INDIVIDUAL EMPATHY, PERSON-ORGANIZATION FIT, AND PATIENT CARE QUALITY: THE MODERATING EFFECT OF COHESION

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INDIVIDUAL EMPATHY, PERSON-ORGANIZATION FIT, AND PATIENT CARE QUALITY: THE MODERATING EFFECT OF COHESION

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Thesis

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ABSTRACT

Cohesion is a multidimensional construct that captures the extent to which members are positively attached to the group. Previous research suggests positive outcomes are expected from work groups that demonstrate different aspects of cohesion among members. Importantly, research has suggested cohesion may operate alongside existing processes to buffer against negative influences on job performance. I extend this research to the experiences of registered nurses predicting that perceived levels of cohesion will moderate the effect of empathy and value congruence such that self-reported job performance (i.e., patient care quality) will be higher when levels of cohesion are higher. In the context of nursing, these relationships are especially important to consider as the nature of carework and the changing expectations associated with nursing have the potential to compromise the extent to which empathy and value congruence facilitate job performance within hospitals. I examine these relationships using survey data collected from 753 registered nurses employed in hospitals affiliated with one health care system. Using Ordinary Least Squares regression, results indicate that nurses’ empathy, value congruence, and task-related cohesion were directly associated with higher levels of self-reported patient-care quality. However, results indicated and only one of the indicators of cohesion had a significant moderating effect. Social cohesion was found to moderate the relationship between value congruence and self-reported patient care quality. Implications of these results as well as directions for future research are discussed.
DEDICATION

To my Mother and Father, to Rachel and Melissa, and to my peers in Olin Hall.
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Many people have been instrumental in the construction of this document. Distinguished among them is Rebecca Erickson. On writing, on research, on academic citizenship, I am especially appreciative of her invaluable direction throughout my progress. My committee members—Janette Dill, Rudy Fenwick, and Jim Diefendorff—have each given focused attention to my project and I thank them for their contributions to my process. Peter Barr, Marci Cottingham, Eric Fritz, and William Kalkhoff have provided helpful comments on early drafts of the manuscript. In addition, Rachel Allison and Michael Steiner gave especially pivotal comments during the final stages of preparation. Thank you everyone. Thank you Corey Stevens, Danielle MacCartney, Tiffany Taylor, Paul Lipold, Daniela Jauk, Alison Moss, Andrea Miller, Richard Serpe, and Jennifer Keys for your mentorship, friendship, or leadership. All mentioned here have been outstanding in my path thus far.

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CHAPTER I
INTRODUCTION TO THE PROBLEM

Recent scholarship suggests that today’s hospital environments may, over time, have a negative influence on nurses’ ability to engage in the empathetic behaviors that are central to the provision of high quality patient care (Coetzee and Klopper 2010; Yu and Kirk 2009). It has also been suggested that some large hospital and health care organizations have emphasized budgetary concerns and standardized routines to the extent that nurses and other health care providers perceive organizational values to be at odds with the values they hold for themselves as caring professionals (Woodward 1997). Within this broader health care context, the current study examines the extent to which perceived cohesion (i.e., perceptions of the totality of forces which encourage members to remain in a group; Festinger 1950) moderates the relationship between empathy and value congruence on nurses’ self-reported patient care quality.

Recent scholarship suggests that nurses’ ability to be empathetic with their patients and the fit between nurses’ professional values and those espoused by health care organizations may be increasingly compromised due to the requirements surrounding the provision of quality care and the changing organizational structure of health care systems. For example, many of the characteristic features of today’s nursing work environment decrease the likelihood of nurses engaging in the empathetic processes that are fundamental to the provision of quality patient care (e.g., demands for paperwork,
increased patient acuity, exposure to secondary trauma; Aiken et al. 2008; Burston and Stichler 2010; Coetzee and Klopper 2010). These nursing scholars further suggest that continuous exposure to patient problems, the deep engagement of one’s self that is inherent to providing care, and the stress associated with exposure to sickness and suffering leads, over time, to increasing apathy, callousness, and indifference toward patients as well as decreasing nurses’ ability or desire to exert the cognitive and emotional effort required to engage in empathetic patient care (Coetzee and Klopper 2010). Stated differently, the performance of carework can, itself, be detrimental to the very processes that are necessary for nurses to continue to provide quality care to patients.

In regard to the organizational structure of health care, some scholars suggest that large hospital systems increasingly function according to principles and values that are at odds with those that motivate the performance of caring labor that nurses, among other health care professionals, provide to their patients (Erickson and Grove 2008; Woodward 1997). For example, the emphasis that some health care organizations place on increased efficiency and the rationalization of nursing tasks may be perceived by nurses as being at odds with the ethic of care that underlies their work. In an era of managed care where organizational profit motives combine with the need for high patient satisfaction scores and low readmission rates, the need to safeguard nurses’ ability to provide empathetic care and to feel that they work in an environment that supports and reinforces their individual professional values has never been greater nor, perhaps, more difficult to maintain (Erickson and Stacey 2013).
Some researchers have suggested that cohesion may operate in work groups to moderate the negative impact of variables that compromise productivity outcomes (Dickstein et al. 2010; Miles, Schaufeli, and van den Bos 2011; Reagans and McEvily 2003). Building on this prior research, the current study examines the possibility that nurses’ self-reported cohesion within their work unit may be associated with the extent to which empathy and value congruence comes to affect how they view their provision of patient care. In that cohesion reflects positive attraction to the group (Friedkin 2004), and has been shown in other contexts to influence job performance (Carless and DePaola 2000; Evans and Dion 1991; Hogg 1992; Lott and Lott 1965), this study investigates the extent to which individuals’ perceptions of different types of cohesion (i.e. social cohesion, task cohesion, individual attraction to the group) operating in the group moderates the relationship between (a) empathy and (b) value congruence and the perceived performance of nursing tasks.

Thus, the first component of this study examines the extent to which perceived cohesion amplifies the effect of empathy on the perception that one has fulfilled tasks associated with a work group; in this case, nurses’ self-reported patient care quality. Cognitive and emotional components of role-taking are the quintessential processes that allow an individual to understand and fulfill the expectations associated with their role in a social interaction (Mead 1934). These cognitive and emotional role-taking processes comprise what Shott (1979) referred to as empathy and others (Davis 2007) have described as undergoing an empathic experience. Empirical research has suggested that the relationship between empathy and performance may be especially strong and
especially important among nursing groups (La Monica et al. 1987; Norman 1996; Olson 1995; Omdahl and O’Donnell 1999).

The second component of the current study investigates the role of perceived cohesion in amplifying the relationship between a nurse’s value-based assessment of her work environment and the fulfillment of her primary work task – providing quality patient care. As one dimension of fit between person and work environment, value congruence has been shown by others to have a positive effect on performance outcomes at work (Bretz and Judge 1994; Lauver and Kristof-Brown 2001). These relationships are based on the notion that values are deeply held beliefs that direct behavior; when individuals and organizations share values, work tasks are easier to complete and become a positive experience for workers (Edwards and Cable 2009; Greguras and Diefendorff 2009). Again, both of these relationships are important to consider because of what we know about the nature of carework and modern hospital organizations: empathy and value congruence, both of which lead to the performance of work tasks (i.e. quality patient care), may be at risk within today’s nursing work environments.

I begin with a review of the empathy literature as it relates to nursing and nursing tasks. In doing so, I demonstrate the importance of empathy for the provision of patient care. I then review the person-organization fit literature to illustrate the ways in which perceptions of value congruence influence the performance of work tasks. Finally, I review the literature on cohesion to show that previous research has suggested that cohesion moderates existing processes at work such that performance outcomes increase when perceived levels of cohesion are high. I examine these relationships among a sample of nurses to determine the extent to which cohesion may moderate the
relationships of empathy and value congruence with perceived patient care quality. I investigate these relationships using survey data collected from registered nurses employed within a Midwestern hospital system ($n=753$) and using Ordinary Least Squares regression (Barron and Kenny 1986).
CHAPTER II
BACKGROUND

*Role-taking Processes Underlying Empathy*

According to Mead (1934), the internalization of norms and expectations for behavior in a specific social context is dependent on the human capacity for *role-taking*. Role-taking is the process of mentally taking the position of another individual or the surrounding community or society in the form of a generalized other (Coutu 1951; Mead 1934). When an individual successfully role-takes he or she may reflect back on their own self as an object to others; in doing so, the individual can know how others need or expect them to respond during interaction (James 1961). This is how an individual comes to internalize broad social and cultural norms as well as contextualized role performances, such as those expected at work (Shott 1979).

Role-taking experiences as they relate to or facilitate the understanding of sharing of cognitive or emotional states between an individual and an other has been conceptualized as *empathy* (Batson 2009; Shott 1979). Empathic role-taking is considered to be a multidimensional experience—it involves a cognitive assessment of another person’s thinking or feeling state, understanding the other person’s cognitive or emotional state as they experience it, and the individual’s thoughts, emotions, or behaviors that are in response to these initial cognitive processes (Batson 2009; Davis 1983, 2007; Wispé 1986).
The relationship between the patient and the nurse is the foundation for the delivery of effective care (Kunyk and Olson 2001; McCabe 2003) and nursing scholars agree that empathy and empathic processes enable nurses to forge relationships with patients and achieve a more accurate understanding of patient’ needs and what would be best for their care (Mercer and Reynolds 2002; Reynolds and Scott 1999; Yu and Kirk 2008). Conceptualizations of empathy in nursing scholarship have accounted for a multidimensional role-taking experience. Empathy in nursing is understood as the nurses’ willingness or ability to identify the needs of patients accurately and to respond to them in a way that satisfies or comforts (Mercer and Reynolds 2002; Norman 1996). Nursing scholars have written extensively on the significance of empathy and empathic processes for the delivery of effective nursing care (Brunero, Lamont, and Coates 2010; Yu and Kirk 2009) and empirical research has generally supported the notion that empathy at work contributes to providing effective instrumental and affective care to patients and their families.

For example, in studies targeting the experiences of patients and their families, researchers have found that higher levels of nurse empathy tend to be associated with positive outcomes. In their experimental study, La Monica et al. (1987) found that the patients of nurses who underwent professional empathy training reported lower levels of depression and hostility and more overall satisfaction than patients of nurses who not undergone such training. Olson (1995) also found that as displays of empathy in nurses during the workday increased, overall patient distress (i.e. depression and anxiety) decreased. In addition, Murphy et al. (1992) found that nurses working in the intensive care unit who demonstrated more empathy in interactions at work were also more likely
to assess the needs of patients’ family members accurately compared to nurses who 
displayed less empathetic behavior. Omdahl and O’Donnell (1999) provide perhaps the 
best direct test of the relationship between empathy and caregiving among nurses. Using 
data from RNs at two hospitals, these authors find that such empathic processes as 
“showing concern for patients” and “effectively communicating” were associated with 
reports of higher personal accomplishment during the workday.

Taken together, these studies suggest that the relationship between empathy and 
patient care extends beyond just instrumental benefits for the patient. Nurses who 
demonstrate empathy at work also cultivate positive affective states for patients and their 
families throughout their stay in a hospital setting. Such affective benefits underpin the 
relationship-based nurse caring model that characterizes the work task associated with 
work groups in my sample, that is, patient care quality (Dingman et al. 1999). Based on 
the preceding literature I therefore propose the following:

Hypothesis 1: Self-reported individual empathy will be positively related to 
nurses’ self-reported patient care quality.

Person-Organization Value Congruence (P-O Fit)

The general degree of compatibility between an individual and their work 
environment is called person-environment fit (P-E fit; Kristof-Brown and Guay 2011). 
This degree of compatibility has been shown to affect a range of work-related behaviors 
and attitudes, including the performance of work tasks (Bretz and Judge 1994; Greguras 
and Diefendorff 2009). The idea that individuals experience varying types and degrees of 
compatibility with their work environments, and that such variability may influence work 
outcomes, is not new to industrial and organizational psychologists. Research on fit is
extensive and the results have led to several specifications of the person-environment fit construct. For example, the concepts of person-vocation fit (Holland 1997), person-job fit (Edwards 1991), person-supervisor fit (Krishnan 2002), and person-organization fit (Kristof 1996; Piasentin and Chapman 2007) each have a research literature. In that each of the concepts has been shown to be conceptually distinct (Cable and DeRue 2002; Greguras and Diefendorff 2009; Lauver and Kristof-Brown 2001), researchers are now careful to specify the type of P-E fit under examination. Researchers are also careful to specify the type of compatibility being considered (Muchinsky and Monahan 1987). For example, a complementary fit is considered to be beneficial to the extent that both aspects of the relationship are compatible. This could be in terms of needs and supplies, or in terms of demands and skills. Supplementary fit, however, is beneficial to the extent that both parties are similar on some dimension. Thus, supplementary person-organization fit (P-O fit) is based on similarity between the individual worker and the organization they work for, most often in terms of value congruence (Chatman 1989; Kristof 1996; Muchinsky and Monahan 1987).

Previous studies have suggested that value congruence is related to a number of positive outcomes for individuals at work, including task performance (Cable and Edwards 2004; Hoffman and Woehr 2006; Kristof 1996; Verquer, Beehr, and Wagner 2003). For example, Bretz and Judge (1994) report that among their sample of industrial relations employees, individuals who report a better fit with their respective organizations in terms of value congruence were more likely to have achieved higher positions within their companies as well as higher levels of compensation. The authors make the case that these external markers of success reflect the continuum of task performance, so that
higher salaries and job levels correspond to better performance outcomes. Lauver and Kristof-Brown (2001) report similar results. In a sample of trucking company employees, these authors find a positive and significant relationship between person and organization value congruence and job performance, above and beyond the effect of other aspects of fit (e.g. Person-Job fit).

The empirical relationships illustrated above between person and organization values and the performance of work tasks is considered a function of individuals fulfilling certain psychological needs (Greguras and Diefendorff 2009). When the values of an employee and an organization are consistent, the individual is more likely to experience his or her work tasks as fulfilling the need for a sense of competence. Based on the preceding literature, I hypothesize the following:

**Hypothesis 2**: Perceived value congruence will be positively related to nurses’ self-reported patient care quality.

**Cohesion**

The study of cohesion and solidarity is at the heart of the study of groups and social life (Wrong 1961). From delinquency to political activism to community health, sociologists have made rigorous attempts to justify the benefits of cohesion and solidarity in groups and they have been largely successful (Moody and White 2003). The study of cohesion in work groups has been particularly fruitful, as many positive individual- and group-level outcomes are associated with high levels of cohesion. Increased commitment to the organization (Dobbins and Zaccaro 1986), positive evaluations of the self and the situation (Ahronson and Cameron 2007), effective communication (Reagans and
McEvily 2003), and increased task performance (Evans and Dion 1991; Wech et al. 1998) can be expected in highly cohesive work groups.

Several studies have investigated how the prevalence of cohesion at work modifies or affects existing social processes that impact the performance of work tasks (Boardley and Jackson 2012; Dickstein et al. 2010; Miles et al. 2011; Reagans and McEvily 2003). For example, Reagans and McEvily (2003) demonstrate the role of cohesion in moderating the effect of network ties on the completion of work tasks. In their sample, knowledge transfer between networks is an integral aspect of completing work tasks. The authors show that knowledge transfer between networks is dependent upon tie strength such that strong ties facilitate the transfer of knowledge in ways that weak ties do not. Reagans and McEvily find that when levels of cohesion are high, workers are more likely to engage in the activities (i.e. knowledge transfer) that lead to task completion regardless of network tie strength.

Further evidence for the role of cohesion related to the performance of work tasks is suggested by studies of voluntary absenteeism. Miles et al. (2011) suggest that level of perceived cohesion in the workplace moderates the relationship between the individual’s personal orientation toward the acceptability of absence at work and their actual absence behavior. The findings of this study indicate that individuals are most likely to follow their own absence tolerance norms when levels of cohesion are low. This means that when levels of cohesion are low, individuals are likely to be absent to the extent that they personally feel it is acceptable. Alternatively, when levels of self-reported cohesion are high individuals are less likely to be voluntarily absent regardless of their personal level of absence tolerance. That is, high levels of cohesion at work moderate the effect of
personal absence tolerance on absence behavior, which one might expect would be detrimental to task performance.

And finally, a beneficial effect of cohesion has been shown to exist within more rigidly defined work groups such as members of the military. For instance, Dickstein et al. (2010) report a robust relationship between combat exposure and post-traumatic stress disorder (PTSD). However, they also find that increasing levels of perceived unit cohesion have a protective effect in regard to the relationship between stress and PTSD. That is, soldiers in highly cohesive units are significantly less likely to develop PTSD symptoms while deployed, even when reported stress levels are high. As a result, we might expect that soldiers who are protected from PTSD symptoms are more likely to remain emotionally and psychologically ready to perform their expected combat tasks.

Taken together, these studies suggest that perceived cohesion moderates the effect of existing individual and environmental processes in such a way that the positive performance of work tasks is more likely when levels of cohesion are high. Miles et al. (2011) suggest that individual orientations toward absence norms are less likely to result in behaviors that are detrimental to the completion of work tasks (e.g., being absent from work) when perceptions of cohesion are high. Reagans and McEvily (2003) and Dickstein et al. (2010) both suggest that perceptions of cohesion moderate aspects of the work environment that may be detrimental to the completion of work tasks (i.e. the strength of network ties and exposure to combat). Based on this literature, I hypothesize the following:

_Hypothesis 3:_ Perceived cohesion will moderate the relationship between self-reported individual empathy and self-reported patient care quality.
Hypothesis 4: Perceived cohesion will moderate the relationship between perceived value congruence and self-reported patient care quality.

Past research suggests that people are attracted to groups for different reasons and different aspects of this attraction are associated with different work outcomes. Thus, many scholars have suggested that cohesion in groups should be treated as a multidimensional concept (Chang and Bordia 2001; Dion 2000; Friedkin 2004; Tziner 1982; Zaccaro 1991; Zaccaro and Lowe 1988). The three types of cohesion under investigation in this study are task cohesion, social cohesion, and individual attraction to the group (Carless and De Paola 2000). According to Carless and De Paola (2000), task cohesion is the extent to which group members are united in accomplishing the work task. Social cohesion is the amount of positive social interaction that is not related to the work task between group members. Finally, individual attraction to the group is the extent to which the individual finds the group an attractive social group in which to belong.

Most of the research on work groups that has included these different conceptualizations of cohesion has not fully explored how each of the indicators may be related to the completion of work tasks. Some suggest that the effects of cohesion may vary based on the characteristics of the work environment and the type of work task. For example, Zaccaro and Lowe (1988) find that in a laboratory setting, and for a task with several sequential steps, task cohesion was beneficial toward productivity outcomes but social cohesion created counter-productive interactions and was not beneficial for outcomes. However, on a group problem-solving task, Zaccaro and McCoy (1988) found
that both task cohesion and social cohesion contributed positively toward task completion.

In a natural setting and on tasks operationalized as the performance of assigned duties and responsibilities, Zaccaro (1991) found that only task cohesion contributed significantly toward task performance. However, Chang and Bordia (2001) reported that for student work teams on a group presentation task, only social cohesion was a positive and significant predictor of performance. In addition, Beal et al. (2003) suggests that cohesion is generally more advantageous to groups when task outcomes are conflated with efficiency instead of the accomplishment of a single task (e.g. having 8 hours to do as much as possible versus building an object, winning a game, etc.). In sum, past research suggests that the cohesion-performance relationship varies between different types of cohesion and different performance outcomes. In that past research is inconclusive about how these relationships hold across work settings and types of work tasks, this study explores the influence of three types of cohesion in a nursing working group, where task outcomes are individual perceptions of providing quality care to patients. In that cohesion is generally found to have a beneficial effect across type and outcome, I propose the following:

Hypothesis 3a: Task cohesion will moderate the relationship between self-reported individual empathy and self-reported patient care quality.

Hypothesis 3b: Social cohesion will moderate the relationship between self-reported individual empathy and self-reported patient care quality.

Hypothesis 3c: Individual attraction to the group will moderate the relationship between self-reported individual empathy and self-reported patient care quality.
Hypothesis 4a: Task cohesion will moderate the relationship between perceived value congruence and self-reported patient care quality.

Hypothesis 4b: Social cohesion will moderate the relationship between perceived value congruence and self-reported patient care quality.

Hypothesis 4c: Individual attraction to the group will moderate the relationship between perceived value congruence and self-reported patient care quality.
CHAPTER III

METHODS

The current study explores the extent to which three aspects of cohesion moderate two types of processes that are expected to be associated with nurses’ perception that they are providing high quality patient care: (a) individual empathy and (b) an individual’s perception of value congruence with their organization. I examine these relationships in the context of nursing where recent scholarship has suggested that these specific processes may be increasingly compromised due to the nature of care work and hospital organizations (Aiken et al. 2008; Coetzee and Klopper 2010; Erickson and Grove 2008; Woodward 1997; Yu and Kirk 2009).

Data and Sample

The data for this study came from a larger project examining the effect of identity and emotion on the health and well-being of registered nurses employed by a large, Midwestern hospital system. A written questionnaire was distributed to all registered nurses employed within each hospital. A complete listing of nursing personnel was obtained from the health system’s human resources department. Participation was limited to full-time, direct-care nurses only. Forty-seven percent of those surveyed returned a completed questionnaire. This response rate is consistent with other studies of this type among registered nurses (e.g., Lucero, Lake, and Aiken 2010). The majority of nurses in the sample being used for this study are white (88%), female (90.8%) and work between
36 and 40 hours per week (79.8%). In addition, samples nurses are, on average, 41 years old (SD = 12.57, range 23-75), have 13 years of nursing experience (SD = 11.98) and seven years of experience working on their current unit (SD = 7.27).

Measures

Dependent Variable. **Perceived patient care quality** was measured using a scale adapted from Dingman et al. (1999). This variable operationalizes the expected work task for the nurses in my sample (Sherwood 1997). Respondents were asked to evaluate the quality of nursing care they provided on the last shift in regard to the following: showing concern for patients, anticipating patient needs, explaining procedures to patients, demonstrating skill in providing care, helping calm patient fears, communicating effectively, responding to patient requests, and overall nursing care. Responses were recorded using a 5-point scale (Very Poor = 1, Poor = 2, Fair = 3, Good = 4, Excellent = 5). An average patient care quality score was computed for each respondent with higher values on the scale indicating higher levels of self-reported patient care quality. The Cronbach’s alpha for this scale is .88. Descriptive statistics for all variables are presented in Figure 1.
1. Hours per Week & 1 & & & & \\
2. Patient Load & 0.012 & 1 & & & \\
3. Patient Acuity & -0.022 & -0.037 & 1 & & \\
4. Task Cohesion & 0.013 & -0.025 & 0.045 & 1 & \\
5. Social Cohesion & -0.049 & -0.071 & .119*** & .348*** & 1 \\
6. Individ. Attract. to Grp. & -0.018 & -0.013 & 0.037 & .294*** & .528*** \\

Means & 39.9 & 5.44 & 2.61 & 2.86 & 2.82 \\
SD & 6.07 & 12.47 & 0.76 & 0.5 & 0.57 \\

*p<.05; **p<.01; ***p<.001

7. Empathy & 0.044 & 0.006 & -0.015 & .166*** & .107** \\
8. Value Congruence & 0.033 & -0.032 & -0.04 & .361*** & .147*** \\
9. Patient Care Quality & 0.056 & 0.058 & -0.01 & .146*** & 0.022 \\

Means & 39.9 & 5.44 & 2.61 & 2.86 & 2.82 \\
SD & 6.07 & 12.47 & 0.76 & 0.5 & 0.57 \\

*p<.05; **p<.01; ***p<.001

7. Empathy & .140*** & 1 & & & \\
8. Value Congruence & .179*** & .292*** & 1 & & \\
9. Patient Care Quality & 0.05 & .313*** & .184*** & & \\

Means & 2.37 & 3.8 & 3.1 & & \\
SD & 0.77 & 0.45 & 0.43 & & \\

*p<.05; **p<.01; ***p<.001

Figure 1. Correlations, Means, and Standard Deviations for Model Variables (N=753).
Independent Variables. **Individual empathy** was measured using a scale adapted from Omdahl and O’Donnell (1999) and Davis (1983). There are three subscales in the individual empathy variable so to reflect the multidimensional empathic experience that is in line with current research on empathy (Batson 2009). Respondents were asked to respond to a series of questions related to each subscale. Responses were recorded using a 4-point scale (Strongly disagree = 1, Disagree = 2, Agree = 3, Strongly agree = 4). An average measure of empathy was computed for each respondent by collapsing all subscale measures into one variable ($\alpha = .869$). The subscales that make up the total empathy variable are described below.

**Perspective taking** is the tendency for an individual to adopt the psychological perspective of another person or other people (Davis 1983). Respondents were asked the following questions to determine the degree to which they engaged in this cognitive component of the empathic experience: I sometimes find it difficult to see things from the “other guy’s” point of view (reverse-coded); I try to look at everybody's side of a disagreement before I make a decision; I sometimes try to understand my friends better by imagining how things look from their perspective; If I'm sure I'm right about something, I don't waste much time listening to other people's arguments (reverse-coded); I believe that there are two sides to every question and try to look at them both; When I’m upset at someone, I usually try to “put myself in his shoes” for a while; Before criticizing somebody, I try to imagine how I would feel if I were in their place.

**Empathetic concern** (Omdahl and O’Donnell 1999) refers to a concern for the well-being of another that does not require sharing emotion. Respondents were asked the following questions to determine the extent to which they engage in this emotional
component to the empathic experience: I often have tender, concerned feelings for people less fortunate than me; Sometimes I don't feel very sorry for other people when they are having problems (reverse-coded); When I see someone being taken advantage of, I feel kind of protective towards them; Other people's misfortunes do not usually disturb me a great deal (reverse-coded); When I see someone being treated unfairly, I sometimes don't feel very much pity for them (reverse-coded); I am often quite touched by things that I see happen; I would describe myself as a pretty soft-hearted person.

**Communicative responsiveness** (Omdahl and O’Donnell 1999) refers to the ability to effectively communicate with others, and represents the behavioral component of this construct. This subscale included the following questions: I usually have a knack for saying the right thing to make people feel better when they are upset; I usually respond appropriately to the feelings and emotions of others; Others think of me as a very empathic person; I am the type of person who can say the right thing at the right time. Again, for each subscale, responses were recorded using a 4-point scale (Strongly disagree = 1, Disagree = 2, Agree = 3, Strongly agree = 4). All responses were summed and averaged to construct the final individual empathy scale, with higher scores indicating the respondent is more likely to report engaging in the empathic processes.

**Value congruence** is the operationalization of supplementary person-organization fit. This item was measured using a scale adapted from the Areas of Worklife scale (Leiter and Maslach 2004). The measures in this study correspond to supplementary aspects of person-organization fit. That is, fit that is determined based on similarities. This study also uses subjective measures of fit. The measure assumes that objective
reality is filtered through individual perceptions and, as such, is likely to also reflect what individuals perceive as influencing their attitudes and behaviors (Cable and DeRue 2002). Each of the subscales in the Areas of Worklife measures includes a series of questions to which respondents were asked to indicate the extent to which they agree or disagree with each statement about their job. Respondents were asked the following: My values and my workplace’s values are alike; The goals of my workplace influence my day-to-day activities; My personal career goals are consistent with the stated goals of my workplace; My workplace is committed to quality; Working here forces me to compromise my values (reverse-coded). Responses were recorded using a 4-point scale (Strongly disagree = 1, Disagree = 2, Agree = 3, Strongly agree = 4) then summed and averaged. Higher scores in the value congruence scale ($\alpha = .729$) indicate a stronger degree of subjective person-organization fit.

*Moderating variables.* I have hypothesized that the perceived level of *group cohesion* moderates the relationship between (a) empathy and (b) perceived value congruence and self-reported patient care quality. The measure used in this study is adapted from the Group Environment Questionnaire (GEQ) (Carron and Brawley 2000; Widmeyer, Brawley, and Carron 1985) for the evaluation of cohesion in nursing work teams specifically.

In the past, cohesion has been measured at both the level of the individual and the group (Friedkin 2004). Friedkin (2004:410) notes that investigators should remain at the individual-level of analysis because most group-level measurements are simply aggregates of individual-level properties of group attraction. This study follows this suggestion by employing self-reported measures of cohesion in the work group. This
study operationalizes cohesion as a multidimensional concept. Past research suggests that the effects of cohesion should be considered in terms of each individual subscales, as each subscale tends to affect outcomes in different ways (Friedkin 2004; Mullen and Cooper 1994; Zaccaro 1991; Zaccaro and Lowe 1991).

The first subscale is **task cohesion**, which is “the extent to which the team is united and committed to achieving the work task” (Carless and De Paola 2000:79). This scale includes the following questions: I’m unhappy with my unit’s level of commitment (reverse-coded); Nurses in my unit have conflicting aspirations for the unit’s performance (reverse-coded); This unit does not give me enough opportunities to improve my personal performance (reverse-coded); Nurses in my unit are united in trying to reach their goals for performance. Responses were recorded using a 4-point scale (Strongly disagree = 1, Disagree = 2, Agree = 3, Strongly agree = 4). They were summed and averaged, with higher scores reflecting more perceived task cohesion in the group (α = .689)

The second subscale is **social cohesion**. This refers to the degree to which team members interact socially (Carless and De Paola 2000). This scale includes the following questions: Nurses in my unit would like to spend time together outside of work hours; Nurses in my unit would rather go out on their own than get together as a group (reverse-coded); Nurses in my unit do not stick together outside of work hours (reverse-coded); Nurses in my unit rarely socialize together (reverse-coded). Responses were recorded using a 4-point scale (Strongly disagree = 1, Disagree = 2, Agree = 3, Strongly agree = 4). They were summed and averaged, with higher scores reflecting more perceived social cohesion in the group (α = .861)
The third subscale is **individual attraction to the group**, which is the extent to which the individual finds the group an attractive social group to belong to. This scale includes the following questions: Some of my best friends are on this unit; For me, this unit is one of the most important social groups to which I belong. Responses were recorded using a 4-point scale (Strongly disagree = 1, Disagree = 2, Agree = 3, Strongly agree = 4). They were summed and averaged, with higher scores reflecting more individual attraction to the group (α = .689)

**Control Variables.** I included the following variables as controls because of their potential association with the dependent variable. Past research (Aiken, Clarke, and Sloane 2002; Kane et al. 2007) has suggested that patient care quality significantly varies with staffing characteristics. Therefore, I controlled for patient load, number of hours worked, and patient acuity.

**Analytic Strategy**

All variables were cleaned and coded to reflect the logic of each hypothesis. I created each scale (i.e. empathy, value congruence, task cohesion, social cohesion, individual attraction to the group, and patient care quality) by summing responses and dividing by the total by the number of responses, resulting in an average score for each variable for each respondent. Interaction terms were created by multiplying each independent variable by each of the three subscales associated with the moderating construct cohesion, resulting in a total of six interaction terms.

In Model 1, I regress all control variables on the dependent variable patient care quality. The first hypothesis makes a prediction about the relationship between empathy and patient care quality. The second hypothesis makes a prediction about the relationship
between value congruence and perceived patient care quality. Model 1 also includes regression analysis to reflect these hypotheses.

The third set of hypotheses (3-3c) make predictions about the moderating effect of cohesion on the relationship between empathy and perceived patient care quality in terms of the three subscales that make up the construct cohesion. Three regression models were run to test for moderating effects of each subscale individually (task cohesion, social cohesion, and individual attraction to the group).

The fourth set of hypotheses (4-4c) make predictions about the moderating effect of cohesion on the relationship between value congruence and perceived patient care quality in terms of the three subscales that make up the construct cohesion. Three regression models were run to test for moderating effects of each subscale individually (task cohesion, social cohesion, and individual attraction to the group).
CHAPTER IV
RESULTS

*Empathy and Patient Care Quality.* Figure 2, Model 1 presents the results of the regression analysis examining the relationship between empathy and perceived patient care quality. The findings indicate that level of self-reported empathy is positively related to perceived patient care quality. Consistent with hypothesis 1, individuals who report that they are more empathetic are also more likely to report that they believe they are providing high quality patient care (p < .001).

<table>
<thead>
<tr>
<th>Model 1</th>
<th>b</th>
<th>SE</th>
<th>β</th>
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<tbody>
<tr>
<td><strong>Controls</strong></td>
<td></td>
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</tr>
<tr>
<td>Hrs/week</td>
<td>.003</td>
<td>.002</td>
<td>.038</td>
</tr>
<tr>
<td>Patient Load</td>
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<td>.001</td>
<td>.057</td>
</tr>
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<td>Patient Acuity</td>
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<td>.019</td>
<td>.001</td>
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<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>.257</td>
<td>.033</td>
<td>.279***</td>
</tr>
<tr>
<td>Value Congruence</td>
<td>.007</td>
<td>.037</td>
<td>.078*</td>
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<tr>
<td>Task Cohesion</td>
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<td>.088*</td>
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<tr>
<td>Social Cohesion</td>
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<td>-.041</td>
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<td>Individ. Attraction to the Group</td>
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<td>.022</td>
<td>-.006</td>
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<tr>
<td>Adj. $R^2$</td>
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<td>.109</td>
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$N = 753.$
* $p < .05; ** p < .01; *** p < .001$ (two-tailed tests)

Figure 2. Empathy, Value Congruence, and Controls
Value Congruence and Patient Care Quality. Figure 2 also presents the results of the regression analysis examining the relationship between self-reported value congruence and perceived patient care quality. The results in Model 1 indicate a positive relationship between these two variables. As proposed in hypothesis 2, the more nurses perceived that their professional values were congruent with those of the organization, the more likely they were to report providing higher quality patient care (p < .05).

Evidence for Moderation. Figure 3 (in Appendix) presents the results of the regression analyses examining the moderating effects for each of the three subscales associated with cohesion on the stated relationships in hypotheses 1 and 2. The findings in Figure 3 provide evidence for only one significant interaction effect. In model 2 and consistent with hypothesis 4b, the social cohesion component of the group cohesion construct moderates the relationship between an individual’s self-reported value congruence and perceived patient care quality. As illustrated in Figure 4, as an individual’s perception of social cohesion increases so does the association between value congruence and perceived patient care quality. These results suggest that while reported patient care quality is always higher among those reporting more value congruence, the quality improves substantially when value congruence occurs in the context of high social cohesion. No support was found for hypothesis 3a, 3b, 3c, 4a or 4c.
## Model 2

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<td><strong>Controls</strong></td>
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<tr>
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<td>.002</td>
<td>.039</td>
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<tr>
<td>Patient Load</td>
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<td>Patient Acuity</td>
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<tr>
<td><strong>Independent Variables</strong></td>
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<tr>
<td>Empathy</td>
<td>.258</td>
<td>.033</td>
<td>.279***</td>
</tr>
<tr>
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<tr>
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<td>Value Congruence X Social Cohesion</td>
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<td>.054</td>
<td>.597*</td>
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</table>

| Constant             | 3.955|
| $R^2$                | .123 |
| Adj. $R^2$           | .113 |

N = 753. Unstandardized Regression coefficients.
*p < .05; **p < .01; ***p < .001 (two-tailed tests)

Figure 3. Patient Care Quality Regressed on Empathy, Value Congruence, Value Congruence Moderators, Interactions, and Controls
Figure 4. Interactions between Value Congruence and Social Cohesion
CHAPTER V
DISCUSSION AND CONCLUSION

The goal of this study was to examine the moderating effect of three types of self-reported cohesion on how empathy and value congruence processes are related to nurses’ self-reported patient care quality. My results suggest that social cohesion has a significant moderating effect on the relationship between value congruence and job performance. Pictured in Figure 1, these findings suggest that when perceptions of value congruence are low, perceptions of high social cohesion function in such a way to buffer the negative impact of low value congruence on patient care. This also means that when perceptions of value congruence are high, social cohesion amplifies this relationship resulting in even more positive outcomes for patients in terms of care quality.

The current study contributes to social scientific knowledge of empathy and person-organization fit in the context of nursing. Past research has suggested that empathy and value congruence tend to be positively related to the completion of work tasks. For social psychologists, having empathy means engaging in cognitive and emotional role-taking experiences (Shott 1979; Davis 2009). In the context of work groups, these processes are important in that they reveal to the individual the expectations for the self in work roles. Nursing scholars have written extensively on the importance of the empathy-performance relationship in healthcare and hospital contexts (Brunero et al. 2010; Mercer and Reynolds 2002; Reynolds and Scott 1999; Yu and Kirk 2008). For
nurses, having empathy means being able to undergo the role-taking processes that are related to providing quality patient care, including forging relationships and understanding individual care needs. The findings reported here lend support to the significance of empathy for the completion of work tasks in a nursing sample. This relationship is robust, as significance appears at the .001 level in nine of the ten regression models in which it appears (results not reported here). These results suggest that engaging in the cognitive and emotional components of role-taking are an important correlate of the tendency for workers to fulfill performance demands – in this case, the belief that one is providing quality patient care.

Industrial and organizational psychologists have documented a positive relationship between perceived value congruence between the self and work organization and the performance of work tasks (Cable and Edwards 2004; Hoffman and Woehr 2006; Kristof 1996; Verquer, Beehr, and Wagner 2003). Results from the current study provide further empirical support for these relationships and extend the P-O fit literature to a nursing work group sample. Nurses who perceive value congruence between themselves and their employers report providing better patient care quality.

Nursing scholars have suggested that empathy displays and person-organization value congruence are two important processes at work that may be especially compromised due to the nature of care work and the increasing routinization and standardization of nursing tasks by organizations (Coetzee and Klopper 2010; Erickson and Grove 2008; Woodward 1997; Yu and Kirk 2009). My results suggest that social cohesion has a significant moderating effect on the relationship between value congruence and the performance of working tasks. In general, nurses who perceive value
congruence between themselves and their employers are more likely to provide quality patient care. However, when nurses also perceive high levels of social cohesion in their workplace the impact of this perceived value congruence on patient outcomes becomes stronger.

This study has made two extensions to social psychological research on the relationship between group cohesion and performance. Past research (Boardley and Jackson 2012; Dickstein et al. 2010; Evans and Dion 1991; Miles et al. 2011; Reagans and McEvily 2003; Wech et al. 1998) has suggested many positive outcomes, including task performance, can be expected for work groups where perceptions of cohesion are high. Cohesion is a multidimensional construct, meaning that within the construct are several subscales corresponding to specifications of the general concept. Past research (Chang and Bordia 2001; Dion 2000; Friedkin 2004; Tziner 1982; Zaccaro 1991; Zaccaro and Lowe 1988) has suggested that these different components of the construct may affect task performance differently based on the type of environment or task associated with the work group. The results in model 1 suggest that the task cohesion component of group cohesion is indeed a significant predictor of performance outcomes associated with nursing work groups. Nurses who perceive higher task cohesion report providing better patient care. These results are consistent with the conclusions of Beal et al. (2003) about the tendency for task cohesion to be beneficial for task performance when working tasks are considered to be general responsibilities or duties to be completed over a set amount of time rather than a singular task, such as winning a game or building an item. Nurses who perceive high levels of task cohesion in their unit are those who are more focused on
fulfilling their duties consistently throughout their workday, thus providing higher quality of patient care.

Interestingly, social cohesion is the only subscale that shows a significant moderating effect, and only with value congruence. Past research suggests that social cohesion has a beneficial effect on task outcomes wherein group members mutually depend on each other for the completion of tasks. For example, on group problem-solving or on group presentations, research has suggested that social cohesion may facilitate the necessary interactions for effective performance (Chang and Bordia 2001; Zaccaro and McCoy 1988). In the current study, social cohesion on its own is not significantly related to task performance, or perceived patient care quality. However, in the context of perceived value congruence between the self and the organization, social cohesion does facilitate task performance. This suggests that social cohesion may be beneficial to task performance when individuals find sociality to be underpinned by a shared set of values. For work tasks characterized by the fulfillment of general duties and responsibilities throughout a workday, social cohesion may be beneficial for work tasks when the individual perceives higher levels of fit between themselves and the organization.

Limitations

Although this study makes contributions to the literature, it also contains limitations that should be noted. The current study used direct measures of person-organization value congruence (Kristof 1996). This means that the individual was asked about perceptions of fit without being asked to identify their own values and the values of their work organization. Thus, the measures in this study represent different aspects of the self and the organization in terms of values, perhaps as many different value
orientations as there are respondents. This study is limited in that it cannot speak to the specific types of value congruence that are beneficial for task performance in nursing (Edwards 1991). As such, future researchers should consider the substantive content of values and which are the most important for nurses and healthcare organizations to agree upon so that benefits for patient care are maximized.

Salancik and Pfeffer (1977) criticize theories of need-satisfaction that are proposed to underlie the relationship between job attitudes and performance models. The relationship between fit and performance in this study and others is underpinned by an assumption that individuals have certain psychological and emotional demands that, when met, make work easier, more satisfying, and a positive experience for workers. Value congruence is considered to be a psychological and emotional demand that, when met at work, allows work to be completed with ease and with efficiency. However, Salancik and Pfeffer (1977) suggest all theories of need-satisfaction are based on an assumption of causality between job characteristics and job attitudes (such as perceptions of fit) and between attitudes and behavior. The authors suggest that such an assumption fails to specify how workplaces affect attitudes and then how attitudes affect behavior. As the purpose of the larger project was not to examine the relationship between fit and job performance specifically, limitations in the data used make this criticism difficult to address. Future researchers may want to consider collecting data intended to address these relationships in further detail.

Verquer et al. (2003) also have suggested that how “fit” is calculated can affect the relationship between fit and outcomes. There are generally three ways to calculate fit between individuals and organizations: subjective, objective, and perceived. Verquer et
al. (2003) find that subjective measures of fit generally have the strongest relationship with attitudinal outcomes. In that this study uses subjective measures of fit, the relationship between fit and perceptions of task performance represented by the data may be stronger than the causal relationship appears in reality.

In this study, the work group is cohesive to the extent that the individual nurse perceives that it is. Cohesion is measured as an individual perception of belonging and similarity. In contrast, several lines of research have conceptualized cohesion as an objective property of groups (Friedkin 2004; Lawler and Yoon 1993; Moody and White 2003), often measured in terms of the density or quality of network ties. To be sure, these two approaches to cohesion reflect very different aspects of reality. And yet, I would suggest that neither is more important than the other. Objective measures of cohesion prove to be instrumental, as does the analysis of individual perceptions of solidarity and belonging (Friedkin 2004; Lawler, Thye, and Yoon 2009). Future research using both conceptualizations of cohesion should investigate these distinct processes in nursing groups, as the employment structure is based on organization into fairly stable units and offers a unique natural setting to explore the differences in these processes.

This study also used measures of perceived patient care rather than more objective measures of patient care quality. However, past research (Engle, Graney, and Chan 2001; Hartig, Engle, and Graney 1997; Sikorska-Simmons 2006) has suggested that perceptions of care and actual care received are strongly correlated for other direct-care employee populations. Future research should explore the extent to which perceived patient care and actual patient care are correlated for RN, bedside nurse samples.
Finally, the underlying validity of cohesion in the context of nursing has not been verified to match the measures used in this study. The measures used in this study have been verified for use in small work groups (Carron and Brawley 2000); the wording in the questionnaire also was adapted to fit use in nursing work groups. Carron and Brawley (2000) note the limitations of using a measure of cohesion that does not emerge from the specific work group context. The authors suggest that work places are unique and the mechanisms which make for cohesive groups are specific to different work places. Future research on cohesion in nursing work groups should determine the underlying structure of a multidimensional conception of group cohesion.

An additional point should be made about the limitations associated with my sample. Nurses represent a unique work sample. While it is true that nurses operate in distinct units (or floors), patient care is often the responsibility of several employee groups. Technicians, aides, nurses, doctors, and sometimes counselors or social workers, often work side-by-side on one case to deliver patient care. It may be suggested that cohesion should be measured within members of a certain caseload to capture the possible benefits of cohesion in a working team for task performance, in this case, patient care. This is interesting question with important consequences for healthcare organizations and healthcare providers.

Conclusion

This research has attempted to respond to ongoing issues in healthcare and healthcare organizations. With the exception of the significant interaction between social cohesion and value congruence, it appears that group cohesion processes generally are not the answer to the two stated issues. The cohesion construct does not substantially
impact individual empathy and person-organization value congruence in ways that are beneficial to patient care. However, in line with the findings from Beal et al. (2003), these results demonstrate the significance of task cohesion for task performance when performance outcomes are considered general daily duties and responsibilities. In addition, social cohesion in the context of person-organization value congruence is also a significant correlate of performance of these types of tasks. Future research should continue to explore variables and programs that may counter or slow the detriment to these processes that are important for patient care.
REFERENCES


Lott, Albert J., and Bernice E. Lott. 1965. "Group Cohesiveness as Interpersonal


