

**An Examination of Social Influence Effects on Commitment to Change and
Implementation Behaviors**

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ABSTRACT

LISA MALI JONES: An Examination of Social Influence Effects on Commitment to Change and Implementation Behaviors
(Under the direction of David A. Hofmann)

Planned organizational changes can be expensive and difficult to implement. Research suggests that implementation failure occurs when managers do not gain their employees' skilled, consistent, and committed program (or product) use (Klein, Conn, & Sorra, 2001). This definition highlights the need to understand commitment to change and the implementation stage of organizational change. The purpose of this dissertation is to investigate attitudinal and behavioral responses to an organizational change by specifying how employee-generated reasons, and dyadic influence mechanisms, relate to employee commitment to change. Two theories are used to understand the processes employees go through in deciding to support and implement a change. First, Behavioral Reasons Theory (Westaby, 2002, 2005) identifies the reasons people consider when deciding to support or resist a change—and I extend this theory by suggesting that reasons may have organizing categories. Second, I build upon social information processing theory (Salancik & Pfeffer, 1978) to suggest that people emphasize different reasons for and against supporting a change after interacting with different network partners. I then argue that employee commitment to change is in part due to the reasons employees adopt from influential network partners at work. I close by further validating that certain types of commitment to change (affective, normative, and continuance) relate to certain implementation behaviors.

Findings indicated and that employee ratings of reasons were subject to influence effects over time (even controlling for original ratings). This was true in the case of reasons related to resource issues and reasons related to the opinions of others. Findings also indicate a significant effect for relationship symmetry and the closeness of reason ratings over time, again for two types of reasons. Also, there was evidence that reasons may be organized by categories, and that certain categories relate to different types of commitment to change. Lastly, regression results indicated that two of the three types of commitment to change related to behavioral outcomes, specifically cooperation and championing behaviors.

This work helps researchers understand more about the social-contextual factors related to organizational change and it can help practitioners intervene in facilitating the implementation of organizational change initiatives.

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CHAPTER ONE

Introduction

Planned organizational changes—whether in the form of new products, new processes, or the mandate to innovate for new markets—can be expensive and difficult to implement. The history of organizational change efforts suggests that many innovative products, practices, and services fail to deliver expected results (2001; Orlikowski, 2000; Pfeffer & Sutton, 2000; White, 1996)). A growing body of research suggests that such disappointments may be the result of *implementation* failure, rather than a result of program or technical failure (Klein et al., 2001; Repenning, 2002). Implementation failure occurs when organizations “fail to gain employees’ skilled, consistent, and committed program (or product) use” (Klein et al., 2001). When this occurs, the change initiative fails to produce expected results. A decade ago, Dean and Bowen (1994) evaluated one type of change initiative, total quality management, and noted that little theory exists to explain the difference between successful and unsuccessful implementation efforts. Since that time, the literature on implementation has grown to contain a large number of case studies (Klein & Sorra, 1996), yet empirical fieldwork and theoretical research on the subject is still lacking. Thus, the need to expand our understanding of the implementation stage of organizational change efforts remains critical.

One way to do this is to focus on the commitment component of the definition of implementation and to work from the commitment construct to understand the antecedents to—and the implementation consequences of—commitment to change. One approach to

evaluating commitment to change is to consider it as part of a sensemaking process whereby individuals evaluate reasons for and against supporting a change and then use social information to judge and act on those reasons. Thus, one can study the phenomenon of commitment to change by selecting an organizational change and 1) identifying the individual-level reasons people have for and against supporting the initiative; 2) identifying how social network ties and communication patterns affect these reasons; and 3) relating the reasons and the network information to both commitment and implementation behaviors.

In this research, I utilize this approach and focus on how reasons for and against supporting an organizational change affect commitment to the change and change-related behaviors—in particular as a result of social interactions. I draw from behavioral reasons theory (BRT) (Westaby, 2005; Westaby & Fishbein, 1996; Westaby, Fishbein, & Aherin, 1997), social network theory (Burt, 1987), social information processing theory (Salancik & Pfeffer, 1978), and the commitment to change literature (Herscovitch & Meyer, 2002) to suggest that implementation success stems from the commitment people feel (or do not feel) toward the change, which may be a result of the types of reasons influential people use in describing and supporting the change. In so doing, I do the following: 1) outline a sensemaking process clarifying how and why reasons may “travel” differently through an organization based on communication flows at work; 2) address the question of whether reasons change over time; and 3) suggest that commitment to change may mediate the relationship between reasons and implementation behaviors.

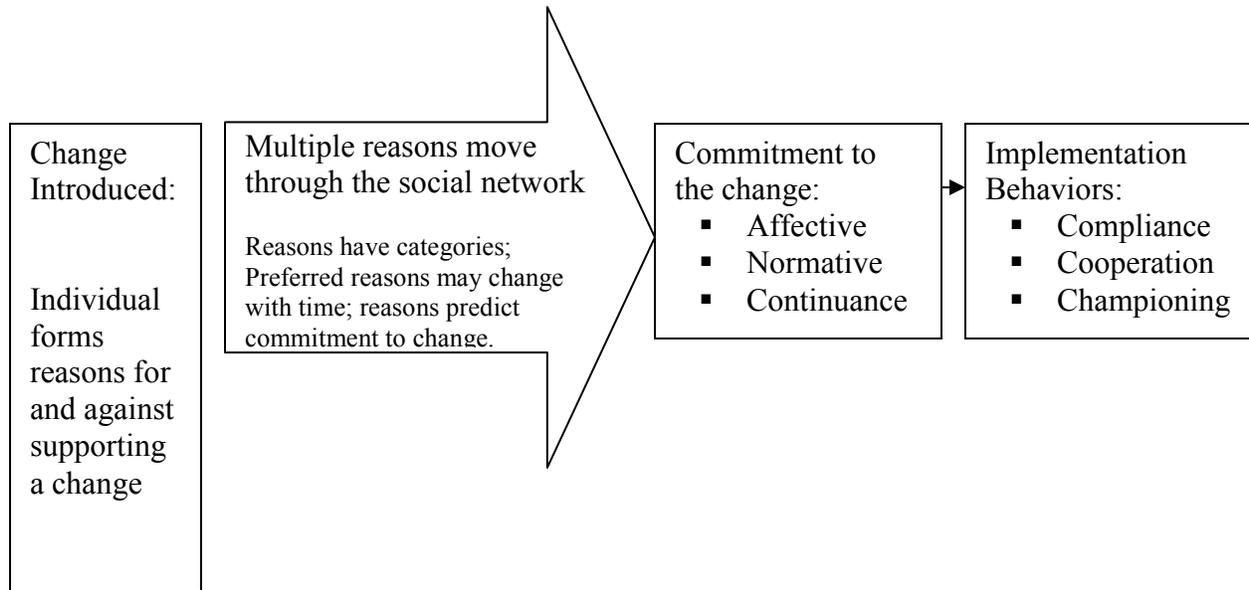
Little research to date has examined commitment to change in relation to implementation behaviors, and no research of which I am aware links reasons and social networks to commitment and implementation. Therefore, this work makes several

contributions to the study of organizational behavior and the study of organizational change in that it further investigates the social influence effects of network partners on change-related cognitions and behaviors; it links commitment to change to a neglected variable, implementation behavior; and it suggests that commitment to change can mediate the relationship between reasons and implementation.

In order to make these contributions, I first discuss the sensemaking and social information processing literatures to clarify the role of social comparisons and network interactions during times of change. With this background, I offer a model that outlines how individuals might respond to a change initiative—and how these responses may change over time as a result of comparing responses with others in the social environment. In order to support the model, I introduce behavioral reasons theory (Westaby, 2002; Westaby et al., 1996; Westaby et al., 1997) and then argue that the movement of specific reasons through a social system can be traced over time. After making this claim, I discuss commitment to change and suggest that individual commitment to change might differ depending upon which reasons are favored. Lastly, I outline the implementation literature, and identify how different types of commitment to change may relate to different implementation behaviors. I close with results and directions for future research.

Figure 1.0 below outlines the general approach of this paper and identifies which elements of commitment to change and implementation will be discussed. Subsequent figures specify in greater detail the proposed influence process within workplace networks.

**Figure 1.0:
Organizing Framework Relating Reasons For and Against a Change to Networks,
Commitment, and Implementation**



CHAPTER TWO

Sensemaking and Social Information Processing In Relation to Organizational Change

Considerable research indicates that during times of uncertainty (such as during an organizational change) individuals look to others in their social environment for information on how to resolve that uncertainty (Ibarra & Andrews, 1993; Meyer, 1994; Rice & Aydin, 1991a). In particular, research on sensemaking and social information processing has established these tendencies. This chapter briefly introduces both literatures in order to establish why and how social comparison behaviors exist during times of organizational change.

Sensemaking refers to the process where organizational members translate an event into a meaningful explanation for that event (Gioia & Sims, 1986). More specifically, the sensemaking perspective focuses on the development of meanings and how they motivate action (Drazin, Glynn, & Kazanjian, 1999). Organizational members do not simply behave and do work, they also order and make sense of their world (Gioia & Sims, 1986; Greenberg, 1995). Weick (1979; Weick & Roberts, 1993) suggests that people create meanings about their social setting through interactions with others. When the social system receives a shock, such as with the introduction of a change initiative, people's habitual responses and interpretations may no longer be appropriate. In such situations, organizational members may need to create new or revised schemes that make sense within the context of the organizational change (Bartunek, 1984).

Often, the sensemaking process can involve the entire social network, because individuals look to a variety of others to compare reactions to change. Such social comparisons are central to the sensemaking process, and social information processing theory (Salancik & Pfeffer, 1978) provides the theoretical background to explain why comparison is part of post-change sensemaking.

Social information processing theory posits that people within organizations use information from others in order to form opinions about the organization and about appropriate behavior. More specifically, social information processing theory suggests that individual opinions about the merits of a particular change come from personal assessments of the change, as well as from evaluations and acceptance of the subjective reactions of coworkers. Timing is critical in social information processing theory, as social information plays a particularly important role in shaping perceptions under conditions of ambiguity or extreme uncertainty (such as during the introduction/sensemaking stage of an organizational change). During times of ambiguity and uncertainty people look to others for cues and interpretations (Festinger, 1954). In particular, social comparison theory (Festinger, 1954) states that when personal and objective standards do not exist (as often is the case with a new change effort), people are more likely to socially compare with both similar *and* dissimilar others.

Several studies have demonstrated that social information processing affects job perceptions or job attitudes (Dean et al., 1994; Dean & Brass, 1985; Rice et al., 1991a). For example, employees in a group show greater congruence in perceptions as their interaction with coworkers increases (Dean & Brass, 1985). Other work in the social influence tradition has moved from measuring perceptions and/or similarity of perceptions to measuring

similarity in attitudes. Some of the attitudes that have been measured are attitudes about computer use (Venkatesh & Davis, 2000), self-efficacy (Burkhardt, 1994) or system worth (Rice, 1993; Rice et al., 1991a; Rice, Grant, Schmitz, & Torobin, 1990). For example, Rice and Aydin (1991) studied departmental responses to a new health information system, and they derived a mean attitude component from responses to three questions about a computer system and 1) whether it was worth the time to use, 2) the extent to which the computer system had changed the ease of performing work, and 3) about the quality of the work after using the system. These researchers used tenets of network theory in order to specify which people would have the strongest effects on attitudes. They also attempted to specify the relative importance of “source others” by having respondents rate how important they found the opinions of supervisors and coworkers, respectively.

Rice and Aydin (1991) discovered that: 1) social information processing influences respondent attitudes toward a new system over and above traditional sources (such as use of the system or occupational membership); 2) there was greater influence from relational and positional sources of information than from spatially proximal sources (i.e. friends and bosses rather than seat-mates); 3) the primary sources of social information are those with whom one communicates freely and one’s supervisor; and 4) weighting of others’ attitude by how important the respondent rates the others’ opinion is necessary in several situations.

This study and others (Meyer, 1994; Rice, 1993; Salancik et al., 1978) lend support to the idea that an individual’s attitudes and beliefs are partially formed as a result of the attitudes and beliefs of surrounding others through mechanisms of social comparison and social information processing. Overall, the sensemaking and social information processing literatures suggest that, particularly in times of uncertainty at work, people look to others for

standards and guidance on how to think and behave. I argue that this claim can be tested in a very specific context—namely, the theories can be used as background in studying antecedents to commitment to change and to change implementation behaviors. No research of which I am aware has investigated these variables in this context.

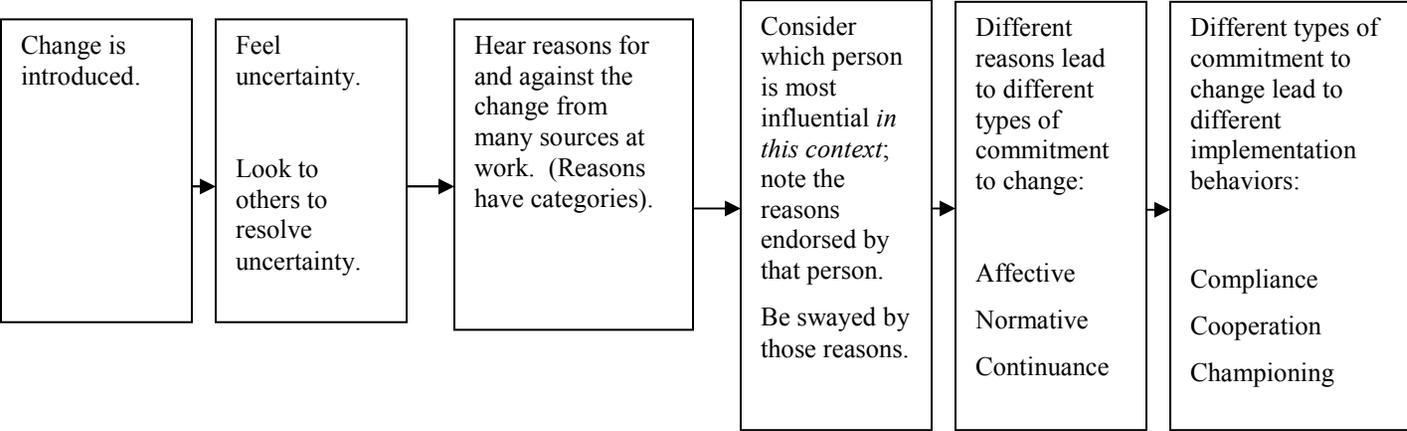
In the following chapters, I build upon the idea that when employees hear about a significant and controversial organizational change, they form initial reactions while also looking to others to determine their ultimate attitudes and behaviors. I suggest that a key area of comparison regards the different reasons for and against supporting the change. As outlined in Figure 2 below, I argue that in selecting their reaction to an organizational change, an individual determines who is most powerful and influential in the *context of the change*. Over time, I argue that an individual adopts the reasons of this influential person. Additionally, I suggest that different types of reasons lead to particular types of commitment to change and to particular implementation behaviors.

Figure 2.0 below outlines a model of how the influence process may work in the context of measuring commitment to change and change implementation behaviors.

The following chapter develops this model by introducing Behavioral Reasons Theory (Westaby, 2002, 2005; Westaby et al., 1996; Westaby et al., 1997; Westaby & Marsick, 2005) in order to establish the role of employee-generated reasons for and against supporting a change as a key element of the social comparison and sensemaking that occurs after the introduction of an organizational change.

Figure 2.0:

Process Model of Dyadic Influence, Commitment to Change, and Change Implementation



CHAPTER THREE

Individual Reactions to Change in the Form of Reasons: The Role of Behavioral Reasons Theory

“The reasons motivating organizational change, both real and perceived, have received relatively little attention in research on the implementation of complex organizational interventions” (Rousseau & Tijoriwala, 1999: 517)

In the context of studying planned organizational changes, there is empirical evidence that employee interpretations of the change are critical to understanding employee reactions to the change. Specifically, in studying worker responses to change initiatives, researchers have found that employee interpretations of the reasons for a change influence their reactions to the change (Shapiro, Buttner, & Barry, 1994). Research also indicates that not all reasons given by managers to explain change are considered credible or acceptable to employees (Bies & Shapiro, 1993). Also, the same change initiative can give rise to very different causal explanations from the perspective of employees (Rousseau & Tijoriwala, 1999). In this context, researchers have also stated (as in the quote above): “the causal frameworks employees use to understand change are not well understood...” (Rousseau & Tijoriwala, 1999:514).

Attempts to address this situation have found that employees interpret the reasons an organization undertakes change based upon the reasons provided by managers, as well as based upon the reasons they generate for themselves (Rousseau & Tijoriwala, 1999). The reasons, excuses, and explanations that managers give are termed “social accounts,” and they

are usually studied in relation to changes that are negative (such as downsizing, job cuts, wage freezes, etc.). When employees seek and generate causal explanations for unusual and unexpected events, and when they generate explanations based upon their own experiences and cognitive processes (rather than from manager accounts), they are engaged in motivated reasoning (Kunda, 1990). Recent work on employee evaluations of reasons to change indicated that *both* social accounts and motivated reasoning affect employee evaluations of whether or not a change is legitimate and functional (Rousseau & Tijoriwala, 1999). Specifically, nurses in a hospital undergoing a restructuring were asked to give their opinion regarding the reasons for the change (e.g. select from categories related to quality, economics, or self-serving reasons) and they were asked to rate these reasons in terms of their legitimacy/acceptableness. When employees rated the managerial social account (quality-related reasons for the change) as legitimate, this was considered as support for social accounts theory; yet when they found other reasons as legitimate they were acting in support of motivated reasoning theory. The results of the study supported social accounts theory, while also providing strong evidence that employees create alternative explanations for change. Importantly, the study also linked legitimacy of reasons to employee-rated implementation success.

This work clearly supports the idea that reasons and justifications matter in evaluating a change initiative; and further that employee-generated reasons are as critical as managerial social accounts in helping researchers understand employee reactions to change. The study also linked legitimacy of reasons to employee-rated implementation success. Given the importance of reasons in evaluating a change initiative, it makes sense to further investigate theories, such as behavioral reasons theory (BRT) (Westaby, 2002; Westaby, 2003; Westaby,

2005; Westaby et al., 1997; Westaby et al., 2005), that provide a theoretical link between employee-generated reasons and behavioral intentions and outcomes.

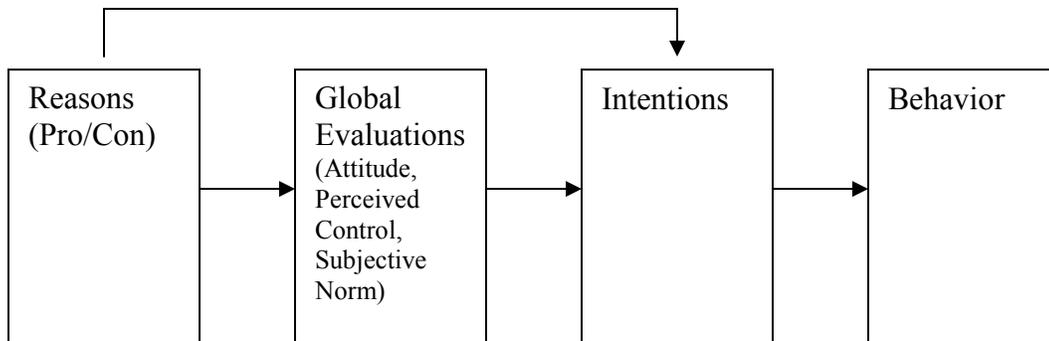
Behavioral Reasons Theory

Behavioral reasons theory belongs to a general family of theories that examine the impact of positive and negative factors on judgments and behavior (e.g. field theory, balance theory, the health-belief model). It builds on behavioral intention theories such as the theory of reasoned action (Fishbein & Ajzen, 1975) and the theory of planned behavior (Ajzen, 1991) by postulating that reasons for and against a behavior serve as an important link between beliefs, “global evaluations” (e.g. attitudes, subjective norms, and perceived control), intentions, and behavior.

More specifically, BRT is a framework that attempts to explain and incorporate the specific cognitive factors that motivate and maintain people’s intentions and behaviors. It suggests that understanding the specific reasons people use to explain “why” they form their behavioral intentions is necessary to fully understand specific motives (Westaby, 2003; Westaby et al., 1996). The emphasis that BRT places upon the importance of specific beliefs (measured as accessible reasons) means that in BRT, accessible reasons are suggested to have direct associations with behavioral intentions. This contrasts with assumptions in the theory of planned behavior (Ajzen, 1991), where the effects of any belief-based components are assumed to be mediated through attitude, subjective norm, and perceived control. Behavioral reasons theory does not omit or “bypass” these variables, as such “global evaluations” are postulated to also mediate the relationship between reasons and intentions/behavior, it simply also suggests a direct link from reasons to intentions and behavior (see Figure 3.0).

Figure 3.0

Behavioral Reasons Theory (from Westaby & Marsick, 2005, under review)



Behavioral reasons theory attempts to describe the role of accessible reasons in behavioral decision-making. In a decision-making framework, the motivational process is presumed to begin with a state of uncertainty. Individuals resolve uncertainty by evaluating their positive and negative beliefs associated with the behavior under consideration. This evaluative process results in intentions to perform the behavior and simultaneously results in the formation of accessible reasons that can be used to justify and support these intentions. Importantly, accessible reasons are assumed to support people’s ongoing pursuit of behavior once the behavior is initiated.

Applications of Behavioral Reasons Theory

Behavioral reasons theory has been used to improve our understanding of turnover decisions and job satisfaction (Westaby, 2003) and implementation behaviors (Westaby et al., 2005). As an improvement on behavioral intention models, behavioral reasons theory can also account for behavioral change—and this is critical to understanding how commitment types and levels might change in the context of an organizational change effort. Specifically, according to the model, people may interrupt their ongoing behavioral pursuits

when new information is presented which causes them to question their current accessible reasons. If their current accessible reasons are not sufficient to counter-argue the newly encountered information, then they become uncertain about their intentions and on-going behavior. At this point, the behavioral decision making process would be re-engaged to “form a new intention, a new set of accessible reasons, and a new course of committed, ongoing action” (Westaby, 2003: G3). Thus, when a change initiative is introduced and discussed, people likely consider or reconsider the reasons that either support or do not support endorsing the initiative. As I discuss later, this consideration likely involves watching and interacting with others in order to fully decide how to act.

As an illustrative example of how accessible reasons theory is operationalized, consider examples from a study where BRT was applied to the understanding of turnover intentions (Westaby, 2003). Accessible reasons are defined as the specific factors that employees use to explain their turnover intention responses—e.g. an employee could access reasons to stay such as “I have good social relationships here” and “I enjoy my job.” Employees would also access reasons against staying (such as “My boss does not promote people”), and together both types of reasons would affect intentions and behavior. In research, accessible reason variables were related to turnover intention and turnover behavior, and they explained an additional 12% of the variance in turnover intentions, after controlling for subjective norm, perceived control, and attitude variables (all of which are related to the theory of planned behavior (Ajzen, 1991)). Accessible reasons also explained more variance in longitudinal job satisfaction than that explained by other theories. Such findings suggest the importance of measuring accessible reason variables in behavioral

intention models. Doing so increases explanatory value while simultaneously highlighting specific targets for applied interventions.

Measuring Behavioral Reasons Theory and Categorizing Reasons

In the research environment, BRT is assessed by first performing qualitative elicitation interviews with organizational representatives in order to capture potential reasons for or against a particular behavior. After salient possible reasons are collected, respondents select applicable reasons from two columns (one “for” and one “against”). Typically, reasons in the list deal with a range of issues, such as relationships, other alternatives, and the nature of the work itself. Respondents are also often asked to place an additional mark next to very influential reasons (which allows for additional assessment). However, to date, no research using the theory has asked: are there predictable categories of reasons for and against an organizational change? This question is important because if there were predictable categories of reasons, then researchers could investigate whether certain reason types strongly relate to certain behaviors or attitudes. This categorization could advance investigations of change beyond idiosyncratic studies and move it toward more systematic types of research.

Since no research (of which I am aware) has attempted to categorize reactions to change initiatives, there is no a priori set of categories to guide such an exploration. There are, however, several literatures that could inform such an investigation: one option is to look at influence attempts (since a change initiative could be classified as an influence attempt); another option is to look at the sensemaking and socialization literature (since an organizational change is a disruption of routines, it requires sensemaking and perhaps new

socialization on the part of employees). A third option is to evaluate the social psychological literature on persuasion.

Influence Literature as an Inspiration for Creating Reason for Change Categories

To date, the empirical study of influence in organizational behavior has been dominated by the goal of developing inventories of strategic influence-seeking behaviors. For example, Kipnis, Schmidt & Wilkinson (1980) identified an inventory of seven influence tactics, which was later modified to nine tactics by Yukl and colleagues (e.g. rational persuasion, inspirational appeal, consultation, ingratiation, exchange, personal appeal, coalition, legitimating, and pressure (Yukl & Falbe, 1990). Most studies examine how tactical choices vary with situational perceptions (Dillard & Burgoon, 1985), individual differences (O'Hair & Cody, 1987), and organizational climate (Cheng, 1983); studies also focus on the effects of certain tactics on certain targets. However, although there are many types of influence tactics, researchers do not agree on the range of tactical options available to managers and there is inconsistent information about results of using the tactics (Higgins, Judge, & Ferris, 2003; Tepper, Eisenbach, Kirby, & Potter, 1998). Given these limitations, some researchers suggest that meta-categories be used to allow a higher level of abstraction in analysis (Furst, 2004; Tepper et al., 1998). The most commonly suggested scheme is that of hard, soft, and rational tactics, where influence occurs by force, psychological persuasion, or instrumental reasoning, respectively (Kipnis & Schmidt, 1985). While such meta-categories may simplify comparative research on influence, such categories do not cleanly translate to the reasons literature (e.g. “hard” versus “soft” reasons are not as intuitive as “hard” vs. “soft” tactics; and force-related reasons seem less common than force-related tactics). However, preserving this distinction between psychological persuasion and

instrumental reasoning remains intuitively appealing. One can both preserve that distinction and improve upon the distinction by evaluating the socialization literature for its contributions.

Socialization Literature as an Inspiration for Creating Reason for Change Categories

The socialization literature suggests that employees who are in a time of transition—either at organizational entry or during a period of organizational change (Schein & Diamante, 1988)—seek five types of information: technical, referent, normative, performance, and social (Morrison, 1993). More specifically, technical information refers to how to perform required tasks; referent information refers to role demands and expectations; normative information regards adapting to the culture and getting integrated into a work group; performance information regards feedback on specific behaviors; and social information regards feedback on the acceptability of non-task behaviors. Attempts to put these informational needs into meta-categories suggest that people seek job-relevant information (informational) and organizational socialization-relevant information (normative) (Morrison, 1993; Shah, 1998). Thus, there are two major types of employee information-seeking that occur along with socialization. This two-part categorization is parsimonious and easily lends itself to application in the reasons and justifications literature (e.g. it can appear logical to suggest that people use informational and normative reasons to support or resist a change). Also, this choice to draw from the socialization literature to understand employee reactions to a change is supported by the literature itself, as researchers in that field suggest that socialization-related issues do not just occur at organizational entry, but at “several times during the managerial career” (Schein, 1988:53). Potentially, the same

type of confusion and need for sensemaking that occurs at organizational entry can occur with an organizational change (Schein, 1988).

Interestingly, these meta-categories as used in the socialization literature overlap considerably with categories utilized in social psychological studies of persuasion and social influence. Specifically, the field of social psychology has used, as its “central organizing framework” (Wood, 2000), the assumption that people agree with others from an informational motivation and/or from a normative motivation—e.g. because they want to understand the entity or issue featured in the appeals and/or because they want to conform to the expectations of another. Given the above information about the use of these two categories as guiding categories in social psychology, and given the parsimony that can come from integrating disciplines, I suggest that categories and meta-categories of information-seeking behaviors can also be applied in evaluating and categorizing reasons and justifications.

Making this application can be done with very few changes to the definitions as used in socialization literature. In taking the categories and applying them to behavioral reasons theory, I argue that the definitions can be adjusted according to the list in Table 3.0 below. Also, while I maintain that each of the five types of organizational information types from socialization also correspond to five types of reason categories, I still suggest that each of these original categories would likely be related to second order higher factors that represent the two metacategories (informational and normative) described earlier. The table below captures the original definition of each information type, its adjusted definition, and its position relative to the two metacategories.

Table 3.0
Categories of Information-Gathering: Adjustments from the Socialization Literature to the Reasons Literature

Type of Information Gathering: Category Name	Original Definition in Socialization Literature	Adjusted Definition in Context of Organizational Change	Meta-Category (Normative= culture/ socialization relevant; Informational=job/task relevant)
Technical	Information on how to perform required tasks	Why employees would be required to perform the change	Informational
Role Referent	Refers to information on expectations of others related to role demands	Why and how change fits with role demands and expectations	Informational
Normative	Adapting to the culture and getting integrated into a work group	Why change facilitates cultural and work group integration; why it is expected	Normative
Performance	Feedback on specific behaviors; helps evaluate job progress	Why and how change is related to work-specific progress (work integration)	Informational
Social	Regards feedback on the acceptability of non-task behaviors; allows one to assess acceptance in workgroup	Why and how change is related to non-task behaviors (social integration); why change will lead to acceptance	Normative

Thus, in investigating whether reasons for and against an organizational change fall into categories, I draw from the socialization and social psychology literature to suggest that there are likely five subcategories of reasons (those listed above in association with socialization). I further suggest that these subcategories can be represented by two meta-categories: normative and informational. This claim can be tested with a combination of qualitative and quantitative research.

Hypothesis 1A: Employee-elicited reasons for and against a change can be independently coded into five categories: technical, referent, normative, performance, and social.

Hypothesis 1B: A second-level of analysis of employee-elicited reasons for and against a change will result in two higher-level factors; such factors can be considered as normative and informational.

This attempt to put reasons for and against a change initiative into empirical and theoretical categories has the potential to significantly increase our understanding of how employees consider and relate to change initiatives. To date, attempts at organizing employee responses have been idiosyncratic and atheoretical (Rousseau & Tijoriwala, 1999); also they have often focused solely on manager-generated accounts (Bies & Shapiro, 1993). This current research provides a theoretical logic for categorizing reasons, while also enabling reasons to be used in other research contexts. The advances possible with this categorization would allow researchers to more systematically study reactions to organizational change.

More specifically, the value of categorizing reasons increases significantly if reasons and reason categories can be linked to hierarchical positions, communication patterns, and ultimately to types of behaviors. To that end, the next chapter suggests how certain reason types may come to be accepted by multiple people in a social system—and it also relates how people likely form commitment and behavioral responses as a result of these reasons.

CHAPTER FOUR

Reasons For and Against Supporting a Change and Dyadic Network Influence During Organizational Change

In the previous chapter I suggested that reasons have organizing categories and that reasons for or against supporting an organizational change ultimately affect attitudes and behavioral intentions regarding that change. In this chapter, I continue to focus on reasons and use them as a vehicle to test how the reactions of influential network members may predict the reactions of others in the network. Again, promoting or accepting reasons for or against supporting a change are one kind of reaction to change, and they are potentially a key area of comparison and exchange between employees who are experiencing and discussing change. In accordance with the model in Figure 4.0, I suggest that after individuals have been exposed to reasons from different sources they consider how to value, weight, and potentially adopt different reasons from different network sources. In order to make claims about how an individual might do this, I discuss the role of power and influence in social interactions.

Power and Influence in Social Network Communications

Most research that focuses on influence in social networks considers power and influence from a resource dependency viewpoint, where it is assumed that people who are able to control resources increase others dependence on them and thus they acquire power (Burkhardt & Brass, 1990; Ibarra et al., 1993; Krackhardt, 1990; Krackhardt & Brass, 1994; Rogers, 2003). In times of uncertainty, such as during an organizational change, resources

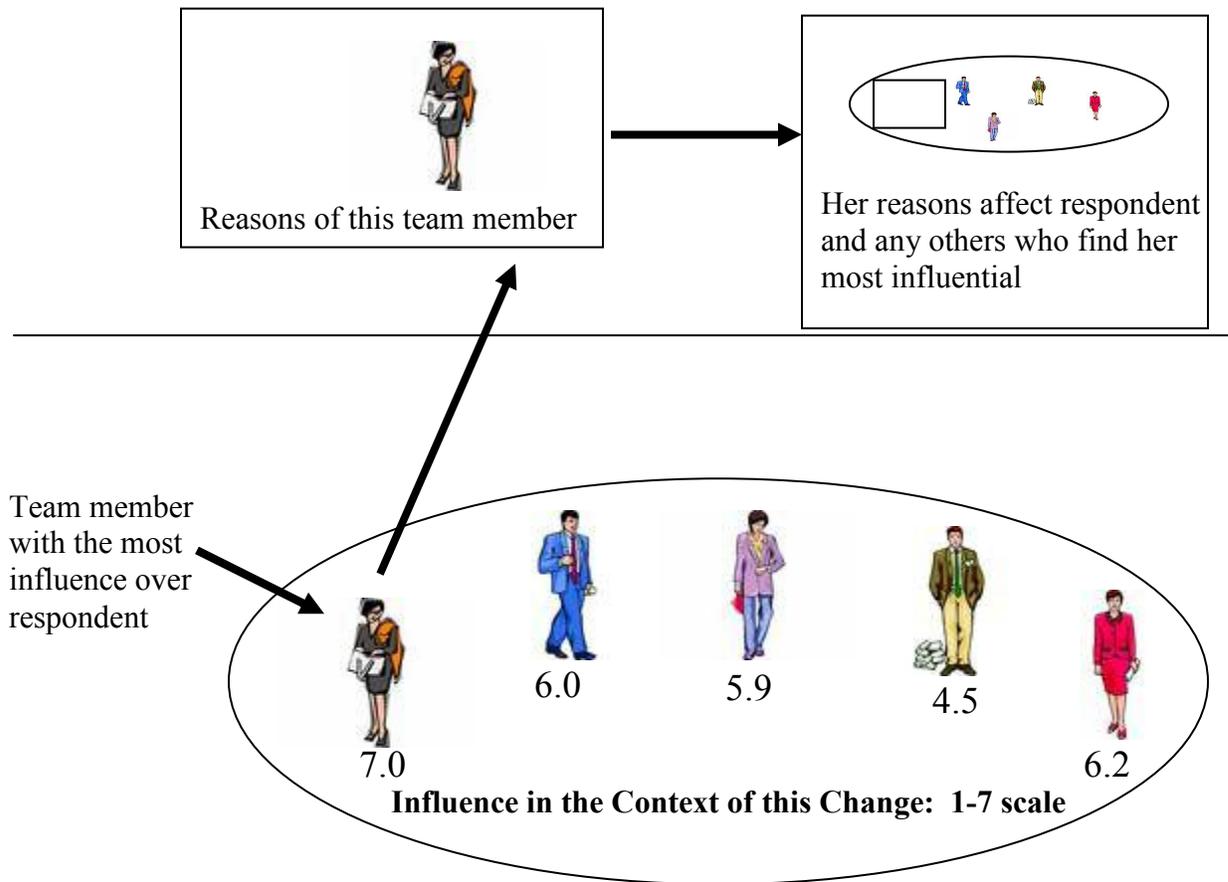
can include access to information, previous experience with the subject of the change, training, or access to other forms of physical or financial support. Such information can be highly salient for organizational survival and for individual success at work. People who have the information, opportunity, and skill set to explain and aid in sensemaking regarding the change are likely to be influential, as they help minimize the cognitive dissonance and uncertainty that accompany a change request.

In studies that assess both communication network information and influence data, an individual's influence is assessed by asking respondents to identify others in the network whom they communicate with in relation to the change, and by then asking them to rate the influence of these people (*vis-à-vis* the change), as well as the frequency of discussions, on a Likert scale (Brass, 1984; Podolny & Baron, 1997; Umphress, Labianca, Brass, Kass, & Scholten, 2003). Such a rating attempts to capture who is most influential to the respondent in the context of the change.

In the context of this dissertation, influence ratings are subjective reactions to (and decisions about) others in the network, and such judgments are idiosyncratic to the context of the change. For some people (and some changes), the most influential person will be a resource provider or a subject matter expert, while for others, the most influential individual might be a persuasive friend or superior. In this study, the focus is accepting the respondent's rating of whom they find to be the most influential in relation to the particular change, and then identifying the reasons (or perceived reasons) of that person. Here, identifying the most influential person in an individual's ego network (Marsden, 1990) is key to understanding which reasons for and against a change will be most discussed and accepted. I argue that over time, influential individuals can exert a disproportionate amount

of influence on the reasons (and thus the commitment and implementation behaviors) of others in the work environment. The argument is partially based on research on selected scores and upward influence (Taylor, 2004; Taylor, Jones, Hofmann, & Mathieu, 2005). Figure 4.0 below indicates, in a very generic manner, how the concept of selected score and influence relate.

Figure 4.0: Selected Scores and Social Influence (from Taylor, 2004)



I suggest that the selected score phenomenon modeled above occurs in situations where individuals are selecting reasons for or against supporting a change. I argue that over time, the reasons of the most influential individual are “selected,” and that this person exerts influence on the formation of reasons above and beyond the reasons of other individuals and above and beyond the reasons the respondent originally favored. Thus, over time, individual reasons for supporting a change will likely be affected by the reasons of the most communicative, persuasive, or otherwise influential person in the context of this change. His or her opinion essentially serves as a weighting mechanism in meetings and in individual and group discussions. Time, as discussed below, plays an important role in this process.

Introducing Time: Early vs. Later Reasons For/Against Supporting a Change

When a change is first introduced, the shock to the system is still “fresh.” There is a great deal of uncertainty, and in these early stages people are still in flux regarding their reactions to the change. Additionally, they are still learning how those around them are responding to the change. Thus, when the change is introduced, people are likely making their early evaluations of the change (and of their reasons for supporting or resisting that change) based on individual differences, initial impressions, and prior experience. However, as people continue to interact with others who are supporting (or not supporting) the change, opinions and behaviors related to supporting the change are likely to alter (Barley, 1990; Drazin et al., 1999; Gioia, Thomas, Clark, & Chittipeddi, 1994; Greenberg, 1995; Ridgeway, Berger, & Smith, 1985). With time, the role of opinion leaders will likely play a stronger role in how the change is considered and used (Drazin et al., 1999; George & Jones, 2001; Gioia et al., 1994; Greenberg, 1995; Langley, 1999; Volkema, Farquhar, & Bergmann,

1996). Thus reasons (and the commitment and behaviors that flow from reasons) change as a result of the sensemaking and social information processing that accompany an organizational change.

Regarding how power and influence change over time, in a longitudinal study that measured changes in network centrality and power after the introduction of a technology change, Burkhardt and Brass (1990) found that while some early adopters increased their power after the technology change, the people who were powerful prior to the change remained powerful later (the correlation between power in the two time periods was .84). Thus it follows that the group member who is most influential in the early stage of implementation likely remains influential throughout. Because the most influential person functions as an informal leader (at least in specific dyads), their ultimate reason “vote” regarding a change should affect an individual’s reasons for or against supporting the change, and likely sways the individual from their original reasons after repeated interactions.

Given this background, the following hypothesis regards the development of reasons for and against supporting a change during the early stages of change implementation. The “early stage” is defined as the period that begins with the announcement of the change and it lasts for at least three to six months thereafter (this time period was selected based on research precedent (Taylor & Todd, 1995; Venkatesh & Davis, 2000)).

Hypothesis 2: The Time 2 reasons of the person given the highest influence rating by the respondent will significantly predict the Time 2 reasons of the respondent, even controlling for Time1 reasons of the respondent.

Potential Moderators of the Influence Relationship

The tendency to “self-monitor” is an individual difference variable which is related to how susceptible people are to social influence effects (Burkhardt, 1994; Mehra, Kilduff, &

Brass, 2001; Pollock, Whitbred, & Contractor, 2000; Snyder & Gangestad, 1986).

Specifically, self-monitoring refers to the extent to which an individual attends to social cues in order to determine the appropriateness of their own individual attitudes and behaviors (Snyder et al., 1986). The construct describes the extent to which people stay “true to themselves” versus the extent to which people alter their behaviors based upon situational cues and requirements. Chameleon-like high self-monitors use social cues to adjust behavior, while true-to-themselves low self-monitors tend to behave the same across situations. Network research that attempts to understand the relationship between self-monitoring and social information processing has found high self-monitors more likely to be influenced by the social environment (and by social information processing mechanisms in particular) (Burkhardt, 1994; Mehra et al., 2001; Pollock et al. 2000).

Thus, I expect the effects of self-monitoring will be similar in the situation described in hypothesis two above—specifically, I suggest that people who are high self-monitors will be more likely to be affected by the reasons of influential people in their network. I argue that the strength of the relationship between Time 1 and Time 2 reasons of the respondent (in relation to the Time 2 reasons of the influential person) will be stronger when the respondent is a high self-monitor than when the respondent is a low self-monitor. Stated formally:

Hypothesis 2B: Self-monitoring will moderate the hypothesized relationship between the Time 2 reasons of the person given the highest influence and the T2 reasons of the respondent (even controlling for the Time 1 reasons of the respondent), such that the relationship will be stronger when the respondent is a high self-monitor.

Relationship Symmetry in Work Relationships

Hypothesis 2 does not address the symmetry of the influence relationship, nor does it fully describe change over time. Given the hierarchical and socially stratified nature of many work settings, both symmetrical and asymmetrical influence is likely (e.g. one person

considers another influential in the context of the change, but the feeling of influence is not reciprocated) (Brass & Burkhardt, 1993). For example, consider the case where an experienced technology user is selected as the most influential person in the context of a change related to that technology—that particular user may be selected by an employee but that user may not select the employee as most influential in the context of this change. In such cases, I would suggest that the employee reasons for and against supporting a change would migrate towards the reasons endorsed by the influential person, but his/her reasons would not migrate towards the reasons of the employee.

Similarly, there are likely some cases (consider two raters who are both in upper management and who have similar hierarchical rankings and credentials related to the change) where both people might rate the other as equally influential in the context of the change. In such cases, one would expect that their mutual sense of influence caused them to exchange information and become even more similar over time in terms of reasons.

Both symmetric influence and asymmetric influence scenario as outlined above can be tested empirically. Stated in formal terms:

Hypothesis 3A: The degree of symmetry in an influence relationship will be positively related to the closeness of reasons, such that the reasons of people in symmetrical relationships will be the most similar to each other, the reasons of people in asymmetric relationships will be less similar, and the reasons of people with no relationship will be the least similar.

Previously, I described how the tendency to self-monitor can alter social influence effects, and I suggested that people who are high self-monitors are more likely to be affected by the reasons of influential people in their network. Accordingly, I expect that self-monitoring could moderate the relationship described in hypothesis three above. I argue that the strength of the hypothesized relationship between symmetry and reason similarity

between the respondent and the most influential person will be stronger when the respondent is a high self-monitor than when the respondent is a low self-monitor. Stated formally:

Hypothesis 3B: Self-monitoring will moderate the effects of respondent relationship symmetry and the closeness of reason ratings between the respondent and the most influential person, such that the strength of the hypothesized relationships between symmetry levels and closeness of reason ratings will be stronger when the respondent is a high self-monitor.

CHAPTER FIVE

Reason Types and Commitment to Change

In the previous chapters, I introduced reasons for and against supporting a change as an important element of social comparison during the sensemaking stage of dealing with an organizational change. I then suggested that reasons move through dyadic networks in situations where influential people guide others to accept their reasons for and against the change. However, reasons for and against supporting a change are also important because they *directly* relate to cognitions and behavioral intentions (Westaby, 2005; Westaby et al., 1997; Westaby et al., 2005). Thus, it is possible that reasons are related to cognitions about commitment to change.

In this chapter, I build on this logic and suggest that certain reasons lead to certain types of commitment to change—and thus people with similar reasons may also have similar levels of commitment to the change. Specifically, I argue that certain types of reasons solidify affective, cognitive, or mixed reactions to the change request, and that different types of reactions relate to different types of commitment to change (and, ultimately, to different behaviors related to the change). Making these connections requires introducing the commitment to change construct and linking network theory to its dimensions.

Commitment to Change- A Three-Component Model

Commitment to change is defined as “a force (mind set) that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative” (Herscovitch & Meyer, 2002: 475). The construct is derived from the multidimensional

organizational commitment construct (Meyer & Allen, 1991), and like organizational commitment, the commitment to change construct also has three constituent components. Essentially, the commitment force or mindset can take different forms: that of desire (affective commitment), perceived cost (continuance commitment) or obligation (normative commitment). These three mindsets essentially refer to the employee feeling as if they want to, have to, or ought to support the initiative. In the case of commitment to change, affective commitment to change is a desire to support the change based on desire and a belief in its inherent benefits; normative commitment to change stems from a sense of obligation to provide support for the change; and continuance commitment comes from a recognition that there are costs associated with failure to provide support for the change.

Research shows that these mindsets are distinguishable from one another (although continuance and normative commitment are correlated (between .41-.64 in some studies)), and that they relate differentially to change related behaviors (Herscovitch et al., 2002). In particular, one study related the commitment types to behavioral outcomes of: compliance (providing minimum support and doing so reluctantly), cooperation (exerting effort, going along with the spirit of the change, and making modest sacrifices), and championing (enthusiastically going above and beyond formal requirements to ensure success and promoting the change to others) (Herscovitch & Meyer, 2002). The findings of this study and a description of the types of commitment are outlined in Table 5.0 below.

Table 5.0
Commitment to Organizational Change- Definitions and Outcomes
 (Based on Hercovitch & Meyer, 2002)

Type of Commitment to Change	Accompanying Mindset	Definition and Potential Bases of Commitment	Potential Outcomes
Affective (I want to)	Desire	Provide support for change based on a belief in its inherent benefits (from personal involvement, identification with the target, or value congruence)	Correlates significantly and positively with: <ul style="list-style-type: none"> ▪ Compliance ▪ Cooperation ▪ Championing
Continuance (I have to)	Cost	Recognition that there are costs associated with failure to support (from sense of accumulated investments or “sidebets” that could be lost; or from lack of alternatives)	Correlates significantly and positively with: <ul style="list-style-type: none"> ▪ Compliance
Normative (I ought to)	Obligation	Sense of obligation to support change (from cultural and/or organizational socialization or a receipt of benefits that activate the need to reciprocate)	Correlates significantly and positively with: <ul style="list-style-type: none"> ▪ Compliance ▪ Cooperation ▪ Championing (occasionally)

As this table identifies, the study utilizing the three-component model found that all three components of commitment to change were related but distinguishable. The study also found that all three types of commitment correlate significantly with self-reported compliance; while only normative and affective commitment correlate significantly with cooperation and championing behaviors (Herscovitch & Meyer, 2002).

Interestingly, researchers also found that people who were uncommitted to the change still reported a general willingness to comply with changes in their organization. Researchers could not fully explain this result, but they speculated that “employees might be reluctant to resist a change unless they view it as having serious negative consequences for themselves...there are likely to be other factors that discourage employees from resisting a change...” (Herscovitch & Meyer, 2002). This statement suggests that commitment to change may not always mediate compliance, and it also suggests that researchers need to “tease out” the specific reasons why people do or do not exhibit a behavior (such as compliance). I argue that by gaining a better understanding of the reasons people use to justify their intentions and behaviors, researchers can move from speculation (above) about behavioral outcomes to prediction of such outcomes. Also, because of the paucity of research using the three-component model of commitment to change, this area of research can be strengthened with further inquiry and improved measurement. Mapping the influence of reasons in a social network (as suggested in this research) enables such inquiry and improvement.

Reason Types and Affective, Continuance, and Normative Commitment

The earlier section on reasons theory and reason types suggested that reasons differ in the amount and type of information they provide. Again, in considering the two meta-

categories of reasons, there are informational and normative categories of reasons. Reviewing the definitions of each category reveals that “normative” reasons are highly relevant to organizational culture and to socialization; whereas “informational” reasons are highly job- and task-relevant. Due to the fact that this paper utilizes the term “normative” in two different contexts (i.e. “normative reasons” and “normative commitment to change”), I make an effort to avoid confusion by referring to “normative reasons” as “normative/socialization reasons” in this document.

Normative/socialization reasons concern issues such as acceptance, integration, value congruence, and social functioning related to the change—all of which could relate to creating a desire to commit to the change based on involvement, value congruence, or identification with the change (all components of affective commitment to change). Given the value- and socially-based nature of normative reasons (and their focus on emotions, values, and beliefs), and given the definition of affective commitment as desire based on identification, value congruence, and emotional involvement, I argue that normative reasons are more likely to trigger feelings of affective commitment. Thus, people who share similar normative/socialization reasons, and who likely more frequently discuss these reasons, would likely have similar reactions of affective commitment to the change.

Hypothesis 4A: Normative (i.e. socialization-related) reasons will be positively and significantly related to affective commitment to change.

Continuance Commitment to Change

In direct contrast to affective commitment to change, feelings of continuance commitment to change have a much lower affective component (since continuance commitment is about calculating options and considering costs of failure to support). As such, continuance commitment is highly cognitive in comparison to the other forms of

commitment to change, and it is focused on ramifications, implications, and potential factual outcomes related to the change. Thus, normative/socialization reasons—with their emphasis on emotions, values, and beliefs—are much less likely to influence continuance commitment. However, informational reasons emphasize work-related information, technical outcomes and exchanges, and instrumental reasoning. These reasons are highly cognitive and are more likely to emphasize and reinforce feelings about costs, benefits, and job-related outcomes related to the change. Thus, people who emphasize instrumental reasons (where cognitive considerations are dominant) would likely have similar reactions of continuance commitment to the change (because continuance commitment is highly calculative and cognitive).

Hypothesis 4B: Informational reasons will be positively and significantly related to continuance commitment to change.

Normative Commitment to Change

Lastly, I suggest that normative commitment to change, which concerns feelings of obligation to support the change, has both an affective and a cognitive component. Specifically, one can feel obligated because the change is in line with beliefs, because the change matters to friends, and/or because one wants to appear consistent (all affect-laden reasons that could be categorized as “normative” given the earlier definition of normative/socialization reasons); however, one could also feel obligated to support the change because the change is important to powerful people or because such support is owed as a returned favor (all instrumental, cognitive calculations that could be categorized as “informational” reasons according to the earlier definition of informational reasons). By definition, normative commitment to change has less of an affective component than does affective commitment to change, but the affective component remains—the sense of obligation can come from social exchange feelings with other affective ties; and it can also

come from a cognitive weighting of owed support. Feelings of normative commitment to change will likely involve both the gathering of information and the gathering of affective support. Thus, I expect that both normative/socialization and informational reasons will influence normative commitment, and this influence will be evident in the similarity of normative commitment between employees who share these reasons. Given this logic, I offer the following hypothesis:

Hypothesis 4C: Both normative/socialization and informational reasons will be positively and significantly related to normative commitment to change.

In this chapter I argue that particular reasons tend to reflect and solidify certain affective, cognitive, or mixed reactions to a change request; and that such reactions relate to different types of commitment to change. I investigate the link between different types of reasons and the interpersonal similarity of employee ratings on their affective, normative, and continuance commitment. I predict that different reasons influence commitment to different degrees, depending on the type of commitment being studied. The next chapter explores how this commitment to change might relate to reasons and implementation behaviors.

CHAPTER SIX

Commitment Types and Implementation Behaviors

This chapter suggests that different forms of commitment to change relate to different implementation behaviors associated with a change request. More specifically, I follow the research of Herscovitch and Meyer (2002) and argue that *all* commitment types lead to compliance behaviors related to the change, while some types of commitment to change are related to discretionary behaviors such as cooperation and championing.

This section will explain that despite the fact that there are three types of commitment to change, it is possible to relate the different types to different behavioral outcomes. This argument builds on the work of Herscovitch and Meyer (2002) whose research on commitment to change makes a distinction between focal behaviors and discretionary behaviors. Focal behavior is “that course of action to which an individual is bound by his or her commitment,” whereas discretionary behavior is “any course of action that, although not specified in the terms of the commitment, can be included within these terms at the discretion of the individual (e.g. exerting extra effort)” (Herscovitch & Meyer, 2002: 475).

The authors continue to suggest that any commitment, regardless of form, should lead to the enactment of the focal behavior—in the case of change this enactment would take the form of compliance with explicit requirements for change. However, discretionary behaviors would include responses to the change that involve going along with the spirit of the change and enacting modest sacrifices for the change (cooperation). A more intense discretionary response would include enacting behaviors that require considerable personal sacrifice, or

behaviors intended to promote the value of the change to others inside or outside the organization (championing). The extent to which employees would engage in any discretionary behavior would depend on the mind-set they have and the type of commitment related to that mind-set.

On the basis of the distinctions in discretionary behaviors listed above, I suggest the following hypotheses:

Hypothesis 5A: Affective, normative, and continuance commitment to change will correlate positively with the focal behavior (compliance with the requirements for change).

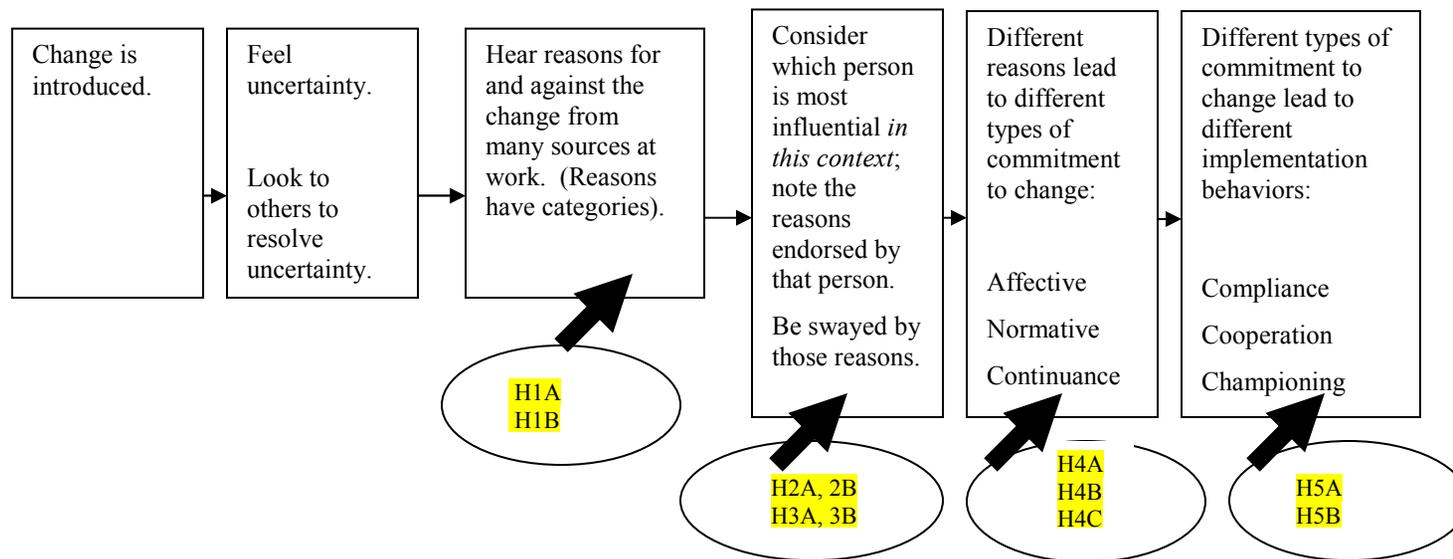
Hypothesis 5B: Only affective and normative commitment to change will be positively related to discretionary behavior (cooperation and championing). Continuance commitment to change will be unrelated, or negatively related to discretionary behaviors.

These proposed relationships between commitment to change and implementation behavior can be tested by asking supervisors to rate the implementation behaviors of individuals, as well as by asking people to self-report their actions.

A summary of the relationships among and between all of the hypotheses is found in Figure 6.0 below.

Figure 6.0:

Process Model and Hypothesized Relationships



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- H1A: Employee-elicited reasons for and against a change can be independently coded into five categories: technical, referent, normative, performance, and social.
- H1B: A second-level of analysis of employee-elicited reasons for and against a change will result in two higher-level factors; such factors can be considered as normative and informational.
- H2A: The Time 2 reasons of the person given the highest influence rating by the respondent will significantly predict the Time 2 reasons of the respondent, even controlling for Time 1 reasons of the respondent.
- H2B: Self-monitoring will moderate the hypothesized relationship between the Time 2 reasons of the person given the highest influence and the T2 reasons of the respondent (even controlling for the Time 1 reasons of the respondent), such that the relationship will be stronger when the respondent is a high self-monitor.
- H3A: The degree of symmetry will be positively related to the closeness of reasons, such that the reasons of people in symmetrical relationships will be the most similar to each other, the reasons of people in asymmetric relationships will be less similar, and the reasons of people with no relationship will be the least similar.
- H3B: Self-monitoring will moderate the effects of respondent relationship symmetry and the closeness of reason ratings, such that the strength of the hypothesized relationships between levels of respondent symmetry and closeness of reason ratings will be stronger when the respondent is a high self-monitor.
- H4A: Normative reasons will be positively related to affective commitment to change.
- H4B: Informational reasons will be positively related to continuance commitment to change.
- H4C: Both normative reasons and informational reasons will be positively related to normative commitment to change.
- H5A: Affective, normative, and continuance commitment to change will correlate positively with the focal behavior (compliance with the requirements for change).
- H5B: Only affective and normative commitment to change will be positively related to discretionary behavior (cooperation and championing). Continuance commitment to change will be unrelated, or negatively related to discretionary behaviors.

CHAPTER SEVEN

Methodology

Research Sample and Procedures

I tested the hypothesized relationships described above in an applied field setting. I identified a top-down, large-scale change effort taking place in the University of North Carolina Hospital system (UNCH), and secured access to employees in order to study their responses to the change via an internet-based survey. Specifically, the change was the introduction of a new program for patient care and crisis management. The program is referred to as “Rapid Response Teams (RRT)” and it consists of a protocol whereby a nurse (or a doctor) can initiate a Rapid Response call if he/she notices deteriorating conditions—and by definition the call results in the immediate arrival of a respiratory therapist, a senior nurse, and a doctor. Part of the RRT program is a stipulation that no call is to be judged or questioned, as it should always be “safe” for a nurse to act on his or her instincts. The change is significant in that its use has been proven to reduce mortality in hospitals (as well as the acuity of “code calls” in hospitals), and it allows nurses more autonomy in patient care. The change is controversial because some doctors and nurses are not comfortable with nurses taking action instead of waiting for the patient’s primary physician to notice and/or respond to deteriorating conditions. The change is also controversial because it requires some staff members to do “double duty” by wearing the RRT pager as well as being required to care for their usual patients and attend to the standard duties of their non-RRT job.

One area of the hospital (pediatrics) has officially instituted Rapid Response Teams (meaning that all staff have been trained about the program, sensitized to the calls, and people alternate the responsibility of wearing the RRT pager and responding to calls). In contrast, other areas are still deciding whether or not to adopt the change. In addition, at the time I launched the survey, several units in the hospital had just finished running a six-month RRT pilot program. For six months certain units acted as “test areas” by adopting RRT for the trial period. Hospital administrators were interested in understanding employee reactions to the change because they were considering launching a hospital-wide roll-out of the program. Thus, I was granted access to the units who had launched the pilot program, access to the units that had already put the program in place, and access to units where people had not had any direct experience with the program. While the program impacts nurses, patients, doctors, residents, and specially-trained nurses known as “respiratory therapists,” its impact is greatest on the nurses and respiratory therapists. Thus, the internet survey was launched among the sample of nurses and respiratory therapists described above.

This change program met the basic requirements implied by my hypotheses. Namely, the change: 1) created enough controversy to stimulate discussion, debate, and a potential difference of opinion; 2) compliance with the change had a discretionary component (nurses could choose not to implement the program, they could refuse to wear the special pager, or they could be champions of the program); and 3) compliance with the program could be externally noted and checked (because RRT calls are monitored and studied).

I was able to gain access to a small sample of physicians, nurses, and nurse managers prior to creating the survey in order to elicit employee-generated reasons for and against supporting the change. After creating the survey using the employee-generated items and

other items described below, I was given a list of email addresses for 726 nurses and 90 respiratory therapists.

All of the names on this list received a customized email (customized by the survey software program to go to each individual email address for matching purposes). The email contained a link to the survey and a personalized letter of introduction from the Patient Safety Officer at the hospital (a person whom they would recognize and potentially respect as an “insider”). Over a six-week period, people received two additional reminders via email, and the third notice introduced an incentive (their names would be in a drawing for gift certificates at a local retailer).

Of the 816 total emails sent, 21 came back due to address errors and 19 responded that they were not appropriate respondents (for reasons such as they worked too few hours or they no longer worked in the pertinent area of the hospital). Thus, a total of 776 surveys were appropriately sent out to the sample, and 184 usable surveys were returned for a response rate of 24%.

Demographics

The majority of the respondents were nurses (66%), and the remaining respondents chose the category named “other.” No residents (medical students) filled out the survey, as the sponsor of the study plans to survey residents and physicians using a separate instrument. Thus, these results were as expected.

The majority of the respondents were female (82%), which is consistent with employee statistics on nursing staff demographics available from the hospital. The breakdown of tenure information indicates that the bulk of the respondents have been employed as nurses for more than six years (64%). Specifically, 12% have been employed

less than one year; 12% have been employed from 1 – 2 years; 12% have been employed from 3 – 5 years; 15% have been employed from 6 – 10 years; 9% have been employed from 11 – 15 years; 13% have been employed from 16 – 20 years; and 27% have been employed for more than 21 years.

While a significant portion of the respondents (71%) had some previous experience with rapid response teams, respondents were almost evenly divided among the experience categories: 29% had some previous experience with adult rapid response teams, 30% had some experience with pediatric rapid response teams, 12% had some previous general experience with rapid response teams, and 29% had no previous experience with rapid response teams.

Due to the nature of the sampling method, demographic statistics were not available to compare respondents to non-respondents according to gender, work experience, functional area, or previous experience with rapid response teams. In particular, all contacts at the hospital were concerned that none of this type of data be released. Hospital administrators did supply nurse names and email addresses organized by unit (or floor), as well as information on the nurse manager in charge of each unit, but due to privacy concerns they did not want to share any detailed demographic information. Therefore, from the data they did provide, it was not possible to deduce gender, experience, functional area, or previous exposure to RRT if a nurse (or respiratory therapist) did not respond to the survey.

Ego Networks

Because of the importance of studying social interaction and ego networks in this research, this project required that I gather data about who talks to whom. Thus, as part of the survey, I asked people to name and rate the influence level of the people they talk to in relation to this change. I followed the procedures previously used by Brass (1984), Marsden (1990), Ibarra (1992), Ibarra and Andrews (1993), and Podolny and Baron (1997)—which involve asking the respondent to enumerate those individuals with whom he or she has direct ties, and leaving blank spaces in which respondents can write names. This method has proven successful in several contexts, and best practices with the method suggest limiting measurement error by giving respondents freedom in selecting the number of people to list (Holland & Leinhard, 1973; Marsden, 1990). Given the email format of the survey, we were not able to provide unlimited space, but we did allow up to 8 names. The majority of respondents (86%) limited themselves to five. This number was used in previous network research as well (Burt, 1984). I was only able to use responses where people provided actual names of influential others (n = 184).

Measures

Reasons For and Against Supporting the Change

Using Behavioral Reasons Theory requires that researchers meet with employees to gather employee-elicited reasons for and against the change in question. For this research, I met with nine hospital representatives to discuss the change and to gather all of their reasons for and against supporting the change. I used a semi-structured interview technique where I recorded their responses to open-ended questions. My plan was to talk to as many representatives as was necessary until respondents consistently offered repetitive information

and no new reasons for or against supporting the change surfaced. This goal was accomplished after nine hour-long interviews. My interviews were with two doctors, one patient safety officer, one nurse educator, one nurse manager, and four nurses (two from pediatrics and two from adult surgery floors). The interviews resulted in the creation of 27 total items (15 in the “reasons for” category and 12 in the “reasons against” category). A full list of the items is found in table 6.0 and table 6.1.

Table 6.0

Reasons For Supporting RRT as Generated From Interviews

Reason Given (For Supporting RRT)
1. RRT should be an integral part of a teaching hospital.
2. The RRT program can expedite the patient's progress to the appropriate destination.
3. It allows me to take better care of the patient—I don't have to wait for someone to get back to me once I know there is a problem.
4. It allows us to catch problems before they become overwhelming.
5. The RRT program can decrease a patient's length of stay.
6. Having the RRT available improves patient outcomes.
7. I finally have a way to get the assistance I need for my patient (in a timely manner).
8. I can get extra hands and help when I am unsure of a patient's condition.
9. I have more autonomy as a caregiver.
10. It provides advanced assessment and intervention training for others—such as people who make the call or new nurses and new doctors who see the intervention.
11. It decreases the acuity of the patient's who "end up" in ICU.
12. It provides advanced assessment and intervention training for me.
13. Authority figures whom I respect really support this program.
14. Feedback I have heard from other parts of the hospital suggest the RRT program is good.
15. Peers whom I respect are very positive and really support the RRT program.

Table 6.1

Reasons Against Supporting RRT as Generated From Interviews

Reason Given (Against Supporting RRT)
1. This does not have enough resources.
2. The administration does not provide enough resources for me to participate properly.
3. I don't think the program can succeed until we have more FTE (full time employees).
4. I don't think we can activate this properly.
5. We don't have enough nurses to do this well.
6. I fear that the RRT team might point at me and ask me why I made the call.
7. I feel that other care providers are judging me for making the call.
8. I don't like the idea of sending the message that I don't trust the doctor.
9. This will not be judgment free- no matter what they claim.
10. This could lead to less trust on the floor, not more trust.
11. I am not sure what happens if I make a mistake about the call.
12. It is intimidating to call in all of that experience, all of those people.

After the full survey was created (comprised of the employee elicited reasons as shown above as well as from established measures described in the previous chapter), I submitted the items in aggregate to the patient safety officer (the sponsor of the survey at the hospital) as well as to the two doctors, one nurse, and to a Nursing Review Board for comment and pre-testing. As part of the pre-test, I needed their opinion on ordering certain questions. Specifically, in order to ascertain how respondent attitudes and opinions had changed over time, it was necessary to ask respondents to recall how they felt about the change six months ago when it was first introduced, as well as how they felt about the change at the time of the survey. With the small group of early respondents, I pre-tested two versions of the survey: one where the “how do you feel now” and the “how did you feel originally” questions were repeated but were separated by the bulk of the survey questions; and one where the questions were asked at the same point in time with two different response stems (the response stems were: how did you feel about that reason originally, how do you feel now- or vice versa).

Results from the pretests revealed that people thought their survey was “broken” when the questions were separated and then repeated, and they overwhelmingly quit the survey at that point (despite the fact that prose in the sample survey explained that the questions were intentionally repeated). Thus, I chose to administer the version where the reasons were stated and then were immediately followed by response stems (ultimately, the stems prompted them to answer with: “how you felt originally,” and then with: “how you feel now”). In order to prime respondents properly for this type of question, I included prose asking them to recall where they lived six months ago, whom they reported to, and in which area of the hospital they worked. The exact wording of the survey is found in the Appendix.

After making other minor changes (elaborating acronyms and separating double-barreled items) as requested by these early respondents, I considered the items as ready for use in the survey. In developing the survey, I created counterbalanced versions to avoid problems with order response bias. Counterbalancing the question order helps eliminate the potential of having the results confounded by respondent order heuristics; as well as it mitigates potential problems related to respondent fatigue affecting the same questions. Thus, in the final version of the survey, I counterbalanced the order in which the “for” and the “against” reasons appeared. Respondents were asked to rank their reactions to the reasons on five-point Likert scales where 1 = strongly disagree and five = strongly agree.

Communication and Influence Networks at UNCH

To measure dyadic influence networks, I asked respondents to name actual names of those other employees whom they considered influential. Specifically, I stated: “research shows that the informal communication patterns at work can be more important than communication through the formal channels. This section helps me understand who talks to whom about what. After I create a generic communication map, I destroy names and only report patterns and trends. Feel free to contact me if you have any questions about this process.”

I then stated: “considering the people you interact with at work and on your floor, please note the people who you talk to about work-related issues and changes such as RRT. You can list as many people as you think are appropriate, but please consider at least your top five. Next, please rate them on how influential they are to you – meaning how much their opinion has the ability to affect your opinion (1 = an insignificant amount of influence

and 5 = a great amount of influence). Lastly, (in case some ratings are tied) please note the person who you think has the *greatest* ability to affect your opinion about RRT.

Interestingly, in about one-quarter of the cases people chose not to mention names. Instead, they chose to include categorical information on the types of people they found influential (i.e. doctors, nurse managers, peers, respiratory therapists, or such things as “personal experience.”). Because these survey responses did not include actual given names, I did not consider them as usable in my analyses of influence effects. They were removed prior to counting the total number of usable surveys (n=184).

Commitment to Change

I measured commitment to change using 18 items from Herscovitch and Meyer (2002). Specifically, I measured affective commitment to change with six items and I asked employees to respond using a five point Likert scale (1= strongly disagree and 5 = strongly agree). The original items included “I believe in the value of this change,” “This change is a good strategy for this organization,” “I think that management is making a mistake by introducing this change (reverse scored),” “This change serves an important purpose,” “Things would be better without this change (reverse scored),” and “This change is not necessary (reverse scored).” I altered each of the items so that they specifically referenced the RRT program rather than the less specific phrase “the change.” For example, I changed the first item to read “I believe in the value of this RRT program.” I made similar changes for all of the items for all three types of commitment to change. Coefficient alpha for this affective commitment to change measure was .92.

The original six items to measure continuance commitment to change (also using the five-point Likert scale) included: “I have no choice but to go along with this change,” “I feel

pressure to go along with this change,” “I have too much at stake to resist this change,” “It would be too costly for me to resist this change,” “Resisting this change is not a viable option for me,” and “It would be risky to speak out against this change.” I altered all of the items so that they referenced the “RRT program” rather than “this change.” Coefficient alpha for this measure was .84.

The six items to measure normative commitment to change were “I feel a sense of duty to work toward this change,” “I do not think it would be right for me to oppose this change,” “I would not feel badly about opposing this change (reverse-scored),” “It would be irresponsible for me to resist this change,” “I would feel guilty about opposing this change,” “I do not feel any obligation to support this change (reverse-scored).” Again, I altered all of the items so that they referenced the “RRT program” rather than “this change.” Coefficient alpha for this measure was .72.

Behavioral Responses to Change

I measured compliance, cooperation, and championing behaviors using scales originally developed by Herscovitch and Meyer (2002). Measuring compliance behaviors involved three items, all rated on a five-point scale (1=strongly disagree; 5=strongly agree). The items were: “I comply with my organization’s directives regarding the change,” “I accept role changes,” and “I adjust the way I do my job as required by this change.” I replaced the words “this change” with the specific name of the change, so that the items read “I comply with my organization’s directives regarding RRT” and “I adjust the way I do my job as required by the RRT program.” Coefficient alpha for this measure was .81.

I measured cooperation using the eight items suggested by previous researchers. These items were also rated using a five-point Likert scale (1 = strongly disagree; 5 =

strongly agree). The items included: “I work toward the change consistently,” “I remain optimistic about the change, even in the face of adversity,” “I avoid former practices, even if they seem easier,” “I engage in change-related behaviors that seem difficult in the short-term but are likely to have long-term benefits,” “I seek help concerning the change when needed,” “I don’t complain about the change,” “I try to keep myself informed about the change,” and “I am tolerant of temporary disruptions and/or ambiguities in my job.” Again, I altered the items to make them more specific, and my alterations included replacing any mention of “change” with specific mention of the RRT initiative. The coefficient alpha for this measure was .85.

I measured championing using six items suggested by Herscovitch and Meyer (2002). Again, I replaced all mention of “the change” with the specific name of the RRT initiative where appropriate. The exact items were: “I encourage the participation of others in the RRT initiative,” “I speak positively about the RRT initiative to co-workers,” “I speak positively about RRT to outsiders,” “I try to find ways to overcome RRT change-related difficulties,” “I persevere with the RRT initiative in order to reach goals,” and “I try to overcome co-workers’ resistance toward the RRT initiative.” Overall, the coefficient alpha for this measure was .92.

Self-Monitoring

I measured self-monitoring using the eighteen items from Snyder and Gangestad (1986). Respondents were asked to rate the items as being true or false. The items included: “I can make impromptu speeches even on topics about which I have almost no information (T),” “I find it hard to imitate the behavior of other people (F),” “At parties and social gatherings, I do not attempt to say or do things that others will like (F),” “I can only argue for

ideas which I already believe (F),” “I guess I put on a show to impress or entertain others (T),” “I would probably make a good actor (T),” “In a group of people I am rarely the center of attention (F),” “In different situations and with different people, I often act like very different persons (T),” “I am not particularly good at making other people like me (F),” “I am not always the person I appear to be (T),” “I would not change my opinions (or the way I do things) in order to please someone or win their favor (F),” “I have considered being an actor or an entertainer (T),” “I have never been good at games like charades or improvisational acting (F),” “I have trouble changing my behavior to suit different people and different situations (F),” “At a party, I let others keep the stories and jokes going (F),” “I feel a bit awkward in public and do not show up quite as well as I should (F),” “I can look anyone in the eye and tell a lie with a straight face (if for a right end) (T),” “I may deceive people by being friendly when I really dislike them (T).”

Items listed with a (T) or an (F) indicate how high-self monitors would answer the question. To score the responses, I reverse-coded the true and false items and then summed the items to give people a scale score from 1 to 18 (1 = low self monitor; 18 = high self monitor). The coefficient alpha for this measure was .65, below the cut-off of .70 (Nunnally, 1978) but consistent with previous research utilizing the measure (Snyder & Gangestad, 1986).

Demographic Variables

I measured several variables of interest related to employee demographics. Specifically, I asked them to report their gender and their tenure in their profession (versus their tenure at the hospital—this was at the suggestion of the main hospital contact). Specifically, their tenure options were: less than one year, one to two years, three to five

years, six to ten years, eleven to fifteen years, sixteen to twenty years, and twenty-one years or more. These categories were provided by contacts at the hospital who had used them in previous studies and who wanted the questions duplicated for comparison purposes.

I also requested job titles, departments, and previous experience with types of Rapid Response programs (the choices were: experience with adult RRT, experience with pediatric RRT, general experience with RRT, no experience, and “other”). These data were collected primarily at the request of the sponsor of the study, who wanted to use the data for purposes unrelated to this inquiry.

CHAPTER EIGHT

Results

Coding Reasons into Categories

The first hypothesis suggested that employee-elicited reasons for and against supporting the change could be independently coded into five specific categories (performance, role-referent, technical, social, normative). However, performing a preliminary exploratory factor analysis on the data set using principal axis factoring with oblique rotation and Kaiser normalization revealed that a five-factor model does not appropriately represent the “reasons for” data set or the “reasons against” data set. Rather, the factor analysis indicated that a two-factor model fit the “reasons for” data and a two-factor model fit the “reasons against” data.

Additionally, the results from asking six content experts (five assistant professors in Organizational Behavior from three different universities and one PhD student in Strategy) to categorize the reason items into five categories corroborated the finding that five categories were problematic. Most experts suggested that two (or potentially three) categories would be more appropriate. Specifically, these experts reached agreement on the categorization of the fifteen “reasons for” items into five categories for only 50.2% of the cases (on average). Regarding the twelve “reasons against” items, these experts only reached agreement on an average of 58.8% of the cases.

Thus, on the basis of the results of exploratory factor analysis and based upon the nature of the expert opinions, Hypothesis 1A was not supported. The lack of support for Hypothesis 1A negated the ability to investigate Hypothesis 1B (i.e. H1B suggests that there would be two meta-categories encompassing the five subcategories; and that the two meta-categories would have informational and normative aspects, respectively). Thus, by default, Hypothesis 1B was also not supported.

Because testing Hypotheses 2 through 5 requires performing data analyses using categories of reason types (which were formerly expected to stem from H1A or H1B), it was necessary to identify reason categories using the results from the factor analysis. Thus, I performed follow-up analyses investigating each of the two-factor solutions. A confirmatory factor analysis using LISREL 8.5 (Joreskog & Forbom, 2003) indicated that from the 15 items that comprise the “reasons for” category there were two main types of reasons; and from the 12 items that comprise the “reasons against” category there were also two (different) types of reasons (fit statistics follow Table 8.1 below).

These findings regarding the existence of four main reason types (two in the “reasons for” and two in the “reasons against” categories) were corroborated by subject matter experts who were again asked to organize the survey items after being given four types of reasons from which to select. For this second round of assessments, a reduced set of three subject matter experts (one PhD student and two assistant professors) reached agreement on 97% of the cases (the number of experts was reduced for this second round of analysis due to availability issues for three of the assistant professors).

Based on the item content of each factor, I named the factors (or reason types) according to common themes. The types in the “reasons against” category can be classified

as 1) reasons related to personal ramifications and possible consequences of initiating an RRT call (named “consequences”) and 2) reasons related to concerns about finances and other types of resources (named “resources”). The two types in the “reasons for” category can be classified as 1) reasons related to personal goals for career advancement or for patient care (named “goals”) and 2) reasons related to social issues such as the opinions of people external to the immediate work environment (named “others”). It was not surprising, given the difference in content between the items that comprise the “for” and the “against” reason categories, that the two resulting reason types in each category were different.

Importantly, despite the differences in item content comprising the four types, an expert investigation of the content of the types (using three experts again and asking them to use the original definitions of “normative” and “informational” categories (Shah, 1998), as well as to use the four reason types) indicated that these experts reached agreement (for 95% of the reason types) about how the reason types map to the definition of one or the other category. The resulting categorizations are found in Table 8.0 and Table 8.1.

Specific fit indices for all LISREL analyses are described immediately following the item descriptions, factor loadings, factor names (and their categorizations as normative or informational) as listed in Table 8.0 and Table 8.1.

Table 8.0
Reasons For Supporting Rapid Response Teams at UNCH- Item Descriptions, Factor Loadings, Reason Types and Category Label

Item Description	Factor Loading	Name of Reason Type	Category Label Normative vs. Informational
1. RRT should be an integral part of a teaching hospital.	.843	Goals	Informational
2. The RRT program can expedite the patient's progress to the appropriate destination.	.827	Goals	Informational
3. It allows me to take better care of the patient—I don't have to wait for someone to get back to me once I know there is a problem.	.785	Goals	Informational
4. It allows us to catch problems before they become overwhelming.	.714	Goals	Informational
5. The RRT program can decrease a patient's length of stay.	.700	Goals	Informational
6. Having the RRT available improves patient outcomes.	.685	Goals	Informational
7. I finally have a way to get the assistance I need for my patient (in a timely manner).	.684	Goals	Informational
8. I can get extra hands and help when I am unsure of a patient's condition.	.672	Goals	Informational
9. I have more autonomy as a caregiver.	.656	Goals	Informational
10. It provides advanced assessment and intervention training for others—such as people who make the call or new nurses and new doctors who see the intervention.	.653	Goals	Informational
11. It decreases the acuity of the patient's who "end up" in ICU.	.626	Goals	Informational
12. It provides advanced assessment and intervention training for me.	.592	Goals	Informational
1. Authority figures whom I respect really support this program.	.816	Others	Normative
2. Feedback I have heard from other parts of the hospital suggest the RRT program is good.	.793	Others	Normative
3. Peers whom I respect are very positive and really support the RRT program.	.698	Others	Normative

Table 8.1
Reasons Against Supporting Rapid Response Teams at UNCH- Item Descriptions,
Factor Loadings, Reason Types and Category Label

Item Description	Factor Loading	Name of Factor/ Reason Type	Category Label: Normative vs. Informational
1. This does not have enough resources.	.911	Resources	Informational
2. The administration does not provide enough resources for me to participate properly.	.879	Resources	Informational
3. I don't think the program can succeed until we have more FTE (full time employees).	.831	Resources	Informational
4. I don't think we can activate this properly.	.703	Resources	Informational
5. We don't have enough nurses to do this well.	.598	Resources	Informational
1. I fear that the RRT team might point at me and ask me why I made the call.	.826	Consequences	Informational
2. I feel that other care providers are judging me for making the call.	.697	Consequences	Informational
3. I don't like the idea of sending the message that I don't trust the doctor.	.694	Consequences	Informational
4. This will not be judgment free- no matter what they claim.	.674	Consequences	Informational
5. This could lead to less trust on the floor, not more trust.	.672	Consequences	Informational
6. I am not sure what happens if I make a mistake about the call.	.670	Consequences	Informational
7. It is intimidating to call in all of that experience, all of those people.	.650	Consequences	Informational

As mentioned earlier, I validated the findings suggested above by performing appropriate confirmatory factor analyses using LISREL version 8.5 (Joreskog & Sorbom, 2001).

Reasons “Against” Category

Results indicated that the two-factor model for “reasons against” achieved a near-acceptable fit ($\chi^2 = 175.14$, $p < .001$, $df = 53$). The root mean squared error of approximation (Steiger, 1990) was .11, somewhat short of the criteria (.08- .10) for reasonable errors of approximation (Browne & Cudeck, 1993). However, inspection of the modification indices indicated a significant correlation between the error terms of two items, and inspection of the two items revealed that they shared a common term related to judgment. (Specifically, the items were: “I feel that other care providers are judging me for making the call” and “I feel the program will not be judgment-free no matter what they say”). Thus, I respecified the model allowing the error terms for these two items to correlate. The new model showed improved fit ($\chi^2 = 119.96$, $p < .001$; $df = 52$; change statistics: $\Delta\chi^2 = 55.18$, $df = 1$, $p < .001$). The root mean squared error of approximation (RMSEA; Steiger, 1990) for the new model was .085, just meeting the criteria for reasonable errors of approximation (Browne & Cudeck, 1992). With no exceptions, item loadings were greater than .600 (in fact, all were greater than .700), suggesting that the items represented their intended constructs (Bagozzi & Yi, 1989). The comparative fit index for the two-factor reasons “against” model (Bentler, 1990) was .97. This figure exceeds the .95 criterion suggested by Hu and Bentler (1998), again suggesting the adjusted two-factor model more appropriately fits the data.

Although the two factors within the “reasons against” category were not highly correlated ($r = .39$), I still proceeded to test a one-factor model in order to verify the value of

the two-factor model. I found the one-factor model to have significantly worse fit than the two factor model ($\chi^2 = 909.90$, $p < .001$, $df = 54$, $RMSEA = .29$; change statistics: $\Delta\chi^2 = 734.76$, $df = 1$, $p < .001$), lending further support to the usefulness of the two-factor model.

Reasons “For” Category

Regarding tests of the two suggested factors in the “reasons for” category, results also indicated that a two-factor model achieved an acceptable fit to the data ($\chi^2 = 231.70$, $p < .001$, $df = 89$). The root mean squared error of approximation for the two-factor model in the “reasons for” category (RMSEA; Steiger, 1990) was .09, meeting the criteria (.08 - .10) for reasonable errors of approximation (Browne & Cudeck, 1993). With no exceptions, item loadings were greater than .90 suggesting that the items represented their intended constructs (Bagozzi & Yi, 1988). The comparative fit index for the two-factor reasons “against” model (CFI; Bentler, 1990) was .97. This figure exceeds the .95 criterion suggested by Hu and Bentler (1999), again suggesting the two-factor model appropriately fits the data.

In the “reasons for” category, the two factors were highly correlated ($r = .71$) suggesting the importance of testing for the value and potential parsimony of a one-factor model. Therefore, I tested a one-factor solution, and found it to have significantly worse fit to the data than the two factor model (one-factor model: $\chi^2 = 358.7$, $p < .001$, $df = 90$, $RMSEA = .128$; change statistics: $\Delta\chi^2 = 127$, $df = 1$, $p < .001$). These results gave further support to the appropriateness of the two-factor model.

Counterbalanced Surveys and Checking for Order Effects

Earlier I stated that I created two versions of the survey so that the time order of the question stems on the reason ratings could be counterbalanced (e.g. some surveys listed a reason and then first prompted respondent with the question “please rate with how you feel

now” followed by “please rate [the same reason] with how you felt originally.” The other version of the survey switched this order). In order to test for order effects, I coded the counterbalanced surveys by version and then performed follow-up t-tests comparing survey version and reason ratings for each of the four reason scales. Results indicated that there was no significant order effect for any of the reason types (Resource-related reasons $F(1,182) = .162$, ns; Consequence-related reasons $F(1,182) = .002$, ns; Others-related reasons $F(1, 182) = .151$, ns; Goals-related reasons $F(1,182) = .074$, ns). Thus, I collapsed results across both survey types and used the combined measures in subsequent hypothesis testing.

With this check for order effects completed—and with the CFA results, the definitions of the four reason types (Consequences, Resources, Goals, Others), and the expert evaluations mapping these to the reason meta-categories (Normative and Informational)—it was possible to test the remaining hypotheses offered in this dissertation.

Descriptive statistics for all variables used in the analysis, including means, standard deviations, and correlations, are shown in Table 8.2. Internal consistency reliability estimates are included along the diagonal. As Table 8.2 indicates, reliability estimates for all scales except self-monitoring exceed the minimum standard of .70 (Nunnally, 1978).

Table 8.2
Descriptive Statistics

	<u>Mean</u>	<u>Sd</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
1. Affective Commitment	4.42	.65	.92					
2. Continuance Commitment	2.16	.73	-.60***	.84				
3. Normative Commitment	3.32	.71	.24***	.16*	.72			
4. Compliance	4.03	.61	.34***	-.22***	.07	.81		
5. Cooperation	3.86	.53	.46***	-.40***	.11	.69***	.85	
6. Championing	3.90	.59	.57***	-.48***	.18*	.55***	.77***	.92
7. Self-Monitoring	6.96	3.02	-.06	.01	.04	.03	-.05	-.08
8. Consequences T1	2.63	.73	-.19**	.29***	.07	-.22***	-.37***	-.38***
9. Resources T1	2.60	.83	-.25***	.26***	.07	-.23***	-.31***	-.29***
10. Goals T1	3.96	.57	.25***	-.25***	.08	.29***	.34***	.28***
11. Others T1	3.82	.68	.28***	-.27***	.06	.28***	.31***	.27***
12. Consequences T2	2.43	.75	-.35***	.32***	-.05	-.27***	-.43***	-.47***
13. Resources T2	2.49	.93	-.34***	.35***	.07	-.27***	-.35***	-.34***
14. Goals T2	4.24	.58	.51***	-.32***	.25***	.35***	.44***	.44***
15. Others T2	4.13	.73	.46***	-.35***	.20**	.38***	.43***	.48***
16. Consequences Person2 T2	2.44	.77	-.06	.03	-.06	.13-	-.01	.05
17. Resources Person2 T2	2.47	.92	-.09	.12	-.04	.07	-.06	-.06
18. Goals Person2 T2	4.26	.60	-.01	.01	-.07	-.17*	-.11	-.18**
19. Others Person2 T2	4.13	.74	.02	-.09	-.03	-.09	-.01	-.06

Table 8.2
Descriptive Statistics

	Mean	Sd	1	2	3	4	5	6
20. Most Influential_Conseq.	1.87	.56	-.04	.13	-.08	.00	-.02	.01
21. Most Influential_Resources	2.59	1.11	-.05	-.09	-.13	.09	.04	.03
22. Most Influential_Goals	4.33	.71	.01	-.04	.04	.01	.19	.05
23. Most Influential_Others	4.33	.67	-.03	.04	-.01	.11	-.04	-.08
24. Similarity_Consequences	.86	.62	-.04	-.01	-.05	.14-	.01	.07
25. Similarity_Resources	1.04	.61	-.09	.12	-.05	.04	-.07	-.07
26. Similarity_Goals	.62	.54	.01	-.01	.10	.18*	.12	.19**
<u>27. Similarity_Others</u>	<u>.80</u>	<u>.65</u>	<u>-.01</u>	<u>.08</u>	<u>-.05</u>	<u>.10</u>	<u>.03</u>	<u>.08</u>

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*** p<.001
 ** p<.01
 - p <.10
 * p<.05

Table 8.2
Descriptive Statistics

	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
7. Self-Monitoring	.65						
8. Consequences T1	.02	-					
9. Resources T1	-.08	.56***	-				
10. Goals T1	-.01	-.33***	-.27***	-			
11. Others T1	.00	-.36***	-.41***	.65***	-		
12. Consequences T2	.06	.75***	.44***	-.21***	-.24	-	
13. Resources T2	-.10	.37***	.84***	-.20**	-.33	.37	-
14. Goals T2	-.07	-.14-	-.15*	.72***	.44	-.30	-.23
15. Others T2	-.07	-.19**	-.28***	.39***	.59	-.30	-.36
16. Consequences Person2 T2	-.01	.10	.06	-.06	-.02	.07	.02
17. Resources Person2 T2	-.01	.04	-.02	-.04	.01	.01	-.01
18. Goals Person2 T2	-.04	-.07	-.02	-.03	-.08	-.01	.08
19. Others Person2 T2	-.01	-.06	.01	.04	-.01	.03	.06

*** p<.001

** p<.01

- p<.10

* p<.05

Table 8.2
Descriptive Statistics

	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
20. Most Influential_Conseq.	.02	.05	-.02	-.25	-.29*	-.01	.01
21. Most Influential_Resources	-.02	.04	-.07	-.09	-.24	.14	-.10
22. Most Influential_Goals	.15	-.07	-.18	.11	.18	-.01	-.27-
23. Most Influential_Others	.03	.04	.10	.02	.02	-.08	.03
24. Similarity_Consequences	-.01	.07	.04	-.05	-.02	.04	.00
25. Similarity_Resources	-.01	.04	-.02	-.06	.01	.02	-.01
26. Similarity_Goals	.03	.07	.01	.05	.09	.02	-.09
27. Similarity_Others	.01	.05	-.02	-.03	.02	-.04	-.06

*** p<.001

** p<.01

- p<.10

* p<.05

Table 8.2
Descriptive Statistics

	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>
14. Goals T2	-						
15. Others T2	.61***	-					
16. Consequences Person2 T2	.00	.04	-				
17. Resources Person2 T2	-.06	-.08	0.35***	-			
18. Goals Person2 T2	-.06	-.21	-0.31***	-0.21***	-		
19. Others Person2 T2	-.02	-.07	-0.34***	-0.36***	0.65***	-	
20. Most Influential_Conseq.	-.13	-.20	0.14	0.05	-0.15	-0.14	-
21. Most Influential_Resources	-.08	-.07	0.20	0.15	-0.11	0.08	0.24-
22. Most Influential_Goals	-.05	-.04	-0.13	-0.29*	0.04	0.18	-0.37**
23. Most Influential_Others	-.03	-.13	-0.24-	-0.31*	0.16	0.13	-0.44***
24. Similarity_Consequences	.01	.05	0.03***	-0.06***	0.05***	0.03***	0.17
25. Similarity_Resources	-.07	-.08	-0.09***	0.21***	0.07***	0.01-	0.03
26. Similarity_Goals	.07	.21	0.00	0.04***	-0.34***	-0.18***	0.15
27. Similarity_Others	.03	.08	-0.01	0.10***	-0.15***	-0.25***	0.14

*** p<.001

** p<.01

- p <.10

* p<.05

Table 8.2
Descriptive Statistics

	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>
21. Most Influential_Resources	-						
22. Most Influential_Goals	-0.14	-					
23. Most Influential_Others	-0.30*	0.70***	-				
24. Similarity_Consequences	0.26-	-0.14	-0.24-	-			
25. Similarity_Resources	0.13	-0.30*	-0.30*	.17***	-		
26. Similarity_Goals	0.09	-0.03	-0.15	.11***	.09***	-	
27. Similarity_Others	-0.08	-0.18	-0.13	.11***	.14***	.37***	-

99

*** p<.001
 ** p<.01
 - p<.10
 * p<.05

Inspection of Table 8.2 reveals several significant correlations that may have bearing on further analyses. First, there are significant relationships between all three types of commitment to change, which could affect tests of H4 and H5. For instance, affective commitment is significantly (but not highly) correlated to normative commitment ($r = .240$, $p = .001$) and significantly but negatively correlated to continuance commitment ($r = -.60$, $p < .001$). The relationships between the commitment to change variables in this research are in a similar direction as those in other research contexts. However, in prior research, affective and normative commitment to change were *more* highly correlated ($r = .48 - .57$), and affective and continuance commitment to change were *less* highly correlated ($r = .27 - .30$) (Herscovitch & Meyer, 2002). The differences in these results suggest that the relationships between these three dimensions of commitment to change fluctuate somewhat according to the change—and thus the definitions of the dimensions may need refinement if this fluctuation repeats across multiple samples.

Other correlations in the table, such as the relationship between compliance and cooperation ($r = .69$, $p < .001$), are high but somewhat expected (given the nature of the change and definition of the constructs—i.e. people either wear the pager or they don't, and wearing it could be both compliance and cooperation). Similarly, the relationship between compliance and championing ($r = .55$, $p < .001$) and between championing and cooperation ($r = .77$, $p < .001$) indicate that for this sample (and this change) there is a high degree of similarity among each of these elective supportive behaviors. Given the discretionary nature of the change, and the fact that supporting the change usually means wearing the pager or supporting someone who is wearing the pager, it may be plausible that compliance,

cooperation, and championing “look and feel” very similar to the nurses who participate—and this similarity is reflected in the high correlation.

Moving away from bivariate correlations to investigating more complete tests of the hypothesized relationships requires testing regression models, and regression results are described below. The first issue under consideration (Hypothesis 2) investigates how reason ratings may change over time in relation to the reason ratings of influential others.

Effects (Over Time) of the Most Influential People

Hypothesis 2 suggested that the Time 2 reasons of the person given the highest influence rating by the respondent will significantly (and positively) predict the Time 2 reasons of the respondent, even controlling for Time 1 reasons of the respondent. I tested this hypothesis using the reason scales (reason types) that came from the factor analyses described previously. In my data set, for both Time 1 and Time 2, respondents have four scale scores based upon the items that comprise each of the four reason types (Consequences, Resources, Others, Goals). In order to test this hypothesis, I needed to have Time 1 and Time 2 data on both the influencer and the one who receives the influence. Thus, I had to re-sort the data set in search of cases where the person named as most influential was also a person who filled out a survey. This need for both members of a dyad to have completed a survey took the sample size from 184 to 51. Using these 51 dyads, I performed OLS regressions for each of the four reason types. I predicted respondent Time 2 scores would be significantly related to the Time 2 scores of the most influential people as well as to the Time 1 score of the respondents. The results of the regression equations are found in table 8.3 below. The regression results indicated that for two types of reasons (Resources and Others) there was a significant relationship between the Time 2 reason ratings of

the influential people and the Time 2 reason ratings of those who rated them as influential, even controlling for the Time 1 reasons of the respondent.

Table 8.3

**Employee Time 1 Reasons, Most Influential Person Time 2 Reasons
and Employee Time 2 Reasons**

Model 1: Direct Effects	<u>Consequences</u>	<u>Goals</u>	<u>Resources</u>	<u>Others</u>
	<u>B</u>	<u>B</u>	<u>B</u>	<u>B</u>
Constant	.32	2.10***	-.22	1.04
Employee Time1	.71***	.49***	.92***	.49**
Most Influential Time 2	.09	.06	.10*	.30*
Overall F	32.07***	14.51***	87.51***	6.19**
R²	0.58***	.39***	.79***	.21**

*** p<.001 one-tailed

** p<.01 one-tailed

* p<.05 one-tailed

The results from these regression equations show that H2 was partially supported. For two of the four types of reason categories, it appears that the Time2 ratings of the most influential people did exhibit a positive and significant influence on the Time2 ratings of the respondents, even controlling for the Time 1 feelings of the respondents.

The types of reasons that were most susceptible to this social influence were reasons related to resource issues (Resources) and reasons related to the opinions of others (Others). The types of reasons that were *not* significantly affected by social influence effects from the most influential others were those related to personal goals (Goals) and consequences of implementing the new program (Consequences). These findings indicate that influential people may spend more time talking about reasons related to these resource or social issues, or that influential people may be considered as more credible sources for these types of data. Further qualitative investigation may be required in order to better understand frequency or credibility issues, but without such investigation the results indicated partial support for the idea that the impact of influential others is related to changes in respondent ratings over time.

Self-Monitoring as a Moderator

Hypothesis 2B predicted that the relationship between the Time2 influential person reason ratings and the Time 2 respondent reason ratings would be stronger for respondents who were high self-monitors. This hypothesis was created in response to previous research which suggests that not all people are equally susceptible to influence; and which further suggests the efficacy of self-monitoring as a moderator (Mehra et al., 2001; Snyder et al., 1986). Therefore, I tested the construct of “self-monitoring” as a moderator of influence effects on reason ratings for each reason category.

As I tested for moderation, I entered the variables in three steps. In the first step I entered the control variable (respondent Time 1 ratings), in the second step I entered the Time 2 ratings of the most influential person, and in the third step I entered the interaction term. I repeated this for all four reason types. However, in all cases there was no significant effect for the interaction term (others: $t(47) = -1.56$, $p = n.s.$; resources: $t(47) = .17$, $p = n.s.$; goals: $t(47) = -1.53$, $p = n.s.$; consequences: $t(47) = .68$, $p = n.s.$). Thus, analyses revealed no support for the idea that in this sample, self-monitoring moderates the effects of influence.

Relationship Symmetry and Employee Reason Types at Time 2

In order to test the hypothesis (H3A) that the degree of symmetry in an influence relationship will be positively related to the closeness of reasons (such that the reasons of people in symmetrical relationships will be the most similar to each other, the reasons of people in asymmetric relationships will be less similar, and the reasons of people with no relationship will be the least similar), it was necessary to match respondents based upon symmetry data. For every person in the data set, there were three possible ratings that could characterize the symmetry of their relationship with others in the data set (i.e. there could be a two-way relationship, a one-way relationship, or no relationship—corresponding to full symmetry, asymmetry, or no symmetry). Thus, if there was a person in the data set who had a total of two relationships with others in the set (assume one one-way relationship and one two-way relationship), this person would be in the position of having one symmetrical relationship, one asymmetrical relationship, and 182 non-relationships with the remaining people in the data set. The symmetry entries for this person would then include a one (for the one-way relationship), a two (for the two-way relationship), and then 182 zeroes (for the remaining nonexistent relationships). Organizing the data set of 184 people in this manner

(and removing any opportunities for double-counting a relationship) resulted in over 16,000 possible comparisons.

After organizing the data for all of the respondents according to the three types of symmetry options, it was evident that there were only eight cases where fully symmetrical relationships were noted (i.e. where both parties filled out a survey and both named the other as influential). In contrast, there were 203 cases where people stated the presence of an *asymmetrical* or one-way relationship, and there were 16,625 cases where there was no relationship. Given this low number of two-way or fully symmetrical relationships, I deemed it appropriate to reconsider the data set in terms of symmetry having two levels (as opposed to three). Thus, I recoded people as either having a symmetric relationship (either fully symmetric or asymmetric) or as having no relationship.

Once the data was recoded in this manner, I was able to test this hypothesis using repeated measures analysis of variance with person and symmetry as factors. The results of the ANOVA regression showed that the effect of symmetry was significant in two of the four situations as follows: For reasons related to resources, the main effect of symmetry yielded an F ratio of $F(1, 16,834) = 3.2, p < .05$ (one-tailed), indicating that the mean similarity score was significantly higher in the no symmetry condition ($M = 1.32, SD = .704$) than in the symmetry condition ($M = 1.19, SD = .73$). For reasons related to goals, the F ratio was $F(1, 16,834) = 3.88, p < .05$, indicating that the mean similarity score for the no symmetry condition ($M = .69, SD = .47$) was significantly higher than the mean similarity score for the symmetry condition ($M = .63, SD = .47$). In contrast, for reasons related to others, the main effect of symmetry yielded an F ratio of $F(1, 16,834) = .02, p = n.s.$, indicating that the mean similarity score in the no symmetry condition ($M = .87, SD = .59$) was not significantly

different from the mean similarity score in the symmetry condition ($M = .88$ $SD = .61$). For reasons related to fears, the main effect of symmetry yielded an F ratio of $F(1, 16,834) = .765$, $p = n.s.$, again indicating that the mean similarity score in the no symmetry condition ($M = 1.18$, $SD = .57$) was not significantly different than the mean similarity score in the symmetry condition ($M = 1.13$, $SD = .55$).

The results of the analysis of variance also showed significant main effects for person as follows: for resources: $F(183, 16,652) = 26.710$, $p < .001$; for others: $F(183, 16,652) = 19.192$, $p < .001$; for fears: $F(183, 16,652) = 18.132$, $p < .001$; for goals: $F(183, 16,652) = 26.946$, $p < .001$. These results verified the importance of controlling for person.

Overall, the results suggested partial support for a revised hypothesis that symmetry is positively related to the closeness of reasons, such that people who have any form of symmetry will be more similar on their reason scale scores than people who have no relationship. This was particularly true for reasons related to goals and reasons related to resources.

These results lend support to the idea that people who interact and communicate at work may come to share similar opinions over time. Just as in the case of the results from H2—which revealed social influence effects from the most influential people as partially supported for certain types of reasons, it appears that similar effects are at play with H3A—symmetry was related to the closeness of certain types of reasons.

In the case of H3A, analysis of the results suggested that there were two types of reasons where similarity is affected by symmetry: 1) reasons related to resource issues and 2) reasons related to personal goals. Follow-up qualitative investigations may be required to ascertain why people speak more frequently about these types of issues with others.

Self-Monitoring as a Moderator

Hypothesis 3B predicted that the relationship between symmetry and closeness of reason ratings would be stronger for people who were high self-monitors. Therefore, I tested the construct of “self-monitoring” as a moderator of the effects of symmetry and the closeness of Time 2 scale scores for each reason category. Because the moderator was a continuous variable, I switched from the ANOVA analyses and moved to testing the relationships and the moderator in a repeated measures regression (Baron & Kenny, 1986). In each regression I entered the variables in three steps using the same data described above. In the first step I entered the dummy codes for person and in the second step I entered the main effects for symmetry. At this point in each analysis, the findings replicated the results from the ANOVA described previously. In the third step I entered the interaction term. In order to fully test for moderation I followed these steps for each of the four reason types. However, in all cases there was no significant effect for the interaction term (others: $t(16,311) = -1.39$, $p = \text{n.s.}$; resources $t(16,311) = -.302$, $p = \text{n.s.}$; goals: $t(16,311) = .118$, $p = \text{n.s.}$; consequences: $t(16,311) = 1.34$, $p = \text{n.s.}$). Thus, analyses again revealed no support for the idea that in this sample, self-monitoring moderates the effects of influence.

Employee Reason Types and Commitment to Change

Moving from findings about social influence effects related to discussions *about* a change to an analysis of attitudes and behaviors related to *enacting* the change requires an analysis of reasons and commitment to change, as well as an analysis of how the three dimensions of this construct relate to behavioral outcomes.

Specifically, testing the hypothesis (4A) that normative reasons will be positively and significantly related to *affective* commitment to change, or (4B) that informational reasons

will be positively and significantly related to *continuance* commitment to change, or (4C) that *both* normative and informational reasons will be positively and significantly related to *normative* commitment to change requires returning to the earlier categorizations of certain reason types as being normative or informational. As stated at the opening of this chapter (and building upon the definitions of normative and informational presented earlier in chapters three and five), experts suggested that three types of reasons (Consequences, Resources, Goals) can be considered to be “informational” reasons (highly instrumental and logically-based), while one type (Others) can be considered as “normative” reasons (comparatively more socially-based and value-laden).

Using these classifications in regression equations with the three types of commitment produced different results for each type of commitment. First, when I put all of the variables in a regression equation predicting affective commitment to change, support for H4A required that one of the reason types (Others) would be significantly related to affective commitment to change while three of the four reason types (the informational types of Resources, Goals, Consequences) would not be significantly related to affective commitment to change. However, when I ran the regressions I found that *all* of the reason types were significantly and positively related to affective commitment to change (resources: $b = -.108$, $t(183) = -2.27$, $p < .05$; goals: $b = .378$, $t(183) = 4.37$, $p < .01$; consequences: $b = -.129$, $t(183) = -2.20$, $p < .05$; others: $b = .137$, $t(183) = 1.92$, $p < .05$ (one-tailed)). Thus, while these results show more positive findings than expected and may trigger post-hoc discussions about the nature of affective commitment to change, H4A was partially supported. In this analysis, normative reasons (although not alone) were positively and significantly related to affective commitment to change.

In testing H4B, I included all of the reason types in a regression equation predicting continuance commitment to change, and then expected that three of the four reason types (Resources, Goals, Consequences) would be significantly related to continuance commitment to change while one type (Others) would *not* be significantly related to continuance commitment to change. Regression results supported this finding (resources: $b = .166$, $t(183) = 2.83$, $p < .01$; goals: $b = -.184$, $t(183) = -1.73$, $p < .05$ (one-tailed); consequences: $b = .152$, $t(183) = 2.11$, $p < .05$; others: $b = -.139$, $t(183) = -1.58$, $p = n.s.$). These findings indicate that H4B was supported.

In order to test H4C, I regressed all of the reason types onto normative commitment to change. In this case, to find support for H4C, I expected all of the reason types to be significantly and positively related to normative commitment to change. However, only two of the four types were significantly and positively related to normative commitment to change (Resources and Goals). Specifically, the results were: resources: $b = .133$, $t(183) = 2.17$, $p < .05$; goals: $b = .257$, $t(183) = 2.30$, $p < .05$; consequences: $b = -.019$, $t(183) = -.247$, $p = n.s.$; others: $b = .121$, $t(183) = 1.316$, $p = n.s.$). Since the reason categories that failed (Consequences and Others) were each from one of the two reason categories that were hypothesized to predict normative commitment to change, there is no support for H4C.

Overall, considering all three types of commitment to change, there was some support for the hypothesis that certain types of reasons relate to certain types of commitment to change – specifically, I did find that informational (logically-laden) reason types were related to continuance commitment to change and that normative reasons (socially-focused) were significantly related to affective commitment to change. These findings suggested that logical concerns may drive continuance commitment to change (as previously suggested by

Herscovitch and Meyer (2002)), while logical *and* social/emotional concerns may be related to affective commitment to change.

Supplemental Analyses for Hypothesis Four

Recall that from either twelve or fifteen original items, each of the four reason scales (Others, Consequences, Goals, Resources) was created. Then, the categories “normative” and “informational” were matched by experts to the resulting four reason scales. Given that process, it could be argued that not every *item* that comprises the reason scales cleanly and clearly “maps” to definitions of “normative” and “informational.” Thus, a more rigorous test of Hypothesis 4 could be made by returning to the original survey *items*, selecting only those items which most appropriately match the definitions of “normative” and “informational,” and then creating and testing scales comprised only of those items.

Accordingly, to further test the three aspects of Hypothesis Four, I moved from a scale-level investigation of informational and normative categories to an item-level investigation. I returned to three subject-matter experts, and gave them a list of the items and a description of the two terms and their definitions. I asked the individuals to select items that they felt clearly met the definition of “informational” and items that clearly and cleanly met the definition of “normative.” In the analysis I only used the items where experts had 100% agreement. I then aggregated these items to a scale level and used them in additional analyses. In total, there were three items used to comprise the “normative” scale and there were six items used to comprise the “informational” scale. The items and their classifications are listed in table 8.4 below.

Table 8.4
Item Descriptions and Category Classifications for Supplemental Tests of Hypothesis 4

Item Description	Reason Category (Normative or Informational)
Authority figures whom I respect really support this program.	Normative
Feedback I have heard from other parts of the hospital suggest the RRT program is good.	Normative
Peers whom I respect are very positive and really support the RRT program.	Normative
I don't think the program can succeed until we have more FTE (full time employees).	Informational
This does not have enough resources.	Informational
I don't think we can activate this properly.	Informational
It allows us to catch problems before they become overwhelming.	Informational
It provides advanced assessment and intervention training for me.	Informational
The RRT program can decrease a patient's length of stay.	Informational

Results from supplemental analyses performed using these items aggregated to a scale level revealed strong support for H4A, 4B, and 4C. Specifically, in performing the simultaneous regressions, I found that normative reasons were significantly and positively related to affective commitment to change, but informational reasons were not (normative: $b = .41$, $t(183) = 6.94$, $p < .01$; informational: $b = -.037$, $t(183) = -.474$, $p = n.s.$). This indicates full support of H4A.

Similarly, results from a simultaneous regression of the reason types onto continuance commitment to change revealed that both reason types were positively and significantly related (normative: $b = -.35$, $t(183) = -5.06$, $p < .01$; informational: $b = .201$, $t(183) = 2.22$, $p < .05$). Again, because both types of reasons (and not just informational reasons) were significantly related to continuance commitment to change, H4B was partially supported.

Thus far in these supplemental analyses, the results have been similar to the regression results obtained from the regressions using the original reason scales. However, in investigating the relationship between the new scales and normative commitment to change, the results are no longer similar to those from earlier investigations. Whereas earlier analyses showed no support for H4C (because one scale from each of the reason types was not related to normative commitment to change), results provided support for H4C. Here, as hypothesized, *both* types of reasons were related to normative commitment to change (normative: $b = .193$, $t(183) = 2.78$, $p < .01$; informational: $b = .281$, $t(183) = 3.09$, $p < .01$). Thus, with the adjusted reason scales, both normative and informational reasons were positively and significantly related to normative commitment to change, results which supported H4C.

Taken together, the results of these supplemental analyses indicated even stronger support for the idea that for all three types of commitment to change, certain types of reasons were related to certain types of commitment – specifically, informational reasons were related to continuance commitment to change, normative reasons were related to affective commitment to change, and both types were related to normative commitment to change.

These tests evaluated how reason types related to commitment to change, and laid the foundation to explore how commitment to change is related to implementation behaviors. The hypothesized relationships between these variables are outlined below.

Relationships Between Commitment to Change and Implementation Behaviors

In order to test the relationships between different types of commitment to change and different implementation behaviors, I returned to the descriptive statistics. Hypothesis 5A predicted that there would be a significant correlation between all three types of

commitment to change and the implementation behavior of compliance. Inspection of the correlations in Table 8.2 reveals the following correlations between compliance and the three types of commitment to change: Affective commitment to change ($r = .343, p < .01$); Normative commitment to change ($r = .072, p = n.s$); Continuance commitment to change ($r = -.221, p < .01$). However, the results for normative commitment to change and compliance were non-significant, and thus there was only partial support for H5A.

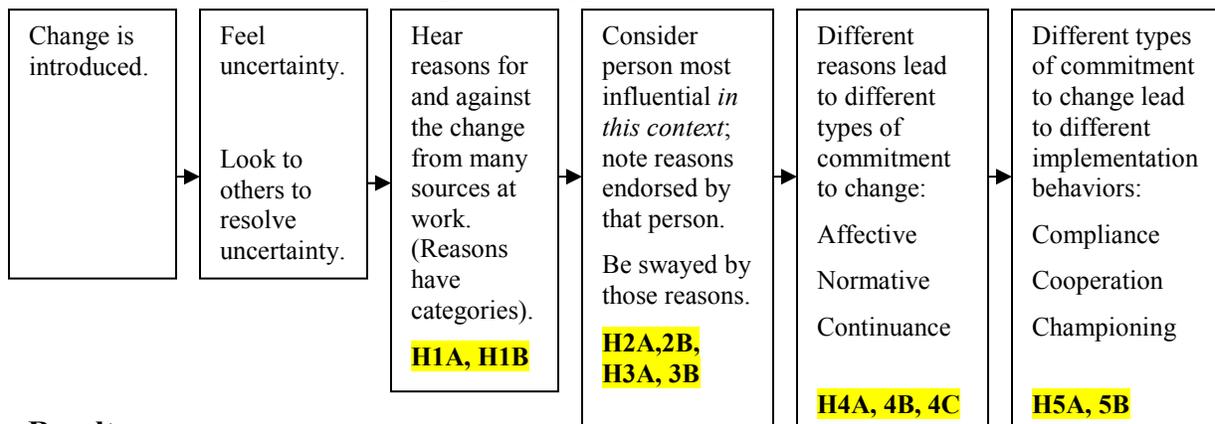
In order to follow-up this with regression results, and in order to test Hypothesis 5B (that only affective and normative commitment to change will be positively related to discretionary behaviors (such as cooperation and championing) and that continuance commitment to change will be unrelated, or negatively related to cooperation and championing) I chose to run two regressions—one each for cooperation and for championing. The results of regressing the commitment to change types onto *cooperation* indicated that affective commitment to change and continuance commitment to change behaved as expected, but there was a non-significant relationship between normative commitment to change and the dependent variable (affective commitment to change: $b = .248, t(183) = 3.4, p < .01$; continuance commitment to change: $b = -.164, t(183) = -2.57, p < .01$; normative commitment to change: $b = .052, t(183) = .97, p = n.s.$). These results showed partial support for H5B as it related to *cooperation*. As expected, continuance commitment to change was negatively related to cooperation with the change, and affective commitment to the change was positively related to cooperation with the change. Only normative commitment to change did not behave as expected in relation to cooperation as the dependent variable. These findings for affective and continuance commitment to change

replicate the direction and nature of similar relationships studied in related settings (Herscovitch & Meyer, 2002).

In changing the analysis to investigate the relationship between all three types of commitment to change and that of *championing* for the change (arguably a more intensified form of discretionary implementation behavior) the results were improved as compared to the results for cooperation (interestingly, cooperation seems a milder form of discretionary implementation support). In this case, all three types of commitment to change were significantly related to championing implementation behaviors, and continuance commitment remained negatively related to championing behaviors (affective commitment to change: $b = .336$, $t(183) = 4.51$, $p < .01$; continuance commitment to change: $b = -.225$, $t(183) = -3.46$, $p < .01$; normative commitment to change: $b = .113$, $t(183) = 2.02$, $p < .05$). The findings for championing behaviors were even stronger than the findings for cooperative behaviors.

Taken together, these results showed full support for H5B in terms of championing and partial support for H5B in terms of cooperation. In all cases, continuance commitment to change was negatively related to all types of discretionary implementation behaviors—both cooperation and championing. Again, this result is consistent with results from previous studies using the commitment to change construct (Herscovitch & Meyer, 2002). A full summary of all hypothesized relationships and the results of the hypothesis tests is found in Figure 8.0 below.

Figure 8.0
Report of Hypotheses and Results



Results:

- H1A: Employee-elicited reasons for and against a change can be coded into five categories: technical, referent, normative, performance, and social. **No support for five categories. However there were two categories in reasons “for” and two in reasons “against.”**
- H1B: A second-level of analysis of employee-elicited reasons for and against a change will result in two higher-level factors; such factors can be considered as normative and informational. **No support. The normative and informational categories were found with the adjusted reason types from H1A.**
- H2A: The Time 2 reasons of the person given the highest influence rating by the respondent will significantly predict the Time 2 reasons of the respondent, even controlling for Time1 reasons of the respondent. **Partial support : True for reasons related to “resources” and “others.”**
- H2B: Self-monitoring will moderate the hypothesized relationship between the Time 2 reasons of the person given the highest influence and the T2 reasons of the respondent, such that the relationship will be stronger when the respondent is a high self-monitor. **No support.**
- H3A: The degree of symmetry will be positively related to the closeness of reasons, such that the reasons of people in symmetrical relationships will be the most similar to each other, the reasons of people in asymmetric relationships will be less similar, and the reasons of people with no relationship will be the least similar. **Partial support: True for reasons related to “resources” and “goals.”**
- H3B: Self-monitoring will moderate the effects of relationship symmetry and the closeness of reason ratings, such that the strength of the hypothesized relationships between levels of respondent symmetry and closeness of reason ratings will be stronger when the respondent is a high self-monitor. **No support.**
- H4A: Normative reasons will be positively related to affective commitment to change. **Partial support: (Both reason types were positively related). Full support in supplemental analysis.**
- H4B: Informational reasons will be positively related to continuance commitment to change. **Supported, then partially supported in supplemental analysis.**
- H4C: Both normative and informational reasons will be positively related to normative commitment to change. **No support in first analyses; full support in supplemental analysis.**
- H5A: Affective, normative, and continuance commitment to change will correlate positively with the focal behavior (compliance with the requirements for change). **Partial support (no correlation for normative commitment and compliance).**
- H5B: Only affective and normative commitment to change will be positively related to discretionary behavior (cooperation and championing). Continuance commitment to change will be unrelated, or negatively related to discretionary behaviors. **Full support in terms of championing; Partial Support in terms of cooperation (there was no relationship between normative commitment to change and cooperation).**

CHAPTER NINE

Discussion

As business environments continue to be marked by rapid changes—both technological and social—managers and employees increasingly need to develop competencies in change management. More specifically, change management efficacy requires that managers and employees become adept at understanding implementation behaviors. As mentioned at the outset of this paper, research suggests that implementation failure occurs when employers fail to gain employees’ “skilled, consistent, and committed program or product use” (Klein et al., 2001). Essentially, this definition implies that change implementation has a “people” component as well as a “technology” component—and thus the definition invites further inspection of intra- and inter-individual processes that may relate to change. Given this background, I chose to examine the commitment element of change implementation, and then to look at implementation in terms of specific discretionary behaviors (compliance, cooperation, and championing). The purpose of this paper was to uniquely combine existing theories in order to extend our understanding of how reasons, dyadic social influence, and commitment to change interrelate to result in different implementation outcomes.

Specifically, I combined Behavioral Reasons Theory, social network theory, and recent work on attitudinal antecedents to implementation in order to link employee-generated reasons to commitment to change and to implementation behaviors. I proposed and tested

specific linkages in a process model relating dyadic influence, commitment to change, and implementation.

In this dissertation, I argued that categorizing employee-generated reasons for and against a change would significantly increase our understanding of how employees consider and relate to change initiatives. I noted that current attempts at organizing employee responses to change have been idiosyncratic and atheoretical (Rousseau & Tijoriwala, 1999); and that they often focus solely on manager-generated accounts (Bies & Shapiro, 1993). In order to improve this situation, I looked to the socialization and information-seeking literatures which indicate that during socialization, employees seek out five categories of information. I drew from this literature and suggested that employees in a change situation would similarly generate responses (or reasons) in five categories, and suggested that reasons for and against a change could be categorized similarly. Results from factor analyses indicate that the five categories I named were not applicable to this sample or in the context of this change. However, results indicated that categories of reasons do exist, and that these categories could be used in additional analyses. In particular, results indicate that it may be possible to identify “informational” and “normative” categories of reasons (importantly, these categories could stem from reasons “for” a change as well as from reasons “against” a change). The advances possible with categorization allow researchers to more systematically study reactions to organizational change.

Using these categories of reasons, it was possible to investigate how reason types may “move” through the work environment over time—particularly in dyadic social exchanges. I found some support for the suggestion that over time, the reasons of the most influential people are significantly related to the reasons of the employees who rated them as

influential—even controlling for the original reasons of the employees. These findings were supported for reasons related to resource issues and for reasons related to the opinions of others.

I suggest that these findings have significant face validity in light of the content of the items that comprised the reason categories. Given that in this sample, the influential people have information and opinions about finances, resources, staffing, funding, and allocation issues (all “resource” issues), their opinions on these matters could be considered highly credible and salient—and thus convincing enough to sway others to have similar opinions.

Similar arguments could be made regarding the items that comprise the “others” reason type. Specifically, the influential people in this sample have mobility in the ranks of this hierarchical organization, and thus could be a credible and salient source for information on how other hospitals, other departments, and respected superiors feel about the change. The data available from this research is not sufficient to allow testing of the specific levels of credibility of people or to test the salience of particular arguments, but findings from this research do indicate that such investigations would have significant value.

It is appropriate to comment upon the two reason types where the reasons of the influential others were *not* significantly related to the reason types of the employees who rated them. The two types that did not reach significance were labeled “consequences” and “goals.” Inspection of the items comprising these reason types suggests clues as to why they were not significantly influenced by others. Specifically, these items reference intra-individual concerns, rather than inter-individual concerns. Potentially, employees discussing this particular change in this environment were more prone to value *external* input (input from superiors/influential others) about *external* issues (issues with empirical foundations

versus more internally emotional and personal ones). Again, these implications merit further investigation and suggest possibilities for future research relating employee reason categories to these and to other dependent variables.

Concerning other effects for reason types and social influence, my results also indicated preliminary support for the idea that relationship symmetry is related to similarity of reasons. More specifically, the significant results for reasons related to “resources” and “personal goals” indicated that people in relationships with others (whether the relationship was two-way or one-way) had more similar reason scores over time in these two categories. These results are similar to the findings described above for the effects of influential people over time, and in fact, the significance of the “resources” reason category is common to both investigations. Where the two findings differ is in the case of the reason category called “goals”—which was significant for symmetry but was not significant previously in regards to influential people and their ratings. This difference invites closer inspection of the items that comprise the “goals” reason category, as well as inspection of demographic information on the names that people listed in the symmetry data.

Inspection of item content on the “goals” reason category and follow-up research on the actual names that respondents listed in the survey illuminates that the symmetry data set was primarily comprised of peer-to-peer relations. Instead of comparing people to the individual they found most influential (usually a superior—as was done in the first comparison), this second comparison was between an individual and up to eight other individuals who they named as having some amount of communication and influence. Since managers or supervisors could be mixed in this data set, I inspected the actual names given in response to this portion of the survey and corroborated that these people were

overwhelmingly peers (77% of the data set was comprised of peer nurses and 23% of the data set was comprised of names of supervisors and nurse managers).

Taken together, this information suggests a possible explanation for why there was a significant relationship for symmetry and similarity of reason ratings related to “goals.” It is possible that people trusted information and input from peers (similar others) in matters that relate to intra-individual concerns. Specifically, the items in the “goals” category covered issues such as “this is good training for me,” and “this allows me to catch problems before they become overwhelming.” Such items speak to issues that peers could relate to, and speak convincingly about, and thus could potentially influence more easily than superiors could. Future qualitative and quantitative research could more fully investigate these suggestions.

In light of these positive results, it is also important to address the role that self-monitoring did *not* play as a moderating variable in the relationships mentioned above. Informal queries directed at nurses who completed the survey, as well as perusal of the comments nurses added to the survey, revealed that there was significant resistance to the self-monitoring items. The self-monitoring items were considered intrusive and they were not considered relevant to the study of Rapid Response Teams. Also, according to the nurses who shared their post-survey reactions via email ($n = 5$), the items appeared at a point in the survey where respondents were becoming quite fatigued. This information may help explain the lower coefficient alpha (.65) and it may also at least partially explain why self-monitoring did not reach significance as a moderator of these relationships.

However, a more compelling explanation for the lack of significance for this variable may be found after inspecting the nature of the sample. The mean level of self-monitoring for the sample was 6.9 (out of a potential 18), indicating that overall, the sample is comprised

of low-self monitors (a score of 9 or above would constitute a person as a medium- to high-self monitor. The highest score even recorded in the sample was 15). Given that nurses must constantly share information in a matter-of-fact manner during the course of their jobs, and given that some self-monitoring behaviors (i.e. providing misleadingly positive information, or “telling people what they want to hear”) could actually be detrimental to patient and family stability and well-being, it is not surprising that the sample of nurses was heavily comprised of low self monitors. The construct could not reach significance if it was not sufficiently present in the sample. Thus, while this variable was not significant for *this* sample, it may still be of significant value in other research populations. Because of its relevance in other research settings (Burkhardt, 1994; Mehra et al., 2001; Pollock et al. 2000), it seems too early to reject this potential moderator based on findings from this sample alone.

Self-monitoring effects aside, the finding that the reason ratings of influential others significantly related to the reason ratings of employees supports the suggestion that reasons may be one type of social information that is exchanged in interactions at work. Combined with the finding that symmetry affects the similarity of reason ratings (for certain types of reasons), these findings indicated preliminary support for the suggestion that social influence effects were in play when it comes to reasons. Further research is required to explain when and why certain types of reasons have these differential effects, but the data from this research indicated that social influence effects were related to reasons, that reasons were a viable research topic, and that such further research on relationship moderators may have merit.

However, validating the idea that employee-generated reasons may have categories, and that reasons and their categories are elements of social comparison and social exchange was only *one* of the goals of this research. Reasons were inspected in their own right as well as in the context that they might be related to different types of commitment to change. The value of this work for managers and practitioners lies in testing the hypotheses relating certain reason types to certain types of commitment to change. The commitment to change literature is relatively new, and some of the findings related to that literature are preliminary. In particular, little is known about the differences in the nature of affective, normative, and continuance commitment to change. Thus, the findings in this research help to build the commitment to change literature. Overall, findings from these analyses suggest that affective commitment to change is predicted by informational reason types; that continuance commitment to change is also related to the informational reason type; and that normative commitment to change is related to both the informational and normative reason types. The implications of these findings suggest that different cognitive processes may be in play in predicting commitment to change—it may be that socio-emotional reasons can better predict affective commitment; that logical reasons may be more predictive of continuance commitment; and that either type can predict normative commitment.

More conservative results suggested slightly different findings—namely that 1) both informational and normative reasons can lead to affective commitment to change and 2) that neither significantly relates to normative commitment to change. Implications from both sets of findings taken together indicate that managers may encourage affective commitment by taking either a logical or a socio-emotional approach with reasons, with the caution that strictly logical approach (while having a potential effect on affective commitment) clearly

has a relationship with continuance commitment to change. Since most managers want to engender affective commitment, it is critical to follow this research with more specific investigations about whether certain reasons have the potential to help an individual move past continuance commitment to change and move towards affective commitment to change. The results from these findings are inconclusive for normative commitment, providing evidence to support arguments questioning the value of the normative commitment to change construct (Meyer, Allen, & Smith, 1993).

All three of the commitment to change constructs were tested in relation to implementation behaviors. Previous research indicated that all three types of commitment to change would be related to compliance. However, this was not true for this sample. In this dissertation, my findings were that only affective and continuance commitment (and continuance was in the negative direction) were significantly related to compliance. This difference in findings may have something to do with differences in how “compliance” is measured (it is a three-item measure that makes no reference to the specific change as it currently exists) and how it is defined and interpreted by respondents in this sample. Recall that reactions to RRT were extreme and bifurcated in this sample (people either really wanted the change or were very much against it), and there was very little variety in what it takes to “comply.” Thus, other types of implementation behaviors (besides compliance) revealed more interesting findings.

Specifically, affective commitment to change was positively and significantly related to cooperation and to championing, and continuance commitment was negatively and significantly related to both behaviors. These findings corroborate other research findings, suggesting that managers may want to continue to encourage affective commitment to

change while minimizing levels of continuance commitment to change (Herscovitch et al., 2002; Meyer et al., 1993). These results also build the literature by indicating that for some changes, normative commitment to change may have significantly less value than either affective or continuance commitment to change —suggesting that managers may be more interested in managing the commitment *extremes* (affective commitment to change or continuance commitment to change) rather than managing a “middle road” (normative commitment to change).

The results also suggest that future research into behavioral options such as resistance may be of value.

Discussion of Research Findings

The first key contribution of this research is the relationship between certain reason types and social influence effects. In this study, I considered four reason types (Resources, Goals, Others, Consequences) and looked at how employee ratings of these types changed over time in relation to the reason ratings of the most influential people, after controlling for original employee ratings. I found support for the idea that for certain types of reasons (those related to resource issues and those related to opinions of others) there was a significant relationship between the opinions of influential and the later opinions of the employees who rated them as influential. This finding should allow researchers to consider reasons as part of the “content” of social exchanges at work. Researchers have indicated that, while we know a great deal about the type and strength of network ties and the frequency of network contact, we still do not know enough about the *content* of network exchanges (Monge & Contractor, 2003; Monge & Eisenberg, 1987; Rice & Danowski, 1991b). The results from this

dissertation suggested the viability of considering *reasons* as the content of some network exchanges.

In a related investigation, I also looked at how relationship symmetry affected similarity in reason ratings over time. I found preliminary support for the idea that people who have at least one-way exchanges of information and influence have more similar reason ratings for two types of reasons (reasons related to resource and reasons related to goals). These findings build on the idea that reasons comprise at least some of the content of network exchanges, as well as suggest that some types of content flow more freely with some types of contacts. These findings stimulate considerable questions appropriate for follow-up research on moderators of the influence relationship. The moderator I did test, self-monitoring, was not significant for the sample. However, the findings from this study suggest that other moderators, such as ones related to network and content types, may be appropriate in future studies.

A second key contribution of this study is the suggestion that reasons for and against supporting a change may have categories. The study of employee reactions to change, and the study of employee-generated responses to change in the form of motivated reasoning, lacks consistency. In this study, I tested categories of reason based on two underlying dimensions of information-giving: “normative” and “informational.” The application of reason categories, potentially those of “informational” and “normative,” brings a theory-based approach to this field that could provide a systematic way for researchers to study changes that were previously too disparate for comparison.

A third contribution of this work is in what it does to build the commitment to change literature. There is considerable need to investigate antecedents to commitment, and more

specifically antecedents to commitment to change (Herscovitch et al., 2002; Meyer & Allen, 1991; Meyer et al., 1993; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). This paper breaks new ground by investigating whether certain types of reasons could be antecedents to certain types of commitment to change. In particular, findings were more conclusive for two of the three types of commitment to change. Results showed that informational and normative reasons significantly related to affective commitment to change, while informational reasons related significantly (and negatively) to continuance commitment. Results were somewhat inconclusive for normative commitment to change, perhaps a result idiosyncratic to this sample. However, the fact that normative commitment to change was not salient for this sample or for this change is a contribution in its own right—as it encourages researchers to investigate whether there are other changes where normative commitment to the change is not a viable outcome.

A fourth contribution of this work stems from the fact that it evaluates change efficacy by looking at implementation behaviors. Many previous investigations of changes simply use dichotomous variables to denote implementation or a lack thereof (Cooper & Zmud, 1990; Dickerson & Gentry, 1983) In contrast, this work asks employees to respond to items that allowed me to categorize their reactions in terms of behaviors. I investigated outcomes such as compliance, cooperation, and championing. In finding that affective commitment to change was positively related to cooperation and championing, this work underscores the importance of building and encouraging affective commitment to change (and because earlier results show which types of reasons related to affective commitment, researchers can now begin to trace how such commitment to change develops over time). I also found that continuance commitment to change was negatively related to cooperation and

to championing—again underscoring results from previous (preliminary) findings suggesting that managers and practitioners need to continue to de-emphasize continuance commitment to change in some situations (Herscovitch & Meyer, 2002).

The results of this study provided some evidence that reasons constituted the content of social exchanges at work, both between employees and their superiors as well as between employees and their peers. Results essentially suggest that “people who interact together, begin to think together” – at least in regards to some issues. While similar conclusions have been drawn from previous research on social information processing, previous findings were in relation to similarity of aggregate attitudinal measures, rather than related to the similarity of actual reasons for or against a change.

A potential limitation of this study is that it was not longitudinal in design. Instead, due to limitations at the research site, it was only possible to ask for retrospected opinions. While I followed established protocols for this type of research (Schwarz, 2000), this work was done based upon recollected contrasts rather than upon information taken from questionnaires administered at two different points in time. In pursuing future research, researchers should instead attempt to gather “time one” information just prior to or immediately after a change is initiated and “time two” data at six-month (or change-appropriate) intervals thereafter.

Other limitations are 1) that the behavioral outcome variables are taken from self-report data and 2) the project relied on a single method for data collection. Both of these can threaten the validity of results (cf. Moorman & Podsakoff, 1992). Reliance on self-reported data may influence study findings in that individuals may engage in cognitive conservation (which would inflate the relationships between the variables in the study measures) and/or in

that individuals may be lenient in reporting their behavioral responses due to self-presentation biases (Furst, 2005; Harrison & McLaughlin, 1996). Further, when data are based on one method of measurement (e.g., a survey) findings may be contaminated by shared method variance (Schmitt, 1994; Spector, 1994).

However, much of the data in this dissertation relied on independent data sources (i.e. for the “most influential” ratings, I used those people’s actual ratings, not perceptions of their ratings). Reliance on self-report data only occurred for the behavioral variable. Such reliance was not planned, but was necessary given the limitations at the hospital data site. I was not allowed to ask external parties to rate individual behaviors due to administrative concern about respondent fatigue and due to administrative resistance to the idea. For future work in similar sites, researchers should negotiate external rating opportunities to include peer or supervisor ratings of employee responses to change (Borman, 1991). Other options are to negotiate alternative forms of data collection, such as interviews, observation, or controlled experiments involving case-based scenarios (Furst, 2005). Given the fact that nurses at this teaching hospital were not allowed to be interviewed during working hours, and given that nurses had already given of their “free time” to do the survey, these options were not possible at this research site.

Despite these facts, previous research on change efficacy has established that there is a role for employee accounts about the viability of a change (Shapiro et al., 1994). Importantly, for some changes, employee perceptions of their own behavioral reactions may be an outcome deserving of merit in its own right (Rousseau et al., 1999). Also, in the case of this research, employees had very little reason to exaggerate or downplay their behavioral reactions because the change in question has obvious and dichotomous behavioral options

(nurses either opt to wear the pager or they don't). Despite this, future researchers should work to mitigate potential problems with self-report and single-source data collection.

Implications for Researchers

In addition to the contributions already noted, this study suggests valuable avenues for future research. First, regarding the study of reasons, it seems necessary to test the suggested normative and informational categories in additional settings, ensuring that with other types of changes and in other samples, the use of the categories is both viable and meaningful. More specifically, the value of categorizing reasons (introduced here) increases significantly if reasons and reason categories can be linked to hierarchical positions, communication patterns, and ultimately to types of behaviors in future research. No work using Behavioral Reasons Theory of which I am aware has attempted to categorize reasons or to relate categories to other variables of interest, and doing so may be of value to future researchers interested in bringing consistency and theory to the study of employee reactions. This paper suggests that it may be possible to use normative and informational categories in other research contexts.

Secondly, as mentioned earlier, future research needs to be done on why certain reason categories were susceptible to social influence effects and why others were not. I have made several suggestions regarding network content, source credibility, and source salience that could be tested empirically. The results would potentially be of value to, and would further improve, the study of the social accounts and motivated reasoning literatures in particular.

Thirdly, and further regarding the search for moderators, self-monitoring should not be removed from future investigations. Because this sample may be unusual in its

composition, future research should be used to corroborate or refute the non-significant findings here.

Fourthly, future research is required to refine and improve the definitions of commitment to change in relation to definitions of organizational commitment. Because there is limited work to date using the commitment to change constructs, and because the only published work I was able to find (Herscovitch & Meyer, 2002) evaluated many different changes rather than one particular change (as was evaluated in this dissertation), it may be valuable to do more work investigating reactions to the same change (a control) so that these dissertation findings can better be compared with future research.

Finally, future research on behavioral responses such as active and passive resistance may be valuable in understanding the full range of reactions to change. Because resisters may have significant influence in the social network, and their reasons may be compelling to certain audiences, it seems valuable to include a wider range of behavioral response options in future studies of organizational change implementation. Such studies would be of value to researchers as well as to managers and practitioners. Other implications for managers are outlined immediately below.

Implications for Managers

One potentially valuable aspect of this dissertation lies in the number of implications these findings have for the managers and practitioners who are working toward change implementation. Firstly, this study identifies context-specific (item-level) reasons for and against a particular change. New studies using a similar design would result in item-level means and standard deviations for every reason used in the study. Such descriptive statistics could give managers a sense of exactly which reasons are “popular” and which reasons seem

to have traction among the employee base. Only managers have the perspective to compare the reasons they emphasized and the reasons they sought to promote with the reasons that are actually circulating in the work environment. Managers armed with such data can then proceed with interventions, particularly marketing and communication-based interventions aimed at 1) further emphasizing current opinions, and/or 2) de-emphasizing incorrect (or reasons out of favor with management's opinion), and/or 3) potentially adding new reasons to the environment.

Secondly, this research suggests that changes can also be studied at a macro level by comparing reason categories rather than comparing items. The reason categories I identified here (normative and informational) may be of value to managers doing macro-level analyses of change reactions, or to managers who are attempting to relate reasons to other variables of interest in their workplace.

Thirdly, managers can also benefit from the new information about the three types of commitment to change. In particular, while affective commitment to change by definition holds intuitive value, its presence and actual value has not been routinely tested in applied field settings. No other research of which I am aware has shown affective commitment to change (the most valuable kind of commitment to change in relation to behavioral outcomes) to be related to informational and normative reasons. The fact that continuance commitment to change (the least valuable kind and the least predictive of managerially-preferred outcomes) also is significantly and negatively related to informational reasons implies that managers may need to be particularly careful when using informational reasons to promote change. It appears that managers who heavily rely on informational reasons to promote change have the *potential* to inculcate affective commitment to change, while at the same

time they have the potential to inculcate the less desirable continuance commitment to change. Again, this work suggests that managers may want to invest more time in understanding which reasons (and which people) encourage the normative reasons which can encourage affective commitment to change.

A final possible benefit for managers who chose to replicate this research design in their own contexts is that it has the potential to reveal the actual names of the influential people in the workforce. Such information, when properly and ethically collected, can allow managers to pinpoint certain individuals in order to ask them for more assistance or to dissuade them from current thinking that might be detrimental to managerial goals. Such data was not released to the client at this data site due to ethical considerations and a fear that in this environment, using names would decrease the response rate. However, under the right conditions and with appropriate forewarning, this type of research could yield important individual-level network data that would allow managers to design interventions at the micro-individual level—thus helping them to create more champions or to pinpoint and dissuade resistors.

Conclusion

In summary, the results of this study provide preliminary evidence that employees use reasons as part of the content of their social exchanges in relation to a change. In particular, there is evidence suggesting that different types of reasons may be the content of exchanges with different types of network partners (superiors versus peers in this example), and that different types of reasons relate to different types of commitment to change. Importantly, there is evidence that informational and normative reasons relate to affective commitment to change—which is potentially the most valuable type in predicting implementation behaviors

such as cooperation and championing. This research improves upon previous studies of social information processing and network mechanisms by establishing that reasons may be one element of network *content*. Further, by linking certain reasons to certain commitment to change types, this work makes a contribution to the implementation literature. The findings should be useful to managers charged with implementing change, as well as to researchers interested in the value of reasons, the intra- and inter-individual level antecedents and consequences of commitment to change, and the antecedents of implementation behaviors.

APPENDIX

Survey Instrument Text

Part I: Reasons For and Against Supporting Rapid Response Teams

In this section, you will be given a list of potential reasons for supporting or not supporting the Rapid Response Team program at UNCH. Please rate them using the scales below. Because I am also interested in how people change their opinions over time, I ask you how you felt about the initiative when you first heard about it. When you see the question repeated, please try to think back to how you felt when you first heard of the Rapid Response Team initiative. Try to recall where you lived and worked, what your tasks were at the time, and how you felt at that time. Respond using your recollection of your reasons for supporting the initiative at that time.

Instructions: From the list below, indicate how you felt originally about the reasons for supporting the Rapid Response Team initiative at UNCH, then please answer the same question while thinking about how you feel now. Reasons Why You Do Support (or Would Support) the Rapid Response Team Program at UNCH:

1. It allows me to catch problems before they become overwhelming.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. It decreases the acuity of the patient that may “end up” in ICU.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. It provides advanced assessment and intervention training for me.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Having the RRT available improves patient outcomes.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. It provides advanced assessment and intervention training for others- such as the people who make the call or new nurses and new doctors who see the intervention.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. It allows me to take better care of the patient- I don't have to wait for someone to get back to me once I know there is a problem.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Peers whom I respect are very positive and really support the RRT program.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Authority figures whom I respect really support this program.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Feedback I have heard from other parts of the hospital suggest the RRT program is good.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. I finally have a way to get the assistance I need for my patient (in a timely manner).

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. I can get extra hands and help when I am unsure of a patient's condition status.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. RRT should be an integral part of a teaching hospital.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. The RRT program can decrease a patient's length of stay.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. The RRT program can expedite the patient's progress to the appropriate destination.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. I have more autonomy as a caregiver.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part II: Reasons Against Rapid Response Teams

The next set of questions asks you about the reasons people might have for not supporting the Rapid Response Team program. Please respond with how you felt when you first heard about the program and then respond with how you feel now.

Instructions: From the list below, please indicate how you felt when you first heard about the Rapid Response Team (RRT) initiative, then answer with how you feel about RRT now. Rate your reactions using the scale below. Reasons You Do Not (or Would Not) Support the Rapid Response Team Program at UNCH:

1. We don't have enough nurses to operationalize this program well.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. I feel that other healthcare providers are judging me for making the call.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. It is intimidating to call in all that experience, all those people.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. I am not sure what happens if I make a mistake about the call.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. I fear that the RR team might point at me and ask me why I made the call.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. I don't like the idea of sending the message that I don't trust the doctor.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. This could lead to less trust on the floor rather than more trust.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. This does not have enough resources.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. The administration does not provide the resources for me to participate properly.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. I don't think the program can succeed until we have more FTEs.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. This is not/will not be judgment-free- no matter what they claim about the program.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. I don't think we can activate this program properly.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
How I Felt Originally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How I Feel Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part III: Communication Networks at UNCH

Research shows that the informal communication patterns at work can be more important than communication through the formal channels. This section helps me understand who talks to whom about what. After I create a generic communication map, I destroy names and only report patterns and trends. Feel free to contact me if you have any questions about this process (lisa_jones@unc.edu).

Instructions:

1. Considering the people you interact with at work and on your floor, please note the people who you talk to about work-related issues and changes such as RRT. You can list as many people as you think are appropriate, but please consider at least your top five.
2. Next, please rate them on how influential they are to you – meaning how much their opinion has the ability to affect your opinion (1 = an insignificant amount of influence and 5 = a great amount of influence).
3. Lastly, (in case some ratings are tied) please note the person who you think has the greatest ability to affect your opinion about RRT.

Name 1:

Influence rating: 1 =Insignificant amount 2 =Small amount 3 =Moderate amount 4 =Considerable amount 5 =Great amount

Name 2:

Influence rating: 1 =Insignificant amount 2 =Small amount 3 =Moderate amount 4 =Considerable amount 5 =Great amount

Name 3:

Influence rating: 1 =Insignificant amount 2 =Small amount 3 =Moderate amount 4 =Considerable amount 5 =Great amount

Name 4:

Influence rating: 1 =Insignificant amount 2 =Small amount 3 =Moderate amount 4 =Considerable amount 5 =Great amount

Name 5:

Influence rating: 1 =Insignificant amount 2 =Small amount 3 =Moderate amount 4 =Considerable amount 5 =Great amount

Name 6:

Influence rating: 1 =Insignificant amount 2 =Small amount 3 =Moderate amount 4 =Considerable amount 5 =Great amount

Name 7:

Influence rating: 1 =Insignificant amount 2 =Small amount 3 =Moderate amount 4 =Considerable amount 5 =Great amount

Name 8:

Influence rating: 1 =Insignificant amount 2 =Small amount 3 =Moderate amount 4 =Considerable amount 5 =Great amount

From the names above, please select who has the greatest ability to affect your opinion about RRT?

1. Name 1
2. Name 2
3. Name 3
4. Name 4
5. Name 5
6. Name 6
7. Name 7
8. Name 8

Part IV. Commitment Measures

This section asks about other reactions to the Rapid Response Team program, especially regarding how it might affect your work. Some questions may sound similar, but they are slightly different- so please answer each one.

Instructions: The following questions refer to the Rapid Response Team program (RRT). Please respond using the scale below.

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
1. I believe in the value of this RRT program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. This program is a good strategy for this organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I think management is making a mistake by introducing this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. This program serves an important purpose.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Things would be better without this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. This program is not necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I have no choice but to go along with this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I feel pressure to go along with this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I have too much at stake to resist this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. It would be too costly for me to resist this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Resisting this program is not a viable option for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. It would be risky to speak out against this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I feel a sense of duty to work toward this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I do not think it would be right for me to oppose this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I would not feel badly about opposing this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. It would be irresponsible for me to resist this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. I would feel guilty about opposing this program.	<input type="checkbox"/>				
18. I do not feel any obligation to support this program.	<input type="checkbox"/>				

Part V: Behavioral Responses to Change

The following questions ask about how you behave (or would behave) regarding an organizational change or because of a new approach such as introducing Rapid Response Teams in your unit.

Please respond the following items using the scale below.

	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
1. I comply with my organization’s directives regarding the RRT program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I generally accept role changes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I adjust the way I do my job as required by this RRT program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I consistently work toward the objectives of this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I remain optimistic about this program, even in the face of adversity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I avoid former practices, even if they seem easier.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I would engage in behaviors related to the program that seem difficult in the short-term but that seem likely to have long-term benefits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I seek further information concerning the program when needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I don’t complain about the program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I try to keep myself informed about the RRT program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. In general, I am tolerant of temporary disruptions and/or ambiguities in my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I encourage the participation of others in the program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I speak positively about the program to co-workers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I speak positively about the program to outsiders.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I try to find ways to overcome difficulties associated with the program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I persevere with the change in order to support the goals of this program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I try to overcome co-workers resistance toward the program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part VI. Personal Characteristics- Individual Differences:

The answers to the following questions help me understand how different personality types deal with change. Please answer the questions openly and honestly, as there is no “ideal” answer.

Instructions: Read each statement and select whether the statement is true or false for you.

	True	False
1. I can make impromptu speeches even on topics about which I have almost no information.	<input type="checkbox"/>	<input type="checkbox"/>
2. I find it hard to initiate the behavior of other people.	<input type="checkbox"/>	<input type="checkbox"/>
3. At parties and social gatherings, I do not attempt to say or do things that others will like.	<input type="checkbox"/>	<input type="checkbox"/>
4. I can only argue for ideas which I already believe.	<input type="checkbox"/>	<input type="checkbox"/>
5. I guess I put on a show to impress or entertain others.	<input type="checkbox"/>	<input type="checkbox"/>
6. I would probably make a good actor.	<input type="checkbox"/>	<input type="checkbox"/>
7. In a group of people I am rarely the center of attention.	<input type="checkbox"/>	<input type="checkbox"/>
8. In different situations and with different people, I often act like very different persons.	<input type="checkbox"/>	<input type="checkbox"/>
9. I am not particularly good at making other people like me.	<input type="checkbox"/>	<input type="checkbox"/>
10. I'm not always the person I appear to be.	<input type="checkbox"/>	<input type="checkbox"/>
11. I would not change my opinions (or the way I do things) in order to please someone or win their favor.	<input type="checkbox"/>	<input type="checkbox"/>
12. I have considered being an entertainer.	<input type="checkbox"/>	<input type="checkbox"/>
13. I have never been good at games like charades or improvisational acting.	<input type="checkbox"/>	<input type="checkbox"/>
14. I have trouble changing my behavior to suit different people and different situations.	<input type="checkbox"/>	<input type="checkbox"/>
15. At a party, I let others keep the stories and jokes going.	<input type="checkbox"/>	<input type="checkbox"/>
16. I feel a bit awkward in public and do not show up quite as well as I should.	<input type="checkbox"/>	<input type="checkbox"/>
17. I can look anyone in the eye and tell a lie with a straight face (if for a right end).	<input type="checkbox"/>	<input type="checkbox"/>
18. I may deceive people by being friendly when I really dislike them.	<input type="checkbox"/>	<input type="checkbox"/>

Part VII: Demographics and Control Variables

Gender:

1. Male
2. Female

Tenure: How long have you been working as a nurse?

1. Less than one year
2. 1 - 2 years
3. 3 - 5 years
4. 6 - 10 years
5. 11-15 years
6. 16 - 20 years
7. 21 years or more

Job Title:

1. Nurse - ICU

2. Nurse - Floor
3. Nurse - Administrator
4. Resident - 1st year
5. Resident - 2nd year or more
6. Attending
7. Administrator (non-Nurse)
8. Respiratory Therapist
9. Other

Department:

1. SICU
2. CICC
3. 5 Childrens
4. 6 Childrens
5. 7 Childrens
6. PICU
7. Newborn CC
8. 4 AND North
9. 5 Bedtower
10. 5 East
11. 5 West
12. 6 NSH
13. Burn Center - Pediatric
14. ISCU
15. 6 Bedtower
16. 3 West
17. Education

Previous Rapid Response Team Experience (select all that apply)

1. Experience with the Adult Rapid Response Team pilot at UNCH
2. Experience with the Pediatric Rapid Response Team program at UNCH
3. Experience with Rapid Response Teams at another hospital
4. No experience with Rapid Response Teams
5. Other

Name: (optional)

Would you like to add any comments?

Do you want a summary of the information? If yes, provide your email address below or send a separate email to lisa_jc@unc.edu.

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