generative processes (Dutton & Heaphy, 2003).

Developmental network: A developmental network is a set of people and individuals who take an active interest in and action to advance a person's career or development (Higgens & Kram, 2001).

Developmental relationship: A developmental relationship is a helping and encouraging relationship in the workplace that fosters an individuals' professional, personal, and career development (Ragins & Kram, 2007).

Emotional carrying capacity: Emotional carrying capacity describes a relationship's capacity level for more emotion, both positive and negative (Carmeli et al., 2008; Dutton & Heaphy, 2003).

High-quality connections (HQC): HQC are short interactions characterized by trust, positive regard, mutuality, and vitality (Carmeli et al., 2008).

High-quality relationships (HQR): HQRs are dyadic short-term relationships that are characterized by positivity, high regard, high trust, high psychological safety, mutuality, and a connection quality from both a behavioral and process stance. In this dissertation the term will apply to desired interactions among staff, as well as staff to patients/families (Dutton & Heaphy, 2003).

Microsystem: A microsystem is made up of a web of relationships that have face-to-face interactions. The term will be used also to describe a nursing unit (Nelson et al., 2002).

Mutuality: Mutuality is a way of relating that denotes individuals actively contributing to one another's development and learning; also the degree to which both are engaged and participating empathetically (Miller & Stiver, 1997: Cameron et al., 2003).

Nursing assistant: A nursing assistant is a trained and certified employee who provides basic patient care under the supervision of a registered nurse. Care provided includes taking vital signs and assistance in activities of daily living such as bathing, walking, feeding, and assistance to the bathroom (Joint Commission on Accreditation of Healthcare Organizations, 2010).

Nurse manager: A nurse manager is a registered nurse in an acute-care hospital having 24-hour accountability for the overall performance of at least one nursing unit (Shirey et al., 2008).

Patientcentric or patient/family-centered care: Patientcentric or patient/family-centered care is a way of seeing experiences, processes, and interactions through the eyes or perspective of patient and family members rather than through the traditional lens of the clinicians as all knowing and in authority (Nelson et al. 2002).

Peer coaching: Peer coaching is a mutual and reciprocal developmental (encouraging and helping) and learning relationship in the workplace of two or more people of equal or similar status (Parker et al., 2008).

Peer mentoring: Peer mentoring is a developmental process at work where a more experienced, longer term employee encourages and enhances learning and skill

development of a lesser experienced or new employee, or a new graduate (Bryant &

Terborg, 2008).

Positive organizational scholarship (POS): POS is the study of especially positive

outcomes, processes, and attributes of organizations and their members; POS focuses on

dynamics that are typically described by words such as excellence, thriving, flourishing,

abundance, resilience, and virtuousness. Scholars research enablers, motivations,

outcomes and/or the effects associated with positive phenomena. POS has three biases:

seeking understanding of positive states, in an organizational context, and scholarship

with empirical credibility and theoretical explanations (Cameron et al., 2003).

Positive or upward spiral: A positive or upward spiral is used to describe a

nonlinear positive dynamic and is frequently used to describe a positive individual or

organizational phenomena (Fredrickson, 2000, 2009).

Positive peer coaching (PPC): PPC is term developed by this researcher to

describe an approach to peer coaching that embraces practices and principles from AI,

PP, and POS, and specifically, behaviors and characteristics that lead to HQR

(Cooperrider & Whitney, 2005; Dutton & Heaphy, 2003; Seligman, 2002).

Positive psychology (PP): PP is the study of positive emotions, character traits,

and enabling institutions. The focus of PP is on strengths and on building on "the best"

in people, experiences, and organizations. A central focus is hope. There is an

underlying assumption that goodness and excellence are not illusions but are authentic

states and modes of being that can be analyzed and achieved through three points of

focus: positive experiences, positive individual traits, and positive institutions (C. M.

Peterson, 2000; C. M. Peterson & Seligman, 2003; Seligman, 2002).

Positive regard: Positive regard is the extent to which individuals experience a sense of being known, valued, cared about, or loved (Carmeli et al., 2008; Dutton & Heaphy, 2003; Rogers, 1973).

Positive relationships at work (PRW): PRW is a new interdisciplinary domain of inquiry that focuses on the conditions, processes, and mechanisms that increase growth, learning, innovation, and resilience in individuals, groups, and organizations (Ragins & Dutton, 2007).

Preceptor: A preceptor is a more experienced skilled nurse who is responsible for the clinical instruction of a new or younger nurse and includes some mentoring functions (Bensfield et al., 2008; Shirey, 2006).

Psychological safety: Psychological safety occurs in relationships where there is a high degree of trust and openness, characterized by a perception of lack of fear that rejection will take place (Edmondson, 1999).

Social capital: Social capital refers to the resources that are part of and flow through networks of relationships and can include knowledge, information, ideas, advice, help, emotional support, goodwill, material goods, and services. Social capital can be positive or negative (Adler & Kwon, 2002).

Social network: A social network is a specified set of actors and their relationships, whereby the actors are viewed as interdependent and have relational ties (Christakis & Fowler, 2009).

Soft skills: Soft skills include interpersonal (social) interactions, communication and relationship skills such as listening, awareness, empathy, concern, responsiveness,

control of emotions, and other relational rather than "hard" or technical skills (Goleman, 2006).

Tensility: Tensility refers the capacity of a relationship to rebound from difficulties (Carmeli et al., 2008; Dutton & Heaphy, 2003).

Traditional coaching: Traditional coaching is considered a subset of mentoring but typically is more job related than career related. In contrast to mentoring, the learning in traditional coaching is more directed, the relationship is involuntary, more problem focused, there is a greater concentration on telling rather than listening, and it is usually more of a short-term or as-needed relationship (Harvard Business Essentials, 2004).

Traditional mentoring: Traditional mentoring is a guiding relationship of a wise, more experienced person with that of a less experienced protègé. Traditional mentoring includes advisement and sharing of knowledge and trusted counsel for psychosocial (role modeling, counseling, acceptance and confirmation, and friendship) and career-related (sponsorship, coaching, protection, challenge, exposure, and visibility) support (Bryant & Terborg, 2008; Kram, 1985).

Unit secretary: A unit secretary is a member of the nursing unit team and maintains the front-desk operation of the unit, welcoming and addressing patients, families, and visitors, interacting with patients over the intercom, and sometimes directly responding to patients' nonclinical requests, such as delivering a blanket, ice water, or a meal tray

Summary

In Chapter I, a description of the research problem addressed by this study was presented. The purpose and the underlying justification were offered, along with a summary of the theoretical rationale. Additionally, the research questions were identified around which the research methodology was organized. Finally, a list of the operational definitions was presented. Chapter II presents a review of the related literature on developmental relationships in the workplace, an introduction to peer developmental relationships including the similarities and distinctions between peer mentoring and peer coaching, models of and effectiveness of peer coaching, the impact of AI on organizational change initiatives, and the impact of HQR on organizational and individual learning, knowledge creation, and sharing.

Chapter III presents the overarching research design used for the study. Included in the chapter are the research methodology, the population and sample, the instrumentation, the reliability and validity, the pilot test, the data collection, and the analysis. Chapter IV presents the results from the study research. Following a demographic description of the participants, the chapter is organized based to answer the research questions. Findings from the study are presented in a narrative format supplemented by tables and figures. Both quantitative and qualitative data are presented. Chapter V presents a summary of the research and the conclusions and significance of the study. In addition, it provides a discussion of the implications and recommendations for future research.

Chapter II

Review of the Literature

Introduction

Part 1 of the literature review consists of background and empirical research studies related to developmental relationships at work and how benefits that were previously attributed to more traditional mentoring are beginning to be associated with peer developmental interactions. Discussion includes studies that demonstrate how peer developmental relationships can help support learning and developmental needs for knowledge workers. Further, the review will include the research in both peer mentoring and peer coaching, including similarities and distinctions, and their meaning in nursing, which will provide the context for the construct of peer coaching in this study.

Part 2 of the literature review consists of an overview of the concepts and empirical studies from POS and the associated concepts and studies from PP and AI. In addition, particular attention will be given to the newly emerging field of study of PRW. Part 3 of the literature review will consist of an overview of concepts and related research on organizational learning, knowledge creation, and sharing.

Developmental Relationships at Work

Ancient origins. Developmental relationships at work are considered helping, learning, and relationships and are commonly seen in various forms such as mentoring and coaching (D'Abate et al., 2003; Garvey et al., 2009; Kram, 1985; Parsloe & Leedham, 2009; Ragins & Kram, 2007). The derivation of the word *mentor*, as well as the construct of *mentoring* has its origin in ancient Greece and in Homer's Odyssey. In the myth, Odysseus sails from Ithaca to fight the Trojans and leaves his son Telemachus

under the guidance of his friend Mentor. Although Mentor is a real man, the female

goddess of wisdom, Athena, assumes his form to guide and protect, as in protègé. Thus,

concepts from antiquity are connected with the modern concepts of mentoring as a

relationship that can rise above time, gender, and culture (Ragins & Kram, 2007).

The derivation of the word *coach,* as a developmental term and concept, has more

modern roots to the 19th century Hungarian word for carriage—*kocis,* and the

transporting or *coaching* of students to instruction and training by professors in a

university setting (Garvey et al., 2009). Yet, in an extensive review of the theoretical

literature on both mentoring and coaching, Garvey et al. (2009) suggested that modern

discourse about both concepts remains rooted in Ancient Greece and in the original,

ancient story of Mentor. For example, Garvey et al. noted that the relationship between

Athena and Telemachus had a clear purpose and that trust was present in all learning.

The mentoring and coaching relationship that Athena provided Telemachus included an

assessment and development of his potential. There was a supportive balance between

the learner (Telemachus) and the organization (Ithaca) and included a wide range of

developers for the learner, each with varying and specific skills. Both challenge and

support were present in the relationship, and finally, independence and empowerment

were encouraged and supported (Garvey et al., 2009).

In addition, Garvey et al. (2009) suggested a link between ancient Greeks and the

modern discussions on coaching, connecting them to the Socratic method. They

theorized that Socratic dialogue and coaching both address the whole person, that insight

is gained by connecting dialogue to concrete experience, that dialogue should be open

and clear, and assumptions should be avoided, that each party should remain persistent

and committed to purpose, and finally, that honesty, trust, and faith in examination of self and others is a condition of mutual striving for accord (Garvey et al., 2009).

Modern concepts of developmental relationships.

Traditional mentoring. In 1985, now over 2.5 decades ago, management scholar, Kram published a seminal work based on theoretical findings and research on the subject of mentoring, entitled *Mentoring at Work*. At the time, mentoring was considered relatively marginal as a research topic (Ragins & Kram, 2007). Scholarly authors now refer to the publication of this work as a prodigious point, noting the subsequent upsurge of interest and research into what has now become a mainstream of scholarly study (D'Abate et al., 2003; Ensher, Thomas, & Murphy, 2001; Garvey et al., 2009; McCauley, 2005; Parsloe & Leedham, 2009; Ragins & Kram, 2007).

McCauley (2005) reported that today mentoring is widely recognized as a useful tool in organizations for human-resource development. Further, there is a shared and common understanding among those in the workplace of mentoring as "an intense, committed relationship in which a senior person, the mentor, stimulates and supports the personal and professional development of the junior person, the protègé" (McCauley, 2005, p. 443). Others reported the growing evidence of benefits from mentoring relationships in both career-related and psychosocial aspects (Allen, Eby, Poteet, Lentz, & Lima, 2004; Kram, 1985; Lankau & Scandura, 2002; McCauley, 2005). The well-established benefits to the protègé include sponsorship, coaching, facilitating exposure, protection, job and career advancement, role-modeling, counseling, confirmation, learning, and friendship (Allen et al., 2004; Hezlett, 2005; Ragins & Kram, 2007). Benefits to the mentor have also been described including technical and psychological

support, increased satisfaction, and respect (Allen, Poteet, & Burroughs, 1997; Kram, 1985; Young & Perrewe, 2004).

Research has also identified negative impacts from mentoring to both the protègé' and the mentor, including anger, mismatch, distancing, resentment, sabotage, anxiety, and decreased learning (Eby, Butts, Lockwood, & Simon, 2004). However, in a recent exploratory case study of 14 protègés in a large federal agency, Hezlett (2005) found that learning was associated with both negative and positive experiences from mentoring. Mentoring relationships have also been shown to be of benefit to organizations in encouraging learning and sharing of both explicit and tacit knowledge (Swap et al., 2001).

Traditional coaching in management/Executive coaching. The literature on coaching is generally reported as either a developmental function in the role of a manager or as specific developmental relationship construct in the form of executive coaching. Feldman and Lankau (2005) conducted a literature review on executive coaching and noted that although descriptive accounts from the practitioners' perspective have mushroomed over the past decade, empirical research has lagged, as well as the underlying theoretical processes. Further, in a broader review of the literature, Garvey et al. (2009) summarized their findings on coaching "as a new field of practice, the theory lagged and the research was rudimentary" (p. 40). Moreover, they argued that in comparison to the tradition of research in mentoring, there is no equivalent body of research in coaching to date, and they called for further research (Garvey et al., 2009).

Coaching as a developmental tool in management is not a new concept and is generally defined as a "process of equipping people with the tools, knowledge, and

opportunities they need to develop themselves and become more effective" (R. S.

Peterson & Hicks, 1996, p. 41). Feldman and Lankau (2005) noted that early studies on

management from the 1950s through the early 1990s described coaching as "a technique

that managers could use to correct deficiencies in employees' task performance," and

only more recently has coaching emerged as a way of facilitating learning and moving

performance from good to great (p. 830).

In 1969, Hersey and Blanchard used the term coaching to describe a type of

leadership style. Their situational leadership model® has been revised over the years to

reflect a more current definition of coaching in which the leader has a highly directive

and highly supportive style, focusing on communicating goals, yet meeting the

subordinates' socioemotional needs by eliciting input and providing encouragement

through persuasion (Northouse, 2007). R. S. Peterson and Hicks (1996) suggested that

coaching can occur anywhere in the organization on a informal basis for the purpose of a

leader assisting a follower in changing specific behaviors. They presented a five-step

process: (a) Forge a partnership—develop a trusting relationship; (b) Inspire

commitment—gather assessments of strengths and weaknesses; (c) Grow skills—create a

development plan; (d) Promote persistence—meet periodically and provide feedback; and

(e) Shape the environment—role model behaviors and foster application of new skills (R.

S. Peterson & Hicks, 1996).

Executive coaching, as a developmental relationship, is generally defined as a

short- to medium-term relationship between a middle- to senior-level manager and an

internal or external consultant for the purposes of improving work effectiveness (Douglas

& McCauley, 1999; Feldman & Lankau, 2005; Garvey et al., 2009). Although there is a

lack of systematic qualitative or quantitative investigation, preliminary findings suggest potential benefit to the individual's effectiveness that translates to greater organizational effectiveness (Feldman & Lankau, 2005; Garvey et al., 2009). Garvey et al. (2009) suggested early influences on modern-day coaching date to the 1990s with the influence of James, Jung, and Adler. Parsloe and Leedham, (2009) contended that workplace coaching has also been influenced by sports coaching. In 1974, Gallwey published a humanistic sports coaching book called *The Inner Game of Tennis*, introducing the philosophy that performance equals potential minus interference. Gallwey defined interference as the bad habits of the mind, such as judging that can interfere with learning and peak performance (1974, p. 33). Gallwey (1999) later translated this coaching philosophy and sports metaphor to a workplace context and is credited with creating a significant contribution to the emerging profession of coaching (Parsloe & Leedham, 2009). Whitmore (1997) introduced the goal, reality, options, and will (GROW) model for business and in 1998 Whitworth, Kimsey-House & Sandahl introduced the coactive coaching model with an emphasis on curiosity and collaboration. Recently, Orem et al. (2007) introduced appreciative coaching (discovery, dream, design, and destiny) based on concepts from AI and PP.

In the 1990s executive coaching emerged as a developmental intervention in management intervention to address failure of executive-leadership skills (Feldman & Lankau, 2005). Feldman (2001) introduced three elements of executive coaching: (a) it involves one-on-one counseling specifically about workplace issues; (b) it includes use of a 360-degree feedback tool to identify strengths and weaknesses and; (c) its formal purpose is to improve leadership effectiveness in the current job. Further Feldman and

Lankau (2005) argued that the above elements are distinct from the concepts of mentoring or therapy.

Alternative forms. In 1985, Kram and Isabella published a research study presenting their results from 25 biographical interviews with relationship pairs about the role peer relationships had in career development. Through a grounded-theory qualitative-analysis approach, their findings suggested that some of the same benefits derived from the more traditional form of mentoring in the workplace could be readily and alternatively achieved with peers (Kram & Isabella, 1985). They concluded that peers could compensate for the absence of traditional mentors with respect to psychosocial support, but not with career-related support (Kram & Isabella, 1985).

Kram and Isabella (1985) identified three categories of peer relationships along a continuum characterized by functions of enhancing career and or psychosocial support, and by levels of trust and self-disclosure. The following are representative quotes from the interviews and reflect the continuum of peer relationships: (a) informational peer— "It's primarily just informational" (b) collegial peer—"There's a lot of give and take on a professional basis and on a social basis. Professionally, we are both learning at the same time" and (c) special peer—"I can say anything to Art and he will be understanding. I am able to get frustration and anger out in a more constructive fashion talking to him. We do that for each other" (Kram & Isabella, 1985, pp. 119–121). Kram and Isabella also identified patterns of benefits in the relationships that emerged, based on successive career stages, for example from "learning the ropes, to gaining visibility, to maintaining visibility, to maintaining knowledge" (1985, p. 125). They concluded that, although many of the functions in peer relationships resembled those seen in traditional mentoring,

the peer relationships tended to involve greater reciprocity and mutuality and went on to

suggest a new line of research to extend beyond traditional mentoring (Kram & Isabella,

1985).

The significance of Kram and Isabella's (1985) study findings was later to be

fully recognized, as organizations moved rapidly into an era of increased downsizing and

flattened hierarchies. Traditional mentoring limitations became more of an issue, in

equal access to and the lack of availability of hierarchical mentors for developmental

support (Hall, 1996). Theoretical and research papers followed, confirming that

alternative forms of mentoring existed and thus scholars began extending the

conventional construct of mentoring beyond the traditional, hierarchical relationship

(Allen & Finkelstein, 2003; Eby, 1997; Higgens, 2000; Higgens & Kram, 2001;

McDougall & Beattie, 1997). Furthermore, researchers found that individuals who had

numerous and varied sources of work-related developmental support tended to be more

satisfied, perceived more confidence, and experienced more job success (Allen &

Finkelstein, 2003; de Janasz, Sullivan, & Whiting, 2003).

Kram (1985) had already proposed in an earlier work that people rely on a

constellation of individuals to provide them with developmental support. Later, Higgens

and Kram (2001) set forth a new research agenda by introducing the perspective of

social-network theory into mentoring theory and reconceptualized mentoring as a

network of developmental relationships. They defined a developmental network as "the

set of people the protègé names as taking an active interest in and action to advance the

protègé's career by providing developmental assistance" (Higgens & Kram, 2001,

p. 268). Using terminology from network theory, they further described developmental

relationships in terms of the number of differing domains of support (network diversity) and the frequency of the interactions, extent of emotional bonding, and reciprocity (relationship tie strength). They proposed typology for four categories of developmental networks: (a) entrepreneurial—high diversity, high tie; (b) opportunistic—high diversity, low tie; (c) traditional—low diversity, high tie; and (d) receptive—low diversity, low tie (Higgens & Kram, 2001, p. 270).

Developmental assistance, as first defined by Kram and Isabella in 1985, includes both career (job) and psychosocial support. Therefore, in the context of today's turbulent times, organizational and mentoring experts suggested that individuals would do well to expand their network to include multiple sources of developmental relationships (Allen & Finkelstein, 2003; de Janasz et al., 2003; Eby, 1997; Higgens & Kram, 2001). Researchers de Janasz and Sullivan (2004) studied the university setting and proposed a multimentor network model, arguing that the old model of a singular, seasoned mentor is no longer relevant in today's complex technologic world, especially in the context of scarce resources. Further, management scholars have suggested that access to and availability of mentoring is lessened due to the changing nature of organizational structures and membership (Higgens & Kram, 2001). Thus, peers can serve as an additional valuable resource for gaining developmental support and improving job-related skills (Bryant, 2005; Bryant & Terborg, 2008; Eby, 1997; Ensher et al., 2001; Higgens & Kram, 2001; McDougall & Beattie, 1997).

In studies looking at common sources of work-related support, as described by individual responders, peer coworkers were identified by the respondents as one of the most frequent and consistent categories of sources for work-related developmental

support (Allen & Finkelstein, 2003; Eby, 1997; Kram, 1985). Allen and Finkelstein (2003) defined developmental support as that which has "helped you learn, grow and develop on the job" (p. 349). Until recently, however, little scholarly literature existed on the study of peer mentoring or peer coaching as definitive constructs in the context of developmental networks.

Peer Mentoring and Peer Coaching as Specific Constructs

Peer mentoring. McDougall and Beattie (1997) conducted one the first scholarly studies looking specifically at peer mentoring as a construct. In McManus and Russell's (2007) review of the literature on peer mentoring they argued that although Kram and Isabella in their 1985 study, "discovered along the way" that peers can serve some of the same functions as traditional mentors (McManus & Russell, 2007, p. 278), it was really McDougall and Beattie's work that definitively defined peer mentoring. Yet, McManus and Russell pointed out there was a convergence of findings from McDougall and Beattie's specific study with that of Kram and Isabella's (1985) more generalized study of alternatives to traditional mentoring.

McDougall and Beattie (1997) studied 28 informal peer-mentoring relationships in postgraduate management-education students. They defined peer mentoring as "a process where there is mutual involvement in encouraging and enhancing learning and development between two peers, where people are of similar hierarchical status or who perceive themselves as equals" (McDougall & Beattie, 1997, p. 425). McDougall and Beattie used critical-incident-technique qualitative interviewing of same-gender pairs (79% woman) and mixed-gender pairs (21%). They reported that with increasing frequency of mentoring episodes and a predetermined intentionality of purpose, over time

the informal peer relationships transformed into mentorship. At this point, the

relationship spanned both work-related and personal domains and was described by the

characteristics of authenticity, intimacy, and vulnerability. Further, their research

indicated that there are different types of learning relationships between peers, which are

determined by the relative importance of job-related issues and/or personal issues and

learning behaviors (McDougall & Beatty, 1997). Table 3 describes those learning-

behavior clusters that were identified in the McDougall and Beatty study.

Table 3
Peer Mentoring Learning Behavior Clusters

Communication behaviors	Discussion, listening, questioning, collaborating, summing up
Affective behaviors	Helping, supporting, encouraging, reaffirming, understanding, and calming
Cognitive behaviors	Explaining, advising, accessing and sharing information, playing devil's advocate, exchanging, developing, and trying ideas with the partner
Learning behaviors	Facilitating, reflecting, taking on different perspectives from the peer mentor, coaching, modeling on the partner
Challenging behaviors	Criticizing constructively, disagreeing, providing a good discipline for progress

Note. McDougall and Beattie found learning behaviors between peers were exhibited for job-related issues and/or personal issues and were based on relative importance. Adapted from "Peer Mentoring at Work: The Nature and Outcomes of Non-hierarchical Developmental Relationships," by M. McDougall & R. S. Beattie, 1997, *Management Learning, 28,* p. 428.

McDougall and Beattie (1997) further proposed a typology of peer mentorship

categories along a continuum of intimacy, openness, and authenticity that spanned both

work and personal focus: (a) "Co-worker," (b) "Utilitarian peer mentor," and

(c) "Holistic peer mentor" (p. 428). McDougal and Beattie's 1997 study findings

converged with Kram and Isabella's earlier categories of "informational, collegial, or

special peer" (1985, pp. 119–121).

All of the participants in the McDougall and Beattie (1997) research study reported positive benefits. Those in the "holistic peer mentors" category reported the most benefits—sounding board, support, confidence building, mutual learning, differing perspective, motivation, confidante, friendship, and stress management—but did not report networking as a benefit. Those in the "utilitarian" category reported similar benefits, with the additional benefit of networking but without the benefits of confidante, friendship, and stress management. Those in the "co-worker" category only reported the benefit of having a sounding board (McDougall & Beattie, 1997, pp. 433–432). McDougall and Beattie reported the main organizational benefit identified across all categories was that of "synergy and cross-fertilization of ideas and experience" (p. 433). Finally, those in the holistic-peer-mentoring category also felt that the relationships contributed to teamwork and that their relationships contributed to their learning (McDougall & Beattie, 1997).

McDougall and Beattie (1997) also explored the disadvantages of peer mentoring. All respondents believed there were no individual disadvantages, however they cited problems with lack of time, availability of the partner, coordination, geography, and external perceptions. McDougall and Beattie concluded that peer mentoring "demonstrated the power of informal learning" and provided significant learning benefits to the organization and for the individual (1997, p. 435).

In their review of the literature on peer mentoring, McManus and Russell (2007) suggested that peer mentoring includes themes of complementarity, mutuality, and reciprocity. The characteristic of complementarity in peer mentoring can be demonstrated in terms of expressions of empathy and mirroring, as well as in "offsetting

of strengths and weaknesses" in knowledge, skills, and abilities (p. 281). They noted the theme of "mutuality," with mutual involvement and fluidity in learning and an ability "to give and receive" as either the learner or the mentor (p. 282). Further, they identified the theme of reciprocity in peer-mentoring relationships as an exchange of similar currency in their career and psychosocially. They suggested more research is needed on all of these themes to differentiate between traditional mentoring and peer mentoring (McManus & Russell, 2007).

McManus and Russell (2007) also found that the concepts of peer mentoring appeared in the literature in two general forms: relational peer mentoring and unidirectional peer mentoring, with the preponderance of the literature representing the latter. They suggested that relational mentoring can be mapped to the concepts presented by McDougall and Beattie (1997) in their "holistic peer mentor." McManus and Russell further suggested that the holistic peer mentorships studied by McDougall and Beattie could be characterized by having "higher-quality relationships and psychological safety than utilitarian mentorships or coworker relationships" and suggested that further research is warranted (McManus & Russell, 2007, p. 285).

Edmondson (1999) studied the relationship of psychological safety in work teams and suggested that when trust is developed in interpersonal relationships and fear of rejection is diminished, learning behaviors are enhanced. Carmeli et al. (2008) confirmed these findings in a study of 212 part-time students who held full-time jobs in a variety of organizations and industry. Their findings suggested the importance of HQR in the workplace for cultivating psychological safety and learning behaviors (Carmeli et al., 2008). McManus and Russell (2007) further suggest that a nonhierarchical, lateral peer

relationship lessens the power differential and may afford an opportunity for taking learning-related risks; but further research is warranted.

Moreover, McManus and Russell (2007) suggested that the majority of published research studies of peer mentorship reflect unidirectional peer-mentorship relationships. Unidirectional peer mentorships take the form of informal peer mentorships or formal socializing peer-mentorship relationships. These relationships can be mapped to the McDougall and Beattie (1997) categories of "co-worker" or "utilitarian peer" categories. In both categories the intention of the relationship is for a more senior student or organizational member to take on the responsibility for orienting or socializing a more junior student, colleague, or newcomer. Allen, Russell, and Maetzke (1997) studied the effectiveness of a formal peer-mentoring program looking at the experiences of 68 first year MBA students who were mentored by second- and third-year students. They found that the perception of satisfaction by the first-year students of the mentoring experience was related to the satisfaction with their mentor and the amount of time spent, and if the mentoring included both dimensions of career-related (vocational) and psychosocial support (Allen, Russell, et al., 1997).

Although most studies on peer mentoring have been conducted in an academic context, a few studies have been conducted in business and professional settings and have demonstrated career-related and psychosocial benefits to both peer protègés and peer mentors including counseling, coaching, job motivation, learning, creating, and sharing knowledge (Allen, Russell, et al., 1997; Bryant & Terborg, 2008; Dennison, 2010; Fine & Pullins, 1998). Bryant and Terborg (2008) conducted a field study in the software industry to test whether peers who received training in peer mentoring were perceived as

more effective as peer mentors of newcomers to the organization and if higher levels of knowledge creation and sharing occurred as a results of the training in peer mentoring (Bryant &Terborg, 2008).

Consistent with the findings from D'Abate et al. (2003), Bryant and Terborg (2008) defined peer mentoring as an "intentional one-on-one relationship between employees at the same or similar lateral level in the firm that involve a more experienced employee providing support and teaching new knowledge and skills to a less experienced employee" (p. 11). They conducted a cross-sectional survey of participants that included 216 peer mentors, 62 peers, and 103 managers (Bryant & Terborg, 2008). Feedback from the survey supported a positive significant relationship between perceptions of peer mentoring and knowledge creation and sharing (Bryant & Terborg, 2008).

Pullins and Fine (2002), in a national study of 138 peer mentors of real estate agents, found that more experienced agents who provided help and support to less experienced agents found enhanced performance and greater satisfaction for both peer mentor and peer protègé. Several other studies exist in business, university, and professional settings where formal peer-mentoring programs were implemented to socialize students or newcomers to the organization and report similar findings: this type of socializing mentoring provided more psychosocial support than career-related support (Allen, Russell, et al., 1997; Bryant, 2005; Dennison, 2010; Fine & Pullins, 1998; Gallo & Siedow, 2003). Gallo and Siedow (2003) reported organizational benefit from a peer-mentoring program instituted in a medical-surgical unit for new employees and novice nurses that positively affected satisfaction and future retention.

Peer coaching. Joyce and Showers (1980), in the field of education, first proposed the concept of peer coaching as an on-site method of staff development to address the problem of low transfer of learning to the classroom from traditional methods of continuing education. They initiated a series of studies to determine if peer-coaching teams could facilitate implementation of new teaching strategies and curriculum. The teams used "modeling, practice under simulated conditions and practice in the classroom, combined with feedback" (Joyce & Showers, 1980, p. 384). Results were consistent in that knowledge transfer and implementation of new practices rose for those participating in the peer-coaching groups. In addition, later studies (Showers, 1985) showed that teachers in peer-coaching groups had higher retention rates. However, Hargreaves and Dawe (1990) reported resistance from teachers to peer observation and technical evaluation in the classroom. Further, they criticized administrative practices that mandated teachers to work together to implement practices under forced conditions and referred to this practice as a form of contrived collegiality. They reported that rather than promoting empowerment among teachers, many felt coerced, and distanced themselves from peer coaching (Hargreaves & Dawe, 1990). Later, Showers and Joyce (1996) presented four principles of effective peer coaching summarized as follows: (a) there must be collective and supportive agreement to the change process; (b) the planning process is collaborative and the feedback is nonevaluative; (c) the coaching relationship is reciprocal; (d) collaborative learning is gained through observation, sharing, and reflection.

Consistent with the best-practice methods recommended by Showers and Joyce (1996), Lam et al. (2002) implemented peer coaching through an action research study

with 85 teachers in two Hong Kong schools. The researchers, the administrators, the

principles, and representatives of the teaching staff formed a core-planning group to

define peer coaching as follows:

> An interaction in which teachers talk about and reflect on their classroom
> teaching, design and plan teaching materials together and are observed by and
> learn from one another. This activity is detached from staff appraisal and does
> not focus on the coaching of technical skills. (Lam et al., 2002, p. 184)

Despite the aforementioned definition, the peer-coaching groups reported a theme

of initial increased teacher psychological pressure, apprehension, and fear of evaluation.

As a result, the core-planning group decided to eliminate an observation-rating scale in

use by the peers. In addition, time constraints were reported as a significant barrier to the

early coaching process. This was ameliorated by the use of a substitute teacher. To ward

off the perception of forcing collegiality and collaboration, the administrators and

researchers adopted a strategy of "asking, inquiring, discussing and developing in the

development model and avoided the strategies of giving, telling, showing and

implementing in the implementation model" (Lam et al., 2002, p. 190). Following the

study, 68 of the 85 initial participants (80%) responded 5.31 on a seven-point scale that

they would be willing to participate in peer coaching again (Lam et al., 2002).

Veenman and Denessen (2001) evaluated the effects of a coach training program

for teacher coaches in the Netherlands. They found a significant treatment effect for

those trained in coaching skills versus those untrained in outcomes related to

development of teacher autonomy, feedback, and business-like attitude; described as a

willingness by the teacher coach and the coachee to focus on purpose and coaching goals.

Murray et al. (2009) studied the effects of peer coaching on teachers'

collaborative interactions and also measured the effectiveness of coaching by looking at

the results of student mathematic achievement. Using an experimental design they studied six teachers receiving peer coaching and their 202 students and five teachers in a control group with 105 students. The results showed that teachers considered peer coaching as a positive experience in their professional development, although they identified scheduling and distance as roadblocks. However, in comparing experimental and control groups, using multiple regression analysis, peer coaching was not associated with improvement in student mathematic achievement after 6 months (Murray et al., 2009). Recommendations from the study included "coaching and mentoring training by experts that illustrates and emphasizes collaborative interactions as well as models of dialogic critique" (Murray et al., 2009, p. 211).

Outside the field of education, there is scant literature on peer coaching. Coaching is often described as a developmental behavior subsumed in the context of mentoring (Grossman, 2007; McDougall & Beatty, 1997). McCauley and Douglas (2004) from the nonprofit Center for Creative Leadership described peer-learning mentoring and coaching as a process in the context of a leadership-development program for managers and executives.

Parker et al. (2008) introduced peer coaching as a specific developmental relationship in the workplace. They built on C. Roger's description of a helping relationship as one with the intention of "promoting growth, development, maturity, and improved function, coping with life of the other" (C. Rogers, 1973, p. 223). Thus, Parker et al. (2008) positioned peer coaching "as a type of helping relationship in which two people of equal status actively participate in a process of helping each other on specific tasks or problems with a mutual desire to be helpful" (p. 499). Further, they described

the characteristics of the relationship as voluntary, nonevaluative, with two or more people of similar experience in a process that is mutually and reciprocally beneficial from both a process and emotional aspect (Parker et al., 2008). They argued that despite the confusion and interchange in the concepts of mentoring and coaching, they "introduce the concept of peer coaching and position it as a relevant and new application of a developmental interaction specifically focused to accelerate career learning" (Parker et al., 2008, p. 488). In a mixed-method study in a university setting of 150 MBA students, Parker et al. found that peer coaching fostered personal learning and leadership development among peer-coaching dyads.

Peer coaching, as an explicitly defined developmental relationship, is new in healthcare and only a few studies are reported (Broscious & Saunders, 2001; Sekerka & Chao, 2003, Waddell & Dunn, 2005). Broscious and Saunders (2001) reported benefits from the use of peer coaching to augment the faculty role with university nursing students. Waddell and Dunn (2005) reported positive results in the use of peer coaches for supplementing the role of continuing-education trainers in clinical breast-examination skills. Sekerka and Chao (2003) used peer coaching as a platform to study the professional development of physicians in the clinical ambulatory-care setting. In a qualitative study of 13 physician coaches they found, through critical-incident interviewing, peer coaching was associated with a positive impact for both the coaches group and those who received coaching. Positive impacts included increased reflection time, personal learning, and change (Sekerka & Chao, 2003).

To date, there are no scholarly studies known to this researcher specifically defined as peer coaching in the healthcare setting for the definitive developmental

purpose of improving service, interpersonal-communication, and relational skills.

However, other related concepts in nursing exist and provide further context for this

research study.

Specific to nursing. The term mentor has most commonly been used in nursing to

describe traditional mentoring relationships in the academic and research setting or for

nursing executives and middle management (Grossman, 2007; Stewart & Kruger, 1996).

Nursing scholars Stewart and Kruger (1996) conducted a concept analysis of mentoring

in nursing. They argued, "despite widespread evidence of the concept of mentoring in

nursing, it has been largely undefined" (p. 311). They reviewed a random sample of 82

(26%) research reports and journal articles on mentoring "to clarify the meaning of

mentoring in nursing and to develop its theoretical framework" (Stewart & Kruger, 1996,

p. 312).

Stewart and Kruger (1996) offered the theoretical definition of mentoring in

nursing as " a teaching–learning process acquired through personal experience within a

on-to-one, reciprocal, career development relationship between two individuals diverse in

age, personality, life cycle, professional status and/or credentials" (p. 315). They noted a

general consensus in the nursing literature that mentoring is a process of transmission of

knowledge from mentors to protègés, and that recipients of mentoring are more willing to

mentor others, demonstrate early leadership behaviors, and experience greater

satisfaction in their careers (Stewart & Kruger, 1996). Although Stewart and Kruger

found that the majority of studies on mentoring at that time were in the academic setting,

a recent nursing studies showed that staff nurses in a hospital setting also experience

greater satisfaction and reduced turnover as a result of mentoring (Gallo & Siedow, 2003; Lacey, 2003).

Stewart and Kruger (1996) found that mentoring was commonly interchanged with the closely related concept of precepting, which they concur is commonly defined as a formal assignment and orientation technique for new staff, new graduates, or nursing students. They also discussed the concept of a "'peer/strategizer' or 'co-mentors,'" further defined as people of a similar age and experience who engage in trading information, guidance, and assistance (Stewart & Kruger, 1996, p. 315). Further, they found that "mentoring in nursing was difficult to distinguish from collaborating and coaching" (Stewart & Krueger, 1996, p. 315). They offered the following definitions of collaborating and coaching in nursing from their review of the nursing literature:

> *Collaborating* is a partnership technique among peers of the same or different disciplines to increase productivity and resources or to refine skills. The partnership whole is considered greater than the sum of its individual parts.

> *Coaching* is a managerial technique used in settings to develop an explicit set of employee expectations, a plan for employee action, a supportive climate to influence employees' performance. This technique is used on a day-to-day basis over the long term of an individual's employment. (Stewart & Kruger, 1996, p. 316)

> Grossman (2007), in a book on mentoring in nursing, noted the interchange of

developmental concept terms in in nursing and stated "*Mentor* is the term used when discussing mentoring in nursing and is often used interchangeable with *preceptor, coach, assessor, teacher/supervisor, and adviser*" (p. 28). Grossman asserted that, "mentoring is very different from coaching (training for a project or being on a task force)" (p. 5); and later, "Coaching can be defined as comprising four roles: career coaching, confronting, and mentoring" and suggests that the most important role of coaching is the confronter role (p. 16).

Further, based on a review of the nursing literature from 1995 to 2006, Grossman

updated the Stewart and Krueger (1996) construct definitions, offering the following

definition of mentoring as emerging from the descriptive literature:

> Mentoring in nursing encompasses a guided experience, formally or informally
> assigned, over a mutually agreed-on period, that empowers the mentor and
> mentee to develop personally and professionally within the auspices of a caring,
> collaborative, culturally competent, and respectful environment. (Grossman,
> 2007, p. 28)

For *Peer strategizer/Comentor* Grossman (2007) stated that the descriptions in the

literature suggested, "Peer colleagues network to assist each other. Each individual in the

peer network receives beneficial outcomes from this sharing of information and

resources" (Grossman, 2007, Table 2.1, p. 30). Moreover, Grossman purported that the

construct of *coach* emerges from the nursing literature: "The process of coaching or

helping an individual to use his or her maximum potential has become more respected

and viewed as very beneficial for new employees. It is a common process of mentoring

nurse managers and administrators" (Grossman, 2007, Table 2.1, p. 30). Finally, there is

an upsurge in nursing research on mentoring, but it is mostly about mentoring in doctoral

education; peer mentoring as a future prospect for nursing would widen the potential for

developmental interactions (Grossman, 2007).

Kowalski and Casper (2007) described a potential model for coaching in nursing

and suggested that the "coaching model for nursing is in its embryonic stages" (p. 11).

They contended "Coaching can support every level of the nursing organization from the

chief nursing officer to the staff nurse" (p. 177). Their model, presented in Table 4, is

consistent with business coaching models (Gallwey, 1999; Harvard Business Essentials,

2004; Parsloe & Leedham, 2009; Whitmore, 1997; Whitworth et al., 1998).

Table 4

The Nursing Coaching Model

The foundation	build relationships
	set realistic expectations
	observe behavior
	use self-reflection
The learning process	be present
	be purposeful and positive
	ask questions
	listen actively
	share perceptions
Taking action	suggest options
	request behavior changes
	clarify the plan and follow-up
	be supportive

Note. The model is based on prior business models and describes three steps with 13 associated behaviors that could be used for coaching in nursing. Adapted from *The Coaching Process: An Effective Tool for Professional Development*, by K. Kowalski & C. Casper, 2007, pp. 171–178.

Finally, Ehrich, Hansford and Tennent (2004) conducted a literature review and content analysis of over 300 research-based papers on formal mentoring programs including medical contexts. They did not distinguish by the term *peer mentor* but broadly used the term *mentoring*. They found 82 articles from medical databases between the years 1995 and 2002. Only eight of those studies met the eligibility of original research findings and the majority of papers were "descriptive in nature and seemed to focus on the value of engaging in mentoring" (Ehrich et al., 2004, p. 7). Further, Ehrich et al. suggested that "research in the area of mentoring in medical contexts is variable and relatively new in comparison with others fields such as education and business" (2004, p. 7).

Construct similarities and distinctions. As previously stated, many scholars argued that there is much conceptual confusion of developmental terms among researchers and practitioners, especially with regard to mentoring and coaching (Bryant & Terborg, 2008; D'Abate et al., 2003; Parker et al., 2008). Some contended that the

terms mentoring and coaching are interchangeable, inseparable, or should be combined into one construct term *coach-mentor*, as is common in the United Kingdom (Garvey et al., 2009, p. 27; Parsloe & Leedham, 2009, p. 11).

To address this issue of concept confusion, D'Abate et al. (2003) looked at 227 descriptions of constructs of employee development from 182 sources from organizational science and other related fields. They found that employee development can occur through a variety of methods and termed these methods "developmental interactions" (p. 360). D'Abate et al. defined developmental interactions as involving "two or more people with the goal of personal or professional development" and noted that such interactions "can take a variety of forms ranging from coaching, mentoring, and apprenticeship to action learning and tutoring" (2003, pp. 360–361).

Using a theoretical nomological network approach, D'Abate et al. (2003) developed 13 common descriptions of which peer mentoring and peer coaching are considered two of the distinct constructs. The goal was to "provide a common language and schema to facilitate comprehension of individual constructs and for making distinctions among multiple constructs" (D'Abate et al., 2003, pp. 362–363). Drawing on terms used by Higgens and Kram (2001), D'Abate et al. used the generic terms *developer* and *learner* to describe participants. They then developed taxonomy for 23 characteristics for the participants and the interactions (D'Abate et al., 2003, p. 364). Looking at respected sources of research and writings from 1981 through 2002, D'Abate et al. coded the percentages of descriptions found as A (76–100%), B (51–75%), C (26–50%), and D (1–25%) and a blank cell with zero descriptive characteristic. They found

nine examples of definitive construct descriptions for peer coaching and 14 for peer
mentoring.

Table 5 shows the comparison of characteristics and percentages found by
D'Abate and colleagues (2003) from nine examples of peer coaching and 14 examples of
peer mentoring. Looking at only peer coaching and peer mentoring as just two of the 13
constructs identified by D'Abate et al., the data in Table 5 shows that there are many
similarities in the two constructs. The greatest distinction being that the purpose of
coaching appears to be more specific and short-term, it is structured in that more
preparation or support is provided to the coach, the learning is more collaborative and
involves more goal setting, observation and feedback, while the emotional support
provided is more aiding than in peer mentoring. Peer mentoring is characterized by a
more experienced or knowledgeable person within the organization, in dyadic or group
relationship, with a generalized purpose of supportive, counseling, advocating,
introducing and sheltering behaviors (D'Abate, 2003, pp. 362–363).

Table 5

Comparison of Peer Coaching and Peer Mentoring Characteristics

Coding options	Peer coaching *n* = 9	Peer mentoring *n* = 14	Coding options	Peer Coaching *n* = 9	Peer Mentoring *n* = 14
Same age		D	Self/Voluntary	D	D
Developer is older			Mandatory		
Developer more experience/knowledge		C	Natural/unmatched		
Doesn't matter		D	Formally matched	D	D
Same backgrounds			Prep/support provided	C	D
Short-term		D	Assessment occur	D	D
Long-term	D	D	Exit procedures		
Single interaction			None		
Regular schedule	D	D	Collaborating	C	D
Unscheduled			Directing		
Face-to-face			Goal setting	C	D
Distance		D	Helping on assignments	D	D
Combination			Modeling	D	D
Dyadic	D	C	Observing	B	D
Group-oriented		D	Problem solving	C	
Multiple developers			Providing practical application	C	D
Lateral	A	A	Providing feedback	A	D
Downward		D	Sharing information	D	D
Upward			Teaching	C	C
Same hierarchy			Affirming		D
Internal	D	C	Aiding	B	C
External		D	Befriending	C	C
Specific purpose	B	C	Calming		D
General purpose	D	C	Confidence building	D	D
Short-term	C	D	Counseling		C
Long-term		C	Encouraging	D	D
Unidirectional		D	Supporting	C	B
Bidirectional	C	C	Advocating		C
Informal/unstructured	D	D	Introducing		C
Programmatic/formal	D	D	Sheltering		D
Highly involved	D		Socializing	D	D
Available	D	D	Mandatory		

Note. Coding options for participant characteristics, interaction characteristics and organizational distance/direction characteristics. Adapted from "What's in a Name? A Literature Based Approach to Understanding Mentoring, Coaching, and other Constructs that Describe Developmental Interactions, by E. P. D'Abate, E. R. Eddy, & S. I. Tannenbaum, 2003, *Human Resource Development Review, 2,* pp. 372–374.

The most significant of the distinctions for peer coaching from peer mentoring that D'Abate et al. (2003) found, are (a) the purpose of peer coaching is more specific and short-term; (b) it is structured in that more preparation or support is provided to the coach; (c) the learning is more collaborative and involves more goal setting, observation, and feedback; (d) the emotional support provided is more helpful than aimed at protection and sheltering, as is the case in peer mentoring. These findings are also consistent with more recent definitions presented for peer coaching by Parker et al. (2008) in management, Lam et al. (2002) in education, Waddell and Dunn (2005) in nursing education, Sekerka and Chao (2003) in physician education, and Kunic (2010) in heath information technology, as well as in contrast to specific definitions for peer mentoring (Bryant & Terborg, 2008). Finally, the findings are consistent for a generalized nursing model for coaching (not specific to peers) proposed by Kowalski and Casper (2007).

To summarize Part 1 of the literature review, it consisted of background and empirical research studies related to developmental relationships at work. Benefits that were previously attributed to traditional mentoring are now also associated with peer developmental interactions. Further, studies have demonstrated that in today's complex business and professional environment, the traditional, singular model of mentoring can be limiting. A constellation of developmental relationships, including peers can help support the learning and developmental needs for today's knowledge workers. Further, the review included research in both peer mentoring and peer coaching, including a discussion of similarities and distinctions, as well as the meaning of terms used in nursing, all of which provided the context for the construct of peer coaching used in this

study. Peer developmental relationships are more consistently associated with mutuality

and reciprocity. Peer coaching is more associated with specific purpose, more

preparation for and by the peer coach, direct observation, and feedback. Lessons learned

from the field of education include the need for development of a trusting, nonevaluative,

uncompetitive relationship.

An Intentionally Positive Approach

Overview. Following the themes identified in the review of the literature on

developmental relationships and specifically peer relationships, this part of the literature

review addressed an intentional positive approach to the development and

implementation of peer coaching. The review consisted of a historical background,

theoretical overview, and empirical research studies of POS; the related research from

PP; and research on the methods of AI in generating behavioral and organizational

change. The section also includes empirical research studies related to the study of

HQCs and relationships in the workplace, and the association to learning behaviors and

personal and organizational learning. Furthermore, a review of a study using AI for

coaching is included.

Positive organizational scholarship. POS is concerned with the study of

especially positive outcomes, processes, and attributes of organizations and their

members (Cameron et al., 2003). POS focuses on dynamics that are typically described

by words such as excellence, thriving, flourishing, abundance, resilience, and

virtuousness. It encompasses attention to the "enablers, motivations, and the outcomes or

effects associated with positive phenomena" (Cameron et al., 2003, p. 4). POS has three

biases: (a) seeking understanding of positive states, (b) in an organizational context, and

(c) scholarship with empirical credibility and theoretical explanations (Cameron et al., 2003, pp. 4–6).

Positive relations at work. The purpose, therefore, of studying relationships through the lens of POS is to better understand what causes organizations and individuals to flourish rather than flounder. The study of PRW is presented as a new interdisciplinary field of study (Dutton & Ragins, 2007). Dutton and Ragins contended that despite the critical nature of relationships in the workplace setting, scholars have "yet to understand the dynamics, mechanisms, and processes that generate, nourish, and sustain positive relationships at work" (p. 3). Further, they argued, "relationships traditionally are placed in the background of organizational life" (Dutton & Ragins, 2007, p. 5). They posited that pockets of knowledge exist but are spread across a variety of disciplines and fields such as network theory, mentoring theory, management theory, relationship theory, and organizational and social psychology. They asserted that PRW provides a scholarly platform to weave these related threads of knowledge and inquiry together (Dutton & Ragins, 2007).

Moreover, Dutton and Ragins (2007) asserted that the current understanding of relationships at work is limited by several factors. First, the theory of social exchange has dominated the research perspective. This perspective views relationships and interactions from utilitarian, economic, and power viewpoints, where "individuals hedonistically strive to maximize their rewards and minimize their costs (Forsythe, 2006, p. 55). Second, Dutton and Ragins suggested that scholars have "a limited understanding of how positive work relationships interact with other aspects of social life within and outside organizations" (2007, p. 6). They argued that research has been constrained by

the artificial boundaries of an organization and that the effects of internal and external

communities on work relationships are poorly understood. Moreover, they contended

that there is limited understanding of relationship building and repair. Third, they

suggested that the contemporary concepts of protean careers and the volatility of the

work and world environment must be considered. They posited that, more than ever,

employee loyalty and commitment is based on a social and relational basis and is not

purely economic (Dutton & Ragins, 2007). They distinguished positive work

relationships from other work relationships and presented a definition:

> A reoccurring connection between two people that takes place within the context
> of work and careers and is experienced as mutually beneficial, where beneficial is
> defined broadly to include any kind of positive state, process or outcome in the
> relationship. (Dutton & Ragins, 2007, p. 9)

Kahn argued for "placing relationships at the center rather than at the periphery of

people experiences of work" (2007, p. 190). Kahn further defined positive relationships

as those "that enable individuals to personally engage in their work—that is, to be

authentic, present and intellectually and emotionally available as they go about their

work" (Kahn, 2007, p. 190). Kahn noted that personal engagement is more likely to

occur when individuals feel personally connected to others (Kahn, 2007).

Kahn (1992) noted, in a study of psychological presence at work that presence is

"manifested by the individual's aliveness to and in a particular situation" (p. 321). Kahn

suggested that psychological presence at work is required for personal engagement and

authenticity and thus can subsume externally driven work (management) motivators.

Further, through grounded theory, Kahn found that in qualitative research there are four

dimensions of psychological presence: attentiveness, connection, integration, and focus.

These dimensions are manifested by such characteristics as a stable physical presence,

eye contact, fullness of speech/tone, and the authenticity of response: "These are indicators that give the observer the sense that someone is 'at home' in interpersonal and work situations" (Kahn, 1992, p. 328).

High-quality connections and relationships. Others defined PRW more specifically as HQCs (Dutton & Heaphy, 2003; Stephens, Heaphy, & Dutton, 2011). Dutton and Heaphy suggested that a connection exists between two people when there is some contact between them "involving mutual awareness and social interaction" and the interaction means they have affected one another in some way (Dutton & Heaphy, 2003, p. 264). Noting, "all connections leave indelible traces," they further described the quality of connections as being either "life-giving or life-depleting" (Dutton & Heaphy, 2003, p. 263).

In order to accomplish work, organizations depend on individuals to interact, form connections, and develop relationships. In turn, connections and relationships at work have a significant affect on people's lives, considering the amount of time over a lifetime one spends in the workplace (Hochschild, 1997). The quality of these connections impacts the individual and in turn, how the organizations function. Further, some suggested that the quality of these connections affects the family and the community at large (Blatt & Camden, 2007; Hochschild, 1997). Moreover, in focusing on aspects of connection quality, Dutton and Heaphy (2003) presented the intent to identify the antecedents of HQCs and thereby release the potential for a positive impact on individuals and organizations. In a low-quality connection, Dutton and Heaphy suggested that a relational tie exists, individuals may communicate, interact, and even

work together interdependently. However, the "connective tissue is damaged"; there is "death in every interaction" (Dutton & Heaphy, 2003. p. 263).

In contrast, in HQCs there is a "transfer of vital nutrients: it is flexible, strong, and resilient" (Dutton & Heaphy, 2003, p. 264). Further, Dutton and Heaphy (2003) pointed out that there is both a time and emotional component of an interaction in that it can be brief or long-term, damaging or empowering. Josselson (1996), in a phenomenological study of relationships and interpersonal communication, referred to this unseen connection between two people as the space between. Dutton and Heaphy further acknowledged that the quality of relationships is contextual and dynamic. As such, they defined and proposed three clusters of indicators, which include both the feature and the quality of the relationship tie (Dutton & Heaphy, 2003).

Dutton and Heaphy (2003) suggested the first cluster of indicators refers to the actual connection between the people and presented the other two clusters as the experiences of each individual in the connection. The first feature of HQC proposed is *higher emotional carrying capacity.* This is evidenced by more emotion in the connection, as well as the ability to express both positive and negative emotion. The second feature Dutton and Heaphy referenced as *tensility,* the capacity of the connection to adjust, to be flexible, and to withstand strain of conflict, tensions, or setbacks in either the circumstance or the individual (2003, pp. 266–267). For the third characteristic, *the degree of connectivity,* Dutton and Heaphy drew on Losada's (1999) research on complex adaptive theory. The degree of connectivity measures the degree of openness to generating possibilities and ideas and sharing innovation. Losada found that HQC have the ability to "dissolve attractors that close possibilities and evolve attractors that open

possibilities" (1999, p. 190). Further, Losada and Heaphy (2004) studied connectivity in terms of team performance and identified distinct patterns and mathematical ratios of positive (open) to negative (close) attractors for behavior and communication. High-performing teams demonstrated a high positive-to-negative ratio, whereas low-performing teams had the reverse of a high negative-to-positive ratio (Losada & Heaphy, 2004).

In addition, Dutton and Heaphy (2003) proposed that there are also three subjective experiences that people in HQCs share. They used the definition of subjective experience from the 1997 work on relational–cultural theory by Miller and Stiver (1997). Miller and Stiver defined a subjective experience as "thoughts together with accompanying emotions" (1997, p. 27). The first subjective experience individuals in a HQC share, described by Dutton and Heaphy (2003), are feelings of *vitality and aliveness* with feelings of positive awakening and a heightened sense of positive energy. Second, there is shared and heightened sense of *positive regard,* which Dutton and Heaphy described as an experience of being known and liked/loved. Third, there is a felt *mutuality,* which a sense that both people are engaged, actively participating, and relating in mutual empathy (Miller & Stiver, 1997).

Others have extended the notion of HQC to HQR. Stephens, Heaphy, Carmeli et al. (2011) presented the results of two separate but complimentary studies that examined relationship emotional capacity and the link to resiliency. The authors defined relationship capacity as the "ability of a relationship to absorb negative shocks, promote positive response, and facilitate flexibility and growth" (Stephens, Heaphy, Carmeli et al., 2011, p. 6). Study 1 was at the employee level (649 university staff members) and Study

2 at the team level. The researchers drew on Dutton and Heaphy (2003) and their conceptualization of HQR to characterize relationship capacity as having the structural features of emotional carrying capacity, connectivity, and tensility. Emotional carrying capacity is the ability to express and "carry" both positive and negative emotions and is linked to resiliency in that partners feel safe and there is greater ability for emotional differentiation and information (Carmeli et al., 2008). Emotional safety has been shown to aid learning and development (Carmeli et al., 2008; Edmondson, 1999). Connectivity describes the level of openness to new ideas and influence and is expected to enable resiliency through the facilitation of learning (Carmeli & Spreitzer, 2009). Tensility refers to the ability of the relationship to withstand strain, to bend and return to an original shape, and is related to resiliency in that there is a confidence that the relationship will "weather the storm" (Stephens, Heaphy, Carmeli et al., 2011, p. 5). When controlled for "friendship," relationship capacity was more strongly related to resilience ($r = .32$) than the degree of friendship ($r = .13$). Further, research by others indicates those in a relationship who are not necessarily "friends" might more readily spark new thought process and ways of thinking (Perry-Smith, 2006).

Finally, POS and mentoring scholars have acknowledged the methods of AI for the ability to spark innovative ideas, generate deeper appreciative and positive relationships, and seed positive changes (Cameron et al., 2003; Dutton & Ragins, 2007). Hence, the review of the literature will proceed with a section on AI and change from both the organizational and individual perspective.

Appreciative inquiry and change.

Introduction and definition. The growing popularity of AI has fostered an increasingly expansive body of practitioner and scholarly literature since its beginnings at Case Western Reserve over 2 decades ago (Bushe & Kassam, 2005; Egan & Lancaster, 2005). Alternatively portrayed as a philosophy and an approach, AI has been described as a deceptively simple yet thorough method for creating transformational organizational change (Faure, 2006). Cooperrider (1986) conceptualized the concept of AI in his doctoral dissertation and was assisted, by his mentor Srivastva, in the development of a new approach to improving organizational effectiveness (Cooperrider, 1986; Cooperrider & Srivastva, 1987) The AI approach differed from the preceding traditional models of organizational development and change that focused on problem identification and resolution. During a management-consulting assignment at the Cleveland Clinic, Cooperrider and Srivastva experimented by focusing on an analysis of factors that contributed to what was working and what was not. The initial results were very positive (Cooperrider & Whitney, 2005; Whitney & Trosten-Bloom, 2003).

Since that time, AI has also evolved significantly through noteworthy contributions of practitioners such as Whitney and Trosten-Bloom (2003), Watkins and Mohr (2001), and others into a more definitive philosophy and process (Bushe, 2011: Egan & Lancaster, 2005; Faure, 2006). According to Cooperrider (1986), the AI process assists organizations and individuals in finding their strengths or their positive core. Further, the principles and practices of AI allow an identification and fusion of strengths that create the capability to create transformative change (Cooperrider & Whitney, 2005).

Prior to providing a specific definition, Cooperrider and Whitney (2005) broke down the term AI into the two root words and provide the following description. The word *appreciative* is defined as a verb:

> 1.) Valuing; the act of recognizing the best in people or the world around us; affirming past and present strengths, successes, and potentials; to perceive those things that give life (health, vitality, excellence) to living systems 2.) To increase in value, e.g. the economy has appreciated in value. Synonyms are: valuing, prizing, esteeming, and honoring. (Cooperrider & Whitney, 2005, p. 7)

The word "Inquiry" is also defined as a verb: "1.) Act of exploration and discovery. 2.) To ask questions; to be open to seeing new potentials and possibilities. Synonyms are: discovery, search, and systematic exploration, study" (Cooperrider & Whitney, 2005, p. 7). Cooperrider and Whitney noted that the collective term AI now holds many descriptions and definitions by various scholars and practitioners, but they more recently offered the following definition:

> Appreciative Inquiry is the cooperative, co-evolutional search for the best in people, their organizations and the world around them. It involves systematic discovery of what gives life to an organization or a community when it is most effective and most capable in economic, ecological, and human terms. (Cooperrider & Whitney, 2005, pp. 7–8)

Process and principles. Although, AI has been associated with action research as a central methodological process for organizational development, action research is a diagnostic intervention and involves a problem-focused approach whereas AI has a positive-seeking focus (Egan & Lancaster, 2005). The process of AI is accomplished through a designed interview and resultant narrative storytelling methodology that builds on the postmodern theory of the social construction of reality (Bushe & Kassam, 2005; Whitney & Trosten-Bloom, 2003). Morgan, in a classic textbook on organizational theory, referred to social construction and the enactment view of culture: "Organizations are in essence socially constructed realities that are as much in the minds of their

members as they are in concrete structures, rules, and relations" (2006, p. 137) and noted

further, "Organizations end up being what they think and say; as their ideas and visions

realize themselves" (Morgan, 2006, p. 140). Organizational-development and AI scholar

Bushe (2000) argued that our ability to create new and better organizations is limited only

by our imagination and collective will.

Therefore, the focus in AI is on creating images and realities by interviewing and

generating stories of the positive extreme or positive deviance of when organizations,

teams, and individuals are at their peak. Based also on a theory described as the

heliotropic hypothesis, Cooperrider (1990) posited that organizations will move toward

their most prominent conscious and unconscious collective images of themselves,

somewhat like a plant toward light (Bushe, 2000). Thus, in the dual framework that

"words create worlds" and organizations learn and grow toward an implicit/explicit

focus, the inquiry includes a series of premeditated, provocatively and intentionally

positive questions designed to facilitate discovery of an organization's or an individual's

positive core. The questions are usually based contextually on the past, the present, and

future (Hammond, 1998).

Cooperrider considered AI to be a generative process and was reluctant to develop

a definitive model or manual (Hammond, 1998). However, Whitney and Trosten-Bloom

(2003), Watkins and Mohr (2001), and others helped Cooperrider and Case Western

Reserve associates articulate theory into practical application through a conceptual

framework such as the 4D cycle and the 4I model, respectively (Egan & Lancaster,

2005). The 4D cycle is a visual circular model where surrounding the Positive Core are

the four phases of *discovery*—appreciate what was and is, *dream*—what might be,

design—what should be, and *destiny*—what will be (Whitney & Trosten-Bloom, 2003, p. 6). An alternative to the 4D is the 4I model—*initiate, inquire, imagine, innovate*— developed by Mohr and Jacobsgaard (as cited in Watkins & Mohr, 2001) and is thought by some practitioners to be more acceptable to the business world (Faure, 2006).

Varying AI authors and scholars described underlying principles (Whitney & Trosten-Bloom, 2003), "scholarly streams" (Cooperrider & Whitney, 2005), or change theories (Bushe, 2000) that drive, support, or are embedded in AI. Cooperrider and Srivastva offered five principles of AI in their early writings (1987). The first is the *constructionist principle*, previously described as *constructionist theory*. The second is the *simultaneity principle*: the inquiry, in of itself, is a vehicle for the emergence of learning and change simultaneously. Third, the *poetic principle*: organizations are less like a machine and more like a book with many coauthors and readings; they are constantly changing. The fourth is the *anticipatory principle*: the imagined future becomes the reality, the actualization of an ideal. Fifth is the *positive principle*: building on PP and the notion that sustainable change requires positive relationships, habit, energy and reinforcement (Cooperrider & Whitney, 2005; Whitney & Trosten-Bloom, 2003).

Following their experience with large-scale change, Whitney and Trosten-Bloom (2003) added three additional principles to the above: wholeness, enactment, and free choice. The *Wholeness Principle* refers to the collective energy and is creativity generated by bringing very large groups of stakeholders together in a forum called AI Summits. The *enactment principle,* previously described, refers to the organizational-theory concept that people, and therefore organizations, can proactively provide a living model of the imagined future. The *free choice principle* refers to organizational theories

about power, in that choice liberates and stimulates contribution and change (Whitney & Trosten-Bloom, 2003). Barrett and Fry (2005) added the *narrative principle,* that people construct the stories about their lives and these stories can be transformative.

Organizational behaviorist Bushe (2000) described five theories of change rooted in AI. Bushe referenced the theory of social construction and Cooperrider's theory of heliotropic hypothesis. In addition, Bushe described notions of change that occur: a change in an organization's inner dialogue, resolutions of paradoxical dilemmas (by offering new images), and an appreciative process of actively scouting for and amplifying the positive, or "tracking and fanning" (p. 7).

Application and effectiveness for change. Since the original work at the Cleveland Clinic in the 1980s, AI has been used as a philosophy and an approach for change in multiple fields of industry, business, health, and education. Notable efforts commonly referred to in the AI literature include, Roadway Express, GTE/Verizon, Lovelace Healthcare Systems, Avon of Mexico, Nutrimental: Brazil, Green Mountain Coffee, The U.S. Navy, John Deere, Benedictine University, Hunter Douglas, American Express, The City of Chicago and United Religions, The University of Kentucky Hospital, and Children's Hospital of Philadelphia. Of note, GTE/Verizon received the American Society for Training and Development Excellence in Practice Award in the category of managing change in 1997 (Bushe & Kassam, 2005; Egan & Lancaster, 2005; Havens, Wood, & Leeman, 2006).

British organizational-development scholar and practitioner Faure (2006) described broad practical AI experiences for transformational change efforts in France, Finland, the Netherlands, and Israel. Faure's findings are consistent with other anecdotal

reports of AI efforts in the United States. These include reduced resistance to change and increased confidence, as groups see themselves as capable and anchored by the stories of prior successes, differences, and distrust among team members are reduced. This increased confidence comes as interviews elicit intimate, deep, and meaningful conversations, generally taking place with "improbable pairs of people who would not normally work together or perhaps even speak to each other during their normal workday" (Faure, 2006, p. 23). Consistent with findings of Bushe and Kassam (2005), Faure spoke to benefits experienced with AI in creating transformational change at the senior and executive-leadership level by the process of rapidly identifying and reinforcing leadership behaviors that generate collaborative and sustainable organizational change rather than top-down compliance-driven initiatives.

Bushe and Kassam (2005) noted that although AI is an increasingly popular method for change, little published scholarly research exists examining the effectiveness of AI in relation to the predominant claim of creating transformational change. They conducted an extensive literature review of all published case studies of AI up to 2002 and then performed a meta-analysis of 20 case reports that met a criteria developed retrospectively by the researchers. From their review of the theoretical literature on AI, they developed inclusion criteria of the presence or absence of seven principles and practices that were culled and identified as common in the literature. They then looked for the presence or absence of transformational change or second-order, culture, or identity change. Bushe and Kassam found that 35% (7/20) showed transformational outcomes. From their analysis of the cases that demonstrated transformational outcomes, they pointed to two key and consistent findings that led them to conclude that AI differs

from more traditional change or organizational-development change methods. First, the cases in which transformation occurred focused on the way people think rather than on what they do. Secondly, when AI efforts are coupled with more conventional change processes, more conventional change outcomes occur. However, when planned change and implementation is abandoned and improvisational change was nurtured, it resulted in transformational change (Bushe & Kassam, 2005).

Egan and Lancaster (2005) conducted a critical comparison study evaluating the perceived strengths and weaknesses of AI compared to action research through interviews with 14 organizational-development practitioners. Prior to the study, their review of the literature on both AI and action research identified a lack of formal study for both practices. A qualitative thematic strategy was used for the data analysis. Several strengths and weaknesses were identified for both approaches. The participants in the study confirmed many of the strengths of AI reported in the literature and identified AI as a useful organizational-development approach. However, the study also identified potential limitations of AI as an exclusive change-management approach for organizations. Further, many of the participants suggested that a potential exists for a combined approach (Egan & Lancaster, 2005).

Appreciative coaching. In developing a new coaching model, Orem et al.'s (2007) fundamental research question was, "Would the principles and practices of the AI approach used in organization development make a successful coaching model?" (p. 209). Applying the five principles and the four stages of AI usually used for small- and large-group work and teams, the researchers constructed a model specifically for one-on-one coaching. They presented their model and findings through four longitudinal

case studies. The case transcripts were systematically and independently coded to confirm that the coaching was accomplished in the constructs of the four stages and reflect the five underlying principles. The summaries of the client case studies and the excerpts from the transcripts were reflective of the four stages of AI (discover, dream, design, and destiny), as are the five core principles of case summaries. Discussion and practical tools were offered and the perspectives of both the coach and the client were confirmatory of the positive approach.

Specifically, the model was tested in two phases. In Phase 1, the authors worked with three clients for nine sessions each over a 15-month period. In Phase 2, one of the authors worked with one client for nine sessions over a 7-month period. During both phases, observations were recorded after each of the coaching sessions following a predetermined protocol. Evaluations were collected from all clients midway through coaching and at the end. In Phase 2, in addition to the above procedures, all of the session conversations were taped recorded with the permission of the client. Again, evaluation from the client occurred midway and at the end. The recorded sessions were transcribed. Following a prescribed protocol, three external coders evaluated the transcripts for evidence of the four stages and principles of AI.

To summarize Part 2 of the literature review, this section included an overview of the underlying concepts and empirical research for employing an intentionally positive and relational approach to the peer-coaching process. It consisted of the historical background, theoretical overview, and empirical research studies of POS, PP, and the related research on AI methods for generating behavioral and organizational change. Key findings from the research on positive relations at work have shown that positive

relationships have higher emotional carrying capacity, greater tensility, and a higher degree of connectivity, which in turn result in a subjective experience of vitality, positive regard, and mutuality. AI, as a social constructionist method, intentionally seeks out and recognizes the positive and allows for individuals and organizations to be in a positive emotional state. Studies on positive emotions in individuals and teams are associated with higher performance, creativity, innovation, and resilience.

Learning, Knowledge, and Innovation in Organizations

Overview. Noting the distinction between old and new ways of thinking and learning and transferring knowledge in organizations, Wheatley (1999) suggested that mechanistic thinking with command and control structure can limit learning, the transfer of knowledge, creativity, and innovation. In agreement with Senge (1990), Wheatley suggested that outdated organizational learning concepts are dominated by the principles and practices of separating things into parts, exerting direct influence from one person on another, and then expecting a predictable response. Wheatley pointed out that organizations are comprised of individuals and relationships, and as such, are more complicated.

Wheatley (1999) argued that the metaphorical lessons from the science of chaos theory suggested organizations should be thought of in a new, holistic way. The author referred to several of nature's instructions: that creativity exists everywhere with no objective reality waiting to reveal a secret formula or some expert advisement; that context is everything and everything is always changing and unique to each individual; that relationships are the key determiner of everything in a web of connections; and

finally, there is a mirrored relationship between order and chaos without which there would be no progress (Wheatley, 1999, pp. 157–168).

Wheatley (1999) made an optimistic case for the zeitgeist of our time, believing there is a new and awakening awareness of an ancient understanding of an intricate interconnectedness; that we are systems and not merely parts of a machine. Wheatley made the organic analogy that even the single cell works in relationship to the biologic whole, yet maintains its own identity, and noted that similar to science, thinking about organizations and people in 17th century ways will not serve well in the 21st century. Parallel discoveries and ideas from all fields of science are culminating and leading the culture to nonlinear, ecological, systems thinking. These ideas acknowledge and respect the profound relationship of the individual to the whole; the idea of fractal patterns within patterns, "strange attractors" and the "dance between turbulence and order"; with the recognition that without the generative force of chaos there can be no transformational learning (Wheatley, 1999, pp. 115–174).

Individual and organizational learning. Bandura (1977) suggested that learning refers to a process in which people engage that can result in relatively long-term changes in attitude, behavior, and knowledge. In the theory of social-cognitive learning, Bandura (1997) described learning as a process of acquiring new behaviors by observing, imitating, adopting, and reenacting the actions displayed by models, such as parents, leaders, or peers. In a study looking at group learning, Shebilske, Jordan, Goettl, and Paulus (1998) found that the extent to which observational peer learning occurs depends on the degree of motivation to learn from the model, the attention given to modeled practices by the observer, the degree that they can remember and reenact the behavior of

the model, and the degree to which the consequences of the new behavior are positive.

Furthermore, Crook and Beier, (2010), recently found that the effectiveness of dyad

training was dependent on the task and the quality of the relationship of the learning

pairs.

Argyris and Schön (1978) suggested that people have mental maps that guide how

they act in certain situations. They referred to these guides or patterns of reasoning as

theories-in-use. Further, they suggested that people often make assertions about how

they would or do act, which they referred to as espoused theory (Argyris & Schön, 1978).

They posited that when a mismatch exists between theory-in-use and espoused theory,

people and organizations act in one of two ways, in either single-loop or double-loop

learning:

> When the error detected and corrected permits the organization to carry on its
> present policies or achieve its presents objectives, then that error-and-correction
> process is *single-loop* learning. Single-loop learning is like a thermostat that
> learns when it is too hot or too cold and turns the heat on or off. The thermostat
> can perform this task because it can receive information (the temperature of the
> room) and take corrective action. *Double-loop* learning occurs when error is
> detected and corrected in ways that involve the modification of an organization's
> underlying norms, policies and objectives. (Argyris & Schön, 1978, pp. 2–3)

Argyris (1980) later posited that learning effectiveness results from the development of

congruence between the espoused theory and the theory-in-use and further suggested that

reflection and dialogue are key to resolving incongruence.

Influenced by Argyris and Schön (1978), Senge (1990) incorporated these

concepts into theories on developing learning organizations. Senge suggested that

learning could be enhanced by creating a culture based on recognition of the organization

as whole systems and as organic and generative. Further, Senge promoted learning as a

capacity that exists at all levels in the organization, not just at the top, and suggested

certain learning disciplines to engage this capacity. Senge defined a learning discipline

as a "developmental path for acquiring certain skills or competencies" (1990, p. 10) and

further expanded the definition to include "an activity we integrate into our lives" (Senge,

1990, p. 141). Suggesting there are two movements or practices that form the foundation

of a discipline, Senge said the first is to continuously clarify what is important, and

second, to continuously learn how to see current reality with increasing clarity. Further,

Senge suggested the gap between the vision (what is wanted) and reality (currently state)

creates a natural dynamic "creative tension," which serves as an individual or

organizational force to resolve the disparity between the two (1990, p. 142).

In this context, Senge (1990) defined learning, rather than merely collecting more

information, as a generative process that expands one's abilities to produce the results

truly desired. Senge argued that organizations learn only through individuals who learn,

and although individual learning does not guarantee organizational learning, "without it

none will occur" (1990, p. 140). Eddy et al. (2005) found an organizational culture of

continuous learning to be an antecedent to peer mentoring.

Senge (1990) also suggested that most organizations have learning disabilities,

and identified seven common disabilities: (a) "I am my position" or limited boundaries;

(b) "the enemy is out there" or blaming others; (c) "the illusion of taking charge" or

reactiveness disguised as being proactive; (d) "fixation on events" or a dominant focus on

the short term; (e) "the parable of the boiled frog" or lack of clarity or recognition that

gradual processes pose the greatest threats; (f) "the delusion of learning from direct

experience" or lack of recognition that actions have longer term consequences beyond a

breadth of current vision or one's "learning horizon"; and (g) "the myth of the

management team" which referred to the appearance of a cohesive team that squelches disagreement and is full of "skilled incompetence" (pp. 18–25). Senge contended that reflection, inquiry, and dialogue would promote collaborative team learning. Further, Senge et al. (1999) suggested that methods for positive feedback and coaching from peer groups would facilitate interpersonal new learning and growth at all levels in the organization.

Bandura (1997) described self-efficacy as an essential determinant of performance, critical to the interpersonal learning process. Bandura defined self-efficacy as "the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations" (1997, p. 2). Bandura (1997) found that people with strong self-efficacy, in comparison to those who do not have that trait, had a stronger belief that they could change, with characteristics that included viewing a struggle or a challenge as a problem to be solved, having a deeper interest in the activities in which they participate, recovering more readily from disappointments and setbacks, and having an strong commitment to their interests and activities. Moen and Allgood (2009) found, in a study of coaching of 127 CEOs, that executive coaching was associated with improved rates of self-efficacy. Further, Forsythe (2006) suggested that similar effects on self-perception and self-efficacy can occur for individuals through extended contact with others in a peer group when the members of the group provide direct and positive feedback of praiseworthy actions. Vinarski-Peretz, Binyamin, and Carmeli (2010) explored the perception of high-quality relational experiences (positive regard, mutuality, and vitality) and their relationship to the engagement of employees in innovative behaviors. Their results suggested that there is a positive relationship between

engagement in innovative behaviors and a subjective positive relational experience. Further, a positive relational experience was positively related to individual self-efficacy and innovative behaviors.

These findings on interest, resilience, learning, creativity, and performance are in concert with Fredrickson's (1998, 2001) research and the "broaden and build" theory of learning. Fredrickson found that when participants were seeded with positive emotion, they were more receptive, more creative, and able to build new skills. In contrast, seeding the participants with negative emotion narrowed their mindsets and resultant capability to learn new skills, solve problems, perform tasks, or create ties. Thus, Fredrickson argued that positive emotions and the associated broadened mindsets are evolutionarily advantageous (1998, 2001, 2009).

Moreover, Davidson and James (2007), looking through the lens of PRW, suggested that a learning approach is a "set of behaviors that reflect curiosity and inquisitiveness about a given context, behavior or relationship" (p. 147). They contended that learning behaviors in organizations necessitate ongoing reflection and actions, including speaking up to test the validity of prior assumptions, continuously seeking out new information from a variety of sources, taking time to stop, and determining new ways to improve old processes. As stated earlier, Edmondson found that feeling psychologically safe is directly related to the aforementioned learning behaviors (1999).

Knowledge and innovation. Nair (2001) described a shift in the scholarly literature on organizational learning in the mid-1990s to a discussion of knowledge creation, management, and transfer in light of increasing business complexity and competition Nonaka (1994), coming from the viewpoint that an organization is a living

entity, stated, "Although ideas are formed in the minds of individuals, interaction between individuals typically plays a critical role in developing these ideas. That is to say communities of interaction contribute to the amplification and development of new knowledge" (p. 15). Nonaka presented a concept for four combinations of knowledge creation based on tacit and explicit knowledge, expanding Polanyi's (1962) description of tacit knowledge to having both a cognitive and technical element: the cognitive as an indwelling perspective, paradigm, or mental model. By contrast Nonaka described the technical aspects of tacit knowledge as concrete and contextual know-how and skills, noting that of importance, "it is the cognitive aspect of tacit knowledge that refers to the individual's images of reality and visions for the future" and tacit knowledge is also "deeply rooted in action, commitment, and involvement within a specific context" (1994, p. 16). Explicit knowledge refers to knowledge that is easily codified and transmittable through a systematic, natural language. Nonaka conceptualized a spiral of knowledge creation process in four stages: socialization (tacit–tacit), externalization (tacit–explicit), internalization (explicit–tacit) and combination (explicit–explicit).

E. M. Rogers (2003) introduced the concept of the diffusion of innovation through the spread of communication over time by individuals in a social system that fall into varying categories and predictable percentages. Further, E. M. Rogers argued that all innovation is associated with a degree of uncertainty or risk, which can affect or slow adoption. However, the speed of adoption is affected by communication and the opinion of others, especially by respected peers.

> All innovations carry some degree of uncertainty for an individual, who is
> typically unsure of the new idea's functioning and thus seeks social reinforcement
> from others of his or her attitude toward the innovation. The individual wants to

know whether he is on the right track in the opinion of peers. (E. M. Rogers, 2003, p. 175)

E. M. Rogers found that innovation, adoption, and spread of ideas follow a bell-shaped curve that can be divided into five groupings and percentages of people for varying innovations as shown in Figure 1.
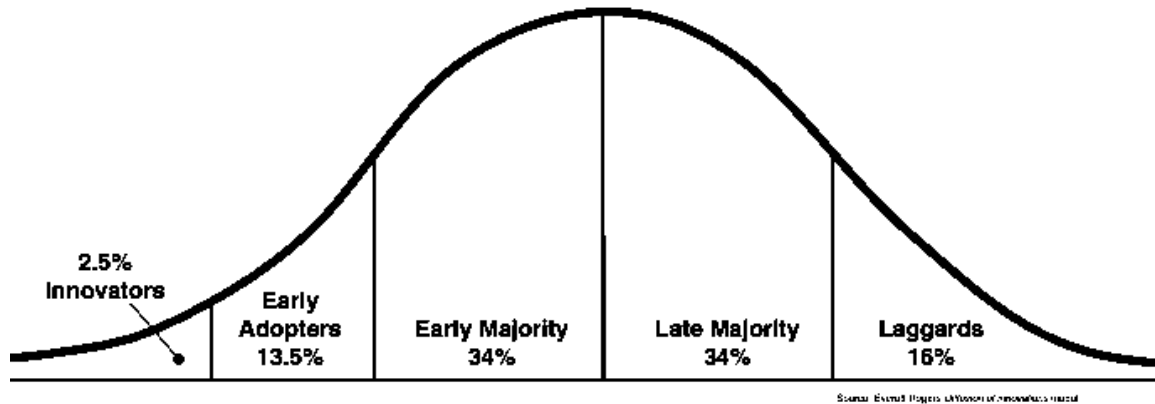
Figure 1. E. M. Rogers innovation adopter categorization curve.
Note. Retrieved from *Diffusion of Innovations* (5th ed.), by E. M. Rogers, 2003, New York, NY: The Free Press, p. 281. Permission granted for reproduction.

In controlled trials, E. M. Rogers (2003) and other scholars found that early adopters have the greatest impact on the diffusion or spread of ideas and behavioral change. They found that powerful and proximal peers, as adopters and respected key opinion leaders, can influence the spread and speed of innovation over time with increasing volume to the late majority, thereby creating a domino, tipping point, or viral effect of change (E. M. Rogers, 2003). E. M. Rogers and others held that is the subjective evaluation of an innovation that is spread through interpersonal communication from a respected peer to another peer that causes an idea to "take off" (2003, p. 274).

Swap et al. (2001) reviewed the literature on storytelling and mentoring to study how tacit knowledge is transferred through the socialization and internalization process

of storytelling by mentors. They found that stories are "powerful conveyors of meaning and tacit knowledge" (p. 110). Further, Bryant and Terborg (2008), in their study of peer mentors in a software firm, suggested that knowledge sharing is one of the primary benefits of peer mentoring. They noted that with the removal of the hierarchical-power gradient of traditional mentoring, peer mentoring provided a relationship that is qualitatively different in the content and method of how knowledge is shared. They found that peer mentoring facilitated knowledge sharing by turning tacit knowledge in to explicit knowledge (Bryant & Terborg, 2008). In addition, they found that peer mentoring allowed for peers to internalize and convert explicit knowledge to tacit knowledge, creating a source for creativity and innovation. Moreover, Bryant and Terborg found peer mentors could demonstrate a procedure or problem solve a programmatic problem and therefore, through modeling and socialization, transfer tacit-to-tacit knowledge (2008).

Carmeli and Spreitzer (2009) conducted a study of 172 employees across a variety of jobs and industry, including health care, to look at the relationship of trust, connectivity, and thriving in the workplace and the implications on innovative behaviors. They measured trust and connectivity at Time 1 and measured thriving and innovative work behaviors at Time 2. Through structural-equation modeling their results indicated that connectivity mediates the relationship between trust and thriving. Furthermore, thriving mediates the relationships between connectivity and innovative behaviors. The implications are that thriving at work enables employees to get their job done and also increases the capacity for displaying innovative work behaviors. They identified a

positive and "sequential relationship between trust, connectivity, thriving and innovative work behaviors" (Carmeli & Spreitzer, 2009).

To summarize the third and final part of the literature review, this section included an overview of concepts and related research on organizational learning, knowledge creation and sharing, and the relationship to HQC in the workplace. In systems thinking, organizations are conceived as holistic systems made up of distinct yet interconnected individuals. The theories and related studies of social-cognitive learning, as well as the diffusion of innovation, suggest that peers can be influential models and networks for learning. The degree of influence is affected by various factors including the degree to which the consequences of the learning are positive, and the quality of the relationship between the learner and the model. Other studies on diffusion of innovation have shown the importance of peer–peer conversations and networks. Finally, studies have shown that learning effectiveness was enhanced by reflection, inquiry, and dialogue, with storytelling defined as an effective method for transferring tacit information to explicit knowledge.

Summary

The review of the literature has included three parts. Part 1 was an overview of the concepts of developmental relationships at work. The most common developmental relationships, mentoring and coaching, were presented both from the perspective of ancient origins and from a modern-day viewpoint. Closely associated to the concept of mentoring, alternative forms of relationships were discussed, such as mentoring networks and peer mentoring. The related but newer concept of peer coaching was presented along with a summary of the scant empirical literature outside the field of education. A specific

section addressed the profession of nursing's current meaning of and use of preceptors, mentoring, and coaching. Finally, an in-depth discussion of the D'Abate et al. (2003) meta-analysis of developmental-relationship terms and constructs was presented to provide context for the use of the construct term, peer coaching, in this study.

Part 2 of the literature review focused on varied concepts originating under the broad new field of study of POS. Specifically, a newer focus of this work entitled PRW was presented as well as the related concepts of HQC. Recent research studies about the various antecedents and processes of HQCs were presented. A section on the related concept of AI in relation to and a method for organizational change was presented, providing a context for some of the methods used in coaching practices including storytelling.

Part 3 concluded the literature review by providing an overview and the related empirical studies on organizational and individual learning behaviors, knowledge, and innovation, and their relationship to HQCs. Organizations were conceptualized as a collective holistic system, made up of individual contributors who have a capacity for the higher order functions of knowledge creation, transfer, and innovation. Hence, studies suggest that learning is enhanced in an environment of collaboration, positivity, and psychological safety. Further, study findings suggested that peers have a unique advantage in transferring both tacit and explicit knowledge, as well as in affecting the speed and adoption of innovation. Finally, studies suggest that peers can generate positive feedback to enhance motivation, interpersonal learning, self-efficacy, and performance. All of the above information presented the overall context for the study of

a process of caregivers as peer coaches, the relationship to HQCs, and the relationships to learning, knowledge, and innovation.

Chapter III

Methodology

Restatement of Purpose

The purpose of this research was to extend the literature about peer-to-peer developmental relationships in the work environment, specifically in peer coaching. It was the intent of the study to explore whether peer coaches trained in an intentionally positive model of peer coaching were perceived as facilitating HQCs with their coachees, and to determine if the peer-coaching process was perceived to benefit team knowledge, skills, and innovation for patient/family-centered interpersonal-communication, relational, and service skills. Finally, it was the intent of this study to contribute to the emerging body of knowledge in the field of POS, PRW and AI.

Research Design

This was a mixed-methods descriptive and correlation study using a non experimental, cross-sectional survey design with intact groups (Creswell, 2008). The practice being investigated was receiving training and mentoring in positive peer coaching (PPC). Two preexisting survey instruments were adapted and modified for the study setting and combined into one instrument that also included additional study and participant-specific questions. The instrument was made available to volunteer participants who received the PPC training, their managers, and nursing staff participants in the coaching groups, or coachees. The survey period followed training in peer coaching and a subsequent period of practical experience.

The justification for collecting data using a survey methodology was to receive direct responses about the attitudes, opinions, beliefs, and practices of the peer-coaching-

process participants (Fink, 2009; Fowler, 2009). Responses came from the varying

perspectives of three cohorts: nursing managers, peer coaches, and peers in the coaching

groups (coachees) and included both open-ended and closed-ended questions. The

survey approach provided an economical and efficient means of gathering data from

many participants working multiple shift schedules. The resultant data obtained from the

survey was analyzed both quantitatively and qualitatively. The two strands of data were

merged, integrated, and linked in order to provide further strength to the study (Creswell,

2008).

Research Setting

The setting for the study was Stanford Hospital and Clinics, a large academic

medical center in northern California. The hospital is licensed for 613 acute-care beds,

with 18 acute medical-surgical units, a large Level IV emergency room with Life Light

helicopter services, 33 operating rooms, and multiple outpatient and ancillary

departments. There are over 1,500 nurses, 1,900 physicians, and 850 medical residents

and interns (Stanford Hospital & Clinics, 2011). The nursing staff is unionized through

an organization called the Committee for Recognition of Nursing Achievement

(CRONA). CRONA is an independent union located at both Stanford Hospital and

Packard Children's Hospital (CRONA, 2007).

This hospital, and specifically the Department of Nursing, has received

recognition as a Magnet®-status hospital. Magnet®-status hospitals pass a rigorous

credentialing process in which they are certified for providing excellence in professional

nursing including innovative leadership practices, nursing research, excellent patient

outcomes, and high levels of nurse satisfaction and involvement (American Nurses

Credentialing Center, 2011a). Mentoring was encouraged as a professional-

developmental process and therefore, so were the underlying concepts for supporting peer

coaching.

Population and Sample

The population for the research study was medical-surgical nursing personnel

defined as nurse managers, staff nurses, nursing assistants, and unit secretaries. From

that population the sampling frame included eight nursing units and 80–90 nursing

personnel who volunteered to participate in a peer coaching training program, their 24

nurse managers and assistant nurse managers, and more than 300 participating coachees.

Human Subjects Approval

In accordance with the University of San Francisco Institutional Review Board

(IRB) process as well as the research process at the host institution, this researcher

obtained written approval prior to conducting the research (see Appendix A). Prior to

submitting the research protocol to the University of San Francisco IRB for the

Protection of Human Subjects, the researcher received approval to conduct the study at

the host institution from the Stanford Chief Nursing Scientist, the Vice President of

Patient Care Services/Chief Nursing Officer, the Director of Nursing, and the Vice

President of Process Improvement. In preparation for the Stanford IRB process, the

researcher was required to take and successfully pass the Collaborating Institutional

Training Initiative training course in responsible research with human subjects, which

was completed. The Stanford IRB proposal was completed and the Chief Nursing

Scientist presented the study proposal, on behalf of this researcher, to the Stanford

University IRB committee; however, the study was deemed exempt. The protocol was

presented and accepted by the Stanford Nursing Research Council with the requirement that the results of the research be presented to the council upon completion of the study.

Permission was granted to obtain an e-mail distribution list of the nursing personnel from each of the participating unit nurse managers in each of the units that participated in the Peer Coaching for Service Excellence project. No patients were involved in the study and all nursing personnel had a choice to participate or decline as part of the survey process. Using language that was reasonable and understandable, the participants were provided with an overview and the purpose for the study. Each individual participant had the opportunity to proceed with an appropriate, accurate, informed-consent procedure that included information about potential harm and benefits from the study. Such informed consent was appropriately documented as part of the online survey process and maintained by the survey host.

This researcher had the primary obligation for maintaining the confidentiality of the participants. Furthermore, the researcher took reasonable precautions to respect the rights of those with whom the researcher works. All records were maintained with confidentiality in mind, including the creation, storing, accessing, transferring, and disposing of records under control. The researcher used a university-approved web-based survey site to establish the survey instrument, manage the e-mail-distribution process, and collect the data. Participants were able to opt out of the survey at any point and no question required a forced response in order to proceed. The e-mail addresses to contact respondents were completely separate from the completed responses. No individual responses were linked to e-mail or IP addresses. No individual identities were used in the reports resulting from the study. The anonymous survey date was stored on

SurveyMonkey, which has an up-to-date firewall and is encrypted. SurveyMonkey employs multiple layers of security, including password protection, to ensure data safety and privacy.

In conducting the research, this researcher did not interfere with or interrupt the participants during their clinical work on the nursing units. Managers provided opportunities for participants to take the survey without interrupting workflow. The researcher provided participants with an opportunity to obtain information about the nature, results, and conclusions of the research. This researcher took reasonable measure to honor all commitments to the research participants and host.

Instrumentation

The final instrument used for this study was called the Peer Coaching Survey and included questions developed by this researcher and the adaptation, modification, and combination of two established, unpublished instrument scales: (a) the Peer Mentoring Training Survey (Bryant & Terborg, 2008) and (b) the High-Quality Relationships Measurement Tool (Carmeli et al., 2008). Permission to use and modify the established survey scales for the purposes of this dissertation was requested and received (see Appendices B and C).

Three versions of the survey were made available for each of the three categories of participants: the peer coaches (see Appendix D), the staff coachees (see Appendix E) and the managers (see Appendix F). Following the introduction to the study and the completion of the consent process, participants were asked to check the appropriate box: peer coach, staff member, or manager. SurveyMonkey skip-logic then directed the participant to the correct participant version of the survey. If the participant declined to

consent to the survey, SurveyMonkey automatically directed them to the end of the survey.

Following the introduction and the consenting section, the first portion of the study survey instrument was entitled Part A: General Information and included items that addressed general characteristics about participants and general characteristics about the coaching process. Such items included questions about the work schedule for the coaches compared to those of the coachees, and the frequency and method of communication between the coaches and coachees (see Appendices D, E & F).

The next section of the instrument was entitled Part B: The Peer Coaching Process and included 16 statements that addressed the attitudes and beliefs of the participants about the peer-coaching process. Eight items (Items 3, 4, 5, 6, 7, 13, 14, and 15) focused on coaching competencies and were modified and adapted, with permission for this study, from the existing instrument scale, the Peer Mentoring Training Survey (Bryant & Terborg, 2008). The remaining eight item statements (Items 1, 2, 8, 9, 10, 11, and 12) were developed by this researcher to operationalize the specific construct of peer coaching, as well as the intentionally positive approach to coaching methods (D'Abate, 2003; Parker et al., 2008). For example, Item 11, "If I give feedback, it is constructive and encouraging" was added to address observation and feedback as one of the most significant distinctions of peer coaching from peer mentoring (D'Abate et al. 2003). In addition, the item statement was intentionally worded to indicate a positive approach (Orem et al. 2007).

Part C: The Coaching Relationships, contained 11 statements that addressed the attitudes and beliefs about the nature of the relationships in and among those in the peer-

coaching process. Ten of the 11 (Items 2 through 11) statements were items this researcher received permission to use from the subscale from the HQR Tool (Carmeli et al., 2008). One additional statement, "My coachees and I feel comfortable in sharing stories about our practice with each other" was added to reflect AI and storytelling (Orem et al., 2007; Whitney & Trosten-Bloom, 2003).

The 11-item subscale, Part C: The Coaching Relationships, was repeated twice and appeared as Part C-1 and Part C-2 in both the peer-coaches survey (see Appendix D) and the managers survey (see Appendix F). The purpose of the duplicate set of item statements was to determine the perceptions of the relationships among the unit peer-coaches group and the perceptions of the relationship between the peer coaches and their designated coachees from the perspectives of the peer coaches and the managers. In the staff survey (see Appendix E), the Coaching Relationship subscale only appeared once to address the staff perception of the relationship between the coach and the coachees, from the perspective of the coachees. The 38 items from Part B (process) and Parts C-1 and C-2 (relationships) were collapsed into three dependent variables measuring process and relationship, respectively.

Part D included eight items about team knowledge, skills, and innovation adapted for this study with permission of the authors of the Peer Mentor Survey (Bryant & Terborg, 2008). Part E included demographic items such as age and employment status. Part F of the survey included an open-ended question for further qualitative analysis (Appendices D, E & F). A summary of the survey sections and relationship to the research questions appears in Table 6.

Table 6

Research Questions With Corresponding Sections From the Peer Coaching Survey

Research questions	Survey section and line items
Characteristics of the participants.	Part A: General Information questions and Part E: Demographics
1) What were the perceptions of the peer coaches about their coaching practices, the peer-coaching process, their ability to develop high-quality connections and the ability to facilitate knowledge, skills, and innovation among their coachees?	Peer Coach Version: Part A: General Information questions Part B: The Peer Coaching Process Subscale, line items 1-16 Part C1 and C2: The Coaching Relationships Subscale, Line Items 1–11 (duplicated). C1= relationships among unit peer coaches group, and C2 = relationship between peer coach and coachees Part D: Team Knowledge, Skills and Innovation Subscale, Line Items 1–8 Part E: Demographics Part F: Open-ended question
2) What were the perceptions of the coachees?	Staff Coachee Version: Part A: General Information questions Part B: The Peer Coaching Process Subscale, Line Items 1–16 Part C2: The Coaching Relationship subscale Items 1–11, between peer coach and coachees Part D: Team Knowledge, Skills and Innovation Subscale, Line Items 1–8 Part E: Demographics Part F: Open-ended question
3) What were the perceptions of the managers?	Part A: General Information questions Part B: The Peer Coaching Process Subscale, Line Items 1–16 Part C1 and C2: The Coaching Relationships Subscale, Line Items 1–11 (duplicated). C1= relationships among unit peer coaches group, and C2 = relationship between peer coach and coachees Part D: Team Knowledge, Skills and Innovation Subscale, Line Items 1–8 Part E: Demographics Part F: Open-ended question
4) What were the relationships among the perceived effectiveness of the peer-coaching process, the coaching relationships, and how the team manages knowledge, skills, and innovation?	Part A General Information questions Part B, The Coaching Process Subscale Part C1 & C2, The Coaching Relationships Subscale Part D, Team Knowledge, Skills and Innovation Subscale

Validity

All items were adapted following procedures for evaluating survey questions, as recommended by Fowler (2009). Drawing on interviews and the literature, questions were developed or adapted to tap into the content domain specific for PPC (D'Abate et al., 2003; Parker et al., 2008). Following an initial pilot, the items were further analyzed in focus-group discussions, with a critical review conducted by a validity panel of three managers, three peer coaches and three staff coachees. A pretest with an adequate sample for each of the three cohorts was conducted to assure that the survey questions worked appropriately for the population, context, and goals of the study (Fowler, 2009).

Reliability

Internal consistency was measured across the items on the instrument by collapsing the item responses into two groups of relationship and process, with four dependent variables overall. Cronbach's alpha measures were used to test for inter item correlation using SPSS to assess an adequate level of internal consistency of 0.7 or higher. Items for the final scales were based on interitem correlations. Reliabilities were confirmed with Cronbach's alpha measures for the subscales measured as follows: Part B = .98, Part C1 = .98, Part C-2 =. 97 and Part D =. 94.

Supporting Instruments

Peer-mentor training instrument. The Bryant and Terborg (2008) instrument was a combination of an original design by the authors of a peer-mentoring competencies and behaviors subscale plus an adaption from a preexisting instrument on knowledge creation and sharing developed by Bontis (2002). The resultant Peer Mentor Training Survey was composed of demographic items and two individual 5-point Likert scales

(1 = *Strongly disagree*, 5 = *Strongly agree*). The subscales were entitled (a) the Peer

Mentoring Competence and Behaviors Scale, and (b) the Organizational Knowledge-

Creation and Sharing Scale. The instrument was thoroughly tested by the authors for

both reliability and validity with the evidence summarized below from the 2008

published article.

     Reliability. The two individual scales in the Bryant and Terborg (2008)

instrument were developed using procedures recommended by Devillis (1991). The

items were then pretested in a pilot involving 100 participants, in a test–retest procedure

format. The results of their pilot indicated high reliability (Cronbach's alphas from .81

to .92) for the measures of peer mentoring and knowledge. Items selected for the final

scales were based on item correlations and confirmatory factor analysis. One item was

deleted due to a low total correlation (.40). Results were consistent and stable across the

test–retest period.

     Validity. The Bryant and Terborg (2008) instrument was developed with input

from managers at the firm where their study was conducted (Microsoft), the peer-mentor

training instructor, and research colleagues. Items were pretested and feedback was

incorporated into the final scales to eliminate redundancy and clarify wording. A

confirmatory factor analysis was conducted to verify that the two scales captured

independent constructs. The high correlation between the two constructs supported

convergent validity among peer mentoring, knowledge creation, and sharing subscales.

     High-Quality Relationship Scale. The High-Quality Relationship (HQR) scale

was developed by Carmeli et al. (2008). Carmeli et al. drew on Dutton's (2003) concept

of HQC and on Dutton and Heaphy's (2003) three capacities that distinguish a high-

quality relationship. The three capacities are: "1) Higher emotional carrying capacity; 2) relationship tensility or the capacity of the relationship to bend and withstand strain; and 3) degree of connectivity" (Carmeli et al. 2008, p. 88). Dutton and Heaphy (2003) also named two subjective experiences that characterize HQR as first, having a sense of positive regard, and second, having feelings of mutuality.

Validity. To assure instrument scale validity, Carmeli et al. (2008) followed Dutton and Heaphy's (2003) conceptualizations of HQC. In addition, they added some extensions and modifications for which the following assessment for validity was conducted.

> We also assessed the fit of a second-order model of high-quality relationships consisting of two lower order constructs: capacity of HQR's (which are composed of three latent variables: higher emotional carrying capacity, relationship tensility and the element of openness in the connectivity dimension [labeled hereafter as connectivity]) and experiences of HQRs (which are composed of two latent variables: a sense of positive regard and feelings of mutuality). (Carmeli et al., 2008, p. 88)

To assess the various manifestations of HQR Carmeli et al., (2008) adapted 20 items from a scale developed by earlier by Carmeli. All items were assessed on 5-point scale ranging from (1 = not at all to 5 = extremely). All items underwent confirmatory factor analysis to test validity of the scales with a reasonable fit with the data resulting in relatively high confirmatory-factor indices (CFI = .88 and .85). The results supported a second-order model consisting of two latent variables (lower order constructs) and one latent model composed of five latent variables (low order constructs) that capture the important dimensions of HQR (Carmeli et al., 2008).

Reliability. The Cronbach's alpha reliability testing and results were as follows: emotional carrying capacity ($r = .72$), tensility ($r = .77$), connectivity ($r = .83$), positive regard ($r = .84$), and mutuality ($r = .85$). The researchers also employed structural

equation modeling using AMOS 5 to test the research model, which resulted in a

goodness of fit (Carmeli et al., 2008).

Researcher's Role

This researcher was an independent nurse educator and consultant to the

organization in which the study was taking place. The researcher took part in the training

of the peer coaches but not in the selection of the units chosen. The researcher provided

guidelines and suggestions for the nurse managers in the selection of peer coaches but did

not choose the peer coaches nor make the assignments to the coachees. The researcher

had full support to perform the study from the Vice President of Patient Care

Services/Chief Nursing Officer, the Director of Nursing, the Vice President of Process

Improvement, and the Director of Process Improvement. This researcher did not bill the

organization for the time at the organization that had to do with conducting the study

survey.

The researcher was a former critical-care nurse, a medical-surgical Nurse

Manager, a Director of Education, a clinical coordinator for a National Institutes of

Health-funded cancer-research project, a Director for Quality, and a Vice President for

Quality and Service Excellence for a large multicampus organization of 7,000 employees.

The researcher has coauthored articles published in the *Annals of Internal Medicine, New*

England Journal of Medicine, and *Science and Circulation*. The researcher has consulted

in the areas of peer review, accreditation and licensure, large-scale quality and service

change initiatives, and leadership coaching and development for multiple not-for-profit

and for-profit organizations, primarily on the West Coast. The researcher received a

Master's of Science of Education in Business and Leadership Studies, and is a member of

Sigma Theta Tau International Honor Society of Nursing and Phi Delta Kappa

International Honor Society for Education. As a certified professional in health care

quality, the researcher has served as an officer on regional and state quality groups and

was formerly the president of a public-education foundation. The researcher is a master

facilitator for several nationally recognized training programs including among others

Zenger-Miller Front-Line Leadership, Quest, First Touch, and *Accountability that Works*.

Pilot Study

In one large academic medical-center setting, a pilot of the survey process was

conducted with a convenience, cross-sectional sample of 41 nurses to test a survey

instrument and to inform the final study. A specific goal of the pilot was to gain an

appreciation of survey methodology as an appropriate form of quantitative and qualitative

research for the formal study. A preestablished instrument, the 2008 Bryant and Terborg

Peer Mentoring Survey, was used to ascertain if, with minor modifications, it could be

used for the study. Both closed- and open-ended questions were used to determine

nurses' attitudes and beliefs about peer-to-peer developmental relationships following a

training program. Data generated from the pilot test was not included in the main study.

As a result of information gained from the pilot, both a web-based survey tool and

a paper survey were made available for the study. The term *peer coaching* was used in

the study and on the survey to differentiate from the term "mentoring," which in nursing

has a prior history and connotation more specific to being a preceptor of new employees

and recent graduates. The results of the pilot reflected a low sample representation of

participants from the night shift and as a result, a more proactive approach to contacting

and recruiting was employed. For the formal study, changes were made to the instrument

for ease of data collection to include adding numerical choices for the number of years worked in the institution. Also, with formal IRB approval, fields for age and cultural background were added as an optional field in the demographics. Additional questions were added to gain perceptions about successful coaching-group pairings.

Validity of the pilot-test instrument. For the purposes of the preliminary pilot, the measurement tool was modified to appropriately reflect demographic items specific to the setting and the participants of the current study. The attitude scale, self-reported behaviors, and questions about the program were also modified slightly to reflect the current study. As part of the quality assessment, a panel of experts was consulted regarding the face validity and content validity of the items on the survey tool and the modifications (Fowler, 2009). The panel included 2 nurse managers, an assistant nurse manager, a peer mentor/coach, a staff nurse, and a statistics professor. At the time of the pilot the terms *peer mentor/coach, mentee's* and *mentoring groups* were used to describe the peer developmental relationships. Two survey instruments were constructed: one for peer mentors and one for mentee's. A field to identify managers was included in the peer-mentor survey.

Reliability of the pilot instrument. To test the attitude scale and the self-reported behavior items, the "think aloud" technique was employed by asking several respondents to read each statement aloud and state what they were thinking as they answered the question. In addition, other respondents were asked to take the written survey and write notes in the margins on anything that bothered them or was unclear or ambiguous (Orcher, 2007). They were also asked to think of any important components of the peer-mentoring program that were missing from the survey. Following this input,

a final hard copy of the peer mentor survey and mentee survey was created as well as a web-based survey containing the same set of questions.

SurveyMonkey was the host online survey service used for this study. Use of this web-based survey service facilitated the use of a skip-logic function to direct the participants to the correct fields of inquiry. The participants' "yes" or "no" response to an initial question automatically sent participants to the appropriate page with items specific to the role of either a peer mentor or a member of a peer-mentoring group. Each page of the instrument was appropriately titled and included clear instructions. Consistent and appropriate response options were included in the design to facilitate quick and reliable completion of the items. A "percent complete" bar appeared at the top of each page. A final thank you page appeared at completion of the survey.

Follow-up pilot and pretest. Due to information gained in the initial pilot study of the Peer Mentoring Survey, the instrument for the formal study was called the Peer Coaching Survey to differentiate from the term mentoring, which is currently used in the study setting for the preceptorship of new graduate nurses and to more specifically address coaching as a construct. The purpose of a follow-up pretest was to test the reliability and validity of the adapted Peer Mentoring Survey (Bryant & Terborg, 2008) specifically for peer coaching, the additional line-item questions developed for PPC, and the addition of the line items from the HQ-R subscale (Carmeli et al., 2008). The survey instrument was tested in the three cohort versions and included a sample of individuals from the each of the cohorts of peer coaches, coachees, and their managers.

Procedures

Peer coaches were invited by their managers to participate in the peer-coaching training and implementation program for a one-year commitment. If in agreement, they attended an initial four-hour interactive workshop, designed and facilitated by the researcher. The purpose of the first session was to introduce the peer coaches to the peer coaching process and review content and skills in interpersonal relations, communication and service excellence. Each of the participating eight units convened in separate workshops at varying dates according to a schedule set by the nursing managers. All of the initial training sessions were taught by the researcher and followed a similar format using AI methodology and concepts from POS. The same content and materials for interpersonal relations, communication, and service skills were provided to all groups. At the end of the initial workshop sessions, each of the peer coaches received the names of approximately three coachees. The managers and assistant managers were, in turn, assigned to each of the peer coaches in order to provide for ongoing mentoring support, as well as, provide an oversight structure for the coaching process.

During the first few days following the seminar, the peer coaches were given the opportunity to reflect on their assignments and contact their managers if they had any interpersonal concerns or potential scheduling conflict with their assigned peer coachees. Over the next few weeks, the peer coaches were instructed to practice and model the communication, interpersonal and service skill behaviors and to reflect and journal their own personal progress. They were also to contact their coachees, explain the peer coaching process and begin the development of a meaningful relationship with each of their coachees. In order to facilitate the coaching relationship process, they were given a

specific AI guide to generate collaborative discussion and to explore common value themes. Following these initial conversations they were encouraged to set up a method for routinely communicating with their coachees.

Over the proceeding months, ongoing coaching education occurred accompanied by advancing coaching responsibilities. Coaching topics included (a) defining and developing the positive coaching relationship, (b) developing and managing a communication method with their coachees, (c) selecting and focusing on key information to be shared, (d) adjusting coaching to different learning/behavioral styles, (e) assessing whether concepts and information shared is being understood, (f) giving positive, nonevaluative feedback, (g) selecting goals and gaining commitments for further action, (h) characteristics of a positive coaching relationship, and (i) a five-stage process for PPC. Figure 2 describes the five-stage process for PPC.
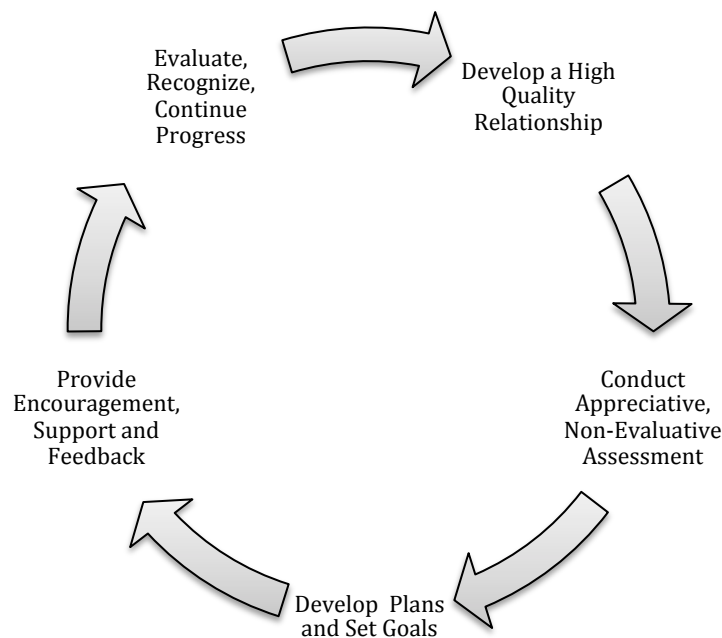
Figure 2. Five-stage PPC process.

Individual unit peer coaches meetings were held monthly to facilitate mentoring and ongoing education for the peer coaches. The meetings were held to provide an opportunity for the peer coaches to meet together, reflect, share experiences and to discuss and practice the peer coaching process together. AI methods and storytelling were used to generate collaborative group conversation about the peer-coaching process and to discuss coaching progress or setbacks. Individual goal setting for the peer coaching interactions was included and was also aligned with overall unit goals for patient-satisfaction improvement. The performance of staff as peer coaches was not included as part of the participants' formal performance appraisal.

Data Collection

A non experimental, cross-sectional survey design was used for intact groups (Creswell, 2008). The variable was the receiving of training for PPC. The survey instrument was made available to volunteer participants who received peer-coaching training, their managers, and the nursing participants in the coaching groups (coachees). The study was conducted by using an online survey conducted through the web-based survey company SurveyMonkey, which was a data-collection platform endorsed by the University of San Francisco. The professional version of the software was used due to the advanced-logic capability, allowing the various categories of participants to enter the correct field of questions into the appropriate version of the instrument, as well as the capability to download the data into SPSS for advanced data analysis. A paper version of the survey was also made available as a back up, if requested.

As stated, data were collected from a web-based version of the study instrument, called the Peer Coaching Survey. The survey included three versions for the three

cohorts of participants (see Appendices D, E, F). The survey was used to collect general demographic data, quantitative data from three subscales, and qualitative data from an open-ended question. Participants surveyed included 90 nursing personnel voluntarily trained as peer coaches, approximately 400 nursing personnel (coachees), and 25 nurse managers from eight participating nursing units/teams.

A complete and current list of names and e-mail addresses of the peer coaches and the coachees was made available to this researcher from the participating unit nurse managers. An e-mail invitation was sent to all of the participants and, in addition, paper-copy invitations were made available on the individual nursing units. All participants in the process had equal access to participate in the survey. The e-mail invitation process was handled through the SurveyMonkey address-book function and included a specific link for each individual to the web-based survey. The e-mail invitation allowed the participants the option to decline future reminder e-mails. If the participant chose the paper version of the survey, copies of the survey, the consent form and confidential return envelopes were provided through the designated unit mailbox.

The survey was open for a response period of 4 weeks, from August 11th through September 6th. Participants were automatically tracked and targeted with e-mail follow-up requests, which were automatically sent to those who had not responded on a weekly basis, unless they had opted in the initial invitation to decline receiving further reminders. A small incentive award was given to the unit that obtained the highest response rate, to encourage a response that accurately represented the range of personnel who participated in the process. Participants who did not complete the survey within the first 2 weeks received a reminder e-mail through the automated SurveyMonkey message-management

and address-book functions. Reminder flyers and cookies were also delivered to the

individual participating units. Based on the results from the initial pilot study, a special

effort was made to recruit night-shift respondents.

As stated, the professional version of the host survey service, SurveyMonkey,

allowed the use of a skip-logic function to direct the participants to the correct fields of

inquiry. The participants "yes" or "no" response to an initial question regarding their

roles automatically sent the participants to the appropriate pages with items specific to a

peer coach, a manager, or staff coachees. Each page of the instrument was appropriately

titled and included clear instructions. Consistent and appropriate response options were

included in the design to facilitate quick and reliable completion of the items. A "percent

complete" bar appeared at the top of each page. A final thank you page was displayed at

completion of the survey.

The address-book feature of the web-based survey service was used to maintain

the participants' e-mail addresses and to avoid potential spam interference or blocking.

In addition, this function was used to manage and facilitate the invitation process.

Invitations were e-mailed to each participant with a direct URL link to SurveyMonkey, to

support the ease of completion. Multiple collectors with specific URL endings were set

up to designate data collection by the individual nursing units participating in the study

and thereby facilitated group comparisons. At the end of the data-collection window, the

survey was closed and the data were downloaded with variable names to be adjusted for

processing by SPSS.

Data Analysis

The research questions for this study focused on examining the attitudes, beliefs, and opinions about and the perceptions of the peer-coaching process and relationships from the perspective of three cohorts: the peer coaches, the coachees, and the managers. There were four research questions that guided the analysis, following training and a period of practice implementation of the positive peer coaching process:

1. What were the perceptions of the peer coaches about their coaching practices, the peer-coaching process, their ability to develop HQC, and their ability to facilitate knowledge, skills, and innovation among their coachees?

2. What were the perceptions of the coachees about the coaching practices, the peer-coaching process, their ability to develop HQC, and the ability to facilitate knowledge, skills, and innovation among the team?

3. What were the perceptions of the nurse managers about coaching practices, the peer-coaching process, the ability to develop HQC, and the ability to facilitate knowledge, skills, and innovation among coaches and their coachees?

4. What were the relationships among the perceived effectiveness of the peer-coaching process, the coaching relationships, and how the team manages knowledge, skills, and innovation?

To fully address the research questions, this researcher organized the data for analysis in a variety of ways. First, characteristics and behaviors of the participants were revealed through individual cohort analysis of demographic and general-practice information from Part A: General Information and Part E: Demographics. Second,

opinions, attitudes, and beliefs, as well as, practice behaviors were revealed through the

individual cohort and comparison analysis of the three closed, line-item, 5-point Likert-

type subscales in Part B: The Peer Coaching Process and Parts C-1 and C-2: The

Coaching Relationships, and in Part D: Team Knowledge, Skills and Innovation. Third,

intergroup and between-group themes of opinions, attitudes, and beliefs were analyzed

from Part F: Open-ended Comment. Fourth, regression analysis was performed to

determine the relationships between the constructs of PPC and HQR, and the relationship

between PPC and knowledge creation and sharing.

Descriptive statistics such as mean, standard deviation, median, and mode were

used to analyze the demographic items collected from the survey about the peer coaches,

the coachees, and the managers. A variety of characteristics of the respondents included

such items as whether they have had prior mentor and coaching training, gender, years

worked at the organization, staff position, primary shift schedule, full-time/part-time

status, and educational level. The resultant distributive patterns and proportions of these

characteristics were discussed in the text and displayed on tables and figures. In addition,

proportional descriptive statistics (percentages) and histograms were used to analyze

interval and ratio levels of measurement such as the distribution of years worked at the

organization. Frequencies of the methods by which the peer coaches and their coachees

communicated with each other were displayed on charts. Percentages were used to

compare groups, as in peer coaches to coachees, job categories, or respondents from

different nursing units.

In addition to general characteristics and demographics, as stated earlier, there

were three core subscales in the survey instrument that were used to answer the research

questions. Two subscales included questions about the peer-coaching process and the coaching relationships (Part C1 and Part C2) and the third subscale addressed how the nursing team manages knowledge, skills, and innovation (Part D). Each of these sections contained individual items listed on a 5-point Likert rating scale from 1 (Strongly Disagree) to 5 (Strongly Agree). Individual item analyses included means and standard deviations. The proportion of ratings for each item was displayed on stacked bar charts. The 5-item scale was weighted and frequencies converted to mean and standard deviations. The individual items in the three core parts (Part B, Part C1 & C2, and Part D) were combined to derive four composite subscale variables that represent the degree of overall agreement with the items in the sections. Within-group and between-group comparisons of participant characteristics and self-reported perception of the peer-coaching competencies, the quality of the coaching relationships, and how the team manages knowledge, skills, and innovation, were conducted using t tests, ANOVA, and correlations. Particular attention was paid to the observed effect sizes due to the census nature of the sample.

The final part of the survey was an open-ended question about the experience of the peer-coaching process. A qualitative content-analysis method was employed to draw inferences about the meaning of the recorded information from the survey respondents (Weber, 1990). Words, concepts, themes, and phrases were identified and quantified such as percentages of positive and negative comments. Finally, themes were determined and correlated to the research questions and to the literature.

Chapter IV

Findings

Introduction

The purpose of this research was to extend the literature about peer-to-peer developmental relationships in the work environment, specifically, peer coaching in a hospital inpatient setting. It was the intent of the study to explore whether nursing personnel trained in an intentionally positive model for peer coaching were perceived as effective in peer coaching, facilitating HQC with their coachees; and if the peer-coaching process was perceived as benefiting team knowledge, skills, and innovation, specifically for patient/family-centered interpersonal communication, relational, and service skills. Finally, it was the intent of this study to contribute to the emerging body of knowledge in the fields of POS, PRW, and AI.

The independent variable in the study was training in a positive peer-coaching process. Specifically, four research questions guided this research. First, what were the perceptions of peer coaches about their peer-coaching behaviors, their coaching processes, their ability to develop high-quality connections and their ability to facilitate team knowledge, skills, and innovation? Second, similarly, what were the perceptions of coachees about the process, the coaching relationship, and how the team manages knowledge? Third, what were the perceptions of nurse managers about the coaching process, the coaching relationships, and how the team manages knowledge? Fourth, what were the relationships among the subscales measuring perceived effectiveness of the peer-coaching process, the coaching relationships, and how the team manages knowledge, skills, and innovation?

Profile of Participants

The sample of respondents consisted of peer coaches, staff coachees, and managers from the eight units that participated in the peer-coaching process. The total response to the web-based survey yielded an initial return of 251 respondents with 187 (73.3%) fully completing the survey, which was defined as completion of all three subscales. Of the 187 who fully completed the survey, 32.6% ($n = 61$) were peer coaches, 54.6% ($n = 102$) were staff coachees, and 12.8% ($n = 24$) were managers. Of the 96 peer cocachees, 61 fully responded for an overall response rate of 63.5%. Of the 639 staff, 102 staff coachees fully responded for a response rate of 15.9%. All 24 of the participating unit and assistant managers responded for a 100% response rate. The overall response rates, including those partially completed and fully completed, for the participating eight nursing units ranged from 24.2% to 62.9%, as shown in Table 7.

Table 7
Response Rate of Participating Units

Unit	Total staff	Initial respondents	Response rate (%)	Fully completed	Final response rate (%)
#1	54	34	62.9	22	40.7
#2	68	25	36.8	15	22.1
#3	140	43	30.7	25	17.9
#4	75	34	45.3	24	32.0
#5	54	33	61.1	25	46.3
#6	56	26	46.4	32	57.1
#7	91	22	24.2	19	20.9
#8	101	34	33.7	25	24.8
Total	639	251	39.2	187*	29.3

Note. Although some of the participants may have completed general information or demographic questions, "fully completed" is defined as completion of the three subscales, and only those responses that included all three completed subscales were subsequently used for the data analysis.

Descriptive statistics were computed on the data collected for the demographic questions in each of the three cohorts and included gender, age, position, employment status, highest level of education, native language, country of origin of nursing/healthcare training, and average commute time, as illustrated in Table 8. Tables 9 and 10 provide further detail about the general diversity in the cohorts by reporting the frequency and percentages of responses for non-English native languages and the location of international education. Table 11 provides a general description of the working experience for each of the cohorts by looking at the years worked in healthcare, years worked in the current organization, and years worked in the current role. Table 12 describes the primary working shifts of the respondents.

The respondents in the peer coaches' cohort were generally female, relatively diverse, full-time, registered nurses with a BSN degree (66.7%), an average of 11.7 years of experience ($SD = 7.8$), who have worked for the host organization for an average 8.2 years ($SD = 6.0$). Of the peer-coach registered nurse respondents, 46% reported that in addition to their staff role, they served as resource nurses. Three of the peer coaches responded that they were unit secretaries and two were nursing assistants, representing a 36% response rate overall for non nurse peer coaches ($n = 14$). Most peer coaches worked full time (80%) with 20% percent working part time. There were no travelers or relief staff respondents in this cohort. Of the respondents, 55% represented the day shift and 45% represented the evening or night shift. The age range for the peer-coach respondents was from 27 to 60 with the largest percentage (42.0%) falling in the 25–34 year old category (see Table 8). English was reported as the primary native language for

67.8% of respondents, with 32.2% reporting another native language, as further detailed

in Table 9.

Table 8
Cohort Demographic Characteristics Frequency and Percentage of Sample

Characteristic	Peer coach		Staff coachee		Manager	
	f	%	*f*	%	*f*	%
Gender						
Male	9	15.0	5	5.1	6	25.0
Female	51	85.0	94	94.9	18	75.0
Position *						
Staff Nurse	48	80.0	88	87.1	n/a	
Resource	28	46.0	27	26.7	n/a	
N. Asst.	2	3.3	7	6.9	n/a	
U. Sec.	3	5.0	7	6.9	n/a	
Employment Status						
Full-time	48	80.0	70	69.3	n/a	
Part-time	12	20.0	27	26.7	n/a	
Traveler	0	0.0	1	1.0	n/a	
Relief	0	0.0	3	3.0	n/a	
Education Level *						
Some college	2	3.3	8	8.0	3	12.5
Assoc. degree	6	10.0	11	11.0	1	4.2
Nursing diploma	4	6.7	4	4.0	1	4.2
BA/BS	7	11.7	19	19.0	6	25.0
MA/MS	2	3.3	11	11.0	3	12.5
BSN	40	66.7	53	53.0	9	37.5
MSN	2	3.3	6	6.0	2	8.3
Trained in US						
Yes	42	72.4	78	79.6	22	91.7
No	16	27.6	20	20.4	2	8.3
English as Native Language						
Yes	40	67.8	58	58.6	14	58.3
No	19	32.2	41	41.4	10	41.7
Age						
25–34 years	21	42.0	33	44.0	2	9.1
35–44 years	18	36.0	26	34.7	7	31.8
45–54 years	9	18.0	11	14.7	10	45.5
55–64 years	2	4.0	5	6.7	3	13.6
	M	SD	M	SD	M	SD
Average One-way Commute Time (minutes)	38.3	18.3	34.0	15.8	37.8	16.2

* *Note*. Percentages sum to greater than 100% due to multiple responses.

Table 9

Frequency and Percentage of Responders to Non-English Native Language Question by Cohort

Location	Peer coach (*n* = 15)		Staff coachees (*n* = 34)		Manager (*n* = 9)	
	f	%	*f*	%	*f*	%
Amharic					1	11.1
Cambodian			1	2.9		
Cantonese					1	11.1
Chinese			3	8.8		
Dari (Farsi)			1	2.9		
Dutch			1	2.9		
Farsi					1	11.1
Filipino	5	33.3	5	14.7	1	11.1
Gujarati	1	6.7				
Hindi	1	6.7	2	5.9		
Ilocano			1	2.9		
Japanese			1	2.9		
Punjabi and Hindi			1	2.9		
Russian			1	2.9		
Spanish			2	5.9	1	11.1
Tagalog	8	53.3	14	41.2	3	33.3
Vietnamese					1	11.1

Note: Percentages based on total "if other than English" language responses.

Table 10

Frequency and Percentages of Respondents to Country of Origin of Nursing/Healthcare Training Question

Location	Peer coach (*n* = 55)		Staff coachees (*n* = 96)		Manager (*n* = 23)	
	f	%	*f*	%	*f*	%
Canada	3	5.5	2	2.1		
England			1	1.0		
Hong Kong					1	4.3
India	1	1.8				
Philippines	9	16.4	15	15.6		
United States	42	76.4	78	81.3	22	95.7

Note. Some " if other than United States" respondents did not specify country of training

Table 11

Measures of Central Tendency of Working Year Characteristics for Various Group Cohorts

Characteristic	Peer coach (*n* = 61)		Staff coachees (*n* = 102)		Manager (*n* = 24)	
	Range	Mean (SD)	Range	Mean (SD)	Range	Mean (SD)
Years worked in healthcare	2–39	11.7 (7.8)	.5–30	7.1 (6.3)	10–39	21.7 (9.3)
Years worked in current organization	2–39	8.2 (6.0)	1–30	7.3 (6.8)	5–39	19.4 (10.1)
Years in current employment role	2–39	9.0 (6.8)	.5–31	8.6 (6.8)	1–25	8.1 (6.5)

Table 12

Frequency and Percentages of Primary Shifts Worked by Respondents

Primary working shift	Peer coach (*n* = 60)		Staff coachees (*n* = 101)		Manager (*n* = 24)	
	f	%	*f*	%	*f*	%
12 hour days	31	51.7	44	43.6	3	12.5
12 hour nights	16	26.7	32	31.7	6	25.0
12 hour rotating days and nights	1	1.7	2	2.0	0	0.0
8 hour day	7	11.7	9	8.9	11	45.8
8 hour evenings	3	5.0	14	13.9	3	12.5
8 hour nights	2	3.3	0	0.0	1	4.2

Of the peer coaches, 72% received their training in the United States whereas 27.6% percent were internationally educated. The Philippines and Canada were reported as the most frequent source of international education, as described further in Table 10. The average one-way commute time to the host organization reported by the peer coach cohort was 38.3 (*SD* = 18.3) minutes.

The respondents in the staff coachees' cohort were also primarily female, young, culturally diverse, full-time, experienced, registered nurses (87.1%), who had worked in the host organization for an average of 8.2 (*SD* = 6.0) years (see Tables 8 through 12). Of registered nurses, 56% reported having earned BSN degrees, 11% lower than reported by the peer-coaches group; 25% of registered-nurse respondents reported that they served as resource nurses, 21% lower than the peer coaches group. Seven of the respondent staff coachees were nursing assistants and seven were unit secretaries. Sixty-nine percent of the respondents were full-time and 26.7% part-time. One respondent was a traveler and three were fill-in/relief staff, as shown in Table 8; 54% of respondents represented the day shift and 47.5% represented the evening or night shift (see Table 12). The age range

for the staff coachees' cohort respondents was 23 to 60 years with the largest percentage

(44.0%) falling in the 25- to 34-year category. English was reported as the primary

native language for 58.6% of the staff coachee respondents with 41.4% reporting another

native language, as detailed further in Table 9. Of staff coaches, 78% received their

training in the United States while 20.4% were internationally educated. Similar to the

peer-coaching group, the Philippines and Canada were reported as the most frequent

source of international education, as described further in Table 10. The average one-way

commuting time reported for the staff coachees' cohort was 34 (SD = 15.8) minutes.

In the manager cohort, 75% were female and 25% were male. Fourteen (58.3%)

reported English as their first language and 10 (41.7%) reported other native languages,

as further detailed in Table 9. Of manager respondents, 91% received their

nursing/healthcare training in the United States (see Table 10); 21% reported advanced

degrees. The age range for the manager group was 28 to 60 years old with the highest

percentage (45.5%) falling in the 45–54 year range (see Table 8). The range for length of

time in their current position was 1 year to 25 years and the average years worked in the

host organization was 19.4 (SD = 10.1) years, as described in Table 11. Of responding

managers, 58% represented the day shift and 41.6% represented an evening or night shift

(see Table 12). The average one-way commute reported by the manager group was 37.8

(SD = 16.2) minutes, as detailed in Table 13.

Table 13

Summary of Prior Mentoring and Coaching Training of Peer Coaches

Training characteristics	*f*	%
Prior Mentor Training (*n* = 61)		
Yes	35	57.4
No	26	42.6
Location (*n* = 39)		
At Stanford Hospital	29	74.3
Other Hospital	5	12.8
Community Setting	1	2.6
Continuing Education Center	4	10.3
Date Received Training (*n* = 23)		
6 months to 1 year ago	7	30.4
2–3 years ago	7	30.4
4–5 years ago	4	17.3
More than 6 years ago	1	4.3
Reasons Cited (*n* = 12)		
Resource/Preceptor Training	6	50.0
Service Champion Program	5	41.6
Fellowship Program	1	8.3
Prior Coaching Training (*n* = 61)		
Yes	17	27.9
No	44	72.1
Location (*n* = 39)		
At Stanford Hospital	27	69.2
Other Hospital	5	12.8
Community Setting	1	3.7
Continuing Education Center	4	10.2
Reasons Cited (*n* = 6)		
Unit Education Coordinator	1	16.6
Service Champion Program	4	66.6
Professional Practice Model	1	16.6
Date Received Training (*n* = 6)		
6 months to under 2 years ago	2	33.3
2 years ago	2	33.3
7 to 10 years ago	2	33.3

Research Question 1: Perspective of the Peer Coaches

The results of the data from the perspective of the peer coaches is presented in three sections. First, questions unique to the peer coaches from Part A: General Characteristics and Part E: Demographics were summarized. Second, the subscale results were provided from Part B: The Coaching Process, Part C1: The Coaching Relationships—among the peer coaches' group, Part C2: The Coaching Relationships—between the peer coaches and their coachees, and Part D: Team Knowledge, Skills, and Innovation. Third, written responses from the peer coaches to the open-ended comment section were summarized.

Responses to Sections A and E peer coaches unique questions. Of the 61 peer coach respondents, 47.5% ($n = 29$) responded that they had served as a peer coach for 6 months to just less than 1 year and 41% ($n = 25$) for 1 year or more, as illustrated in Figure 3.
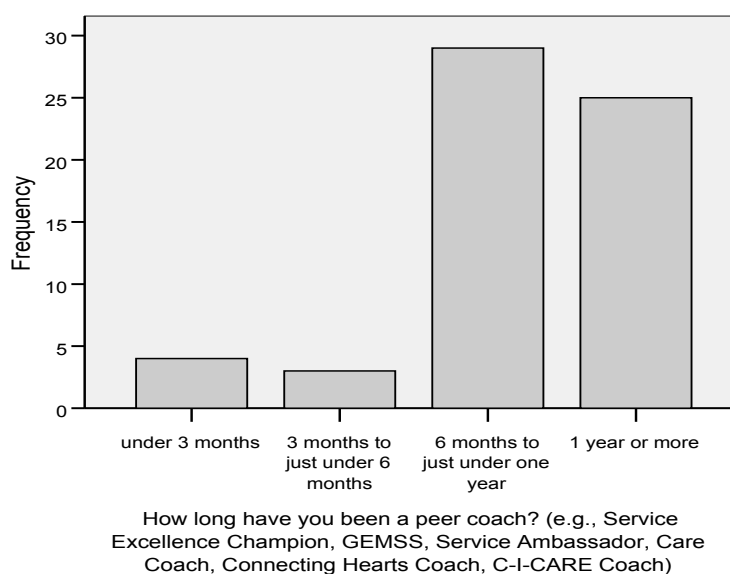
Figure 3. Distribution of responses from peer coaches answering the question of how long have they served as a peer coach.

When asked about prior mentoring training, over half (57.4%) of respondents reported they had prior mentoring training, while only 27.9% reported prior training in coaching, as described in Table 13. Although the question specifically stated "training prior to this program," five referred to the training program described in this study as the source of their mentoring education, and four for coaching education. The majority of the mentoring training was relatively recent, completed at the host institution, and was for the purpose of preceptorship or for a resource nurse role or as stated above, for the program described in this study. Training for coaching was less frequent than for mentoring, was also relatively recent, and the primary purpose reported was for the programs described in this study.

Most (54.1%) of the peer coaches reported that they were assigned coaching relationships with three staff coachees: 24% ($n = 14$) coached two staff, whereas 18.0% ($n = 11$) coached four or more staff, and 4.9% ($n = 3$) coached only one person (see Figure 4). Of peer coaches, 84% reported that their coachees generally worked the same shift, and over half (54.1 %) reported that the coachees worked the same weekend rotation.

Of the peer coaches, 44% ($n = 27$) reported that they communicated with their coachees on a monthly basis, 24.6% ($n = 15$) on an every other week basis, and 11.5% ($n = 7$) every week. There were zero peer-coach respondents who reported "never" connecting with their coachees (see Figure 5).
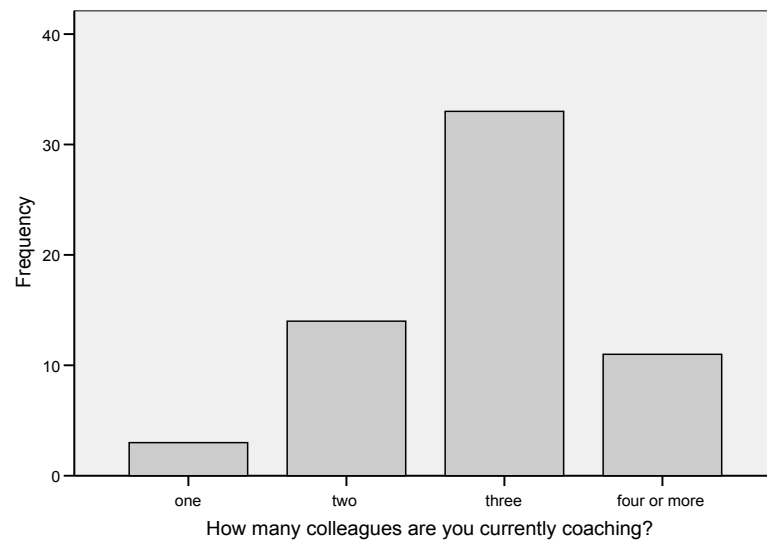
Figure 4. Distribution of responses from peer coaches answering the question of how many staff coachees they have.
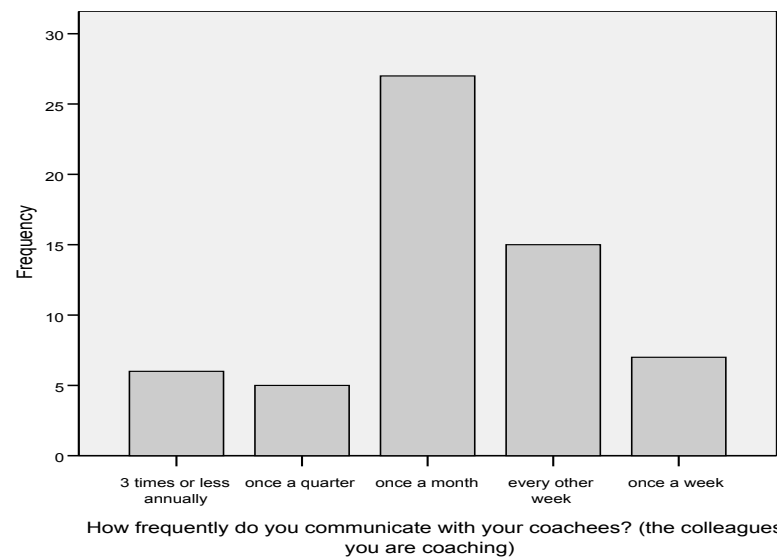
Figure 5. Frequency of communication with their coachees as reported by peer coaches.
All of the peer coaches reported that they connected in a face-to-face method with

their coachees. Figure 6 describes additional methods of communication reported for

how the peer coaches interacted with their coachees, of which e-mail was the highest

response category at 62.3%.
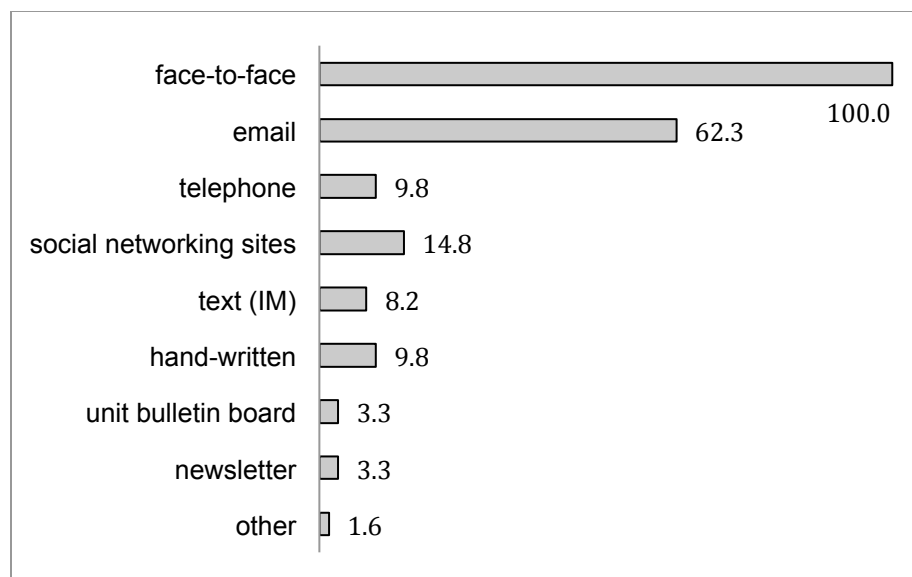
Figure 6. Percentages of peer coaches who reported using various methods of communication with coachees.

A voluntary unit peer-coaches meeting was held monthly on seven of the eight participating units. As described earlier in procedures, this meeting was for the purpose of the unit peer coaches gathering to participate with their other coaching colleagues in appreciative storytelling and reflection about their coaching progress or challenges, receive ongoing coaching and interpersonal-skills education, share ideas, plan, and set unit and/or individual goals for coaching. As described in Figure 7, a majority (55.7%) of the peer-coach respondents reported monthly attendance and 19.7% reported attending every other month.
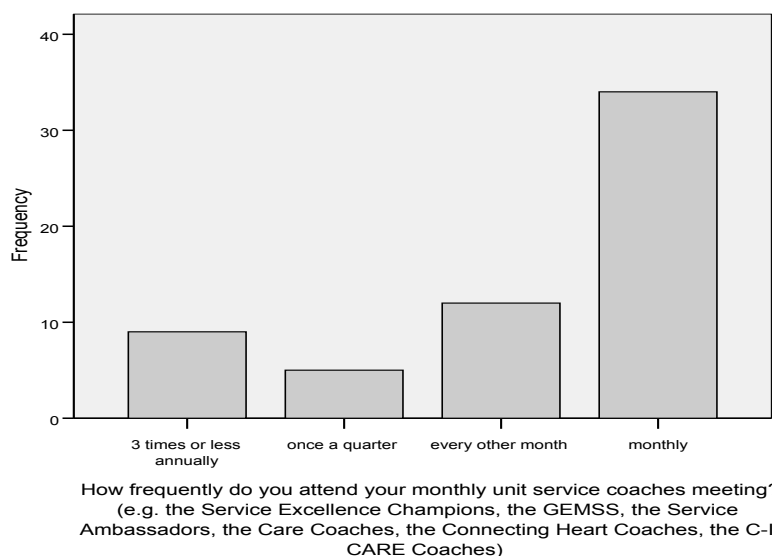
Figure 7. Frequency of attendance by peer coaches at monthly peer coaches meeting.

Peer coaches' responses to Parts B, C, and D subscales. In the peer-coach

cohort there were 61 completed responses for the subscales. Part B: The Peer Coaching

Process subscale, measured the perception of the peer coaches about their peer-coaching

behaviors and competencies. Part C1 and C2 The Coaching Relationships duplicate

subscales measured the perception of HQC among the unit peer coaches (C1) and

between the peer coaches and their coachees (C2). Table 14 presents a reference for the

line items in each of the subscales. Part D: Team Knowledge, Skills and Innovation

Subscale, measured the peer coaches' perception of how the unit manages knowledge

creation and dissemination.

Table 14

Subscale Line Item Reference Guide with Key Words in Bold

	Part B: The Coaching Process subscale (coaching competencies and behaviors)
B-01	Build the **relationship**
B-02	Value **strengths**
B-03	Sensitive to **style-learning**
B-04	Sensitive to **style-communication**
B-05	Have **formal** system for connecting
B-06	Set **goals**
B-07	O**rganize** thoughts before communicating
B-08	Foster **reciprocal** learning
B-09	Use an **appreciative** approach
B-10	Observant **listener**
B-11	Give constructive **feedback**
B-12	Give **recognition**
B-13	Improved self **efficacy**
B-14	Coaching **benefits-me**
B-15	**Motivated** to coach
B-16	Coaching **benefits-team**

	Part C1: The Coaching Relationship subscale (HQC among the peer coaches)
	Part C2: The Coaching Relationship subscale (HQC between the coach and the coachees)
C1-01 & C2-01	Comfortable being **reflective**
C1-02 & C2-02	Try to **understand** each other
C1-03 & C2-03	Are **open** to other's ideas
C1-04 & C2-04	Consider other's **perspective**
C1-05 & C2-05	Encourage other's **creativity**
C1-06 & C2-06	Build off of each other's ideas and **contributions**
C1-07 & C2-07	Are **generative**
C1-08 & C2-08	Can **express** both positive/negative
C1-09 & C2-09	Have **Constructive** conversations
C1-10 & C2-10	**Grow** from setbacks
C1-11 & C2-11	Feel **Safe** expressing emotion

Part D: Team Knowledge, Skills and Innovation subscale (how the unit manages knowledge creation and dissemination)	
D-01	Generate new **ideas**
D-02	**Adaptable**
D-03	Talk and **share** knowledge among the team
D-04	**Transform** self knowledge to shared knowledge
D-05	Create **innovative** processes
D-06	Share with **other units**
D-07	Capture ideas for **improvement**
D-08	**Committed** to patient/family centered care

Peer coaches' rating of Subscale B. The 16 items in Subscale B: The Coaching Process were combined to form an overall average rating for each peer-coach participant. The overall mean was 4.19 (*SD* = 0.49) with a skewness statistic of 0.03. Overall, the minimum mean score was 2.75 and the maximum score was 5.00. As can be seen from the histogram in Figure 8, the overall scores were generally high and clustered around the mean, indicating agreement by the peer coaches with the statements about their peer-coaching behaviors and competencies. Only one rating appeared slightly below the neutral point.

The 16 items for Subscale B were also generally rated high by the peer coaches (see Table 15). The variation in items was fairly consistent, as shown by the error bars in Figure 9 and the standard deviations in Table 15. Item B-05, "I have a formal system in place to connect with my coachees" and B-06, "I am able to focus my coaching interactions on unit goals for communication, relational and service skills" scored the lowest, with mean scores of 3.42 (*SD* = 1.05) and 3.79 (*SD* = 0.88), respectively. Items B-13, "Improving my own communication, relational, and service skills makes me more effective at my job," and B-14, "Helping our team develop positive communication,

relational and service skills benefits me directly," scored highest with a mean scores of

4.44 ($SD = 0.54$) and 4.44 ($SD = 0.56$) respectively.
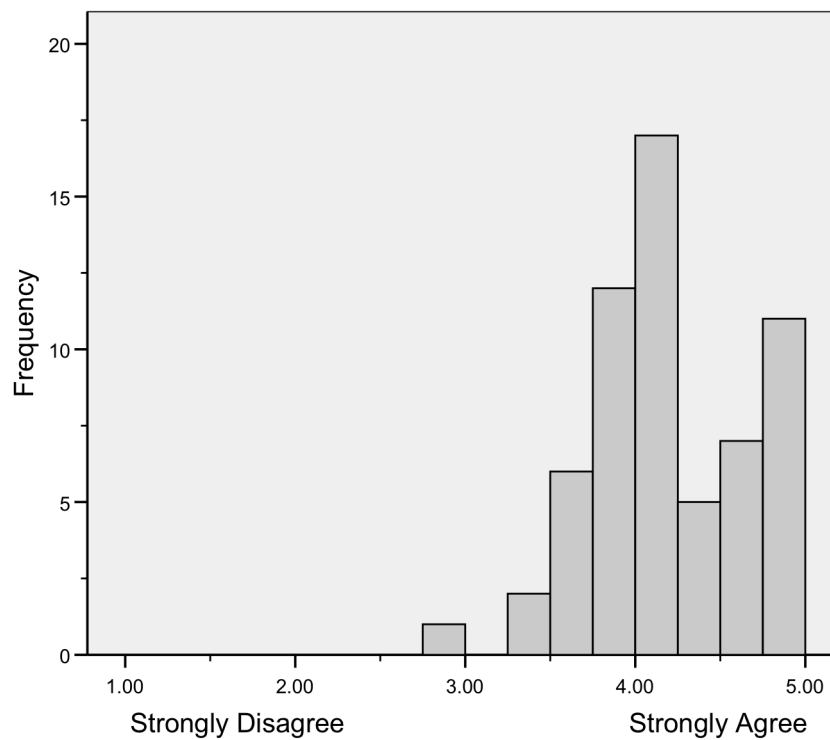
Figure 8. Distribution of overall rating by peer coaches for Subscale B.
Overall $M = 4.19$; $SD = 0.49$.

Table 15

Peer Coaches' Responses to Part B: The Coaching Process Subscale (Coaching Competencies and Behaviors)

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation	Skewness
B-01	0	0	8	35	18	4.16	0.64	-0.15
B-02	0	0	1	37	23	4.36	0.52	0.22
B-03	0	0	4	29	28	4.39	0.61	-0.47
B-04	0	0	5	28	27	4.36	0.64	-0.47
B-05	2	10	18	21	9	3.42	1.05	-0.28
B-06	1	4	13	32	11	3.79	0.88	-0.79
B-07	1	2	4	40	14	4.05	0.76	-1.48
B-08	1	0	5	39	16	4.13	0.69	-1.42
B-09	0	0	4	41	16	4.20	0.54	0.12
B-10	0	0	3	37	21	4.30	0.56	-0.01
B-11	0	0	1	38	22	4.34	0.51	0.28
B-12	0	0	2	40	19	4.28	0.52	0.25
B-13	0	0	1	29	31	4.49	0.54	-0.30
B-14	0	0	2	30	29	4.44	0.56	-0.35
B-15	0	0	11	31	19	4.13	0.69	-0.18
B-16	1	0	12	25	23	4.13	0.85	-0.94
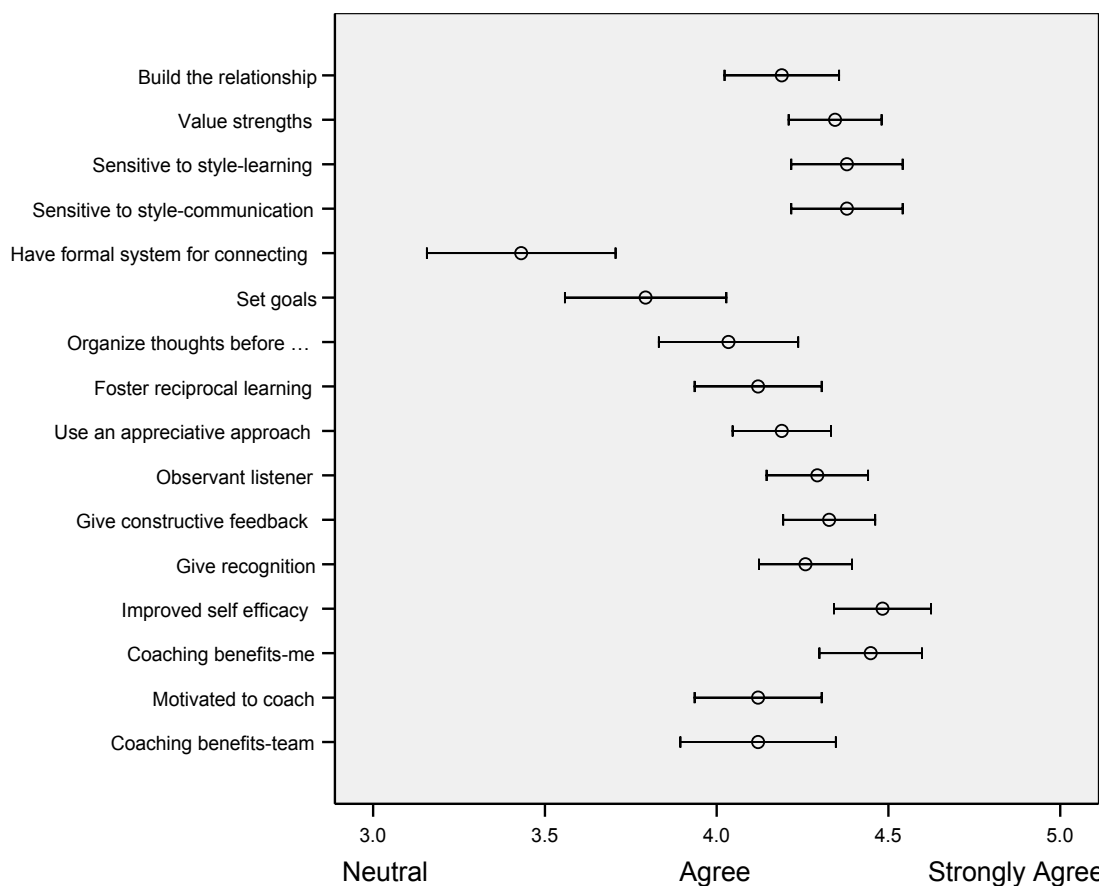
Figure 9. Mean item scores and confidence intervals for peer coaches' rating of Subscale Part B: The Coaching Process.

Peer coaches' rating of Subscale C1. The 11 items in Subscale C1: The

Coaching Relationship (among the unit peer-coaches group) were combined to form an

overall average rating for each peer-coach participant. The overall mean was 4.2

($SD = 0.48$) with a skewness statistic of 0.37. Overall, the minimum mean score was

3.18 and the maximum score was 5.00. As can be seen from the histogram in Figure 10,

the overall scores were generally high and clustered around the mean, indicating

agreement by the peer coaches with the statements about the quality of the relationship among the other unit peer coaches.
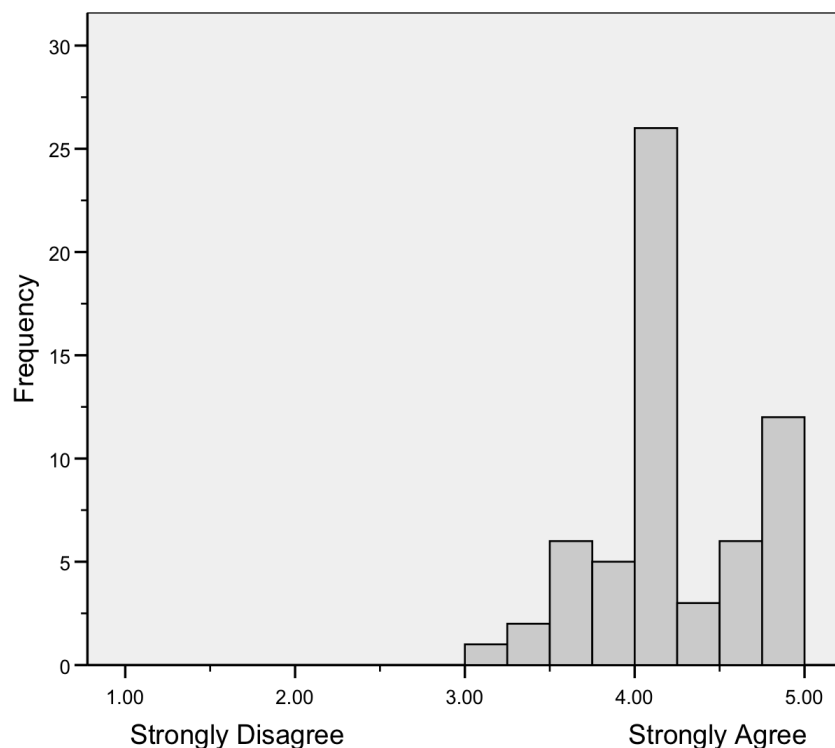
Figure 10. Distribution of overall rating by peer coaches for Subscale C-1 (relationship among the peer-coaches group).
Overall *M* = 4.2 (*SD* = 0.48).

The items in the C1 subscale were generally rated high by the peer coaches (see Table 16). The variation in items was fairly consistent as shown by the error bars in Figure 11 and in the standard deviations reported in Table 16. Although still scoring fairly high, Items C1-11, "My coachees and I feel safe in fully expressing emotions with one another," and C1-01, "My coachees and I feel comfortable in sharing reflective 'best self' stories about our practice with each other," received the lowest rating with mean scores of 4.03 (*SD* = 0.67) and 4.13 (*SD* = 0.71) respectively. Items C1-03, "When we interact, we are open to listening to each other's ideas," and C1-02, "We try to understand

one another," scored the highest with mean scores of 4.34 (*SD* = 0.48) and 4.31

(*SD* = 0.53), respectively.

Table 16
Peer Coaches' Responses to Part C1: The Relationship Subscale (among the unit peer coaches group)

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation	Skewness
C1-01	0	1	7	36	17	4.13	0.67	-0.50
C1-02	0	0	2	38	21	4.31	0.53	0.14
C1-03	0	0	0	40	21	4.34	0.48	0.67
C1-04	0	0	0	45	15	4.25	0.44	1.18
C1-05	0	0	4	40	17	4.21	0.55	0.08
C1-06	0	0	2	38	21	4.31	0.53	0.14
C1-07	0	0	5	35	20	4.25	0.60	-0.15
C1-08	0	0	10	31	20	4.16	0.69	-0.22
C1-09	0	0	7	38	16	4.15	0.60	-0.06
C1-10	0	1	5	35	19	4.20	0.66	-0.60
C1-11	0	1	11	34	15	4.03	0.71	-0.34

Peer coaches' rating for Subscale C2. The 11 (duplicate) items for Subscale C2:

The Coaching Relationship, between the peer coach and coachees, were combined to

form an overall average rating for each peer-coach participant. The overall mean for

Subscale C2 was 4.1 (*SD* = 0.51) with a skewness statistic of 0 .097. Overall, the

minimum mean score was 2.91 and the maximum score was 5.00. As can be seen from

the histogram in Figure 12, the overall scores were generally high and clustered around

the mean, indicating agreement by the peer coaches with the statements about the quality

of the relationship between themselves as peer coaches and their coachees. Only one

rating fell below neutral.
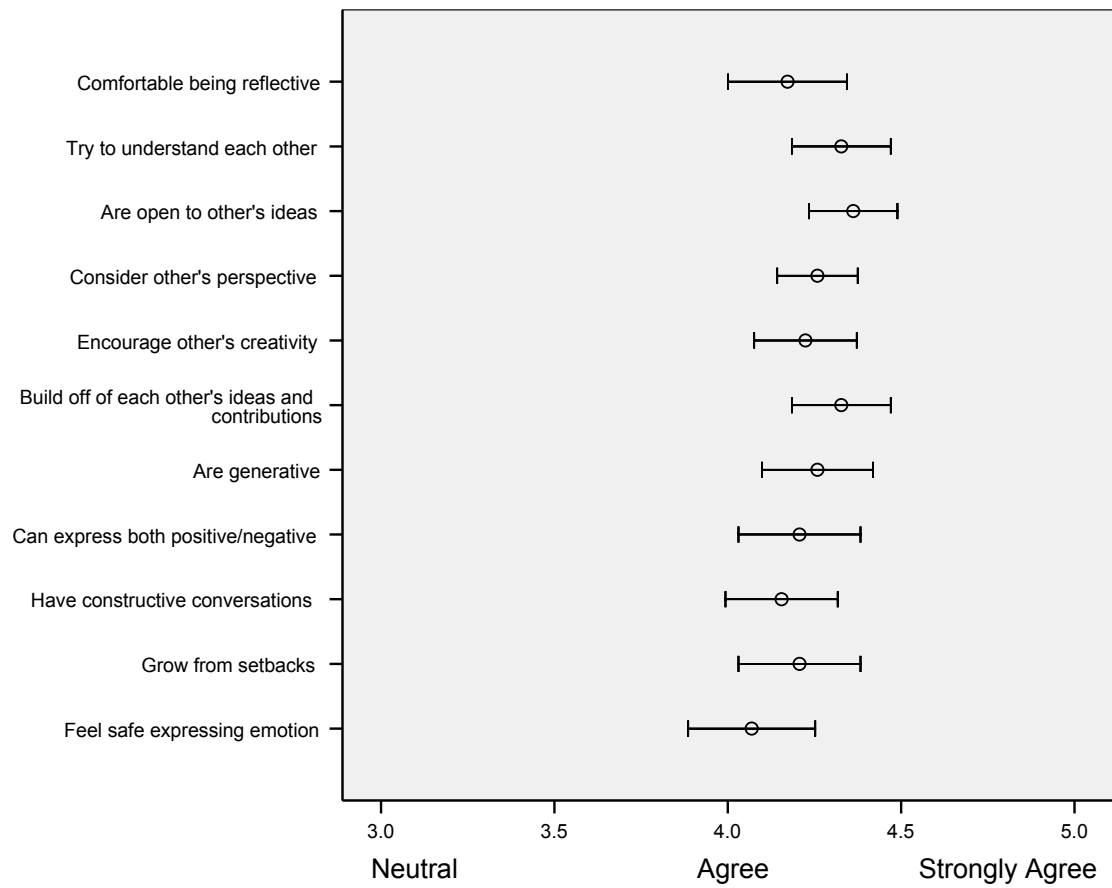
Figure 11. Mean item scores and confidence intervals for peer coaches' response to Subscale C1: The Coaching Relationship (among the unit peer coaches).
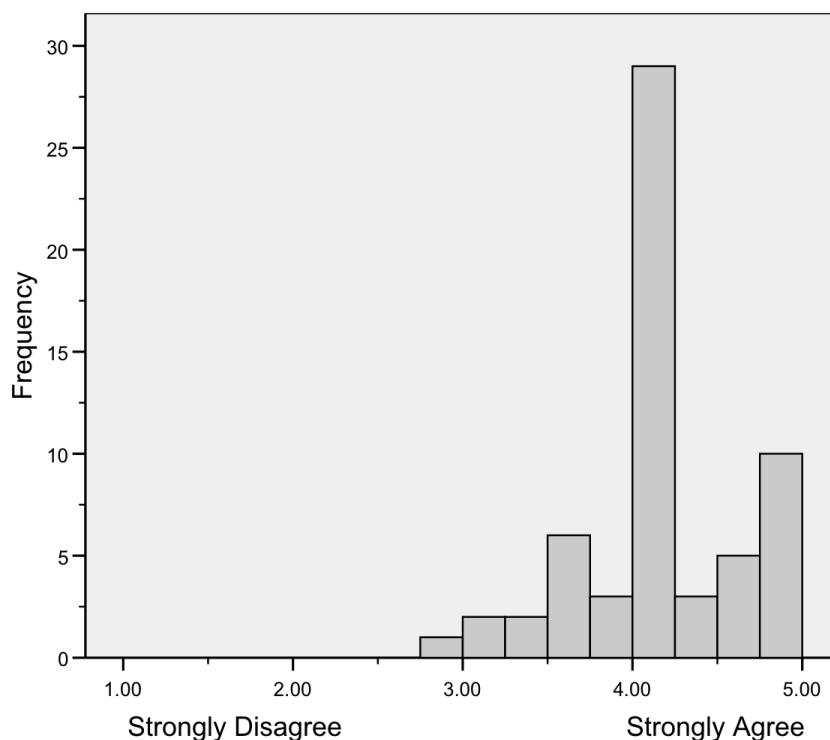
Figure 12. Distribution of overall rating by peer coaches for Subscale C2: The Coaching Relationship (between peer coaches and coachees).
Overall *M* = 4.1 (*SD* = 0.51).

The items for Subscale C2 (relationship between peer coaches and coachees) were generally rated high by the peer coaches (see Table 17). The variation in items was fairly consistent as shown by the error bars in Figure 13 and the standard deviations in Table 17. Items C2-01, "My coachees and I feel comfortable in sharing reflective 'best self' stories about our practice with each other," and statement C2-11, "My coachees and I feel safe in fully expressing emotions with one another," were the lowest rated items with a mean of 4.03 (*SD* = 0.71) and 4.05 (*SD* = 0.69), respectively. Item C2-02, "My coachees and I try to understand one another," was the highest rated item with a mean score of 4.23 (*SD* = 0.56). Items C2-03, "When we interact, we are open to listening to each other's ideas," and C2-06, "When we interact, we build off of each other's ideas and

contributions," tied for the second highest rated items, both with means of 4.21

($SD = 0.52$) and 4.21 ($SD = 0.58$), respectively.

Table 17

Peer Coaches' Responses to Part C2: The Relationship Subscale (Between the Peer Coach and Coachees)

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation	Skewness
C2-01	0	1	11	34	15	4.03	0.71	-0.34
C2-02	0	0	4	39	18	4.23	0.56	0.03
C2-03	0	0	3	42	16	4.21	0.52	0.25
C2-04	0	0	3	45	13	4.16	0.49	0.39
C2-05	0	0	6	42	13	4.11	0.55	0.07
C2-06	0	0	5	38	18	4.21	0.58	-0.05
C2-07	0	0	8	36	17	4.15	0.63	-0.12
C2-08	0	1	9	34	17	4.10	0.70	-0.44
C2-09	0	0	6	42	13	4.11	0.55	0.07
C2-10	0	0	7	38	16	4.15	0.60	-0.06
C2-11	0	1	10	35	15	4.05	0.69	-0.38
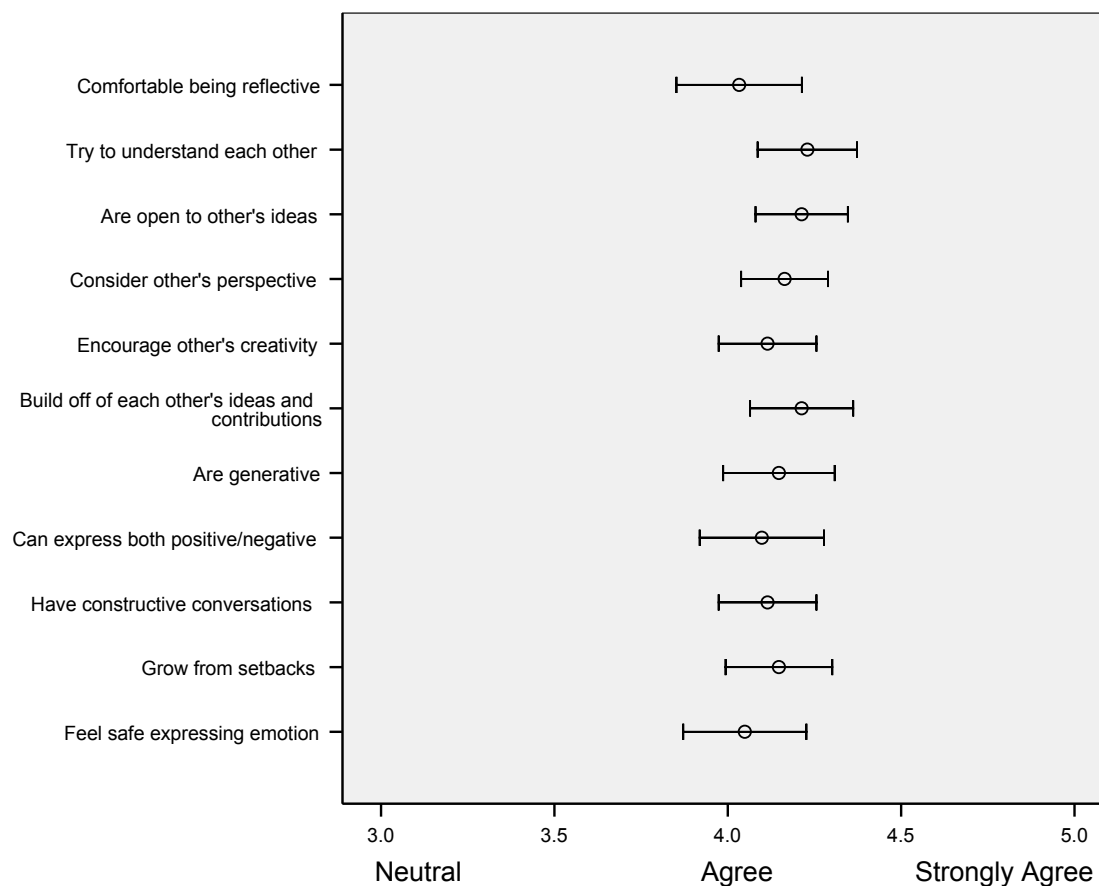
Figure 13. Mean item scores and confidence intervals for Subscale Peer Coaches Response to Subscale C2: The Coaching Relationship (between the peer coaches and coachees).

Peer coaches' rating for Subscale D. The eight items in Part D: Team Knowledge, Skills, and Innovation subscale, were combined to form an overall average rating for each peer coach participant ($n = 61$). The overall mean score was 4.1 ($SD = 0.54$) and a skewness statistic of 0.12. Overall, the minimum score was 2.75 and the maximum was 5.00. As can be seen from the histogram in Figure 14, the overall scores were generally high and clustered around the mean, indicating agreement by the peer coaches with the statements about the quality of the relationship between themselves as peer coaches and their coachees. The overall scores were generally high and clustered

around the mean, indicating agreement by peer coaches with statements about how the team manages knowledge creation and dissemination.
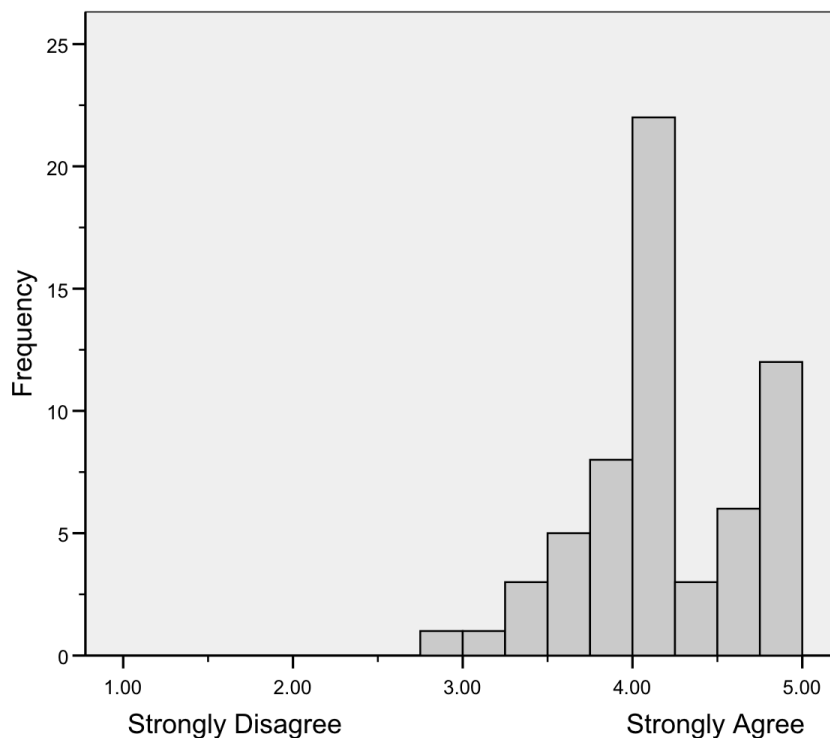
Figure 14. Distribution of overall rating by peer coaches for Subscale D: Team Knowledge, Skills and Innovation.
Overall *M* = 4.1 (*SD* = 0.54).

The items in Subscale D were generally rated high by the peer coaches (see Table 18). The variation in items was fairly consistent, as shown by the error bars in Figure 15 and the standard distributions in Table 18. Items D-06, "Members of our unit regularly share knowledge with other units working on improving the patient/family experience of care," and D-07, "My unit has systems in place to efficiently capture staff's knowledge for improving the patient/family experience," were the two lowest rated items in the Team Knowledge subscale with a mean score of 3.84 (*SD* = 0. 92) and D-07, and 3.97 (*SD* = .82), respectively. Item D-03, "Members of our unit actively talk with each other

and share knowledge," and D-02, "Members of our unit adapt our work to meet the patient/family individualized desires," were the two highest rated items with a mean of 4.3 (*SD* = 0.59) and 4.28 (*SD* = 0.55), respectively.

Table 18

Peer Coaches' Responses to Part D: Team Knowledge, Skills, and Innovation Subscale

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation	Skewness
D-01	0	0	6	37	18	4.20	0.60	-0.10
D-02	0	0	3	38	20	4.28	0.55	0.04
D-03	0	1	1	38	21	4.30	0.59	-0.67
D-04	0	0	5	37	19	4.23	0.59	-0.09
D-05	0	0	7	39	15	4.13	0.59	-0.03
D-06	1	4	13	29	14	3.84	0.92	-0.74
D-07	1	2	9	35	14	3.97	0.82	-1.08
D-08	0	0	8	31	22	4.23	0.67	-0.30
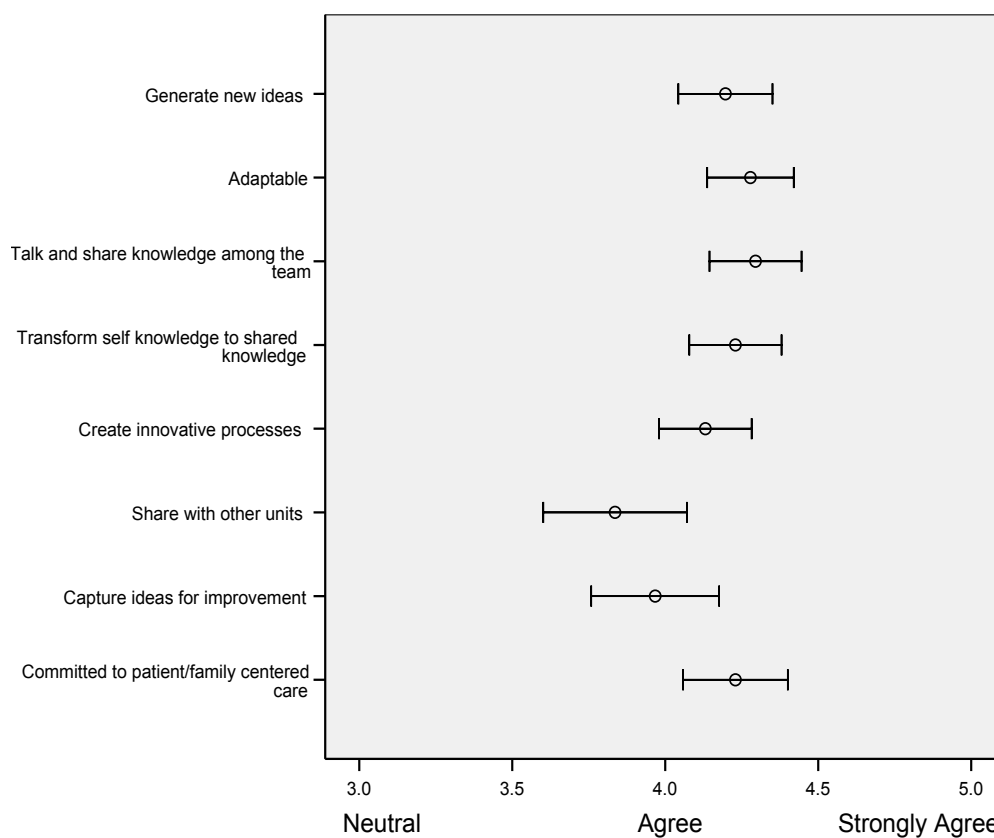
Figure 15. Mean item scores and confidence intervals for peer coaches' response to Subscale D: Team Knowledge, Skills, and Innovation subscale.

Peer Coaches' Responses for Part E Open Comment Question. Of the 61 staff coachees, 54% ($n = 34$) responded to Part E, the open-ended comment section. This section provided an opportunity for peer coaches to share any additional thoughts they had about their experience as a peer coach or their unit coaching process. The peer coaches' comments were generally very favorable although there were some negative, neutral, or mixed comments, described in Tables 19 and 20. Several comments also reflected hopes, dreams, or ideas for future planning (see Table 21). Five major advancing theme categories emerged, in descending order: enhanced team culture, personal growth, improved patient/family care, effective process, and appreciative of the opportunity.

Under each major advancing theme, 20 minor concepts emerged (see Table 19). One central constraining theme with five subthemes emerged concerning lack of or decreased time available to connect with coachees. Seven additional minor themes (three or less counts) emerged, including inability to attend the unit peer-coaches meeting and feeling uncomfortable connecting with their coachee (see Table 20). There was one mixed theme in that two respondents said they believed and admired the goals of peer coaching but believed it was an unrealistic process to implement. There were seven responses that fell under the general category of hopes or ideas for planning (see Table 21).

Table 19

Content Analysis and Count of Advancing Themes from the Peer Coaches Responses to the Open-Ended Question about Peer Coaching Process

Advancing themes	Count	Total
Enhanced team culture		
Closer/cohesive/comfortable/peer relationships	8	
Improved team/peer communication	5	
More positivity/energy/satisfaction in team	4	
Share more feelings/emotions/hardships of job	3	
Learn, share ideas, give feedback, positive & negative	3	23
Personal Growth		
More effective, interpersonal skills/positive communication, better relationship skills	5	
Can set example, role-model, inspire others, coach effectively	4	
More open-minded/aware/understanding of diverse beliefs/values	3	
Greater overall self-confidence	3	15
Improved Patient/family care		
See positive effect on quality of care/ better patient satisfaction results	8	
Observe better communication/positive interactions with patients	4	
Closer connections/holistic caring	3	15
Effective Process/Program		
Effective/great success/very helpful/positive/wonderful	8	
Practical tools	2	
Way to disseminate positive stories, ideas & practices to staff	2	
Way of getting both positive and negative input from all staff	1	13
Appreciate Opportunity		
For learning/development/growth	5	
To be in coaching role/program	4	
External coaching/education/guidance	4	13
Total		79

Note. This table reflects the responses from 34 peer coach participants who completed the final open-ended question. Some responses included multiple comments and themes.

Table 20

Content Analysis and Count of Mixed and Constraining Themes from Open-Ended Question

Mixed and Constraining themes	Count	Total
Mixed themes		2
Believe in goals but difficult to implement		
Constraining themes		
Lack or decreased/available time to connect with coachees		
Busy shift/no down-time	4	
Different work schedules	4	
Short-staffed/understaffing	3	
Meeting outside of work not possible	2	
Too many other changes/initiatives	1	14
Coachees nonresponsive to e-mails		3
Can't attend unit peer coach meetings		
Lack of child care	1	
Too busy on shift	1	2
Impossible to implement		2
Concept never "took off" on our unit		2
Hard to connect with coachees outside of work		2
Feel uncomfortable approaching coachees		1
Having concept of champions assumes others are not		1
Total		29

Table 21

Content Analysis of Planning Themes from Open-Ended Question

Planning themes	Count
Wish/Hope/Plan for	
Address staffing shortage	1
More time to focus on this project	1
Change meeting to every other month	1
Better agenda planning/follow-up expectations	1
Reduce number of coachees from four	1
Share more stories in short huddles	1
Discuss difficult patients, challenging situations more	1
Total	7

Note. Table 19 and 20 reflects the responses from 34 peer coach participants who completed the final open-ended question. Some responses included multiple comments and themes.

Research Question 2: Perspectives of the Staff Coachees

The results of the data, from the perspective of the managers, were presented in the three sections. First, questions unique to the coachees from Part A: General Characteristics and Part E: Demographics, was summarized. Second, the subscale results were provided from Part B: The Coaching Process, Part C2: The Coaching Relationships—between the peer coaches and their coachees, and Part D: Team Knowledge, Skills, and Innovation. Third, the written responses from the staff coachees to the open-ended comment section were summarized.

Questions unique to the staff coachees. In the staff coachees cohort of 102 respondents, 73.5% ($n = 74$) responded "yes" to the question of whether they had been networked to a peer coach, with 16.9% ($n = 17$) reporting "no," 9.9% ($n = 10$) responded that they "didn't know," and one respondent leaving this answer blank. The highest frequency of "no" and "don't know" responses came primarily from two units and accounted for just under half of the no/don't knows (12 out of 27). Seventy-seven percent reported that their peer service coach worked the same shift and 41.7% reported

that they worked the same weekend schedule. The frequency of communication between the peer coaches and the coachees reported from the perspective of the coachees is described in Figure 16. "Monthly" was the most frequent response ($n = 27$). The "never" category received 13 responses in this cohort in contrast to zero counts in the peer-coaching cohort.
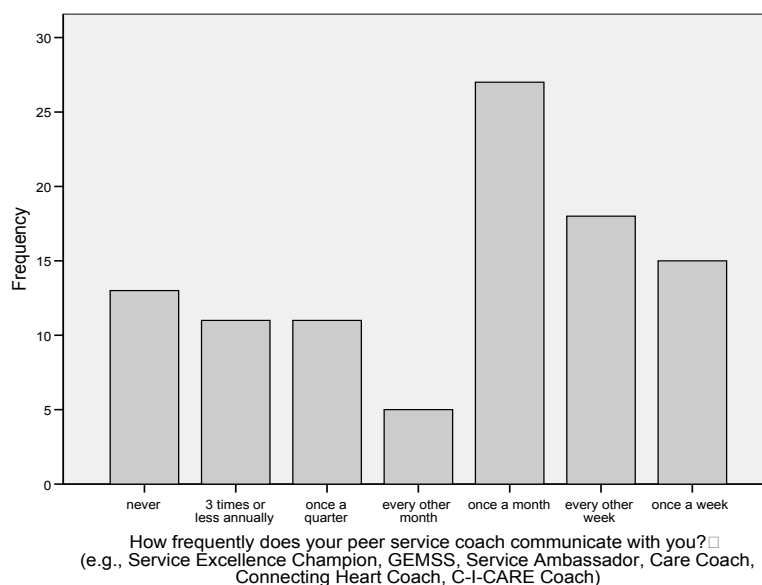
Figure 16. Frequency of communication with their peer coaches as reported by staff coachees.

Staff coachees' responses to Parts B, C, and D subscales. In the staff coachees cohort there were 102 completed subscale responses. In contrast to the peer coaches and the managers who responded to four subscales, the staff coachees were asked to complete only three subscales; Part B: The Peer Coaching Process, Part C-2: The Coaching Relationship (between the peer coach and coachees) and Part D: Team Knowledge, Skills, and Innovation.

Staff coachees' responses to Subscale B. The 16 items in Subscale B: The Peer Coaching Process, were combined to form an overall average rating for each of the

responding staff coachees. The overall mean was 3.62 (*SD* = 0.86) with a negative

skewness statistic of -0.86, indicating a few low scores from among the generally high

ratings. Overall, the minimum score was 1.00 and the maximum was 5.00. These ratings

portrayed dispersion throughout the scale range, from Strongly Disagree to Strongly

Agree, with visible clusters of scores around the Neutral and Agree options, as can be

seen in the histogram in Figure 17.
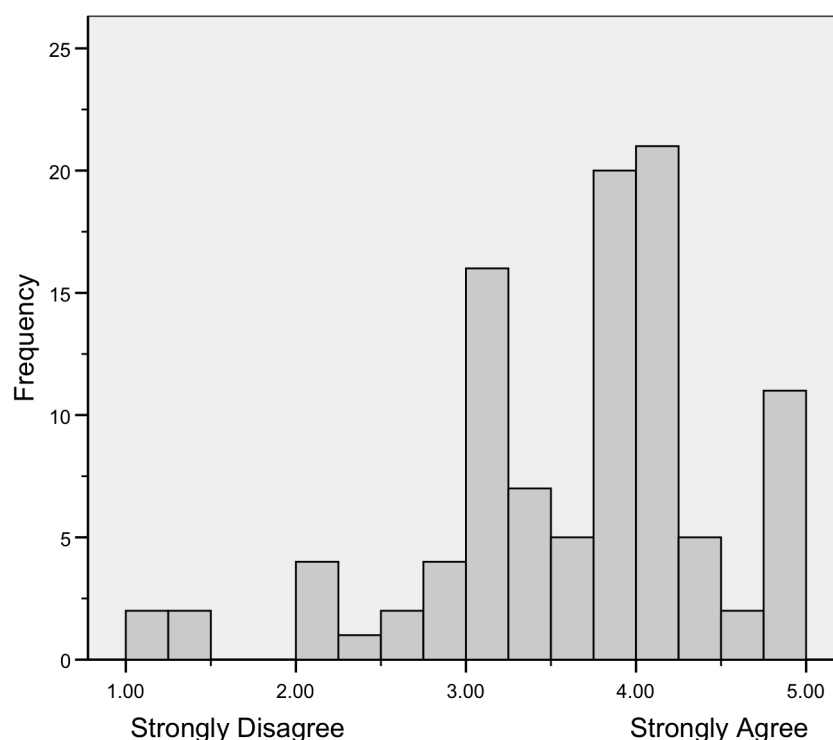
Figure 17. Distribution of the overall rating by the staff coachees for Subscale B: The
Peer Coaching Process. Overall *M* = 3.62 (*SD* = 0.86).

The 16 items in Subscale B were rated positively on average by the staff coachees

but they are lower overall than the ratings given by the peer coaches group. In addition

there was wider variation among responses of the staff coachees as seen by the error bars

in Figure 18 and the standard deviations in Table 22. Items B-05, "My peer coach has a

formal system in place to connect with me," and B-08, "He/she actively looks for ways to

encourage a reciprocal learning relationship," were the two lowest rated items in the scale

with a mean of 3.34 (*SD* = 0.91) and 3.48 (*SD* = 0.96), respectively. Items B-13,

"Improving my communication, relational and service skills makes me more effective at

my job," and B-14, "Helping our team develop positive communication, relational and

service skills benefits me directly," were the two items that received the highest ratings in

the subscale with a mean of 4.00 (*SD* = 0.93) and 3.94 (*SD* = 0.96), respectively (see

Table 22).

Table 22
*Staff Coachees' Responses to Part B: The Coaching Process Subscale (Coaching
Competencies and Behaviors)*

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation	Skewness
B-01	4	8	28	47	15	3.60	0.97	-0.72
B-02	4	8	28	47	15	3.60	0.97	-0.72
B-03	4	7	31	43	17	3.61	0.98	-0.63
B-04	4	9	28	48	13	3.56	0.96	-0.72
B-05	4	10	43	37	8	3.34	0.91	-0.41
B-06	4	7	27	48	14	3.61	0.95	-0.79
B-07	5	6	27	50	14	3.61	0.97	-0.88
B-08	4	10	33	43	12	3.48	0.96	-0.56
B-09	4	9	26	45	18	3.63	1.00	-0.69
B-10	4	7	31	42	18	3.62	0.99	-0.62
B-11	4	7	29	44	18	3.64	0.98	-0.68
B-12	4	9	30	42	17	3.58	1.00	-0.58
B-13	2	5	17	45	33	4.00	0.93	-0.97
B-14	2	6	20	42	32	3.94	0.96	-0.83
B-15	4	7	30	44	17	3.62	0.98	-0.66
B-16	4	8	28	47	15	3.59	0.97	-0.55
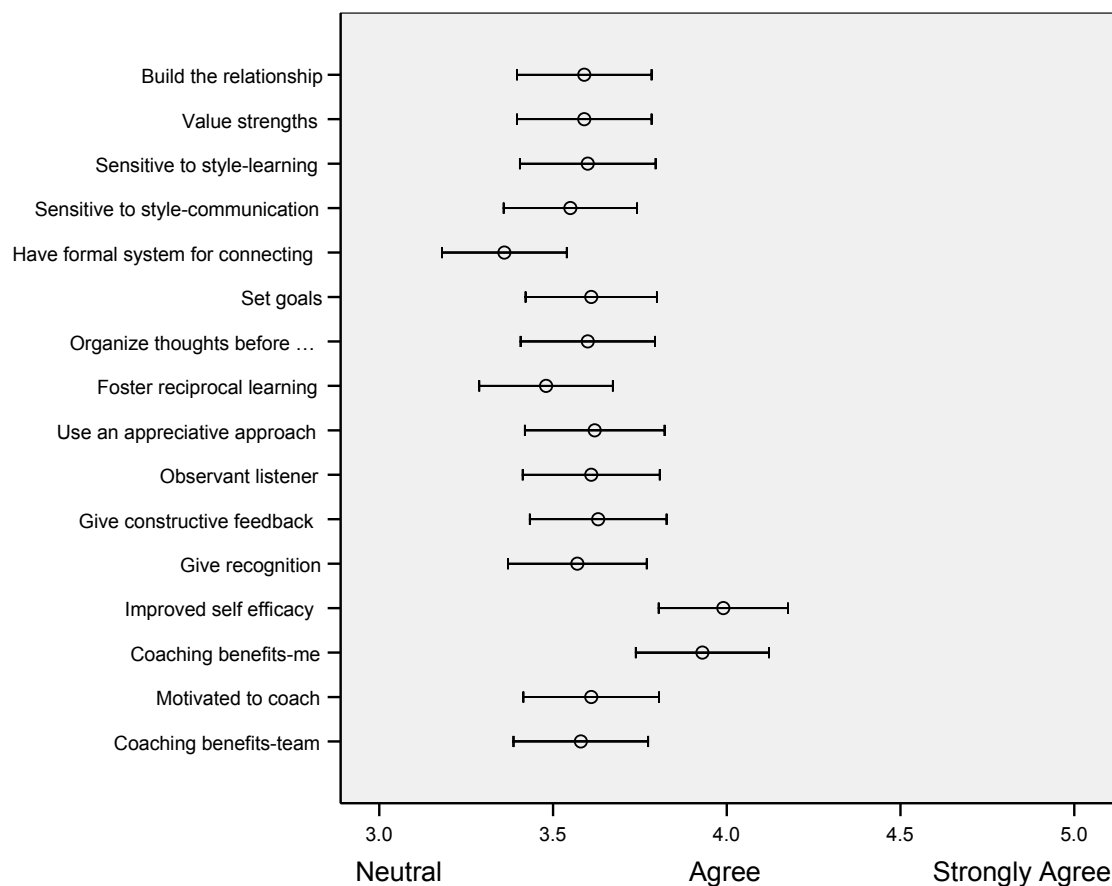
Figure 18. Mean item scores and confidence intervals for staff coachees' responses to Subscale B: The Peer Coaching Process.

Staff coachees' responses to Subscale C2. The 11 items in Subscale C2 measuring the coachees' perception of the coaching relationship they have with their peer coachees were combined to form an overall average rating for each of the responding staff coachees. The overall mean was 3.65 (*SD* = 0.85) with a negative skewness statistic of -0.86. Overall, the minimum score was 1.00 and the maximum score was 5.00. As can be seen in the histogram in Figure 19, the ratings are more dispersed around the mean with three respondents who responded Strongly Disagree to all items. These three respondents also responded "no" to the question asking if they had been networked to a peer coach.
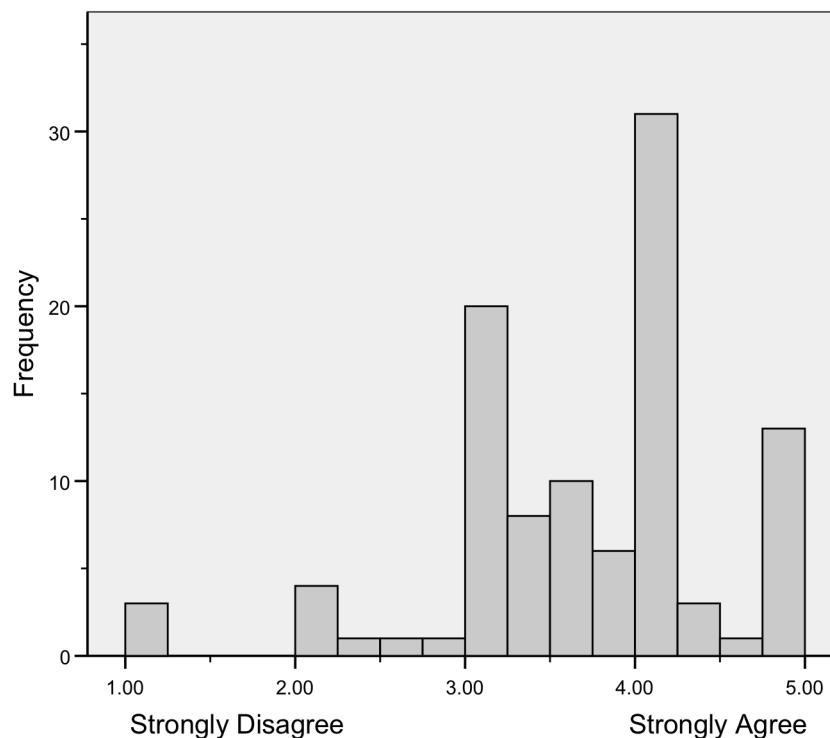
Figure 19. Distribution of overall rating by the staff coachees of Subscale C2: The Coaching Relationship (between peer coaches and staff coachees). Overall $M = 3.65$; ($SD = 0.85$).

The items were generally rated high (see Table 23). The variation in items was fairly consistent, as shown by the error bars in Figure 20 and the standard deviations in Table 23. Items C2-01, "We feel comfortable in sharing reflective 'best-self' stories with one another," and C2-08 "We feel safe in fully expressing emotions with one another," were the two statements rated the lowest with a mean of 3.53 ($SD = 0.95$) and 3.59 ($SD = 0.90$), respectively. Items, C2-03, "When we interact, we are open to listening to each other's ideas," and C2-02, "We try to understand one another," were the two statements rated the highest with a mean of 3.84 ($SD = 0.88$) and 3.78 ($SD = 0.93$).

Table 23

Staff Coachees' Responses to Part C2: The Relationship Subscale (Between the Peer Coach and Coachees)

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation	Skewness
C2-01	5	4	38	40	14	3.53	0.95	-0.63
C2-02	4	3	24	51	20	3.78	0.93	-0.99
C2-03	3	2	24	52	21	3.84	0.88	-0.95
C2-04	3	4	28	51	16	3.72	0.88	-0.81
C2-05	3	6	29	49	15	3.66	0.91	-0.72
C2-06	3	6	27	47	17	3.69	0.93	-0.73
C2-07	3	5	30	49	15	3.67	0.89	-0.73
C2-08	4	4	35	46	13	3.59	0.90	-0.72
C2-09	4	4	34	47	13	3.60	0.90	-0.75
C2-10	4	4	27	52	14	3.67	0.91	-0.94
C2-11	4	7	41	37	13	3.47	0.94	-0.42
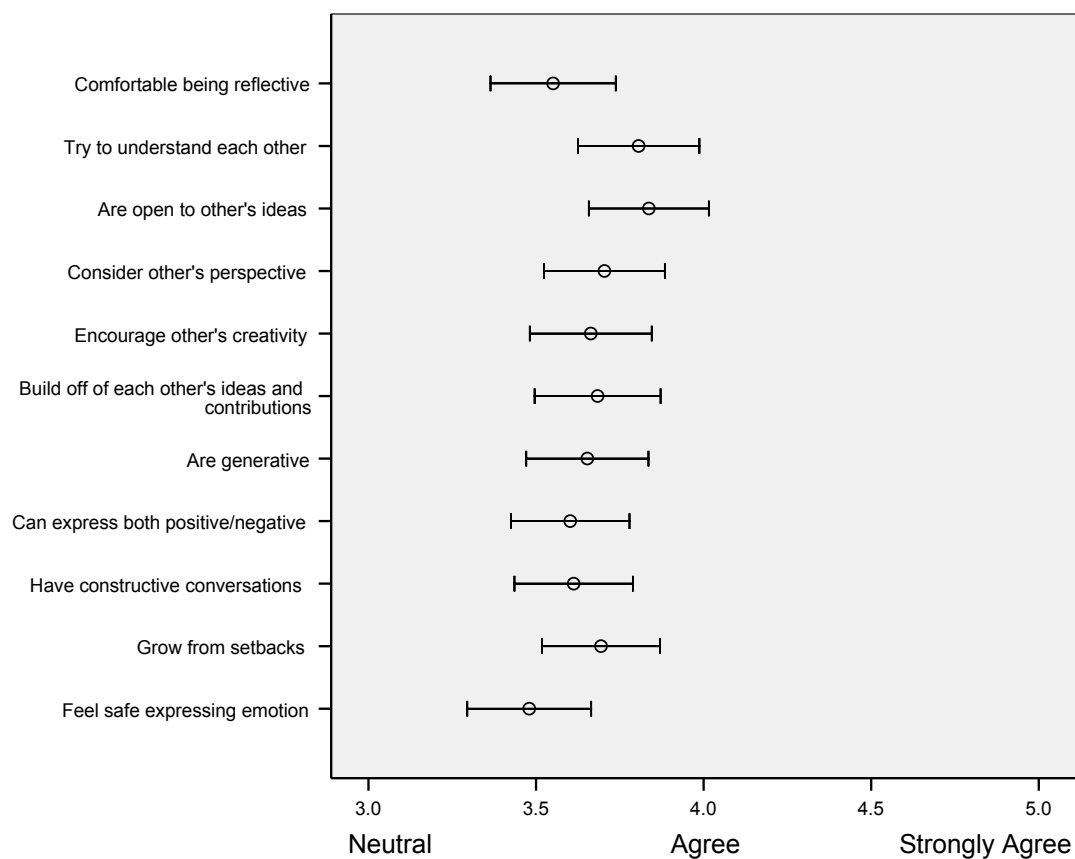
Figure 20. Mean item scores and confidence intervals for staff coachees' responses to Subscale C2: The Coaching Relationship (between peer coaches and staff coachees).

Staff coachees' responses to Subscale D. The eight items in Subscale D measuring the staff coachees' perception of how the team creates and disseminates knowledge, were combined to form an overall average for each of the staff coachees. The overall mean was 3.90 (SD = 0.70) with a negative skewness statistic of -0.67. As can be seen from the histogram in Figure 21, the overall scores were generally high and clustered around the mean, indicating agreement by the peer coaches with the statements about how the team manages knowledge creation and dissemination. There are a few ratings below neutral, including one person who strongly disagreed with every item. This individual also responded "no" for if they were networked to a peer coach.
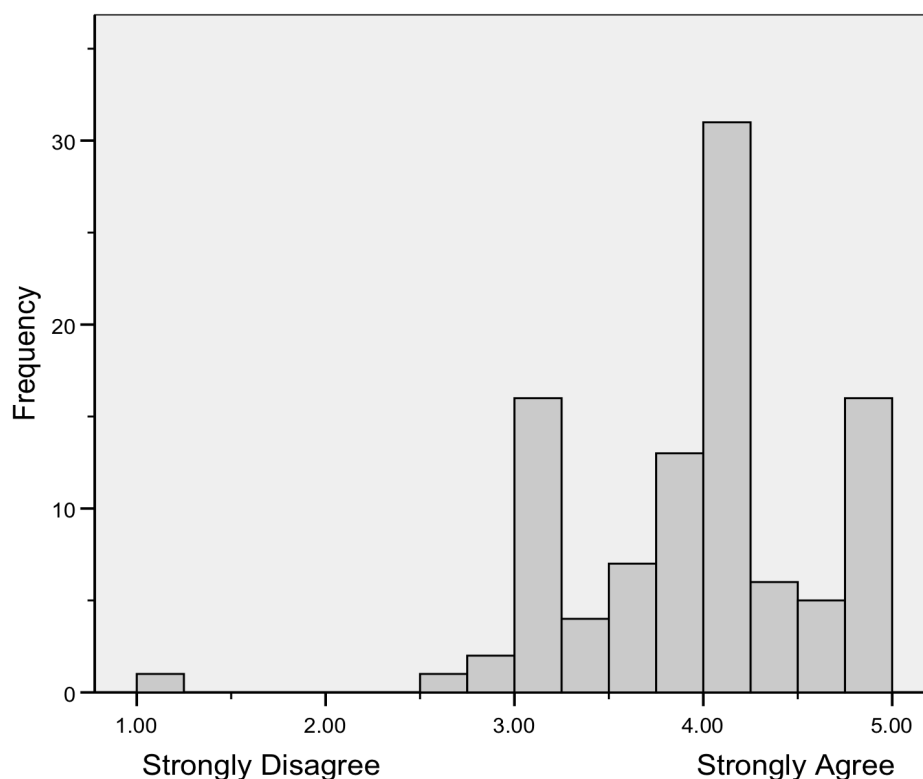
Figure 21. Distribution of the overall rating by the staff coachees for Subscale D. Team Knowledge, Skills, and Innovation. Overall M = 3.90 (SD = 0.70).

The items were generally rated high (see Table 24). The variation in items was fairly consistent, as shown by the error bars in Figure 22 and the standard deviations in Table 24. Items D-06, "Members of our unit regularly share knowledge with other units working on improving the patient/family experience," and D-07, "My unit has systems in place to efficiently capture staff's knowledge for improving the patient/family experience," were rated the lowest. Items D-03, "Member of our unit actively talk with each other and share knowledge," and D-08, "My unit is committed to implement new ideas and processes for patient/family centered care," were rated the highest by the staff coachees.

Table 24

Staff Coachees' Responses to Part D: Team Knowledge, Skills, and Innovation Subscale

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation	Skewness
D-01	1	2	23	54	22	3.92	0.78	-0.63
D-02	1	1	19	58	23	3.99	0.74	-0.74
D-03	1	0	18	58	25	4.04	0.72	-0.72
D-04	1	0	24	56	21	3.94	0.73	-0.54
D-05	1	4	25	50	22	3.86	0.83	-0.57
D-06	2	12	24	45	19	3.66	0.98	-0.55
D-07	2	5	26	48	21	3.79	0.89	-0.68
D-08	1	2	20	52	26	3.99	0.79	-0.72
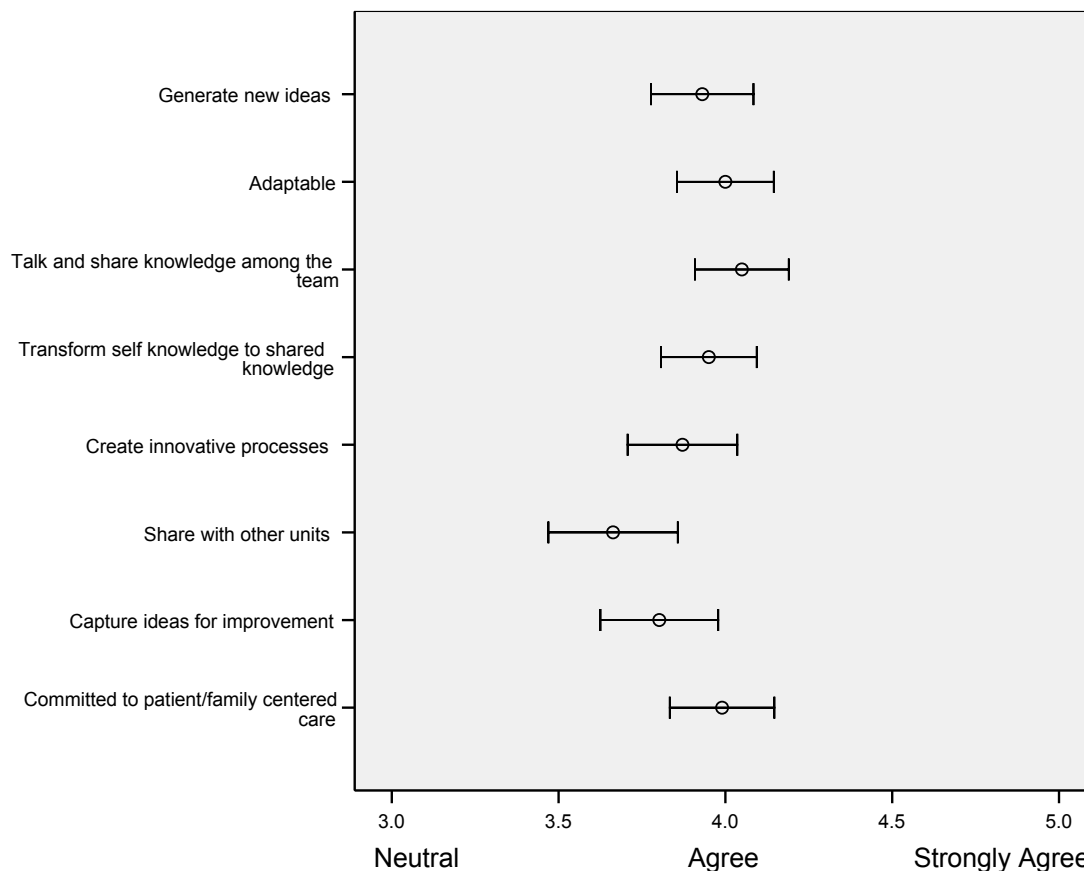
Figure 22. Mean item scores and confidence intervals for staff coachees' Subscale D: Team Knowledge, Skill and Innovation.

Staff coachees' responses to Part F open-ended comment. A little more than one third (*n* = 34) of the 102 staff coachees responded to the open-comment section. In general the comments were more neutral about the process, although there were both very positive and very negative responses. Four main positive or advancing themes emerged with 11 subthemes in these main themes (see Table 25). The major advancing themes in descending order were improvement in unit/team culture, appreciation for hospitalwide C-ICARE training, impressed with peer coaches, peer-coach process is going well, and three additional minor themes with one count each were identified and further described in Table 25. There were three major constraining themes, with 14 subthemes that

emerged in each of the core categories In addition three minor themes (one count each) were identified and included: positive patient outcomes, appreciation for management, and improved self-confidence (see Table 26). The main constraining themes were don't know about this process, peer coach's style/effectiveness, and C-ICARE training. One mixed theme emerged: peer coaching is a good idea but difficult to connect with my coach; and one planning theme was suggested: peer coaches and coachees should be matched by shift schedule.

Table 25

Content Analysis and Count of Advancing Themes from Staff Coachees' Responses to Open-Ended Question

Advancing themes	Count	Total
Impressed with the peer coaches		
Commitment/reach-out	3	
Effective/knowledgeable	2	
Good role model	2	
Approachable/supportive/encouraging	3	10
Observed the unit culture improve		
More positive	3	
Better teamwork/cooperation	2	
Better communication	2	
More patient focused/positive patient outcomes/satisfaction	2	9
Peer Coaching process		
Great/excellent/going well/love it	4	
Improves communication/self-confidence	1	4
Total Peer Coaching		23*
Other Themes		
Appreciate C-ICARE training**		
Great, excellent	2	
Helpful that training includes whole hospital/doctors/not just nurses	2	4
General appreciation for unit manager	2	2
Total Other		6

Note. This table reflects the responses from 34 staff coachees' who completed the final open-ended question. Some responses included more than one theme. *C-ICARE was a medical-centerwide service-training program, originally taught by managers, but also included training by unit peer coaches on some units; however this was excluded from the total count of advancing themes for peer coaching.

Table 26

Content Analysis and Count of Staff Coachees' Responses and Constraining, Mixed,
Planning Themes from Open-Ended Question

Constraining themes	Count	Total
Peer Coach Style/Effectiveness		
Only heard from my coach once	3	
My coach is overbearing, intrusive	1	
Is intimidated by me	1	
Doesn't reach out	1	
Not an effective role model	1	
Too casual, not focused on goals	1	
Implies I am not good enough	1	
Not sincere	1	10
Don't Know		
Who my peer coach is	3	
What this is about/if our unit is doing	3	6
Total		16
Other Subjects		
C-ICARE Training*		
Too scripted, robotic	2	
On my unit was just a video/paper to fill out/not collaborative	2	
Top down from management	1	
Implies we were not good enough before	6	
Professional Roles Based Model/pay structure – dissatisfied	1	1
Total		7
Mixed Themes/Planning Themes		
Good idea but hard to connect with my coach because varying schedules/other initiatives.	2	2
Should match peer coaches up with coachees on same shift schedule	1	1
Total		3

Note. This table reflects the responses from 34 staff coachees who completed the final open-ended comment section. *Some comments included multiple themes. C-ICARE was a medical-centerwide service-training program, originally taught by managers but also included the involvement of some unit peer coaches; **Other comments were unrelated to the peer-coaching process.

Research Question 3: Perspective of the Managers

The results of the data, from the perspective of the managers, were presented in the three sections. First, questions unique to the managers from Part A: General Characteristics and Part E: Demographics were summarized. Second, the subscale results were provided from Part B: The Coaching Process, Part: The Coaching Relationships—among the peer coaches' group and Part C2: The Coaching Relationships—between the peer coaches and their coachees, and Part D: Team Knowledge, Skills, and Innovation. Third, the written responses from the managers to the open-ended comment section were summarized.

Responses to manager-specific questions from Parts A and E. Of the 24 managers, 83% reported they had participated in the service peer-coaching process for 1 year or more, 12.5% reporting 6 months to just under 1 year. Ninety-two percent reported having a unit coaches meeting monthly; 67% responded that they attend the meeting on a monthly basis, with 16.7% reporting attending every other month, 12.5% three times a year or less, and one manager reported never attending. In a "check all that applies" response, 13 responded that a staff nurse usually chairs the monthly peer-coaches service meeting, whereas nine responded that a manager usually chairs, and 12 stated an assistant manager usually chairs. Sixty-seven percent ($n = 16$) responded "yes" to the question of whether each of the peer coaches are assigned to a specific manager for mentoring, 16.7% said "no" ($n = 4$), and 16.7% ($n = 4$) did not know. The average number of peer coaches mentored by a manager was 3.9 ($SD = 2.7$). Almost half the managers responded that they check in monthly with the peer coaches on their coaching progress, while 8.7% check in weekly (see Figure 23).
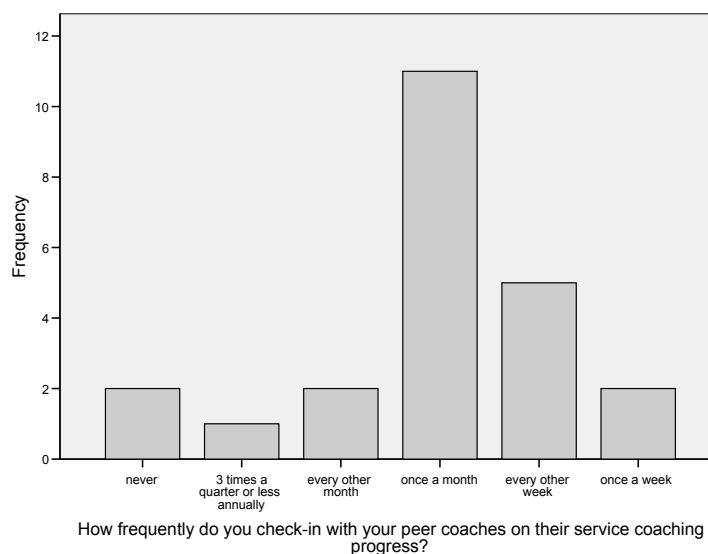
Figure 23. Distribution of manager response to how often they check-in with the peer coaches they are mentoring.

Managers' responses to Parts B, C, and D subscales.

Responses for Subscale B. The 16 items in Subscale B: The Coaching Process were combined to form an overall average rating for each manager participant. The overall mean was 4.45 (*SD* = 0.36) with a negative skewness statistic of -0.43. Overall, the minimum mean score was 3.81 and the maximum score was 5.00. As can be seen from the histogram in Figure 24, the overall scores were generally high and clustered around the mean, indicating agreement by the managers with the statements about their coaching/mentoring behaviors and competencies.
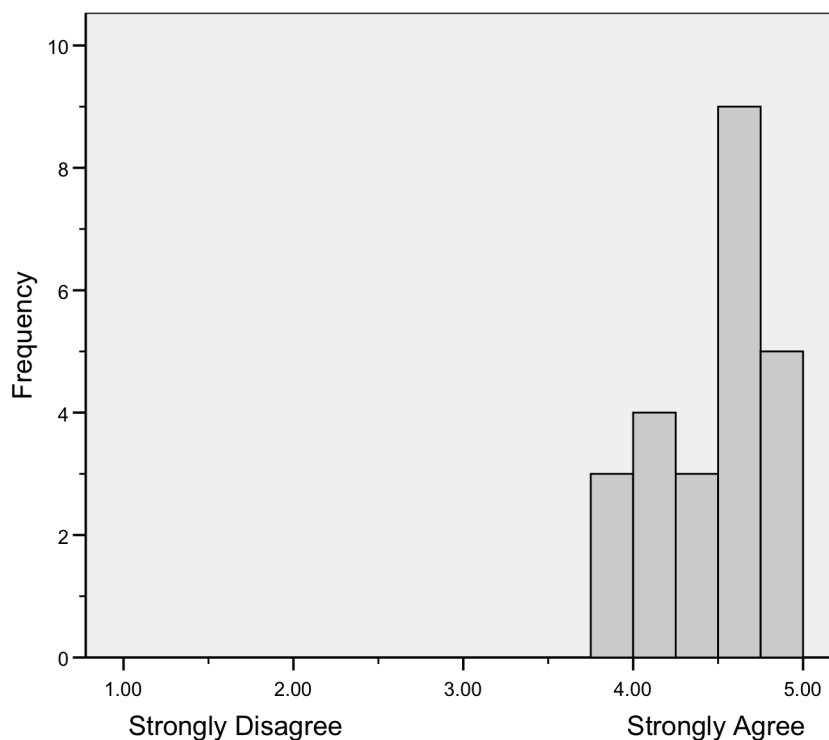
Figure 24. Distribution of overall responses by managers to Subscale B. The Coaching Process (managers to peer coaches). Overall $M = 4.45$ ($SD = 0.36$)

The 16 items in Subscale B were rated high by the mangers (see Table 27). The variation in items was fairly consistent, as shown by the error bars in Figure 25 and the standard deviations in Table 27. Item B-05, "I have a formal system in place to connect with my coachees," and B-06, "I am able to help the peer coaches focus their interactions with their coachees on unit goals for communication, relational and service skills," scored lowest, with mean scores of 3.57 ($SD = 0.84$) and 4.0 ($SD = 0.66$), respectively. Items B-13, "Improving my own communication, relational, and service skills makes me more effective at my job," and B-15, "I am highly motivated to develop a good service peer coaching process on our unit," both scored second highest with a mean score of 4.67 ($SD = 0.48$).

Table 27

Managers' Responses to Part B: The Coaching Process Subscale (Coaching Competencies and Behaviors)

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation	Skewness
B-01	0	0	0	12	12	4.50	0.51	0.00
B-02	0	0	0	8	16	4.67	0.48	-0.76
B-03	0	0	0	10	14	4.58	0.50	-0.36
B-04	0	0	0	8	16	4.67	0.48	-0.76
B-05	0	2	9	9	3	3.57	0.84	0.03
B-06	0	0	5	14	5	4.00	0.66	0.00
B-07	0	0	3	13	8	4.21	0.66	-0.24
B-08	0	0	1	16	7	4.25	0.53	0.24
B-09	0	0	0	12	12	4.50	0.51	0.00
B-10	0	0	0	12	12	4.50	0.51	0.00
B-11	0	0	0	11	13	4.54	0.51	-0.18
B-12	0	0	0	9	15	4.63	0.49	-0.55
B-13	0	0	0	7	17	4.71	0.46	-0.98
B-14	0	0	0	9	15	4.63	0.49	-0.55
B-15	0	0	0	8	16	4.67	0.48	-0.76
B-16	0	0	1	10	13	4.50	0.59	-0.69
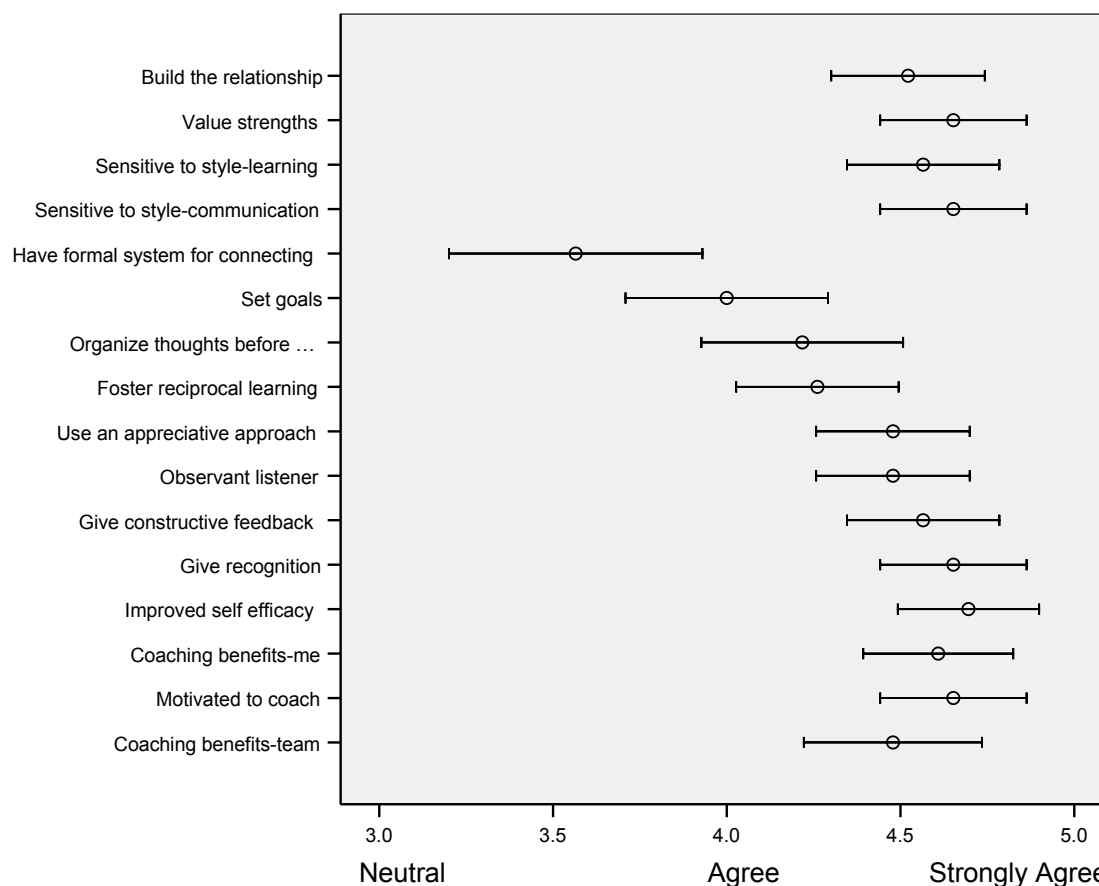
Figure 25. Mean item scores and confidence intervals for manager responses to Subscale B: The Coaching Process (between manager and peer coaches).

Managers' responses for Subscale C1. The 11 items in Subscale C1: The

Coaching Process were combined to form an overall average rating for each manager

participant. The overall mean was 4.3 ($SD = 0.55$) with a negative skewness statistic

of -0.43. Overall, the minimum mean score was 3.00 and the maximum score was 5.00.

As can be seen from the histogram in Figure 26, the overall scores were generally high

and clustered around the mean, indicating agreement by the managers with the statements

about the quality of the relationship among their unit peer coaches.
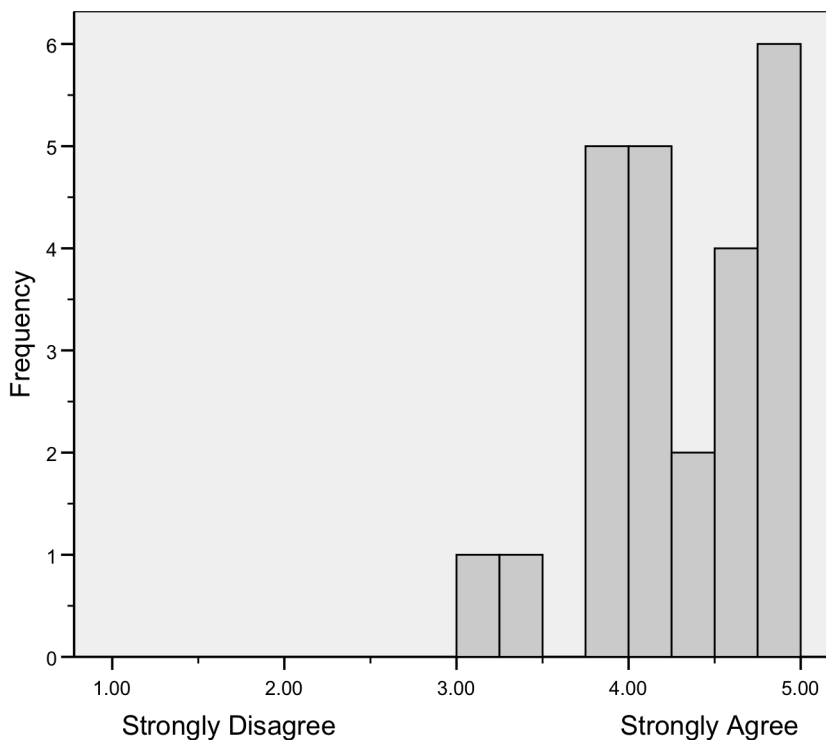
Figure 26. Distribution of overall rating of managers' responses to Subscale CI: The Coaching Relationship among the peer coaches group. Overall *M* = 4.3 (*SD* = 0.55).

The managers' perception of the quality of the relationship among the peer-coaches group was measured by the items in the C1 subscale and were generally rated high (see Table 28). The variation in the items was fairly consistent, as shown by the error bars in Figure 27 and in the standard deviations reported in Table 28. Item C1-11, "We feel safe in fully expressing emotions with one another," although still rated high, received the lowest rating by the managers with a mean score of 4.04 (*SD* = 0.86). Items C1-02, "We try to understand one another," and C1-03 "When we interact, we are open to listening to one another," both scored highest with mean scores of 4.46 (*SD* = 0.59).

Table 28

Managers' Responses to Part C1: The Relationship Subscale (Among the Unit Peer Coaches Group)

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation	Skewness
C1-01	0	0	2	11	11	4.38	0.65	-0.54
C1-02	0	0	1	11	12	4.46	0.59	-0.53
C1-03	0	0	1	11	12	4.46	0.59	-0.53
C1-04	0	0	1	14	9	4.33	0.56	-0.06
C1-05	0	0	1	13	10	4.38	0.58	-0.21
C1-06	0	0	2	11	11	4.38	0.65	-0.54
C1-07	0	0	2	11	11	4.38	0.65	-0.54
C1-08	0	1	3	12	8	4.13	0.80	-0.80
C1-09	0	1	3	11	9	4.17	0.82	-0.85
C1-10	0	1	2	14	7	4.13	0.74	-0.91
C1-11	0	1	5	10	8	4.04	0.86	-0.53
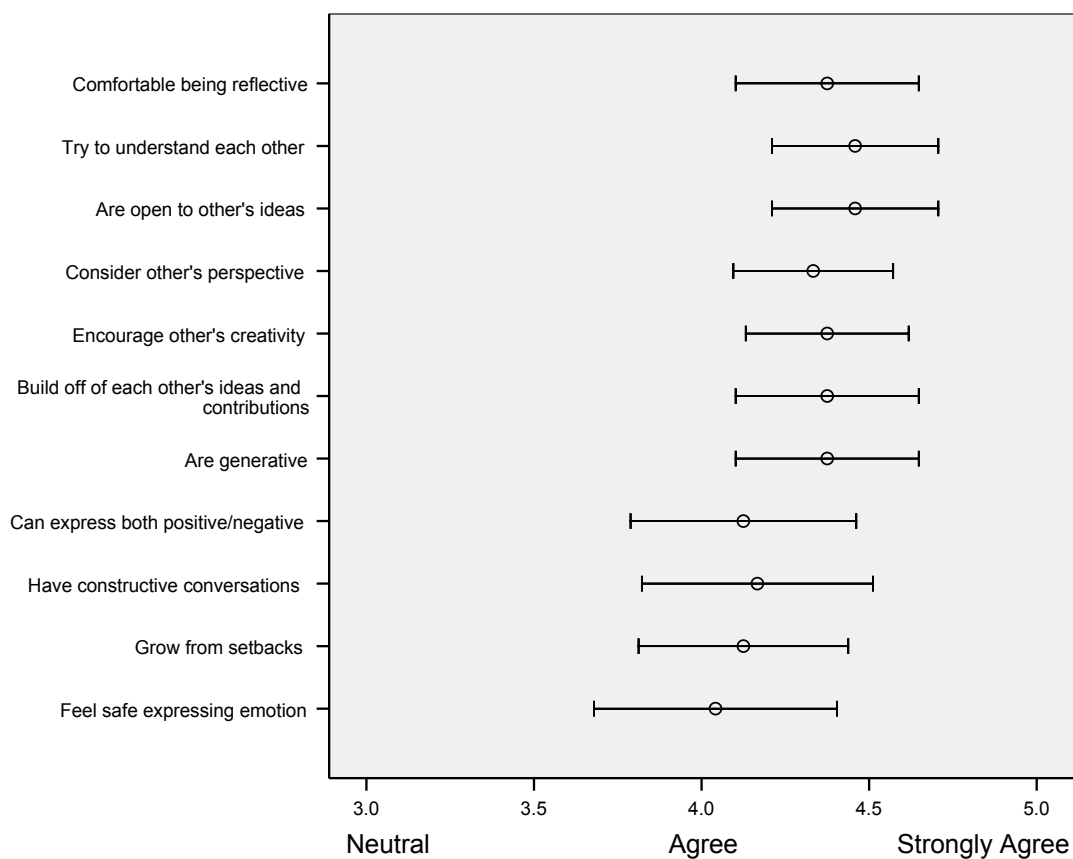
Figure 27. Mean item scores and confidence intervals for managers' responses to Subscale C1: The Coaching Relationship (among the peer coaches).

Managers' responses for Subscale C2. The 11 items in Subscale C2: The

Coaching Relationship, that measured the perception by the manager of the relationship

between the peer coaches and their coachees, were combined to form an overall average

rating for each manager respondent. The overall mean was 4.0 ($SD = 0.62$) with a

negative skewness statistic of -0.23. Overall, the minimum mean score was 2.45 and the

maximum score was 5.00. As can be seen from the histogram in Figure 28, the overall

scores were generally high and clustered around the mean, indicating general agreement

by the managers with the statements about their perception of the quality of the

relationship between their unit peer coaches and staff coachees. Only one rating fell

below neutral.
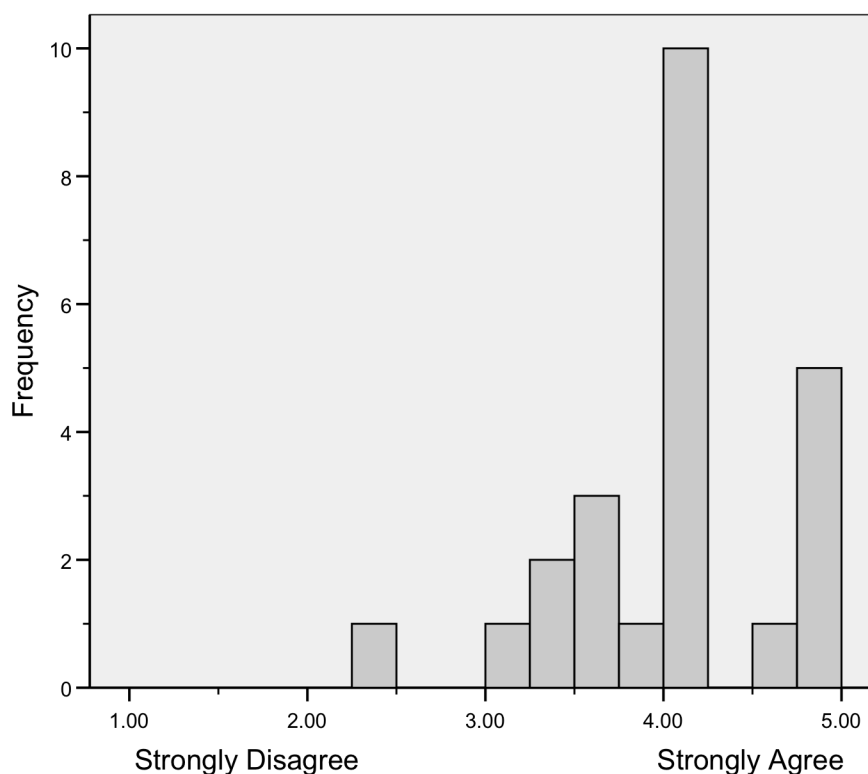
Figure 28. Distribution of overall rating by managers of Subscale C2: The Coaching
Relationship (peer coaches to coachees). Overall $M = 4.0$ ($SD = 0.62$).

The items for Subscale C2 (perception by the manager of the relationship between peer coaches and coachees) were generally rated high by the managers (see Table 29). The variation in items was fairly consistent, as shown by the error bars in Figure 29 and the standard deviations in Table 29. Items C2-08, "They feel safe in expressing both positive and difficult feelings," and statement C2-11, "They feel safe in fully expressing emotions with one another," were the lowest rated items with a mean of 3.75 ($SD = 0.94$) and 3.38 ($SD = 0.96$), respectively. Item C2-02 "The peer coaches and their coachees try to understand one another," was the highest rated item with a mean score of 4.17 ($SD = 0.56$).

Table 29
Managers' Responses to Part C2: The Relationship Subscale (Between the Peer Coach and Coachees)

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation	Skewness
C2-01	0	1	2	15	6	4.08	0.72	-0.90
C2-02	0	0	2	16	6	4.17	0.56	0.06
C2-03	0	0	3	15	6	4.13	0.61	-0.06
C2-04	0	0	2	18	4	4.08	0.50	0.20
C2-05	0	0	3	15	5	4.09	0.60	-0.01
C2-06	0	0	3	15	6	4.13	0.61	-0.06
C2-07	0	1	2	14	6	4.09	0.73	-0.90
C2-08	0	3	5	11	5	3.75	0.94	-0.47
C2-09	0	2	1	15	6	4.04	0.81	-1.16
C2-10	0	1	3	14	5	4.00	0.74	-0.74
C2-11	0	3	4	11	6	3.83	0.96	-0.60
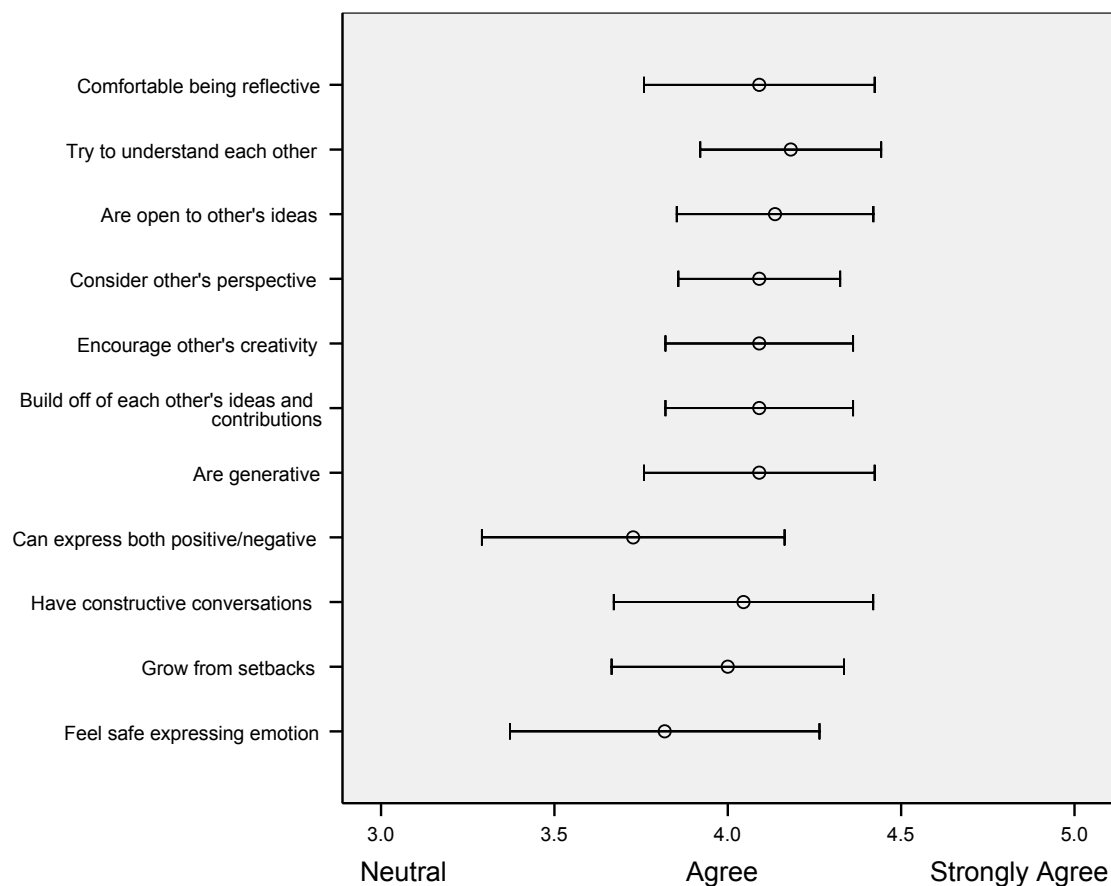
Figure 29. Mean item scores and confidence intervals for responses by managers to Subscale C2: The Coaching Relationship (between the peer coaches and the coachees).

Managers' responses for Subscale D. The 8 items in Subscale D: Team

Knowledge, Skills, and Innovation were combined to form an overall average rating for

each manager participant. The overall mean was 4.25 (*SD* = 0.62) with a negative

skewness statistic of -1.65. Overall, the minimum mean score was 2.14 and the

maximum score was 5.00. As can be seen from the histogram in Figure 30, the overall

scores were generally high and clustered around the mean, indicating agreement by the

managers with the statements about their perception of the quality of the relationship

between their unit peer coaches and staff coachees. Two ratings were below neutral.
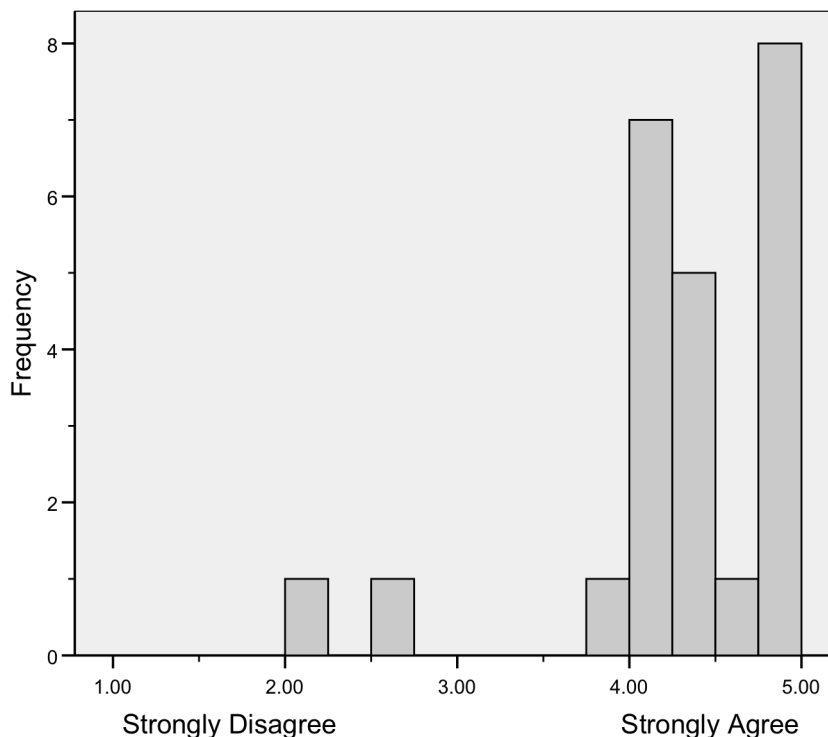
Figure 30. Distribution of overall rating by managers for Subscale D. Team Knowledge, Skills, and Innovation. Overall $M = 4.25$ ($SD = 0.62$)

The items in Subscale D were generally rated high by the managers (see Table 30). The variation in items was fairly consistent, as shown by the error bars in Figure 31. Items D-06, "Members of our unit regularly share knowledge with other units working on improving the patient/family experience of care," and D-07, "My unit has systems in place to efficiently capture staff's knowledge for improving the patient/family experience," were the two lowest rated items in the Team Knowledge subscale with a mean score of 3.83 ($SD = 1.05$) and D-07, and 4.0 ($SD = .93$), respectively. Item D-02, "Members of our unit adapt our work to meet the patient/family individualized desires," and D-08, "My unit is committed implement new ideas and processes for patient/family centered care," were the two highest rated items with a mean of 4.54 ($SD = 0.51$) and 4.52 ($SD = 0.51$), respectively.

Table 30

Managers' Responses to Part D: Team Knowledge, Skills, and Innovation Subscale

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation	Skewness
D-01	0	1	1	7	15	4.50	0.78	-1.80
D-02	0	0	0	11	13	4.54	0.51	-0.18
D-03	1	1	1	8	13	4.29	1.04	-1.91
D-04	1	1	0	13	9	4.17	0.96	-1.95
D-05	0	1	1	13	9	4.25	0.74	-1.15
D-06	1	2	3	12	6	3.83	1.05	-1.12
D-07	1	1	1	15	6	4.00	0.93	-1.75
D-08	0	0	0	11	12	4.52	0.51	-0.09
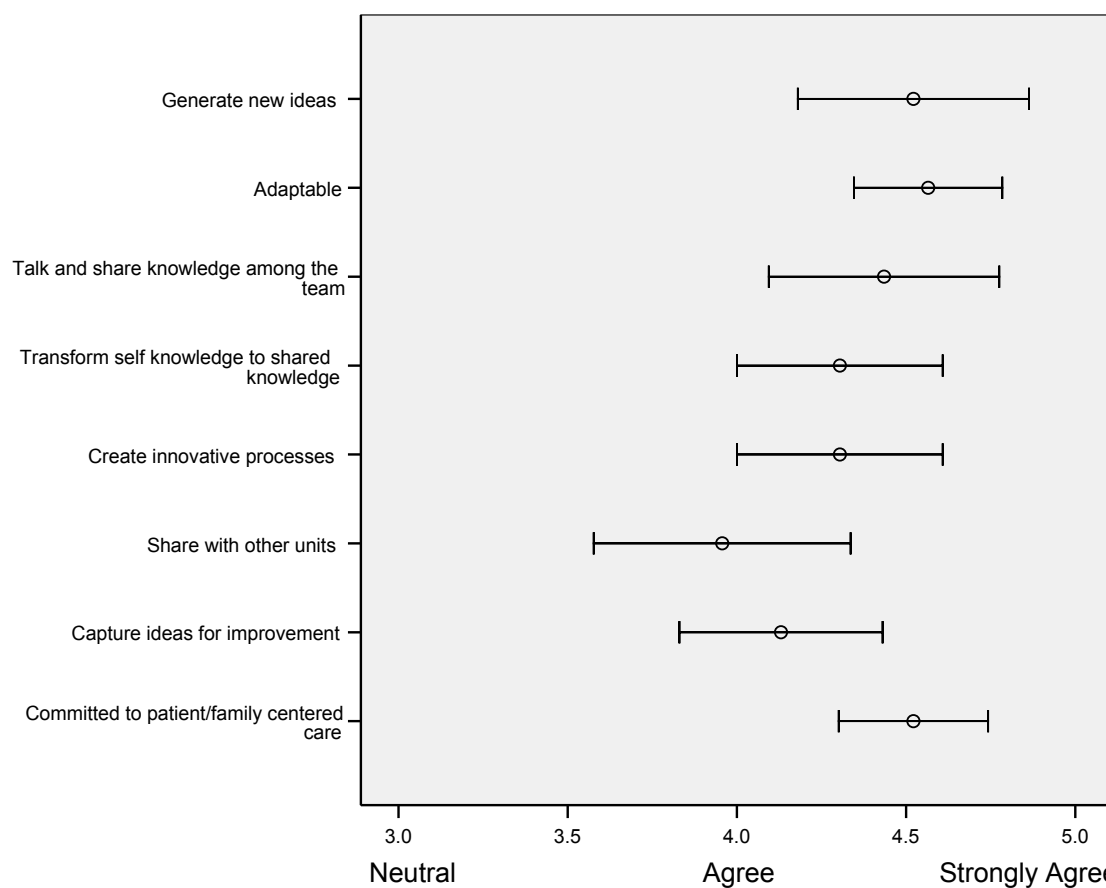
Figure 31. Manager responses mean item scores and confidence intervals for Subscale D.

Managers' responses to Part F open-ended comment. Of the 24 staff

managers, 58% (*n* = 14) responded to the open-comment section (see Table 31). The

comments were very favorable to the peer-coaching experience. Seven major advancing

themes with 21 minor subthemes emerged and included in descending order observed

positive change in team culture, impressed by the peer coaches, the process is effective,

improved the patient-satisfaction scores, improved quality of relationships, way to

identify and develop leaders, and appreciative of external advisement. Two constraining

themes emerged: lack of time and availability to connect with peer coaches, and peer

coaches connecting with their coachees and the change process itself took a long time and

was sometimes frustrating. One planning theme emerged as an intention to continue the

process to provide groundwork for complimentary organizational initiatives.

Research Question 4: What is the Relationship Among the Subscales?

The data that answered Research Question 4 were analyzed and presented in these

sections. First, the relationships among subscales began with a description of the factor

analysis and concluded with scatterplots and correlations. The second section provided

predictive analysis about Subscale Part D: Team Knowledge, Skills, and Innovation,

including regression analysis for all participants and regression analysis for coaches and

managers. The third section provided a comparison of the cohorts based on the subscale

ratings using one-way ANOVA's with post hoc comparisons and means plots, as well as

a *t*-test comparison of coaches and managers for Subscale Part C1: The Coaching

Relationships—among the peer-coaches group.

Table 31

Content Analysis and Count of Advancing, Constraining and Planning Themes from Managers' Responses to Open-Ended Question

Advancing Themes	Count	Total
Observed unit/team culture improved/transform		
More connected, cohesive, strengthened around common values/mission/significance	9	
Completely "transformed" our staff/unit	2	
Positive effect on morale	3	
Increased openness, safety in sharing/talking/ learning	6	20
Peer coaching process going well		
Highly effective, great, useful, very positive, successful, wonderful		14
Impressed/"surprised" by the peer coaches		
Dynamic, passionate, innovative	5	
Leadership emergence	4	
Overcome coaching challenges	2	11
Improvement in patient experience/satisfaction		
Scores have gone up	2	
Staff more patient-centered awareness/actions comfortable connecting with patients	6	8
Improved quality of relationships		
Patients staff	3	
Manager staff	2	
Peer to peer	2	7
Way to identify and develop new leaders		4
Appreciate external coaching, advisement		4
Total		68
Constraining Themes		
Time/availability for managers to connect with coaches/or coaches to connect with coachees	2	
Long journey, sometimes frustrating	1	3
Total		3
Planning Themes		
Want to continue as provides groundwork for other organizational initiatives, professional role based model/career ladder/CICARE		
Total		3

Note. This table reflects the responses from 14 manager respondents who completed a final open-ended question. Responses may have included more than more theme.

Relationships among the subscales. Prior to the analysis of the relationships among the three main Subscales B: The Coaching Process, C2: The Coaching Relationships—between the coaches and coachees, and D: Team Knowledge, Skills, and Innovation, an exploratory factor analysis was conducted to verify the factor structure of all of the individual measurement items (Mertler & Vannatta, 2005). Principal-component factor analysis with varimax rotation, showed that all measurement items loaded into four factors (or constructs). The groupings of items that loaded into the first three factors coincided directly with the items in the three subscales, namely B: The Coaching Process—measuring coaching competencies and behaviors; C2: The Coaching Relationship—measuring the quality (HQC) between the coaches and coachees; and D: Team Knowledge, Skills, and Innovation—measuring knowledge creation and dissemination. There were two items, B-05, "Have formal system for connecting," and D-06, "Share knowledge with other units," with the strongest factor loading aligned with the fourth factor that emerged as a unique factor for this data. However, the second strongest loading for these two items was with the factors representing their respective subscales, B: The Coaching Process and D: Team Knowledge, Skills, and Innovation. Finally, the researcher supplemental measurement items which were added to measure the construct of positive peer coaching, affiliated as well as the item alignment of the previous researchers. For example, B-11, "feedback is constructive and encouraging," loaded onto Factor 1 at 0 .734 and C2-01, "comfortable being reflective," loaded onto Factor 2 at 0.747 (see Appendix G for the rotated factor-loading matrix). In general, the factor structure of all of the measurement items confirmed their relationship with the underlying theoretical constructs being measured.

The degree of linear relationships between each of the three Subscales B: The Coaching Process; C1: The Coaching Relationship—among the peer coaches group; C2: The Coaching Relationship—between the peer coaches and coachees; and D: Team Knowledge, Skills, and Innovation, was investigated using Pearson product-moment correlations. A direct and generally strong relationship was observed between Subscale B and Subscale D ($r = 0.64$, $r^2 = 0.41$) as shown in Figure 32. A direct and generally strong relationship was observed between Subscale C1 and Subscale D ($r = 0.55$, $r^2 = 0.30$) as shown in Figure 33. A direct and generally strong relationship was observed between Subscale B and Subscale C2 ($r = 0.62$, $r^2 = 0.38$) as shown in Figure 34. The coefficients of determination (r^2) suggested a range of 30% to 40% shared variance between the pairs of variables.

Prediction of knowledge subscale. Based on the relationships identified in the previous section, two multiple linear regressions were conducted to predict Subscale D: Team Knowledge, Skills, and Innovation, based on the other subscales and a variety of participant characteristics. The selected characteristics included items shared across cohorts (e.g., gender, age, employment-longevity measures) and measured as dichotomous or interval-level variables. In the first regression analysis, in order to include as many participants as possible ($n = 117$), Subscale C1: The Coaching Relationship—among the peer coaches, which only applies to coaches and managers, was not included. In the second regression analysis, Subscale C1 was included, essentially eliminating all staff members from the analysis ($n = 85$). Cases with missing values were omitted on a list wise basis to ensure complete records were used to build the regression models.
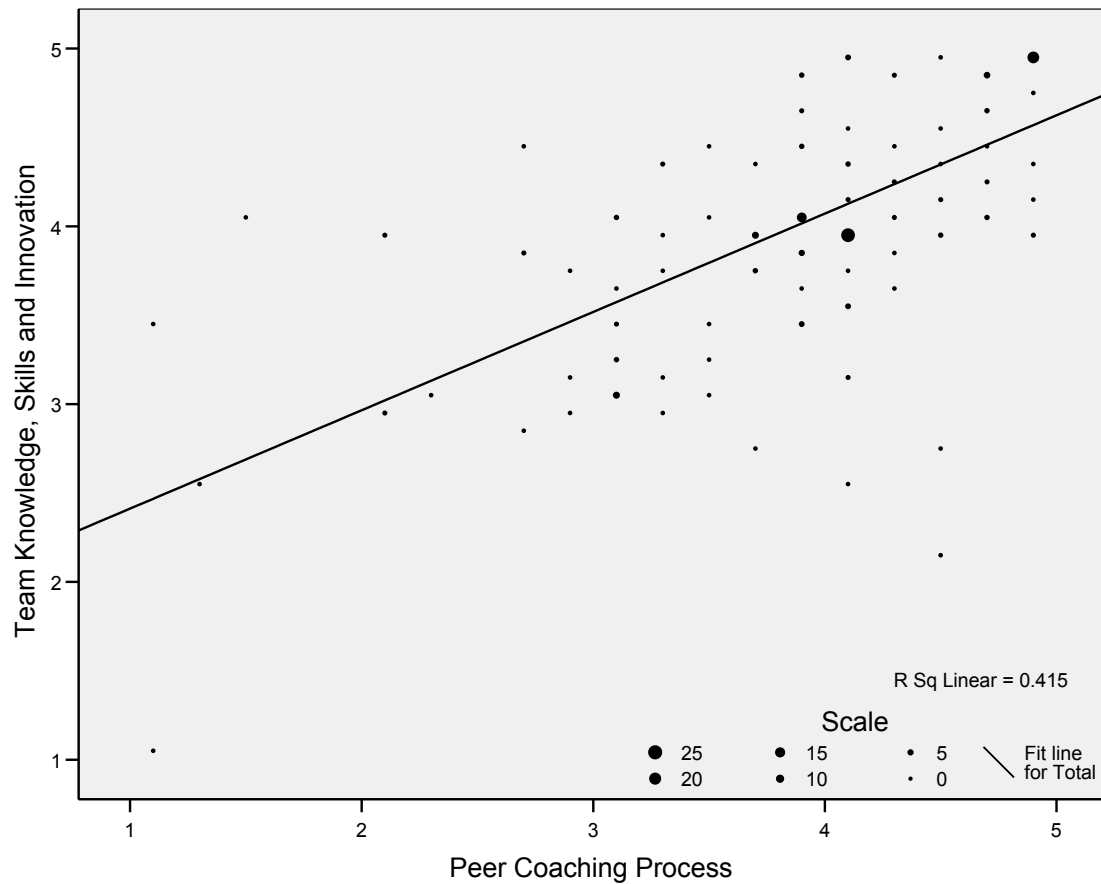
Figure 32. Scatter plots noting the correlation between the subscale items from Part B: The Peer Coaching Process and Part D: Team Knowledge, Skills, and Innovation.
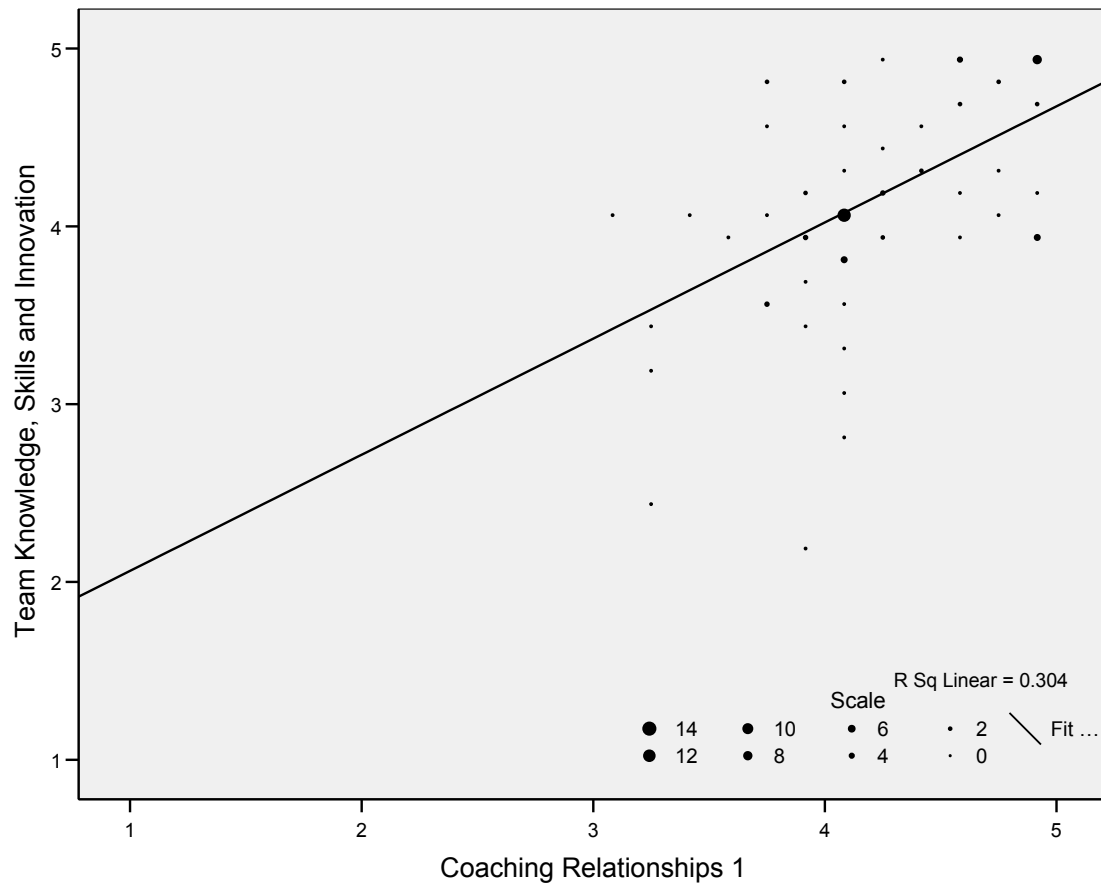
Figure 33. Scatter plots noting the correlation between the subscale items from Part C1: The Coaching Relationship (among the peer coaches) and Part D: Team Knowledge, Skills, and Innovation.
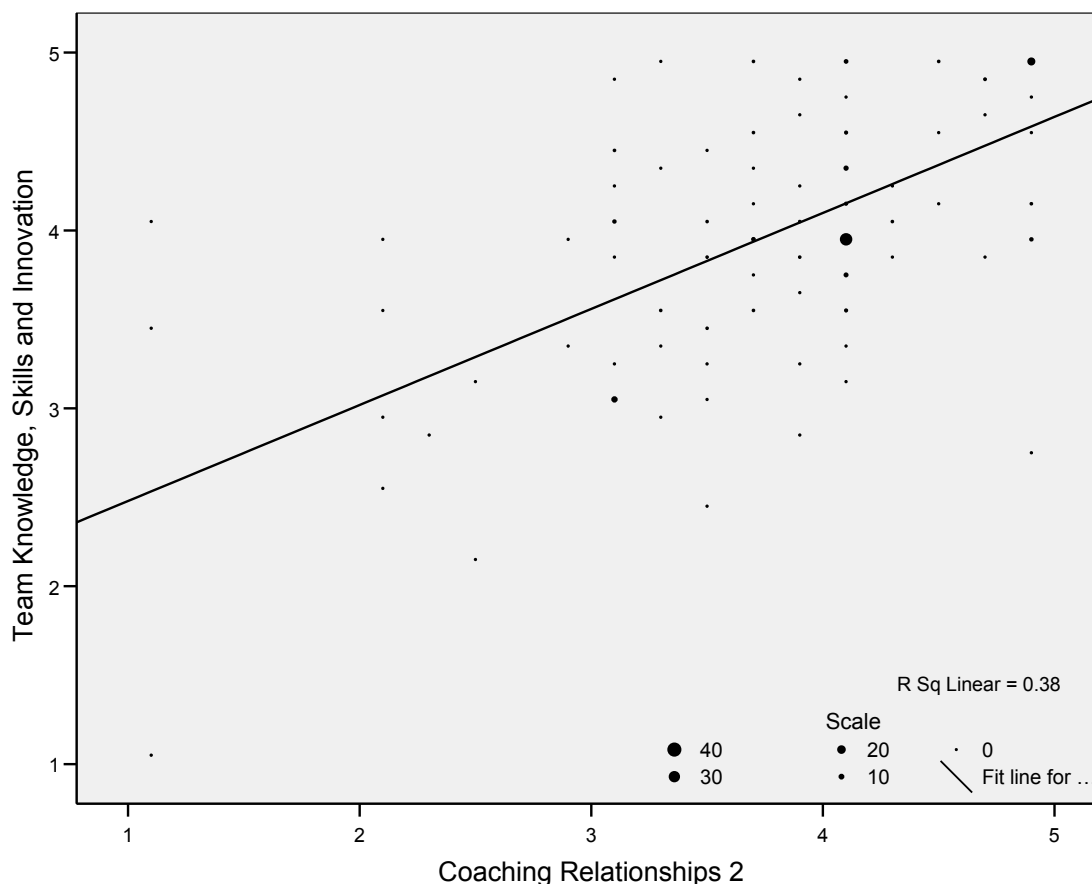
Figure 34. Scatter plots noting the correlation between the subscale items from Part C2: The Coaching Relationship (between the peer coaches and their coachees) and Part D: Team Knowledge, Skills, and Innovation.

To predict ratings of Subscale D: Team Knowledge, Skills, and Innovation, the following subscales and participant characteristics were entered into a stepwise linear regression analysis: Subscale B (coaching competencies and behaviors), Subscale C2 (quality of the coaching relationship between the coach and coachees), age, gender, whether the participant was trained in the United States, years in healthcare, years in the current organization, years in the current role, and whether English was the participant's first language. After two iterations, two predictors were identified—Subscale B: The Coaching Process and years in the current organization. The resulting regression model explained a statistically significant 46.7% (adjusted R^2), almost half of the variance in

Subscale D ($F_{2,114}$ = 51.7, $p < .001$). The standardized coefficients for the predictor variable of the Peer-Coaching Process was β = 0.69 (t_{116} = 10.06, $p < .001$). The predictor, Years in Current Organization, had an indirect influence on Subscale D at β= -0.18 (t_{116} = -2.66, p = .009).

The process for the second regression model was similar to the first, with one important difference. Subscale C2 was included in the set of predictor variables, effectively omitting data from all staff-coachee participants. The following subscales and participant characteristics were entered into a stepwise linear regression analysis: Subscales B, C1, and C2, age, gender, whether the participant was trained in the United States, years in healthcare, years in the current organization, years in the current role, and whether English was the participant's first language. After three iterations, three predictors were identified—Subscale C1, whether the participant was trained in the United States, and whether English was the participant's first language. The resulting regression model explained a statistically significant 35.1% (adjusted R^2) of the variance in Subscale D ($F_{3,67}$ = 13.6, $p < .001$). The standardized coefficients for the predictor variable Coaching Relationship 1 was β = 0.60 (t_{70} = 5.98, $p < .001$). Note that the predictor, Trained in the US, had an indirect influence on Subscale D, β = -0.26 (t_{70} = -2.60, p = .012). The coding of this variable assigned 0 to No and 1 to Yes responses. The predictor, English as First Language was coded similarly and had a standardized coefficient of β = 0.21 (t_{70} = 2.01, p = .048).

Comparison of cohorts on subscales. To further understand the patterns of subscale responses among the three cohorts—coaches, coachees, and managers—their mean ratings were compared using a series of one-way ANOVAs and a *t* test. The one-

way ANOVA compared the means of Subscales B, C2, and D among the three cohorts.

The *t* test compared the coach and manager's means for Subscale C1. Descriptive

statistics involved in these comparisons are shown in Table 32.

The ratings of Subscale B were found to be statistically significantly different

overall ($F_{2,184}$ = 19.9, p < .001) with a small effect size of η^2 = 0 .18. Post hoc analysis

(Tukey's HSD test) identified the mean of the staff members to be statistically different

from the means of the other two cohorts (see Figure 35). Caution is exercised due to

differences in sample sizes, standard deviations, and standard errors leading to a violation

of the homogeneity of variances assumption. Welch and Brown-Forsythe *F* ratio

estimates were calculated and consistent results were obtained.

Table 32
Descriptive Statistics for Subscales for Each Cohort

		N	Mean	Standard deviation	Standard error
Peer Coaching Process	Peer Coach	61	4.19	.49	.06
	Staff Member	102	3.63	.86	.08
	Manager	24	4.45	.36	.07
	Total	187	3.91	.77	.06
Coaching Relationships 1	Peer Coach	61	4.21	.48	.06
	Manager	24	4.29	.56	.11
	Total	85	4.23	.50	.05
Coaching Relationships 2	Peer Coach	61	4.14	.51	.07
	Staff Member	102	3.66	.85	.08
	Manager	24	4.03	.63	.13
	Total	187	3.86	.76	.06
Team Knowledge, Skills, and Innovation	Peer Coach	61	4.15	.54	.07
	Staff Member	102	3.90	.70	.07
	Manager	24	4.25	.71	.14
	Total	187	4.03	.66	.05
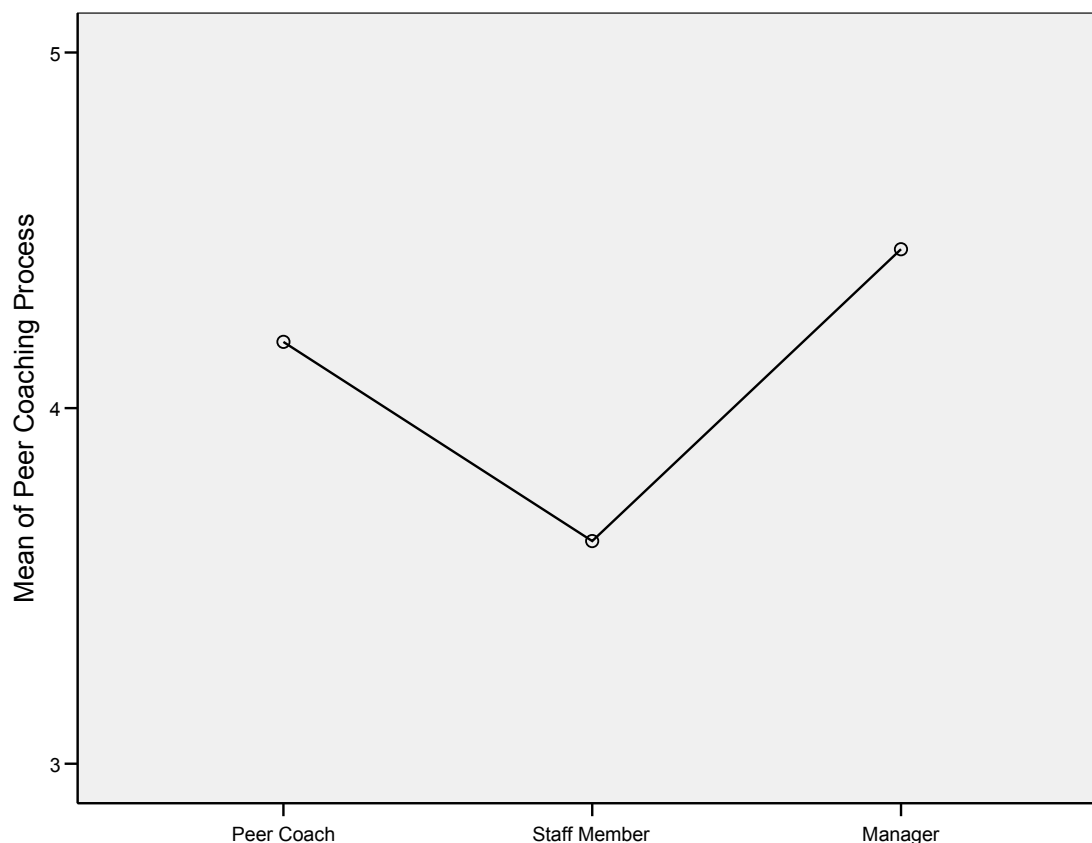
Figure 35. The three cohorts means plotted for Subscale B: The Coaching Process (measuring competencies and behaviors).

The ratings of Subscale C2 were found to be statistically significantly different overall ($F_{2,184} = 9.1$, $p < .001$) with a very small effect size of $\eta^2 = 0.09$. Post hoc analysis also identified the mean of the staff members to be statistically different from the means of the other two cohorts (see Figure 36). Once again, caution is advised due to the differences in homogeneity of the variances of sample sizes, standard deviations, and standard errors. Welch and Brown-Forsythe *F* ratio estimates were calculated and consistent results were obtained.
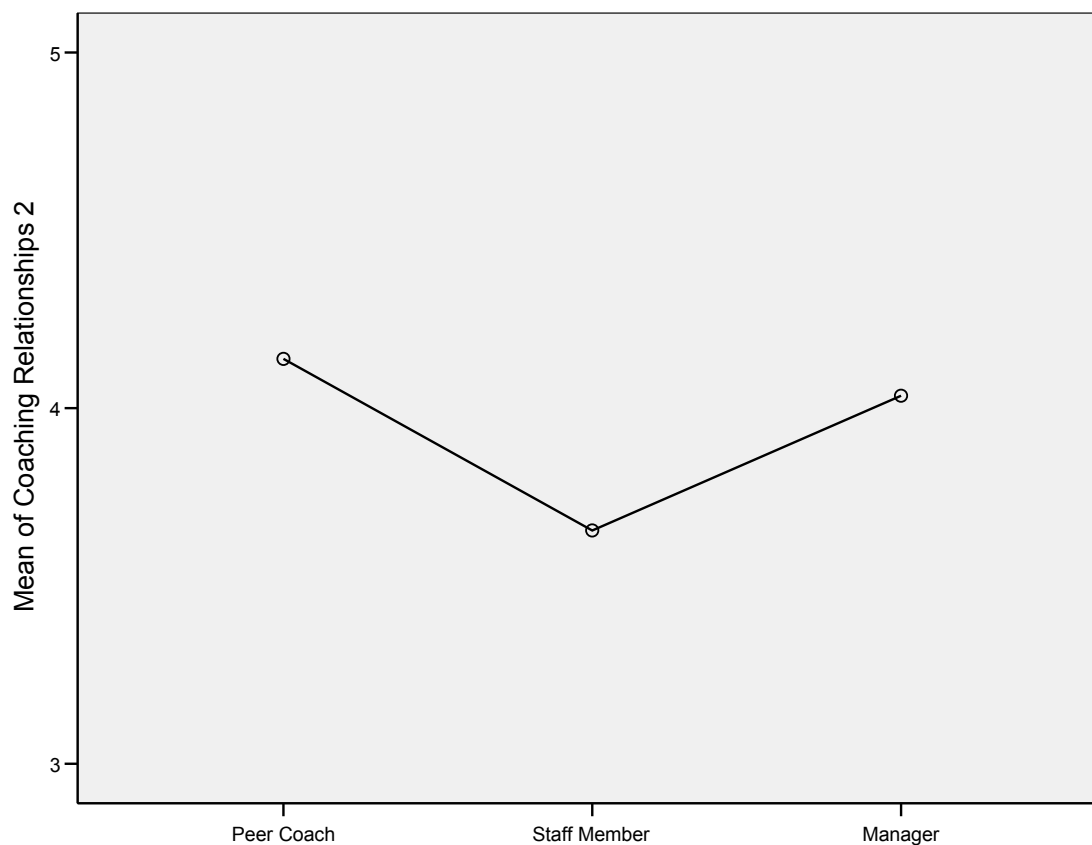
Figure 36. The three cohorts means plotted for Part C2: The Coaching Relationship (quality of the relationship between the peer coaches and their coachees).

The ratings of Subscale D were found to be statistically significantly different overall ($F_{2,184} = 4.4$, $p = .014$) with a very small effect size of $\eta^2 = 0.05$. Post hoc analysis identified a slightly different pattern in this case. The mean of the staff members was statistically different from the mean of the managers, but the mean of the coaches was not statistically significantly different from either the coachees or the managers (see Figure 37). In this comparison, the assumption of homogeneity of variances was met.
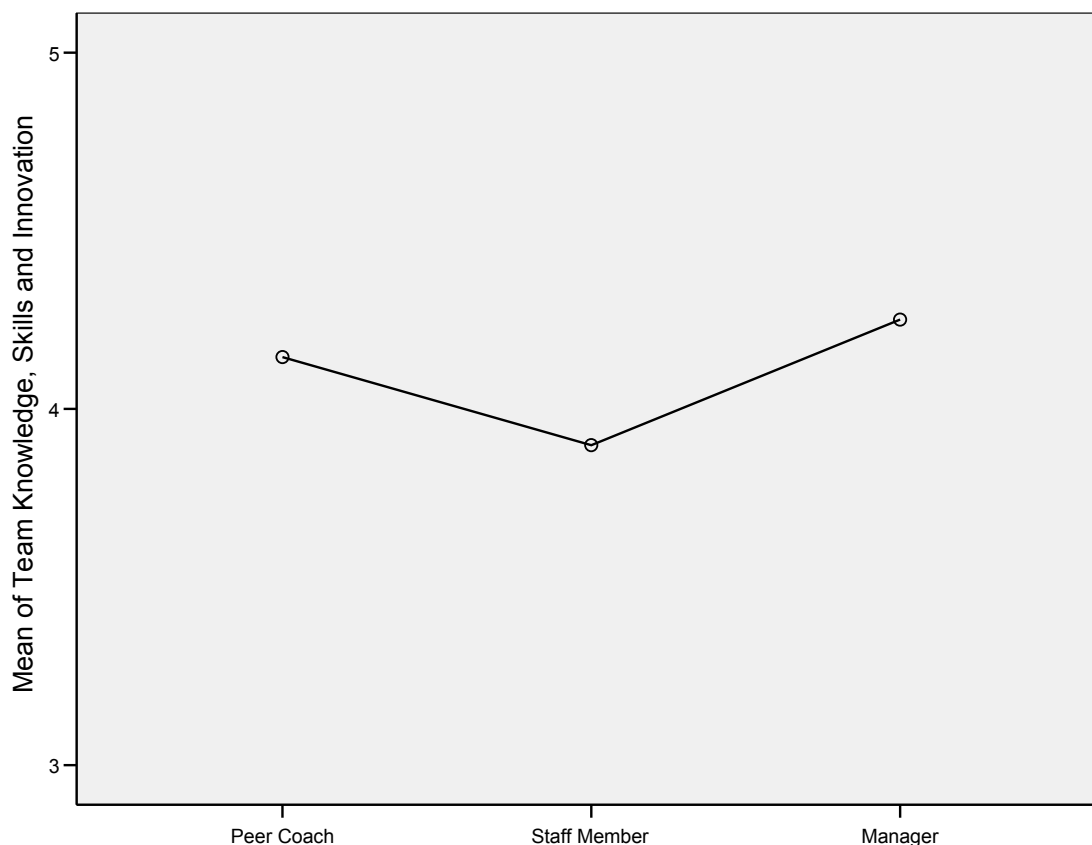
Figure 37. The three cohorts Means plotted for Subscale Part D: Team Knowledge, Skills, and Innovation (knowledge creation and dissemination).

The remaining comparison involved the ratings on Subscale C1, which pertained only to the coaches and managers; consequently an independent sample *t* test was conducted. The Subscale C1 means of the two cohorts were not found to be statistically different.

Summary

The independent variable in the study was training in a positive peer-coaching process. Specifically, four research questions guided the research. First, what were the perceptions of the peer coaches about their peer-coaching behaviors, their coaching processes, their ability to develop HQC, and their ability to facilitate team knowledge, skills, and innovation? Secondly and similarly, what were the perceptions of the

coachees about the process, the coaching relationship, and how the team manages knowledge? Thirdly and similarly, what were the perceptions of the nurse managers about the coaching process, the coaching relationships, and how the team manages knowledge? Fourth and finally, what were the relationships among the subscales measuring perceived effectiveness of the peer-coaching process, the coaching relationships, and how the team manages knowledge, skills, and innovation?

The sample of survey respondents consisted of peer coaches, staff coachees and managers from eight units that participated in the peer-coaching process. The total response to the web-based survey yielded an initial return of 251 respondents with 187 (73.3%) fully completing the survey, which was defined as completion of all three subscales. Of the 187 who fully completed the survey, 32.6% ($n = 61$) were peer coaches, 54.6% ($n = 102$) were staff coachees, and 12.8% ($n = 24$) were managers.

Overall, the perception of the peer coaches was favorable and ratings rarely fell below neutral in all four of the pertinent subscales. The overall perceptual rating for the peer coaching competency scale (B) was 4.19 ($SD = 0.49$), the quality of the relationship among the peer coaches group (C1) overall perceptual rating was 4.2 ($SD = 0.48$), the quality of the relationship between the coaches and their coachees (C2) overall perceptual rating was 4.1 ($SD = 0.51$), and the perception of how team knowledge was managed (D) was 4.2 ($SD = 0.54$). Qualitative review of the peer coaches' open comments included several positive themes such as an enhanced team culture, more open and cohesive peer relationships, improved self-confidence and self-efficacy, and observed improvement in the patient/family experience of care. Constraining themes identified were lack of time and availability to connect with the coachees and some unreceptive coachees.

In general, the perception of the staff coachees for each of the three of the pertinent subscales (B, C2, and D) was more neutral and demonstrated a wider range of responses on both ends of the 5-point rating scale. The coachees' perception of the peer-coaching process was an overall mean of 3.62 ($SD = 0.86$). The perception of the quality of the relationship between the staff coachee and their peer coaches (Subscale C2) overall mean was 3.6 ($SD = 0.86$) and the overall rating for Subscale D, the perception of how team knowledge is created and shared, was a mean of 3.90 ($SD = 0.70$). Information gained through the open-comment section reflected that many staff on the participating units were unaware of the peer-coaching process, had not been networked to a peer coach, or had been contacted by a peer coach only once. A review of those respondents revealed very low scores on all survey scales.

The managers were very favorable to the coaching process, with an overall mean of 4.45 ($SD = 0.36$). They held a positive perception of their own capabilities in mentoring the peer coaches, as well as the abilities of the peer coaches in coaching their peers. The managers' perception of the quality of the relationships among the unit coaches group (C1) was generally high with a mean overall rating of 4.3 ($SD = 0.55$). Their perception of the relationship between the coaches and the coachees was slightly lower, but still relatively high, with a mean overall rating of 4.00 ($SD = 0.62$). The managers' overall rating of the team knowledge creation and sharing was 4.25 ($SD = 0.62$), which was somewhat higher than the perception of the peer-coach cohort and significantly higher than the perception of the staff-coachee cohort. Qualitative review of the manager's open comments included positive themes such as promoting positive unit/team culture change, developing leadership at the staff level, and making a

positive impact on the patient/family experience of care including a positive impact on patient-satisfaction results.

The factor structure of all of the measurement items, including those developed specifically for this study, confirmed their relationship with the underlying theoretical constructs being measured, namely positive peer-coaching competencies, high-quality relationships, and knowledge creation and sharing. All of the subscales were very strongly and directly related to one another. The highest correlations were among the peer-coaching competencies and relationships scales. In the first regression analysis involving all cohorts, two variables were identified—the coaching process and competencies (Subscale B) and Years in the Organization (inversely)—as predictors of knowledge creation and diffusion. In the second regression analysis, focusing on managers and peer coaches only, the C1 scale, English as First Language, and Trained in the US (inversely) were predictors of knowledge creation and dissemination.

The following chapter presents an interpretation of the quantitative and qualitative findings that emerged from the research study. First, a summary of the study is reviewed followed by a discussion of general findings from which conclusions were drawn by the researcher. The conclusions are followed by implications for actions at the peer coach, manager, and organizational levels. This is followed by recommendations for professional practice. Limitations of the study are presented, followed by recommendations for future scholarly research, and a concluding summary and remarks.

Chapter V

Discussion, Conclusions, Implications, and Recommendations

Introduction

This chapter provides a summary of the study with conclusions drawn from the results presented in Chapter IV. First, a discussion will provide a general review of the study and the research methods used to generate the results. Then major findings identified from the study will be discussed. Based on the findings, conclusions, study limitations, implications for professional practice, and suggestions for future research will be offered. The chapter will end with concluding thoughts.

The subject of peer developmental relationships, and specifically the construct of peer coaching, represents a small but emerging focus in the scholarly literature. In the healthcare setting, there are relatively few studies about the use of peer coaching outside of the classroom setting. To date, although there are anecdotal reports in the field, there are no scholarly reports documenting the empirical study of peer coaching in a hospital setting for the intended purpose of supporting service, communication, and interpersonal-skill development.

Purpose Statement and Research Questions

The purpose of this research was to extend the literature about peer-to-peer developmental relationships in the work environment, specifically, peer coaching. It was the intent of the study to explore whether peer coaches who were trained and mentored in an intentionally positive model for peer coaching, were perceived as facilitating HQC with their coachees, and to determine if the peer-coaching process was perceived as benefiting team knowledge, skills, and innovation with regard to patient/family-centered

interpersonal communication, relational, and service skills. Finally, it was the intent of this study to contribute to the emerging body of knowledge in the field of POS, PRW, and AI.

This study was guided by four main research questions. Following training and a period of practice, and implementation of the positive peer-coaching process.

1. What were the perceptions of the peer coaches about their coaching practices, the peer-coaching process, their ability to develop HQC, and their ability to facilitate knowledge, skills, and innovation among their coachees?

2. What were the perceptions of the coachees about the coaching practices, the peer-coaching process, the ability to develop HQC, and the ability to facilitate knowledge, skills, and innovation among the team?

3. What were the perceptions of the nurse managers about coaching practices, the peer-coaching process, the ability to develop HQC, and the ability to facilitate knowledge, skills, and innovation among coaches and the coachees?

4. What were the relationships among the perceived effectiveness of the peer-coaching process, the coaching relationships, and how the team manages knowledge, skills, and innovation?

Research Methodology

This was a mixed-method, descriptive, and correlation study using a non experimental, cross-sectional survey design with intact groups (Creswell, 2008). The practice being investigated was receiving training and mentoring in positive peer coaching. Two preexisting survey instruments, the Peer Mentoring survey (Bryant & Terborg, 2008), and the HQR scale (Carmeli et al., 2008) were adapted and modified

with permission for the study setting and for the construct of positive peer coaching. The resultant study instrument, the Peer Coaching Survey, also included additional characteristic and demographic questions specific to the three cohorts involved in the study (see Appendices D, E, F). All of the subscale measurement items were rated on a 5-point scale (1 = strongly disagree to 5 = strongly agree). The instrument was made available online, using SurveyMonkey, to volunteer participants from the eight participating units where the positive peer-coaching process had been implemented. The survey period followed training and mentoring in peer coaching and a subsequent period of practical experience.

Responses came from the varying perspectives of three cohorts: nursing managers, peer coaches, and peers in the coaching groups (coachees) and as stated earlier, the survey included both open-ended and closed-ended questions. The survey approach provided an economical and efficient means of gathering data from many participants working multiple shift schedules. An open-ended question provided additional and specific information from each of the participant cohorts. The resultant data obtained from the survey was analyzed both quantitatively and qualitatively. The two strands of data were merged, integrated, and linked to provide further strength to the study (Creswell, 2008). The initial response to the survey included 251 participants; however, only those participants who fully completed the survey were included in the analysis. There were 61 peer coaches, 102 staff coachees, and 24 managers who were included in the data analysis.

Discussion

      Research Question 1: The peer coaches. This first research question sought to understand from the viewpoint of the peer coaches, what their perceptions were about the overall peer-coaching experience. Specifically, this included an understanding about their attitudes and beliefs about the peer-coaching process; the perception of their own coaching practices and abilities; their abilities to develop HQC; and the abilities to facilitate knowledge, skills, and innovation among their coachees and the team.

      The results of this study provided empirical evidence from both a quantitative and qualitative standpoint, that despite some reported constraints, the majority of peer coaches perceived the experience of peer coaching to be both positive and effective. Furthermore, the peer coaches reported that beneficial impacts were gained by them personally, by the team as a whole, and by the patients and their families.

      The 61 coaches rated the peer-coaching process, behaviors, and competencies (Subscale B) relatively high, with an overall mean of 4.19 ($SD = 0.49$): 97% agreed or strongly agreed that the peer-coaching process had benefited them directly (Item B-14), 11% were neutral, and none disagreed. In addition all but one coach agreed or strongly agreed that improving their communication, relational, and service skills made them more effective at work (B-13). As a proximal measure of satisfaction, these findings were consistent with, and somewhat higher than the results from a peer-coaching study with 202 MBA students in the United States and Australia, in which Parker et al. (2008) found that "roughly three quarters of the students experienced some level of satisfaction with the peer-coaching process" and "sixty-six percent of the student peer coaches also reported some contribution to their personal growth" (p. 494).

The following comments from several peer coaches reflect themes of personal reflection, benefit, growth, and development: "I am more open minded and non-judgmental"; "I have enjoyed and benefited from the coaching experience"; "It helped me improve my own developmental opportunities"; "It helped me improve greatly in regards to how I provide patient care and how I interact with my peers"; "I love it. It has made me more confident." Personal growth as a qualitative theme was also consistent with Sekerka and Chao (2003), in their study of peer coaching with physician faculty.

In a meta-analysis of the developmental-relationship literature by D'Abate et al. (2003), giving feedback was found to be one of the few factors that differentiated the construct of peer coaching from peer mentoring. Therefore, a feedback line item (B-11) was added to the Bryant and Terborg peer-mentoring competency subscale (2008). In this study, the peer coaches' self-perception of feedback as a competency was one of the highest self-rated line items. This finding was consistent with Veenman and Denessen (2001), who found that peer-coaching training for teacher coaches significantly improved their feedback skills. Parker et al. (2008) also identified a theme of improved ability in giving feedback in the qualitative review of comments from MBA student peer coaches.

Although still self-rated as relatively high by the peer coaches, some items received overall lower ratings: "I have a formal process in place to communicate with my coachees" (B-05) and "I am able to focus my coaching interactions on unit goals for communication, relational and service skills" (B-06), had means of 3.42 ($SD = 1.05$) and 3.79 ($SD = 0.88$), respectively. The qualitative comments provided further insight into these findings and identified the availability of scheduling and time as constraints. One peer coach stated,

> I strongly believe in the goals of peer coaching but have found it next to impossible to implement in such a busy work environment where we often work different shifts. When we all have a full assignment there is little time for thoughtful, unrushed interaction.

Further, another peer coach's comment below, revealed the frustration of having several coachees and limited availability to connect, however also demonstrates reflective thinking and commitment to future planning to address the constraining issues:

> I am neutral in several areas of the survey. This is related to the decreased time I have formally connected with my coachees individually at work (over the past several months). The four of us together have never been free to connect at the same time at work. Outside of work "togetherness" has not been possible for me either. I do have a plan to change from an "all or nothing" approach, to a 1–5 minute huddle approach to share each others service stories (care) stories, ideas, etc.

Another coach reiterated time and availability as constraints to the peer-coaching process, yet was also reflective in comments about benefits:

> Available time is a challenge to peer coaching. One of my peer coachees appears not very receptive to the idea of setting up face-to-face meetings outside of work—possibly due to a busy schedule outside of work (e.g., family). I try to communicate by e-mail but would rarely get feedback. Talking to coachees at work is almost impossible as there is hardly any downtime. I feel though that whatever effort we put in, no matter how big or small has produced some positive effect on the quality of care we give.

Barriers such as travel distance, availability, time, and partner resistance were also identified in a teachers' peer-coaching study (Murray et al., 2009). The findings of Parker et al. (2008) also suggest similar constraints and as a result were associated with lower levels of satisfaction with the peer-coaching experience. However, in spite of the constraints identified in this study, 80% of the peer coaches were motivated to be a good coach. This finding was also consistent with the general results from other studies (Murray et al., 2009; Parker et al., 2008; Sekerka & Chao, 2003).

Eighty-two percent of the peer coaches also agreed or strongly agreed that peer coaching had benefited the team. Further, these results were consistent with the most predominant theme that emerged from the open-comment section in that the peer-coaching process had a positive impact on team environment/culture. Perceived impacts were interwoven as subthemes and included: better peer relationships, increased team positivity and energy, increased team learning, and reciprocal sharing of ideas and feedback. Comments included "It has enriched our workplace experience"; "I feel that it has affected the culture on the unit and has changed to create a more positive experience for the patient and the nurse"; "Peer coaching is essential in building strong relationships and team energy." From the comments, it appeared that the intentionally positive approach to coaching combined with the shared peer-learning experience contributed to a shift in culture. Schein (2010) provided the following definition of culture that puts an emphasis on shared-learning experiences, leading to shared implicit and explicit assumptions held by the members of the group:

> The culture of a group can now be defined as a pattern of shared basic assumptions learned by a group as it solved its problems of external adaption and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (p. 18)

Although tangentially explored in the literature, no studies on peer coaching or peer mentoring included findings making the direct connection between peer coaching and the improvement of overall team culture/effectiveness (Broscious & Saunders, 2001; Bryant & Terborg, 2008; McDougall & Beattie, 1997; Parker et al., 2008; Sekerka & Chao, 2003; Veenman & Denessen, 2001; Waddell & Dunn, 2005). Bryant and Terborg (2008), however, did conclude that beyond facilitating creation and sharing of

knowledge, the interpersonal nature of peer mentoring might also result in more effective teams.

The following coach's comment further associated the peer-coaching process to improved HQR among team members, which in turn was connected to a positive impact on patient care.

> Overall this experience has been very positive. It has brought XX closer and more cohesive. The tools we have learned have enabled us to work better as a whole. We feel comfortable and open to sharing our experiences therefore helping us to become not only better nurses, but friends. By us taking care of each other we are essentially taking better care of our patients, making it a WIN–WIN for all involved.

Using the HQR scale (Carmeli et al., 2008), the peer coaches' perceptions of high-quality relationship capacities (i.e., tensility, connectivity, and emotional carrying capacity) were measured. The HQR scale was repeated twice, first measuring the perceived relationships among the unit peer coaches (C-1) and secondly, measuring the perceived relationships between the coaches and their staff coachees (C-2). The overall means for both were high, 4.2 ($SD = 0.48$) and 4.1 ($SD = 0.51$), respectively. Consistent with these findings, a strong qualitative theme emerged linking the positive peer-coaching process to enhanced relationships in the team. The theme was evidenced in the following comments: "It creates a good and close relationship with coworkers" and, "As a peer coach, it enabled me to be more cognizant and understand the needs and personalities of other peers. This experience enabled me to be more open-minded and non-judgmental. It allowed more positive interactions and relationships."

Similar qualitative themes emerged in the Parker et al. (2008) study. When style accommodations were made, when there was an emotional component to the relationship, and when the relationship was perceived as mutually respectful and professional (Parker

et al., 2008), higher ratings of satisfaction occurred. Furthermore, the above peer coaches' comments mirrored characteristics consistent with Dutton and Heaphy's (2003) construct for HQR, as well as similar to the description of Kram and Isabella's (1985) "special peer" or McDougall and Beattie's (1997) "holistic peer mentor."

The peer coaches in this study also reported a positive impact on their own personal learning and growth specific to the areas of interpersonal, service (caring), and communication skills. In addition, as a result of such growth, they seemed to perceive a greater satisfaction and fulfillment in their relationships with the patient/family. Such findings are consistent with Watson's theory of transpersonal caring (1988) and with Swanson's meta-analysis (1999) of caring nurse–patient relationships. A significant outcome of Swanson's study of caring (versus uncaring) relationships for the nurse was personal and professional fulfillment. The following peer coach's comment made a similar connection:

> I have enjoyed and benefited from the Champion (coaches) experience and all the education and modeling provided. Awareness to personal manner of approach to patient care and communication with patients and families and colleagues as well has greatly improved and is more sensitive, caring and very personally satisfying.

In order to measure the coaches' perceptions of an intentionally positive approach to peer coaching, eight items were added to the coaching process subscale (B-01, 02, 08, 09, 11, 12) and one to the HQR subscale (C1-01 and C2-01). The nine additional items were highly consistent with the other items in their respective subscales and all scored generally high. As an example, 93% of the coaches agreed or highly agreed that they used an appreciative questioning and conversation (Orem et al., 2007) for mutuality in learning (Dutton & Heaphy, 2003) and 97% reported they actively sought out ways to appreciate and recognize positive skills observed in their coachees (Orem et al., 2007).

In the relationship subscale, more than three quarters of the coaches used and felt

comfortable in sharing reflective "best self" stories as a mutual-learning approach among

the other coaches and with their own coachees. Roberts (2007), in speaking about the

process of using best self reflection and sharing of positive stories, stated,

> The instruction to share stories about what that person does well, often prompts feedback givers to share information that comes as a complete surprise to the recipient. This process often deepens and improves the quality of the relationship because it provides an opportunity for the pair to grow closer. This feedback process is likely to increase employees' opportunities to feel emotionally supported by their colleagues. (p. 54)

> Further, McManus, and Russell (2007) stated, "With peers … interpersonal

comfort may be the primary concern when people consider engaging in a mutually

developmental relationship" (p. 291). Additionally, they suggested that peer

relationships in which there is a perceived greater sense of mutual similarity might be

evaluated as HQR. Roberts (2007) also stated, "Mutuality is essential for generating

identify-enhancing outcomes. In positive relationships, people are more likely to become

more self-aware of strengths and limitations, to feel affirmed, and to become more open

to continued growth and development" (p. 31). The peer coaches' self-ratings were

generally very high for those questions in the C-scale regarding listening and perspective

taking in the relationships with other peer coaches, as well as between themselves and

their coachee. The peer coaches also generally reflected safety and comfort in expressing

both negative and positive emotion in both sets of relationships (C1 and C2). A

relationship with a high-emotional carrying capacity (expressing both positive and

negative emotions), connectivity, psychological safety, and support has been associated

with higher learning behaviors (Carmeli et al., 2008; Edmondson, 1999; Lankau &

Scandura, 2002).

Positive organizational scholars suggest that belonging, feeling connected, and receiving positive feedback generates the positive energy required for individuals, groups, and organizations to be creative and innovative, to thrive and flourish in the workplace (Baumeister & Leary, 1995; Dutton & Heaphy, 2003; Fredrickson, 1998, Fredrickson & Losada, 2005; Losada & Heaphy, 2004; Quinn, 2007). The word "positive" was specifically used in a quarter of the peer coaches' comments as a descriptor for impact on relationships, the team, and about the peer-coaching process. One peer coach also reported an observation of increased "team energy." Quinn & Dutton (2005) defined energy in the workplace as a subjective and affective experience in which a person or people feel the capability and desire to act. The peer coaches' self-ratings were generally very high for three questions on the HQR scale that related to creativity or generativity (C-05, C-06. and C-07). Fredrickson (1998) found that energy and creativity were byproducts of positive emotion. Further, Fredrickson and Losada (2005) and Losada and Heaphy (2004) studied the relationship of positivity and the performance of business teams. They found that those that were flourishing had a higher ratio of positivity to negativity team interactions in the form of higher levels of connectivity, a more expansive emotional space, more inquiry (versus self-advocacy), and an "other versus self" orientation in conversation and interactions (Losada & Heaphy, 2004, p. 761).

Overall the peer coaches also rated the creation and dissemination of knowledge, Scale D, relatively high with a mean of 4.1 (*SD* = 0.54) with only one rating falling below neutral. This finding, combined with the self-rating of the peer-coaching competencies and behaviors, Subscale B, were consistent with the Bryant and Terborg

(2008) peer-mentoring study in which they found that "higher perceived levels of peer mentoring competencies were a significant and positive predictor of self-perceptions of knowledge creation and transfer" (p. 21). The following comment from a peer coach in this study summarized the perceived association between the peer-coaching process, the development of HQR, and the impact on learning and knowledge sharing: "It has improved peer to peer communication on our unit as well as enhanced learning and provided a place for us to share our ideals comfortably with each other, as well as give feedback whether positive or negative." Consistent with the findings from other research, this comment reflected key characteristics of positive relationships in the workplace (Carmeli et al., 2008; Carmeli & Gittell, 2009; Dutton & Heaphy, 2003; Losada & Heaphy, 2004) as well as making the link to enhanced learning.

Research Question 2: The coachees. This second research question sought to understand the peer-coaching experience from the viewpoint of the coachees. Specifically, the intent was to develop an understanding about their attitudes and beliefs about peer-coaching practices and process; the quality of the relationship between themselves and their coaches; and their attitudes about how the team manages knowledge, skills, and innovation. The results of this study provided empirical evidence from both a quantitative and qualitative standpoint—despite the findings that several respondents were not assigned to a peer coach—overall the staff-coachees cohort perceived the peer-coaching process to be beneficial for them personally, for the team as a whole, and for the patients and families.

There were 102 staff coachees who fully responded to the survey, with overall, a much wider variation in the subscale ratings and in the opinions expressed in the

qualitative data. Interestingly, 27 staff stated that they either did not have a peer coach or they didn't know if they did. Not surprisingly, those particular respondents gave low ratings for all scales. However, in spite of this finding, the coachees' overall ratings for the three subscales (B, C2, and D) were fairly high. Given the wider range of responses, the overall ratings trended more toward neutral than those of the peer coaches or the managers. As stated, both the subscale ratings and qualitative comments ranged from very high ratings (5) and very positive responses, to very low ratings (1) and very negative responses. Contrasting opinions were evidenced by the following comments: "Love the whole idea. Definitely need it for continued working ethics, cooperation and success of a unit and team" to, "I had no idea there was a peer coaching process on our unit."

For Subscale B (the peer-coaching process, behaviors, and competencies), the overall mean rating by the coachees was 3.9 ($SD = 0.70$). Similar to the peer coaches, more than three quarters of the coachees perceived the peer-coaching experience to benefit them personally. Again, as a proximal measure of satisfaction, these findings were consistent and even slightly higher when compared to the results of Parker et al. (2008). Furthermore, over 60% of the coachees felt that the peer-coaching process benefited the team, with a little more than a quarter neutral and 20% in disagreement. These numbers are not unexpected, given the number of respondents who said they were not involved in or aware that a peer-coaching process had been implemented on their unit.

More than half of the coachees agreed or highly agreed with items intending to measure the perception of an appreciative, positive, and mutual approach to the peer-

coaching and learning process. The coaching practices described by these item measures,

such as using appreciative questioning and conversation to acknowledge strengths and set

goals, were consistent with general coaching practices used by Orem et al., (2007) in

their seminal study of an appreciative approach to coaching with six clients. The

following comments from coachees in this study reflected a sense of positivity: "Good

experience. Keeps positive action towards patient and peers"; "I have observed a positive

change in behavior/interaction among my peers, the unit secretaries and nursing

assistants"; and "Very positive and continues to work well with the staff."

The staff coachees' overall rating for the HQR subscale (C2), was 3.7

($SD = 0.85$). Similar to the results of other studies (Parker et al., 2008; Veenman &

Denessen, 2001), it appears that the degree of satisfaction with the peer-coaching process

was very closely related to available time, coaching skills and the ability to develop and

maintain a positive, high-quality relationship. Parker et al. (2008) observed that peer

coaching did not always work and cautioned, "It has to be done well to have a

developmental impact" (p. 500). The following comment from a coachee in this study

revealed a perception of a low-quality relationship and poor coaching experience:

> My service champion (coach) is encroaching, motivated mostly to fill their quota
> of information for their meetings, intrusive, often asking "what have you done to
> improve yourself and your patient care?," giving unsought advice, calling one at
> home for information etc.

Although the intentions of the peer coach described in the above comment may

have been sincere, it would appear that a high-quality relational connection was not fully

developed prior to engaging in the "business" of coaching. Further, it seems that the

relationship described was more unidirectional and transactional in nature, which resulted

in the loss of a shared learning experience and the unintended consequences of bitter

feelings. The description is consistent with what Kram and Isabella (1985) referred to as an "information peer" or McDougall and Beattie's (1997) typology of just a coworker.

The overall mean for the knowledge creation and sharing (Subscale D) was 3.9 (*SD* = 0.70). In stark contrast to the above coachee's comment, the following coachee's description of the experience with their peer coach, presented a different picture of coaching competencies and relationship, which in turn seemed to have led to knowledge creation and sharing:

> My peer coach XX is very encouraging and I admire her greatly. She has worked at this hospital longer than I have and she always shares what she's learning and her experiences with me. I've always admired her communication skills; she is always easily approachable and always willing to share her thoughts when I have a question or something I need to talk about. She always has the right thing to say, not just with me but I see it with her patients as well. I know she'll always be there to support me if I need her.

This relationship appeared to have the elements of a high-quality relationship, as evidenced by expressed feelings of comfort, connectivity, mutuality, and support (Dutton & Heaphy, 2003). Further, the above description from the coachee about their coach is consistent with McDougall and Beattie's (1997) typology for a "holistic" peer mentor.

Research Question 3: The managers. This third research question sought to understand the peer-coaching experience from the viewpoint of the participating unit managers. Specifically, the intent was to develop an understanding about their overall perception of the peer-coaching experience: their perceptions about the coaching and mentoring practices of their peer coaches; their feelings and beliefs about the quality of the relationship between themselves; as well as their perception of the relationship between the coaches; their coachees' perception of the quality of the relationships between the peer coaches and their coachees; and how their team manages knowledge, skills, and innovation. The results of this study provided empirical evidence from both a

quantitative and qualitative standpoint, that the managers perceived the experience of peer coaching to be very positive and effective. Furthermore, the managers reported that beneficial impacts were achieved for the team as a whole, for the peer coaches, and for patients and their families.

The 24 responding managers rated the peer-coaching process, as well as their own behaviors and competencies in coaching and mentoring the peer coaches (Subscale B) relatively high, with a mean of 4.45 ($SD = 0.36$). All but one manager agreed or highly agreed that the peer-coaching process had benefited the team (B-16); one response rated the process as neutral, and none disagreed. The managers also rated the relationship subscales high, both for the perceived relationship among the unit peer coaches (C1) with a mean of 4.3 ($SD = 0.55$), as well as the perceived relationships between the coaches and their coachees (C2) with a mean of 4.0 ($SD = 0.62$). Finally, the managers rated the knowledge scale high with a mean of 4.25 ($SD = 0.62$).

Consistent with the qualitative results of the other cohorts, a positive impact on the team environment/culture, relationships, and patient care were advancing themes that emerged from the qualitative review of the managers' comments. A distinct and significant theme from the managers' comments was the perception that a positive consequence of the peer-coaching process was the cultivation of previously undiscovered leadership at the staff level. Additional themes were a perception that the process had furthered positive relationships between the staff and management and had positively affected the patient/family experience of care with resultant improvements in patient-satisfaction scores.

Several managers were thoughtful about the process and the time required for significant transformation or culture change. Bushe and Kassam (2005) in their meta-analysis of AI in change initiatives, found that true transformational change was consistent with a focus on the way people think, rather than only on what they do. The following comment from a manager referenced the social-constructionist nature of the AI process and the transformation in the way the team thinks and acts.

> It has been a long journey, but our peer coaching process has DEFINITELY transformed our staff, our vision and goal for the unit, and how we care for our complex and diverse patient population on the unit! I have been pleasantly surprised with the process, how staff has embraced and taken over the committee to drive their work—both for the unit/team and for the patients. The key to it, as I reflect on our journey, is getting to know EACH other first. The pivotal moment (and ultimately, our successes and sustainability of the process/group) was sitting down with each other and remembering and sharing WHY/HOW we got into nursing. It was that powerful! And from there, we each realized no matter what our journey was to nursing, we all have the same heart and goal: to provide care with heart because someone else did that for us in the past—whether it was us, or our family or friend. And to have that moment to connect with each other first, it was then easier to get down to work. We are often so busy during patient care that we don't get the opportunity to connect with each other emotionally, so it was a huge revelation about our journey into nursing and connected us even more as professionals. The process also surprised me with individual staff that rose to the occasion. Given the opportunity, staff nurses show their strengths and leadership capability that were dormant until the peer coaching process was developed. I enjoy sitting on the sideline and mentoring while staff ran the meeting, came up with themes and next steps. They have really embraced their role and work with each other to overcome challenges in their peer coaching and getting others to follow their lead.

Another manager's comments described a similar viewpoint, "You cannot imagine how this initiative, has totally transformed XX for ever. I truly believe this was the seed of a new culture now being born and carried forward with the implementation of C-ICARE."

Research Question 4: Correlations. The final research question for this study sought to understand the relationships among the perceived effectiveness of the peer-coaching process; the coaching relationships; and how the team manages knowledge,

skills, and innovation. The data that answered this research question were analyzed and resulted in four sets of findings.

First, a factor analysis of the items added by this researcher aligned with the theoretical constructs as well as those items from the original researchers (Bryant & Terborg, 2008; Carmeli et al., 2008). The supplementary items provided additional data that measured the construct of peer coaching, as well as the intentionally positive approach (D'Abate et al., 2003; Orem et al., 2007). Secondly, the correlations conducted among the subscales showed that there was a direct and generally strong relationship among all three subscales: the coaching process (B), the relationship scales (C1 & C2), and the team-knowledge scale (D). The effect size for the subscales ranged from moderate to strong.

This finding aligns and supports the earlier work of Bryant and Terborg (2008) in which they reported a direct and strong correlation between the peer-mentoring competency scale and team knowledge, innovation, and skills scale. However, to this researchers knowledge, this is the first study to provide new empirical evidence about the relationship between the HQR construct and the coaching-competency construct, as well as the relationship between HQR and the team-knowledge construct.

For the factor analysis, all measurement items loaded into four factors and the groupings of items in the first three factors coincided directly with the items in the three subscales. There were two items whose strongest factor loading aligned with a fourth factor. Those items—"have formal system for connecting" (B-05) and "share knowledge with other units" (D-06)—may have had a setting-specific influence that involved time constraints. Time and availability of both parties (coach and coaches) were identified in

the qualitative analysis as constraints for the coaches in connecting with their coachees. Similarly, sharing knowledge with other units would require time and availability for parties (various units) to connect and share knowledge.

The predictive analysis for the subscale on team knowledge (D) included two multiple linear regressions: one for all participants and a second for coaches and managers only. Selected characteristics were only those items that were shared across all three cohorts, dichotomous, or interval-level data. In the first regression model, which included participants from all three cohorts, the coaching process (Subscale B), and Years in the Current Organization (indirect), were identified as predictors, with the coaching process being one half to one third of a stronger predictor than Years in the Organization. This finding was consistent with Bryant and Terborg (2008) and suggested that perceived competency and skill in peer mentoring had a very strong and direct influence on team knowledge, skills, and innovation. The finding also suggested the importance of ongoing peer-coach training, mentoring, and guidance, especially in light of the Bryant and Terborg study findings that showed perception of peer-mentoring coaching improved over time after initial training.

Although not as strong a predictor as was perception of coaching competencies, the finding that fewer Years in the Current Organization had a direct influence on team knowledge, skills, and innovation was a very interesting result. This finding may suggest that these newer employees (but not necessarily chronologically younger) were more, in E. M. Rogers' terms, "champions of innovation," than those who were with the organization for a long time (2003, p. 414). E. M. Rogers stated such key influencers are better at "overcoming indifference or resistance that the new idea may provoke in an

organization" (E. M. Rogers, 2003, p. 414). Perhaps, acceptance of new ideas occurs more readily in employees who are newer to the organization. Further E. M. Rogers suggested that the "general picture of an innovation champion emerges not as a particularly powerful individual in an organization, but rather as someone particularly adept at handling people, an individual, skillful in persuasion and negotiation" (2003, p. 415). This description is consistent with the qualitative comments by the coachees about peer coaches with whom they described a high-quality relationship and a positive coaching experience.

The second regression also raised some interesting results. Three predictors, or influences on the knowledge scale were identified: Subscale C1 (the relationship among the unit peer coaches), whether the participant was trained in the United States (indirect influence), and English as the First Language. C1 was the strongest predictor of the three. C1 and thus the regression only included the perception of the relationship among the unit peer-coaches group. The majority of the peer coaches and managers responded that they attended this unit meeting monthly or every other month. Perhaps because of the way in which the meeting transpired, using AI and other relationship-building techniques, they were able to build more collaborative and generative relationships with each other, which in turn may have led to the perception of shared knowledge and innovation among the team as a whole. Another influence on the prediction of knowledge and sharing, although less strong, was English as a First Language. Perhaps this may have contributed to feeling more confident in sharing information among other unit peer coaches and managers at the monthly meetings.

The second regression also revealed that receiving nursing or healthcare Training Outside the US was also a less strong but a direct predictor of the perception of team knowledge and sharing. This finding may or may not have suggested the involvement of a cultural component. Schein (2010) argued that although occupations themselves have a culture, the country of origin of training or practice may also be a factor to consider:

> For most of the occupations that will concern us, these cultures are global to the extent that members are trained in the same way to the same skill set and values. However, we will find that macro cultures also influence how occupations are defined, that is, how engineering or medicine is practiced in a particular country. These variations make it that much more difficult to decipher in a hospital, for example, what is nation, ethnic, occupation, or organizational. (p. 21)

The demographic data revealed the highest percentage of peer-coach (and coachee) respondents reported being internationally trained, received their training in the Philippines. Using the framework of Hofstede's five-category culture model (2011), the Philippines compared to the United States is a culture that is more collectivistic, has a higher power distance, is similarly masculine, has similar uncertainty avoidance, and has a similar shorter term orientation (Hofstede, 2011; Wibbeke, 2009).

Hofstede (2011) also reported on data that shows the two major differences in the Philippine and U.S. culture as they relate to the workplace: the importance of the group/interdependence versus an individual's needs and independence, and an expectation or acceptance that power is unequally distributed in society, rank, education, and role (Hofstede, 2009). Perhaps the second regression finding in this current study suggests that for a significant number of internationally trained peer coaches, there is a very strong appreciation for the interdependence of the group relationships formed in the unit peer-coaching groups and between the coaches and coachees. Moreover, the explicit role of being a peer coach may have strengthened the perception about expectations to

share knowledge. A larger sample is indicated to increase understanding of this phenomenon.

The third section provided a comparison of the three cohorts based on the subscale ratings using one-way ANOVAs and a *t*-test comparison of coaches and managers. The mean of the staff coachees, for Subscale B—peer-coaching process and C2—relationship between the coach and coachee, although both above neutral, were statistically significantly lower than the means of the other two cohorts. Again, these findings were not unexpected given the number of staff respondents who had only been contacted once, or did not know who their peer coach was, or that a peer-coaching process had been implemented on their unit. Pertaining to this implementation issue, there were specific local findings that were not reported in this study due to confidentiality.

The ratings for knowledge (Subscale D) were statistically different overall. Interestingly, the mean of the staff coachees, although above neutral, was significantly different from the mean of the managers, yet the mean of the peer coaches was not statistically different from either the coachees or the managers. Perhaps the very high perceptional rating of knowledge by the managers could be seen as a self-evaluation and was affected by the sense of responsibility managers feel for knowledge creation and sharing. On the other hand, the manager's perspective may be broader about the unit as a whole, reflected in the ratings. The managers in the Bryant and Terborg (2008) study also perceived a positive and significant relationship between peer mentoring and knowledge creation and sharing. The remaining comparison involved Subscale C, which pertained only to the perception of the quality of the relationship between the peer

coaches and the coachees. Here, there was no significant difference between the perception of the peer coaches and that of the managers, demonstrating a consistent perception that HQR existed among the unit peer-coaches group.

Conclusions

The central finding of this study was that the peer-coaching process was perceived by a definitive majority of the peer coaches and managers, and a general majority of the coachees, to be a positive and effective process contributing to the development of HQR, knowledge creation and sharing. The peer coaches and the managers rated all three subscales generally high with relative consistency. In the coachees cohort, there was a wider variation in ratings. Several staff/coachee respondents reported in the open-comment section that they had not been included in the peer-coaching process, were unaware of a such a program, or were contacted only once by their peer coach. This group rated the scales very negatively and as a result, the overall subscale ratings for this cohort trending more toward neutral. Despite this finding and other reported barriers to the peer-coaching process such as time constraints, the majority of respondents in all three cohorts perceived the peer-coaching process to be a positive experience with beneficial impacts on the team, the individual, and on the patient/family experience of care.

Further, a significant finding was the predominance of the perception of a positive impact on the team. Comments about the team included the following subthemes: enhanced or "transformed" unit culture; increased positivity and team energy; more open, less judgmental environment; greater cohesiveness among the team members; more effective communication among peers, manager, and patients and families; and

improved unit patient satisfaction scores. In the limited studies on peer coaching, a positive impact on team culture appears to be a new finding (Broscious & Saunders, 2001; Parker et al., 2008; Sekerka & Chao, 2003; Waddell & Dunn, 2005). Several managers also expressed pleasant surprise about the emergence in the team of new staff leadership and increased creativity as a result of the peer-coaching process.

Perceived impacts at the individual level included increased self-confidence; better interpersonal relationship skills; closer relationships with others including peers, managers, and patients and families; greater sense of positivity; and improved sense of fulfillment in their work. Impacts on the patients/family experience of care included improvements in patient-satisfaction scores, observations and self-reports of more frequent caring acts, greater sensitivity, better connections, and overall improved communication with the nursing staff.

Several staff also referred specifically to the benefit of providing a structure that was restorative and encouraging of emotional support for what one participant called the "hardships of our work." It is widely acknowledge that the daily work of nursing can be both physically and emotionally demanding, making caregivers potentially susceptible to service and/or "compassion fatigue" without the necessary restorative and encouraging relational support (Ashkanasy et al., 2000; Johnson, 1992; Kahn, 1993; Knobloch-Coetzee & Klopper, 2010). Encouraging the development of relational skills, teaching appreciative storytelling methodology, and role modeling how to create safe environments in both the monthly unit peer-coaches groups and private conversations between the coaches and coachees, allowed for a structure and a forum for the expression of powerful and sometimes difficult emotions. Kahn (1992) suggested such collegial

support is necessary to allow caregivers to be "fully there" and "psychologically present,"

to be able to care for others (p. 322). Watson (1988, 2005) has long argued for the need

for nurses to attend to the mind, body, and spirit in order to fully acknowledge and care

for the humanity of others. Further, Kahn (1993) and Bass and Riggio (2006) suggested

that creating organizational space for supportive, open peer relationships is a

demonstration of transformational leadership.

Similar to Parker et al. (2008), who identified constraints to the peer coaching

process, this study identified similar constraints of time, availability of all parties, and

resistance from some. Because of the busy nature of nursing duties and the additional

constraints of varying schedules, time and availability to connect with their coachees was

a definite constraining theme for peer coaches. Parker et al. (2008) also cautioned that

peer coaching does not always work. This study identified that some of the coaching

relationships, in contrast to mutually, holistic, helping relationships, were more

unidirectional and transactional in nature and resulted in lower satisfaction.

Consistent with the findings of Bryant and Terborg (2008), there was a significant

and direct relationship between higher perceived levels of peer-coaching competencies

and behaviors and knowledge creation and sharing. Further, there was a significant and

direct relationship between higher perceived levels of peer-coaching competencies and

behaviors and HQR. There was also a significant and direct relationship between HQR

and knowledge creation and sharing. Of significance, this is the first study reported as

yet, of the HQR scale being used in concert with the peer-coaching competency scale and

the scale measuring team knowledge creation and sharing. Finally, the intentionally

positive approach to the peer-coaching process, which included a focus on POS theory

and the use of AI method, was an identifiable theme in both the quantitative findings and in the qualitative review as contributing to the effectiveness of the process.

Finally, it remains clear from the study results, that positive peer coaching takes practice, time, partner availability, and coaching guidance for it to seed, take root, and flourish. Sometimes it does not develop at all, becoming more unidirectional and transactional in nature. This is consistent with the findings from the Bryant and Terborg study (2008), where perceptional ratings of peer-mentoring skills improved over time. Further, the study's findings are consistent with Parker et al. (2008), who found that nearly a quarter of the peer coaches in their study were dissatisfied in part due to relational issues and barriers such as time constraints and partner availability. Organizations and managers must allow the time and space for the practice and development of coaching skills and relationship building to take hold, as well as providing assistance as possible, to overcome some of the barriers to peer coaching that a busy hospital setting naturally incurs. As one manager summarized, it was a "long journey but well worth the effort."

Recommendations for Professional Practice

The results of this study support the concept that HQR are developed and knowledge is shared through positive peer-coaching relationships, and that beneficial impacts are observed on the team as a whole, on individuals in the team, and on the patient/family experience of care. Thus, the following recommendations for professional practice are offered.

First, prior to implementing a peer-coaching program, as with any change effort, there must be a willingness on the part of the nursing-leadership team and the nursing-

unit management team to provide the necessary support in initial education and ongoing mentoring and guidance of a positive peer-coaching process (Kotter, 1995).

Second, because the relationship is lateral and nonhierarchical, the peer influence is referential in nature (Hughes, Ginnett, & Curphy, 2006). Therefore, the selection of the peer coaches is a very important component of the future success of the process and the subsequent impact on the team knowledge creation and sharing. This should be a voluntary commitment and not tied to performance evaluation (Parker et al., 2008). The selection and/or recruitment of coaches need not be limited to extroverted, experienced, older, or prior leader/resource/preceptors on the unit. Yet, the peer coaches must authentically model and have a "heart" for relational work (Kouzes & Pozner, 2007). It is also advised that there is an agreement of a commitment to the peer-coaching role of at least 6 months to a year, as it has been demonstrated in the literature that peer mentoring (coaching) competencies and effectiveness improves over time (Bryant & Terborg, 2008).

Third, monthly unit meetings for the peer coaches are an essential structural element for the success of implementation and should remain a priority for at least the first year. The structure of the monthly meetings allows a forum to build and deepen the relationships among the unit peer coaches: creating a safe environment for them to share, learn, and collaborate with each other. Further, this researcher has observed that these groups generate a particular energy, passion, and creativity that, in turn, provides positive reinforcement for the coaches in their roles as key influencers of innovation. The meetings also allow for ongoing education in caring theories, POS principles, AI

methodology, facilitation techniques, and formally establish unit goals to clarify future direction/next steps for the peer coaches and coachees.

Third, the peer coach-to-coachee pairing is recommended to be at the lowest ratio as possible. Having more than three coachees to connect with is very difficult for busy nurses, as described in the qualitative comments. Shift schedule matching must be an important consideration. The advantages and disadvantages of an assigned versus a self-selected pairing is not well studied. However, Parker et al. (2008) suggested that it did not make a difference in satisfaction levels. On the other hand, the mentoring literature suggests that cultural similarities, gender, personality style, and other attractors are antecedents to a positive mentoring experience (Lankau & Scandura, 2002; Wanberg, Welsh, & Hezlett, 2003). As voiced in the qualitative comments of this study, having the coaching pairs (groups) conduct appreciative inquiries with each other provides a rare opportunity to share values and experiences in which mutual respect is increased, commonalities are found, and comfort in the relationship occurs that can increase learning behaviors (Carmeli et al., 2008).

Fourth, in concert with transformational-leadership principles (Bass & Riggio, 2006), at some point in the process, after the first 6 months, these meetings can be transitioned to staff-level chairs/facilitator, as the managers noted in their comments, to help build leadership at the staff level. Managers should remain as supportive mentors and advocates when necessary in overcoming implementation issues and barriers to peer coaching. Further, managers can assist in finding opportunities for collaborating and sharing knowledge with other units, thereby diffusing innovation and culture change throughout the broader organization (E. M. Rogers, 2003).

Recommendations for Future Research

This research was limited to a single-site study where positive peer-coaching training was implemented to support organizational efforts to enhance interpersonal communication, relational, and service skills among nursing personnel. The use of a small convenience sample selected from one major academic teaching hospital with designated Magnet® certification status limited the study findings; thus, results cannot be generalized to other settings. Institutions with Magnet® certification status have demonstrated they have a culture that is favorable to mentoring and therefore to the related concept of peer coaching. The study was confined and limited to those nursing units and participants who had received training. Further, the initial peer-coaching training was conducted by this researcher, as part of broader consulting focus to enhance the patient/family experience of care.

The use of self-report data and the cross-sectional design was an additional limitation. The survey sample, in general terms, reflected the diversity of the nursing population regarding culture, gender, age, and shift schedule, but was limited by response rate, particularly among the general staff coachees. Because nursing personnel had just completed a 3-week survey period for a national nursing quality survey, the response rate may have been affected.

Additional research is therefore warranted and would contribute to the emerging scholarly literature on developmental relationships in the workplace, specifically the professional practice of using peer-coaching relationships, as well as POS and AI. There are several suggestions:

1. Future studies could include a longitudinal design structure to test the various subscales used in the Peer Coaching Survey (peer-coaching competencies, the HQR, and the knowledge scale) before and after the implementation of positive peer coaching, again at 6 months and 12 months, or other varying periods of time.

2. Researchers could try varying the ratio of coaching assignments and measure the impact of lower numbers and the perceived impact on the coaching competency scale, the HQR scale, and the knowledge scale.

3. Researchers could conduct an experimental design using a non-AI, POS approach as a control with the positive peer-coaching approach as the intervention.

4. Future studies could take place in different settings, including nonacademic, non-Magnet-certified hospitals.

5. Researchers could conduct a more in-depth qualitative study to examine the relationship of culture and other similarity/dissimilarity factors that either facilitate or inhibit peer-coaching relationships.

6. Future studies can also explore the relationship of the leadership style of the team/unit leader and the effectiveness of the peer-coaching process.

Concluding Remarks

Writing this dissertation from the perspective of a scholar/practitioner has provided the benefit of a unique experience from which to test and build on theory. As Schein argued, "practical experiences where we are actually helping organizations to

solve their problems provides multiple opportunities to observe and inquire, leading to better concepts, models, and tools to be replicated in further experience" (2010, p. xii).

This researchers' original interest in the study of peer coaching began with observations that were shared anecdotally by other practitioners of similar work. This study gave the opportunity to provide empirical evidence to support those anecdotal observations about the powerful influence of peers in an intentionally positive environment. The study results suggested that peer coaching creates excitement for learning and sharing knowledge that is supportive of a more patient/family-centered culture. Further, this researcher and other colleagues have often shared the thought that, as important as executive leadership is in an organization, it is the management at the unit level that can enhance or diminish the patient's experience of care. As healthcare becomes increasingly complex, front-line managers will continue to be challenged to provide their staff with all the necessary learning and developmental and relational support. Developmental relationships in the form of positive peer coaching can serve as another method of providing a support structure for fostering collegial HQR and knowledge sharing with a positive impact on the team, the patient, and the families they serve.

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Appendix A. Institutional Review Board Approval

May 19, 2011

Dear Ms. Miller:

The Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco (USF) has reviewed your request for human subjects approval regarding your study. Please pardon the delay in processing your application.

Your application has been approved by the committee (IRBPHS #11-046). Please note the following:

1. Approval expires twelve (12) months from the dated noted above. At that time, if you are still in collecting data from human subjects, you must file a renewal application.

2. Any modifications to the research protocol or changes in instrumentation (including wording of items) must be communicated to the IRBPHS. Re-submission of an application may be required at that time.

3. Any adverse reactions or complications on the part of participants must be reported (in writing) to the IRBPHS within ten (10) working days.

If you have any questions, please contact the IRBPHS at ▮▮▮▮▮▮▮▮

On behalf of the IRBPHS committee, I wish you much success in your research.

Sincerely,

Terence Patterson, EdD, ABPP
Chair, Institutional Review Board for the Protection of Human Subjects
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IRBPHS – University of San Francisco
Counseling Psychology Department
Education Building – Room 017
▮▮▮▮▮▮▮▮▮▮▮▮

Appendix B. Permission to Use Instrument

Subject: Re: Interest in Your Peer Mentoring Survey
Date: Monday, February 8, 2010 12:02 PM
From: Bryant, Scott
To: Lisa Miller
Conversation: Interest in Your Peer Mentoring Survey

Lisa,
I would be happy to have you use the peer mentoring survey. You are free to use it to collect data and publish it if you would like. I collected data as part of evaluating a peer mentoring training course—so I collected data before and after the training. You could also use it get a snapshot of where your participants currently are.

I have been very interested in applying the peer mentoring concepts to the health care industry—particularly nurses and doctors. So, if you have access to this audience and are interested in working on a project together I'd be open to that as well.

I've attached the survey. I collected all my data using a web-based survey. It's a really nice way to collect it—it makes the data analysis process a lot less painful. Let me know if you have other questions.
Cheers,
Scott

Appendix C. Permission to Use High-Quality Relationship Measure Items

Lisa,

Thank you for your email. My new email address is ████████████ as I moved to
another institution.

You can certainly use the HQC scale. I have attached some more studies with a hope you
will find them helpful. Please let me know whether we can be of any further help.

Best wishes,
Avi Carmeli

Abraham Carmeli, Ph.D.
Professor of Strategy and Management
Faculty of Management
Tel-Aviv University

----- Original Message -----

From: Jane Dutton **To:** Lisa Miller
Cc: Avi Carmeli
Sent: Thursday, March 03, 2011 1:21 PM

Subject: Re: Interested in Using Your H-QC Scale

Hi Lisa, great to her from you and I am excited that you are interested in our measure of
HQCs—I have AVI on the email and I am sure he would ok your use of the measures—I
am going to forward a paper we recently submitted that measures three aspects of HQCs
a the individual and team levels. Avi has done lots with these measures so I am sure he
would have other articles to send you. We have another measurement paper for HQCs
but it got royally rejected by a journal so I don't want to send that. I would love to learn
more about your interventions as I am designing a peer based coaching class for MBAs
called coaching for change. It too has PP and POS at its core—I am very excited to be
connected! Jane

On Wed, Mar 2, 2011 at 11:29 AM, Lisa Miller

Dear Dr. Dutton,

Please allow me to introduce myself. I am a nurse, consultant and a doctoral student in
the School of Education, Department of Organization and Leadership studies at the
University of San Francisco, California. I have considered contacting you on previous

multiple occasions in the throngs of my passionate excitement in reading your work in *Positive Organizational Scholarship, Positive Relationships at Work* and your articles on High-Quality Connections. I am reaching out to you now for your kind assistance.

My working dissertation proposal is on peer-to-peer coaching among nursing personnel in an academic medical center for the purpose of improving patient/family centered relational and communication skills. The peer coaches will have received training in a positive model for coaching which includes concepts from Positive Organizational Scholarship and Appreciative Inquiry methods. Researcher/professor Scott Bryant, has graciously extended permission to me to modify his peer mentoring training survey from the Bryant and Terborg research 2008 article, *The Impact of Peer Mentor Training on Creating and Sharing Organizational Knowledge (Managerial Issues, (20)1).*

I read with great interest the 2008 research paper *Learning Behaviors in the Workplace: The Role of High-Quality Interpersonal Relationships and Psychological Safety*. I would be very interested in using the H-QR scale and/or the structured survey instrument in parallel with the peer mentoring (coaching) training survey.

I have contacted Dr. Carmeli twice but have not received a reply as yet. I am hoping that you might provide me with assistance in obtaining permission to use the H-QR scale.

I am very much looking forward to hearing from you and your kind consideration of my request.

Best regards,

Lisa

Lisa K. Miller, RN, MS, CPHQ

Appendix D. Peer Coaches Survey

Peer-Coaching Survey
Introduction and Consent

Lisa Miller, RN, MS, is a doctoral candidate in the School of Education at the University of San Francisco. She is doing a study on perceptions of peer coaching, positive relationships at work, and knowledge creating and sharing. Lynn Forsey, RN, PhD, Nurse Scientist at Stanford Hospital and Clinics, is serving as the institutional adviser. Survey Monkey is the vendor that will be used for data collection and storage.

Audience: You are being asked to participate because you are either a designated peer coach, a manager or a member of a nursing unit who is participating in a peer coaching Program.

Procedure: If you agree to participate you will complete a survey, which contains basic informational questions including age, gender, ethnic background and employment status. The survey also contains questions about the peer relational, peer coaching process and knowledge creation and sharing at Stanford Hospital and Clinics. There are three versions of the survey: one for the peer coaches, one for the managers and one for staff members on the unit. You will be directed to the appropriate form of the survey. The survey takes about 10 to 15 minutes to complete.

Confidentiality: The email addresses to contact respondents will be completely separate from completed responses. No individual responses will be linked to email or IP addresses. No individual identities will be used in the reports or publications from the study. Individual responses will be aggregated. The anonymous survey data will be stored on Survey Monkey, which has an up to date firewall and is encrypted. Survey Monkey employs multiple layers of security, including password protection, to ensure data safety and privacy.

Discomforts/Risk: Survey participation will take some time and though on your part. It is possible that some of the questions may make you fell uncomfortable. You are free to decline to answer any question you do not wish to answer or you are free to stop participation at any time.

Benefits: There may be no individual benefits for you, however your participation in this study will contribute to the scholarly and practical understanding of peer coaching, positive relationships at work and how knowledge is created and shared. What is learned from this study may have future benefit to you and your colleagues.

Questions: If I have any question about the stud. I can contact Lisa Miller, at ▮▮▮▮▮▮ ▮▮▮▮▮▮▮▮▮▮▮▮▮▮.com or Lynn Forsey at ▮▮▮▮▮▮▮▮ I can also contact the

Institutional Review Board at the University of San Francisco at ███████████ or
███████████

Consent: I have read the Project Summary (above) and any questions I have about the study have been answered to this point.

Participation in research is voluntary. I am free to decline to be in this study, or to withdraw from it at any point. My decision to participate in this study will have no influence on my present or future status at Stanford Hospital and Clinics.

1. Please click the consent button below to indicate your informed consent to participate in the study. If you choose not to consent, please choose the decline option and you will be directed to the end of the survey.

❑ Continue Anonymously ❑ Decline to Continue Anonymously

2. To be directed to the correct version of the survey for you, please check the appropriate box.

❑ Peer Coach ❑ Staff Member ❑ Manager

Part A: General Information—Coaches' Survey

1. Have you had coaching training prior to this program? ❑ Yes ❑ No

2. If yes, when and where did you have the training?

_____

3. Have you had mentoring training prior to this program?
❑ Yes ❑ No

4. If yes, when and where did you have the training?

_____

5. Name the clinical unit(s) where you usually work.

❑F3 ❑E3 ❑C3 ❑B3 ❑D2/G2S ❑B2 ❑G1 ❑B1/DGR ❑EGR/FGR

6. How long have you been a peer coach? (e.g. a Service Excellence Champion, GEMSS, Service Ambassador, Care Coach, Connecting Hearts Coach, C-I-CARE Coach)

❑under 3 months ❑3 months or more ❑6 months or more ❑ 1 year or more

7. How frequently do you attend the monthly unit coaches meeting? (e.g. Service Excellence Champions, GEMSS, Service Ambassadors, Care Coaches, Connecting Hearts Coaches, C-I-CARE Coaches)

❑ monthly ❑ every other month ❑once a quarter ❑ 3 x or less annually ❑ never

8. How many colleagues are you currently coaching?

❑one ❑two ❑three ❑four or more

9. How frequently do you communicate with the members of your coachees?

❑once a week ❑every other week ❑once a month ❑ once a quarter ❑3x or less annually ❑ never

10. What method(s) of communication do you use to connect with your coachees? (check all that apply)

❑face-to-face ❑email ❑telephone ❑social networking sites ❑text(im) ❑twitter

❏hand-written ❏unit bulletin board ❏newsletter ❏other

11. **If other, please specify.**

_____

12. What is your primary working shift? ❏12 hour days ❏12 hour nights ❏12 hour rotating D/N3pm ❏12 hour 11am to 11 pm ❏8 hour day ❏8 hour nights

13. Do the members of your coachees generally work the same shift as you?
❏ Yes ❏ No

12. If no, how many work other shifts? ❏1 ❏2 ❏3 ❏4 or more

Part B: The Peer Coaching Process—Coaches' Survey

1. The following statements address your attitudes and beliefs about your peer coaching process.

	Strongly Disagree				Strongly Agree
I make it a priority to build a meaningful relationship with my coachees.	1	2	3	4	5
I make it a priority to value their individual strengths.	1	2	3	4	5
I am sensitive to the learning style of my coachees.	1	2	3	4	5
I am sensitive to the communication style of my coachees.	1	2	3	4	5
I have a formal system in place to connect with my coachees.	1	2	3	4	5
I am able to focus my coaching interactions on unit goals for communication, relational and service skills.	1	2	3	4	5
I take time to organize my thoughts before I communicate with my coachees.	1	2	3	4	5
I actively look for ways to encourage a reciprocal learning relationship.	1	2	3	4	5
I encourage our mutual development through appreciative questions.	1	2	3	4	5
I make it a priority to use observant listening when interacting with my coachees.	1	2	3	4	5
If I give feedback, it is constructive and encouraging.	1	2	3	4	5
I look for ways to recognize my coachees positive communication, relational and service skills.	1	2	3	4	5
Improving my own communication, relational and service skills makes me more effective at my job.	1	2	3	4	5
Helping our team develop positive communication, relational and service skills benefits me directly.	1	2	3	4	5
I am highly motivated to be a good peer coach.	1	2	3	4	5
Peer coaching has benefited our team.	1	2	3	4	5

Part C. The Coaching Relationships—Coaches' Survey

C-1. The following statements address your attitudes and beliefs about the nature of the relationship among the unit peer coaches group (e.g. the Service Champions, the GEMSS, Service Ambassadors, Care Coaches, Connecting Hearts Coaches, C-I-CARE Coaches)

	Strongly Disagree				Strongly Agree
We feel comfortable in sharing reflective "best self" stories with each other.	1	2	3	4	5
We try to understand one another.	1	2	3	4	5
When we interact, we are open to listening to each other's ideas.	1	2	3	4	5
When we interact, we are able to consider differing perspectives.	1	2	3	4	5
When we interact we encourage each other's creativity.	1	2	3	4	5
When we interact, we build off each other's ideas and contributions.	1	2	3	4	5
When we interact with each other we feel generative (productive and creative).	1	2	3	4	5
We feel safe in expressing both positive and difficult feelings.	1	2	3	4	5
When talking about difficult situations, we do so in a constructive way.	1	2	3	4	5
When we experience setbacks, we learn and grow from them.	1	2	3	4	5
We feel safe in fully expressing emotions with one another.	1	2	3	4	5

C-2. The following statements address your attitudes and beliefs about the nature of the relationship between you and the colleagues you are coaching.

	Strongly Disagree				Strongly Agree
My coachees and I feel comfortable in sharing reflective "best self" stories with each other.	1	2	3	4	5
My coachees and I try to understand one another.	1	2	3	4	5
When we interact, we are open to listening to each other's ideas.	1	2	3	4	5
When we interact, we are able to consider differing perspectives.	1	2	3	4	5
When we interact we encourage each other's creativity.	1	2	3	4	5
When we interact, we build off each other's ideas and contributions.	1	2	3	4	5
When we interact with each other we feel generative (productive and creative).	1	2	3	4	5
My coachees and I feel safe in expressing both positive and difficult feelings.	1	2	3	4	5
When talking about difficult situations, we do so in a constructive way.	1	2	3	4	5
When my coachees and I experience setbacks, we learn and grow from them.	1	2	3	4	5
My coachees and I feel safe in fully expressing emotions with one another.	1	2	3	4	5

Part D: Team Knowledge, Skills, and Innovation—Coaches' Survey

The following statements address your attitudes and beliefs about how members of your nursing unit as a whole, manage knowledge skills and innovation.

	Strongly Disagree				Strongly Agree
Members of our team (unit) constantly generate new ideas to enhance the patient/family experience of care.	1	2	3	4	5
Members of our team adapt our work to meet the patient/family individualized desires.	1	2	3	4	5
Members of our team actively talk with each other and share knowledge.	1	2	3	4	5
Members of our team transform individual knowledge to shared knowledge.	1	2	3	4	5
Our team regularly creates innovative patient/family centered care processes.	1	2	3	4	5
Members of our team regularly share knowledge with other units working on improving the patient/family experience of care.	1	2	3	4	5
My unit has systems in place to efficiently capture staff's knowledge for improving the patient/family experience.	1	2	3	4	5
My unit is committed to implement new ideas and processes for patient/family-centered care.	1	2	3	4	5

Part E. Demographic—Coaches' Survey (All information will remain confidential and reported only in the aggregate)

1. Position: (check all that apply) ❏ Educator ❏Resource Nurse ❏ Unit Secretary ❏ Nursing Assistant ❏ Staff Nurse ❏ Management

2. Employment Status: ❏ Full-time ❏ Part-time ❏ Traveler ❏ Relief

3. Gender: F   M

4. Birth Year _____

5. Highest Level of Education: ❏ Some college ❏ AD ❏ Nursing Diploma ❏ BA/BS ❏ MA/MS ❏ BSN ❏MSN ❏ Other

6. If other, please specify _____

7. Did you receive your nursing (or healthcare) training in the U.S.?   Y   N

8. If no, where? _____

9. Years worked in healthcare

10. Years worked at this organization?

11. Years worked in current role? (e.g. as nurse, nursing assistant, or unit secretary)

12. Is English your native language? Y   N

13. If no, what is your first (native) language? _____

14. What is your average commute time in minutes? _____

Part F. Open Comment—Coaches' Survey

Please use the following space to share any additional thoughts you have about your experience as a peer coach or your unit peer coaching process (e.g. Service Champions, GEMSS, Service Ambassadors, Care Coaches, Connecting Hearts Coaches, C-I-CARE Coaches)

_____

_____

_____

_____

_____

_____

_____

_____

Thank you so much again, for your time and attention. Feel free to contact me anytime.

Lisa K. Miller, RN, MS, CPHQ

Appendix E.   Staff Coachee Survey

Part A: General Information - Staff Survey

The purpose of this section is to gain general information about the characteristics of the staff and the peer coaching process.

1. Name the clinical unit where you usually work.

❏F3 ❏E3 ❏C3 ❏B3 ❏D2/G2S ❏B2 ❏G1 ❏B1/DGR ❏EGR/FGR

2. Have you been networked with a unit peer coach? (e.g., Service Excellence Champion, GEMSS, Service Ambassador, Care Coach, Connecting Hearts Coach, C-I-CARE Coach)

❏Yes ❏No ❏ Don't know

3. How frequently does your peer service coach communicate with you? (e.g. Service Excellence Champions, GEMSS, Service Ambassadors, Care Coaches, Connecting Hearts Coaches, C-I-CARE Coaches)

❏once a week ❏every other week ❏once a month ❏ every other month ❏once a quarter ❏ 3 x or less annually ❏ never

4. What method(s) of communication does your peer service coach use to connect with you? (check all that apply**)**

❏face-to-face ❏email ❏telephone ❏social networking sites ❏text(im) ❏twitter ❏hand-written ❏unit bulletin board ❏newsletter ❏other

5. If other please specify. _____

6. What is your primary working shift? ❏12 hour days ❏ 12 hour nights ❏12 hour rotating D/N ❏ 12 hour 11am to 11pm ❏8 hour days ❏8 hour evenings ❏8 hour nights

7. Does your peer coach generally work the same shift as you?
❏ Yes ❏ No

8. Does your peer coach generally work the same weekend as you?
❏ Yes ❏ No

Part B. The Peer Coaching Process—Staff Survey

1. The following statements address your attitudes and beliefs about your unit service peer coaching process.

	Strongly Disagree				Strongly Agree
My unit service peer coach makes it a priority to build a meaningful relationship with my coachees.	1	2	3	4	5
My service peer coach makes it a priority to value my individual strengths.	1	2	3	4	5
He/she is sensitive to my learning style.	1	2	3	4	5
He/she is sensitive to my communication style.	1	2	3	4	5
My service peer coach has a formal system in place to connect with me.	1	2	3	4	5
He/she is able to focus our coaching interactions on unit goals for communication, relational and service skills.	1	2	3	4	5
My service coach takes the time to organize his/her thoughts before communicating with me.	1	2	3	4	5
He/she actively looks for ways to encourage a reciprocal (give/receive) learning relationship.	1	2	3	4	5
He/she encourages our mutual development through appreciative questions and conversation.	1	2	3	4	5
He/she makes it a priority to use observant listening when interacting with my coachees.	1	2	3	4	5
If my service coach gives feedback, it is constructive and encouraging.	1	2	3	4	5
He/she looks for ways to recognize my positive communication, relational and service skills.	1	2	3	4	5
Improving my own communication, relational and service skills makes me more effective at my job.	1	2	3	4	5
Helping our team develop positive communication, relational and service skills benefits me directly.	1	2	3	4	5
My service coach is highly motivated to be a good peer coach.	1	2	3	4	5
The peer coaching process has benefited our team.	1	2	3	4	5

Part C. The Coaching Relationship—Staff Survey

The following statements address your attitudes and beliefs about the nature of the relationships with your unit service peer coach (e.g. Service Excellence Champion, GEMSS, Service Ambassador, Care Coach, Connecting Hearts Coach, C-I-CARE Coach).

	Strongly Disagree				Strongly Agree
1.We feel comfortable in sharing reflective "best self" stories with each other.	1	2	3	4	5
2.We try to understand one another.	1	2	3	4	5
3.When we interact, we are open to listening to each other's ideas.	1	2	3	4	5
4.When we interact, we are able to consider differing perspectives.	1	2	3	4	5
5.When we interact we encourage each other's creativity.	1	2	3	4	5
6.When we interact, we build off each other's ideas and contributions.	1	2	3	4	5
7.When we interact with each other we feel generative (productive and creative).	1	2	3	4	5
8.We feel safe in expressing both positive and difficult feelings.	1	2	3	4	5
9.When talking about difficult situations, we do so in a constructive way.	1	2	3	4	5
10.When we experience setbacks, we learn and grow from them.	1	2	3	4	5
11.We feel safe in fully expressing emotions with one another.	1	2	3	4	5

Part D. Team Knowledge, Skills, and Innovation—Staff Survey

The following questions address how your nursing unit manages Knowledge, Skills, and innovation.

	Strongly Disagree				Strongly Agree
1. Members of our unit constantly generate new ideas to enhance the patient/family experience of care.	1	2	3	4	5
2. Members of our unit adapt our work to meet the patient/family individualized desires.	1	2	3	4	5
3. Members of our unit actively talk with each other and share knowledge.	1	2	3	4	5
4. Members of our unit transform individual knowledge to shared knowledge.	1	2	3	4	5
5. Our team regularly creates innovative patient/family centered care processes.	1	2	3	4	5
6. Members of our unit regularly share knowledge with other units working on improving the patient/family experience of care.	1	2	3	4	5
7. My unit has systems in place to efficiently capture staff's knowledge for improving the patient/family experience.	1	2	3	4	5
8. My unit is committed to implement new ideas and processes for patient/family-centered care.	1	2	3	4	5

Part E. Demographic Information - Staff Survey
(All information will be kept confidential and will be reported only in the aggregate)

1. Position: (check all that apply) ❏Resource Nurse ❏ Unit Secretary ❏ Nursing Assistant ❏ Staff Nurse

2. Employment Status: ❏ Full-time ❏ Part-time ❏ Traveler ❏ Relief

3. Gender: F   M

4. Birth year. _____

5. Highest Level of Education: (check all that apply) ❏ Some college ❏ AD ❏ Nursing Diploma ❏BA/BS ❏MA/MS ❏ BSN ❏ MSN ❏ other

9. Years worked in healthcare

10. Years worked at this organization?

11. Years worked in current role? (e.g. as nurse, nursing assistant, or unit secretary)

12. Is English your native language? Y   N

13. If no, what is your first (native) language? _____

14. What is your average commute time in minutes? _____

Part F. Open Comment—Staff Survey

Please use the following space to share any additional thoughts you have about your experience as a peer coach or your unit peer coaching process (e.g. Service Champions, GEMSS, Service Ambassadors, Care Coaches, Connecting Hearts Coaches, C-I-CARE Coaches)

_____

_____

_____

_____

_____

_____

_____

Thank you so much again, for your time and attention. Feel free to contact me anytime.

Lisa K. Miller, RN, MS, CPHQ

Appendix F. Managers' Survey

Part A: General Information - Managers' Survey

1. Name the unit (s) where you usually work?

❑**F3** ❑**E3** ❑**C3** ❑**B3** ❑**D2G2S** ❑**B2** ❑**G1** ❑**B1/DGR** ❑**EGR/FGR**

2. How long have you participated in a service excellence peer coaching process?
(e.g. a Service Excellence Champion, GEMSS, Service Ambassador, Care Coach, Connecting Hearts Coach, C-I-CARE Coach)

❑under 3 months ❑ 3 months to just under 6 months ❑6 months to just under 1 year ❑ 1 year or more

3. How many peer coaches do you have on your unit? ____

4. How frequently do you have a unit coaches team meeting on your unit? (e.g. Service Excellence Champions, GEMSS, Service Ambassadors, Care Coaches, Connecting Hearts Coaches, C-I-CARE Coaches)

❑ monthly ❑ every other month ❑once a quarter ❑ 3 x or less annually ❑ never

5. How frequently do you attend the meetings? ❑monthly ❑ every other month ❑once a quarter ❑ 3 x or less annually ❑ never

6. Who chairs the meeting? (check all that apply)

❑Staff nurse lead ❑manager ❑ assistant manager

7. Are each of the peer coaches assigned to a manager for mentoring?

❑yes ❑no ❑don't know .

8. How frequently do you check-in with the peer coaches on their service coaching work?

❑ once a week ❑ every other week ❑ once a month ❑ every other month❑ once a month ❑ every other month ❑ once a quarter ❑ 3 times a year or less annually ❑ never

9. What method(s) of communication do you use to communicate your coaches?

❑face-to-face ❑email ❑telephone ❑social networking sites ❑text(im) ❑twitter ❑hand-written ❑unit bulletin board ❑newsletter ❑other

10. If other, please specify. _____

10. What is your primary working shift? ❑12 hour days ❑12 hour nights ❑12 hour rotating days/nights ❑12 hour 11 am to 11pm ❑8 hour day ❑ 8 hour eve ❑ 8 hour nights

11. If you are formerly mentoring a group of peer coaches, do they generally work the same shift as you?
❑ Yes ❑ No ❑ Does not apply

Part B. The Peer Coaching Process—Managers' Survey

The following statements address your attitudes and beliefs about the peer coaching process.

	Strongly Disagree				Strongly Agree
1. I make it a priority to build a meaningful relationship with my peer coaches.	1	2	3	4	5
2. I make it a priority to value their individual strengths.	1	2	3	4	5
3. I am sensitive to the learning style of my peer coaches.	1	2	3	4	5
4. I am sensitive to the communication style of my coaches.	1	2	3	4	5
5. I have a formal system in place to connect with my coaches.	1	2	3	4	5
6. I am able to help the peer coaches focus their interactions with their coachees on unit goals for communication, relational and service skills.	1	2	3	4	5
7. I take time to organize my thoughts before I communicate with my peer coaches.	1	2	3	4	5
8. I actively look for ways to encourage a reciprocal (give/receive) learning relationship between the coaches and their coachees.	1	2	3	4	5
9. I encourage mutual development through appreciative questions and conversation.	1	2	3	4	5
10. I make it a priority to use observant listening when interacting with my peer coaches.	1	2	3	4	5
11. If I give feedback, it is constructive and encouraging.	1	2	3	4	5
12. I actively look for ways to recognize my staff's positive communication, relational and service skills.	1	2	3	4	5
13. Improving my own communication, relational and service skills makes me more effective at my job.	1	2	3	4	5
14. Helping our team develop positive communication, relational and service skills benefits me directly.	1	2	3	4	5
15. I am highly motivated to develop a good service peer coaching process on our unit.	1	2	3	4	5
16. The peer coaching process has benefited our team.	1	2	3	4	5

Part C. The Coaching Relationships—Managers' Survey

C-1. The following statements address your attitudes and beliefs about the nature of the relationship among the members of your unit peer coaches group (e.g. the Service Champions, the GEMSS, Service Ambassadors, Care Coaches, Connecting Hearts Coaches, C-I-CARE Coaches)

	Strongly Disagree				Strongly Agree
1. We feel comfortable in sharing reflective "best self" stories with each other.	1	2	3	4	5
2. We try to understand one another.	1	2	3	4	5
3. When we interact, we are open to listening to each other's ideas.	1	2	3	4	5
4. When we interact, we are able to consider differing perspectives.	1	2	3	4	5
5. When we interact we encourage each other's creativity.	1	2	3	4	5
6. When we interact, we build off each other's ideas and contributions.	1	2	3	4	5
7. When we interact with each other we feel generative (productive and creative).	1	2	3	4	5
8. We feel safe in expressing both positive and difficult feelings.	1	2	3	4	5
9. When talking about difficult situations, we do so in a constructive way.	1	2	3	4	5
10. When we experience setbacks, we learn and grow from them.	1	2	3	4	5
11. We feel safe in fully expressing emotions with one another.	1	2	3	4	5

C-2. From what you have observed or hear, the following statements address your generalized attitudes and beliefs about the nature of the relationships of the peer coaches and their designated coachees.

	Strongly Disagree				Strongly Agree
1. The peer coaches and their coachees feel comfortable in sharing reflective "best self" stories with one other.	1	2	3	4	5
2. They try to understand one another.	1	2	3	4	5
3.When they interact, they are open to listening to each other's ideas.	1	2	3	4	5
4.Whent they interact, they are able to consider differing perspectives.	1	2	3	4	5
5. They encourage each other's creativity.	1	2	3	4	5
6.When we interact, they build off each other's ideas and contributions.	1	2	3	4	5
7.When they interact with each other they feel generative (productive and creative).	1	2	3	4	5
8. They feel safe in expressing both positive and difficult feelings.	1	2	3	4	5
9.When talking about difficult situations, they do so in a constructive way.	1	2	3	4	5
10.When they experience setbacks, they learn and grow from them.	1	2	3	4	5
11. They feel safe in fully expressing emotions with one another.	1	2	3	4	5

Part E. Demographic—Managers' Survey (All information will remain confidential and reported only in the aggregate)

1. Position: (check all that apply) ❏ Educator ❏Resource Nurse ❏ Unit Secretary ❏ Nursing Assistant ❏ Staff Nurse ❏ Management

2. Employment Status: ❏ Full-time ❏ Part-time ❏ Traveler ❏ Relief

3. Gender: F   M

4. Birth Year _____

5. Highest Level of Education: ❏ Some college ❏ AD ❏ Nursing Diploma ❏ BA/BS ❏ MA/MS ❏ BSN ❏MSN ❏ Other

6. If other, please specify _____

7. Did you receive your nursing (or healthcare) training in the US?   Y   N

8. If no, where? _____

9. Years worked in healthcare

10. Years worked at this organization?

11. Years worked in current role? (e.g. as nurse, nursing assistant, or unit secretary)

12. Is English your native language? Y   N

**13. If no, what is your first (native) language?** _____

14. What is your average commute time in minutes? _____

Part F. Open Comment—Managers' Survey

Please use the following space to share any additional thoughts you have about your experience as a peer coach or your unit peer coaching process (e.g. Service Champions, GEMSS, Service Ambassadors, Care Coaches, Connecting Hearts Coaches, C-I-CARE Coaches)

_____

_____

_____

_____

_____

_____

_____

_____

Thank you so much again, for your time and attention. Feel free to contact me anytime.

Lisa K. Miller, RN, MS, CPHQ
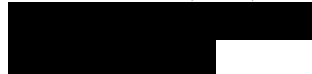
Appendix G. Factor Analysis Matrix

Table G1

Rotated Factor Matrix of Subscale Items (B, C2, D)

	Factor			
	1	2	3	4
Build the relationship	.747	.384	.213	.278
Value strengths	.759	.426	.219	.085
Sensitive to style-learning	.759	.404	.283	.060
Sensitive to style-communication	.757	.406	.292	.097
Have formal system for connecting	.454	.376	.143	.504
Set goals	.644	.366	.197	.404
Organize thoughts before communicating	.648	.482	.132	.292
Foster reciprocal learning	.699	.485	.189	.286
Use an appreciative approach	.724	.478	.305	.185
Observant listener	.754	.383	.303	.184
Give constructive feedback	.734	.478	.271	.117
Give recognition	.736	.435	.321	.155
Improved self efficacy	.604	.295	.484	-.211
Coaching benefits-me	.638	.350	.513	-.163
Motivated to coach	.709	.388	.299	.121
Coaching benefits-team	.690	.312	.290	.085
Comfortable being reflective	.430	.747	.240	.143
Try to understand each other	.465	.765	.251	.059
Are open to other's ideas	.417	.782	.236	.028
Consider other's perspective	.420	.796	.231	.052
Encourage other's creativity	.395	.794	.252	.099
Build off of each other's ideas and contributions	.374	.828	.285	.006
Are generative	.428	.776	.282	.163
Can express both positive/negative	.284	.819	.220	.219
Have constructive conversations	.416	.747	.284	.157
Grow from setbacks	.444	.753	.269	.164

Feel safe expressing emotion	.349	.746	.250	.280
Generate new ideas	.178	.208	.852	.096
Adaptable	.286	.175	.847	-.036
Talk and share knowledge among the team	.205	.231	.825	.023
Transform self knowledge to shared knowledge	.237	.248	.822	.155
Create innovative processes	.230	.333	.796	.226
Share with other units	.191	.187	.543	.611
Capture ideas for improvement	.268	.250	.637	.527
Committed to patient/family centered care	.286	.177	.778	.203

Note. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.