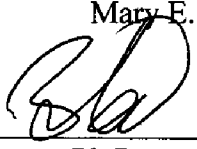EXPLORING SUPPORTIVE AND DEFENSIVE COMMUNICATION BEHAVIORS

AND PSYCHOLOGICAL SAFETY BETWEEN SUPERVISORS AND THEIR

SUBORDINATES

By

Mary E. Strehl
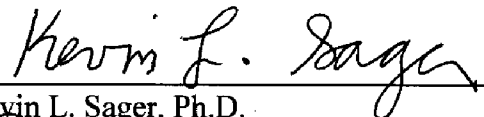
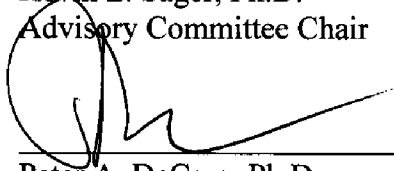RECOMMENDED:

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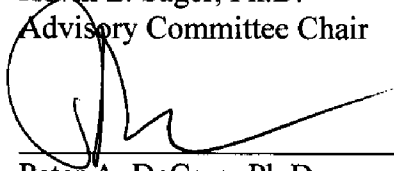
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May 1, 2015
Date

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EXPLORING SUPPORTIVE AND DEFENSIVE COMMUNICATION BEHAVOIR

AND PSYCHOLOGICAL SAFETY BETWEEN SUPERVISORS AND THEIR

SUBORDINATES

A

PROJECT

Presented to the Faculty

of the University of Alaska Fairbanks

in Partial Fulfillment of the Requirements

for the Degree of

MASTER OF ARTS

By

Mary E. Strehl, B.A.

Fairbanks, Alaska

May 2015

Abstract

This project explores the relationship between supportive and defensive communication behavior and psychological safety in the organizational setting. A paper and pencil survey measuring team psychological safety and supportive and defensive communication behaviors was administered to participants in the northwestern region of the United States. Supervisor use of supportive communication behavior was hypothesized to be positively correlated with employee psychological safety. Support was found for the hypothesis. This research sought to expand the scope of our understanding of psychological safety in an organizational setting while highlighting the benefits of using supportive communication behavior.

Table of Contents

Acknowledgements

Live and let go.

Don't be held down

By what you cannot control.

Kevin

Thank you for always believing in me.

Peter and Brian

Karen

Who still inspires my love of learning

Mike, Sarah, and Rensun

Riley

Nadia

Mom and Ben

Astrid and Papa

To all of my amazing siblings: who show me everyday how it feels to be loved

unconditionally

Michelle

Mason and Matthew

Christine and Florin

Chapter 1 Introduction

Effective supervision has been the focus of many communication studies (Becker, Halbesleben, & O'Hair, 2005; Czech & Forward, 2010; Nembhard & Edmondson, 2006). This study seeks to contribute to research on supervisor communication behavior and how they affect the perceptions of psychological safety in the workplace. Psychological safety is an employee's perception of how safe he or she feels sharing ideas, concerns, and complaints without fear that it may affect his or her job or relational status among organizational members (Edmondson, 1999). Creating a psychologically safe working environment has been shown to increase involvement in quality improvement in the workplace (Nembhard & Edmondson, 2006), enhance team performance (Baer & Frese, 2003; Edmondson, 1999; Hirak et al., 2012), raise creative work involvement (Carmeli et al., 2010; Kark & Carmeli, 2009), as well as reduce mistakes through learning behaviors (Carmeli et al., 2009; Edmondson, 1999).

The present study explores the relationship between supervisor use of Gibb's (1961) supportive and defensive communication behaviors and employee level of psychological safety. Although supportive communication has been positively correlated with preventing employee burnout (Becker et al., 2005) and increasing job satisfaction (Czech & Forward, 2010), no research that I have been able to locate has linked supportive communication behaviors to psychological safety. This study seeks to fill that research gap.

Chapter 2 Theory and Research

First, I will review previous studies and current literature on supportive and defensive communication and psychological safety.

2.1 Supportive and Defensive Communication.

Gibb's (1961) original framework for supportive and defensive communication has been influential in researching communication behavior in both organizational and educational institutions. Gibb classified six categories of supportive communication behavior, each with a contrasting counterpart.

2.1.1 Defining the six categories of supportive communication. Supportive communication is direct and straightforward (Forward, Czech, & Lee, 2011). Gibb's (1961) defines supportive communication as defense reducing behavior. Such communication is nonjudgmental, promotes equality among members, and involves listening behaviors (Myers & Rocca, 2001). The six categories of supportive communication are (a) descriptive, (b) problem orientation, (c) spontaneity, (d) empathy, (e) equality, and (f) provisionalism (Gibb, 1961).

2.1.1.1 Descriptive. (a) Descriptive speech acts involve asking for information rather than blaming or demanding. Such speech reduces defensive responses. Detection of descriptive speech is heavily reliant on vocal tone, and it can be hard to distinguish in text between description and its defensive counterpart, evaluation (Gibb, 1961). The speaker communicates a genuine interest in acquiring knowledge and information as well as a desire to understand the other's point of view (Forward et al., 2011).

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2.1.1.2 Problem orientation. (b) Problem-oriented communication infers that both members have the same problem and that it is something they need to fix together. The sender communicates that he or she has no predetermined solution to the problem and is interested in collaborating with the listener (Forward et al., 2011). Problem orientation allows the receiver to feel that he or she is setting his or her own goals and making his or her own decision (Gibb, 1961).

2.1.1.3 Spontaneity. When the sender conveys that he or she has no hidden motives and is providing honest and straightforward information as well as (c) spontaneous responses, he or she can reduce the perception that he or she is manipulating the receiver (Gibb, 1961). When the motives of the sender are transparent to the listener, the sender is perceived as more honest (Forward et al., 2011).

2.1.1.4 Empathy. Showing (d) empathy towards the listener signals that the sender values the other's ideas, emotions, and thoughts (Gibb, 1961). Empathic speech acts show concern for the ideas of the other and gives him or her a sense of worth. To be effective the speaker must identify emotional reactions and share in the other's feelings (Forward et al., 2011).

2.1.1.5 Equality. Despite the differences in skill, abilities, or talents between self and other, in order to produce results and encourage productivity, it is important to treat people with respect and see them as (e) equals (Forward et al., 2011). Using speech strategies that communicate equality and trust will reduce defensive responses (Gibb, 1961).

2.1.1.6 Provisionalism. The sender can communicate a (f) provisional attitude toward the sender if he or she shows that he or she is willing to look for alternative

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solutions and is open to new possibilities (Forward et al., 2011). The communicator must be willing to experiment with changing his or her behaviors, values, or beliefs. This involves actually listening to what the other person is saying, not just debating and arguing against it (Gibb, 1961).

2.1.2 Defining the six categories of defensive communication. Gibb (1961) defined defensive communication as any behavior that an individual perceives as a threat. He suggested that a person who responds defensively devotes more energy to defending himself or herself than he or she does to the task at hand. Defensive communication acts tend to create a circular path in which the people involved become increasingly destructive; defensive behavior can provoke defensive listening and defensive responses. The more defensive a person becomes the less he or she is able to "perceive the motives, values, and emotions of the sender" accurately (Gibb, 1961). The six defensive communication categories are (a) evaluation, (b) control, (c) strategy, (d) neutrality, (e) superiority, and (f) certainty (Gibb, 1961).

2.1.2.1 Evaluation. When the sender judges the listener, it can raise defensiveness (Gibb, 1961). The sender may make different value judgments than that of the listener, which can imply that the speaker has a higher standard. Such judgments can make the receiver feel insecure or feel like he or she is being (a) evaluated.

2.1.2.2 Control. Speech acts that attempt to (b) control the listener often raise defensiveness. If the speaker treats the listener as if he or she is not as competent as the sender, or as unable to make intelligent decisions, the listener will often become defensive (Gibb, 1961). Using controlling and manipulating strategies, or being unwilling

to choose alternative solutions, shows the listener that the sender is not interested in collaborating (Forward et al., 2011).

2.1.2.3 Strategy. When the sender communicates hidden motives for messages or seems to be only interested in their own ambitions, the receiver becomes defensive (Forward et al., 2011). (c) Strategy involves the perception that the listener is a pawn to be used for the purposes of obtaining the sender's goals. Defensiveness can occur when the receiver becomes aware that the sender is not genuinely interested in him or her as a person, but only as a means to an end (Gibb, 1961). When the sender has the intent to manipulate the listener, and it is perceived, it will often raise defensiveness (Stamp, Vangelisti, & Daly, 1992).

2.1.2.4 Neutrality. If the sender does not care about the listener or anything he or she has to say, then it can create a sense of rejection and invoke defensive communication (Gibb, 1961). Communication that shows little warmth or (d) indifference toward the listener will be perceived as cold and uncaring of the listener's feelings (Forward et al., 2011).

2.1.2.5 Superiority. When the sender communicates that he or she is (e) superior in wealth, intellect, position, or power, it can invoke defensiveness in the listener (Forward et al., 2011; Stamp et al., 1992). This creates feelings of inadequacy in the listener, and he or she will concentrate less on the message and more on competing with the sender (Gibb, 1961).

2.1.2.6 Certainty. When the sender communicates that he or she is (f) certain and unwilling to compromise or that a decision has already been made, it will often invoke

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defensiveness in the listener (Forward et al., 2011). The sender sees his or her ideas as truths that need to be defended (Gibb, 1961).

2.1.3 Addressing the validity of Gibb's twelve categories with more recent

research. Costigan and Schmeidler's (1984) Communication Climate Inventory uses Gibb's (1961) twelve categories of supportive and defensive communication to measure the behaviors associated with both supportive and defensive communication climates. More recent literature has examined the validity of the twelve categories looking for internal consistency and multicollinearity. Forward, Czech, and Lee (2011) found high internal consistency between the items measuring each of the supportive and defensive communication subscales, except for neutrality ($\alpha = .65$), which fell below the accepted standard of .70 for communication research (Osborne, 2013). Internal consistency reliability suggests that each of the items being measured is a report of the same construct. An alpha level of below .70 suggests that some variables in the same scale may be measuring different things (Forward et al., 2011).

All 36 items of the Communication Climate Inventory scale underwent a confirmatory factor analysis to test the 12-factor model of supportive and defensive communication. The results showed that the model did not fit the data well. Forward, Czech, and Lee's (2011) results produced a five-factor solution that accounted for 69.83% of variance, but the fifth factor, neutrality, only had one item. This fifth factor was therefore eliminated from further analysis. They divided the remaining four factors into a 2x2 matrix. They called the first cell collaboration; it involves the way a person approaches another interpersonally. This cell encompasses the supportive categories of provisionalism, equity, spontaneity, and empathy (Forward et al., 2011). The second cell,

authoritarianism, contained a combination of items measuring control, certainty, and superiority. The third cell explains the way a person undertakes a problem or task when it is being discussed. Forward, Czech, and Lee (2011) called this cell "descriptive orientation" and it included all of the description and problem orientation items. The final cell was labeled "manipulation" and included a combination of neutrality and evaluation items. Forward et al.'s (2011) findings suggest Costigan and Schmeidler's (1984) operationalization of Gibb's (1961) supportive and defensive categories could use some more development.

2.1.4 Supportive and defensive communication behavior vs. climate. Supportive and defensive communication climate and behavior have often been used interchangeably, but there is an important distinction that needs to be made in regards to this study. Different levels of supportive and defensive communication behaviors are viewed as creating different levels of supportive or defensive communication climates. Behaviors create climates. Thus, high levels of supportive communication behavior create a supportive communication climate.

2.1.5 Literature review of supportive and defensive communication and climate. Gibb's (1961) supportive and defensive communication behaviors have been applied to research in classrooms (Garvin-Doxas & Barker, 2004; Myers & Rocca, 2001), delinquent families (Waldron, Turner, Alexander, & Barton, 1993), depression (Kingstone & Endler, 1997), educational institutions (Czech & Forward, 2010), and organizations (Becker, Halbesleben, & O'Hair, 2005; Stamp, Vangelisti, & Daly, 1992).

2.1.5.1 Supportive and defensive communication and self-perceived flaw. An article by Stamp, Vangelisti, and Daly (1992) discussed four conditions that, together,

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can elicit defensiveness during an interaction between two individuals. If an individual has (1) a self-perceived flaw that he or she is (2) sensitive about and may be unwilling to admit to another, this can cause defensiveness if (3) the other person perceives this flaw and (4) attacks it (Stamp et al., 1992). Stamp et al. found that these four conditions (self-perceived flaw, sensitivity about that flaw, perception of that flaw by another, and attack of the flaw) were all significantly positively related to defensiveness, except for self-perception of the flaw, being inversely related (Stamp el al., 1992).

2.1.5.2 Supportive and defensive communication and depression. Defensive communication has also been linked to depression. For example, Kingstone and Endler (1997) observed depressed individuals' interactions with their chosen significant other and then compared their interactions to the interactions of non-depressed dyads. Their results revealed a 5:1 ratio of supportive to defensive communication for non-depressed dyads compared to a 1:1 ratio for depressed dyads (Kingstone & Endler, 1997). Their findings suggest that depressed individuals express a greater amount of defensive communication and less supportive communication with their significant other than do non-depressed individuals (Kingstone & Endler, 1997).

2.1.5.3 Supportive and defensive communication in chair effectiveness and job satisfaction. Research in education suggests that instructor supportive communication in the classroom is linked with lower perceived instructor verbal aggressiveness (Myers & Rocca, 2001). Similarly Czech and Forward (2010) found that when a department chair utilized the communication behaviors of problem orientation, description, control, and neutrality, faculty members perceived him or her as being more effective. In contrast, department chairs who used strategy were seen as less effective

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(Czech & Forward, 2010). Czech and Forward (2010) reasoned that faculty members want to be involved in departmental decision-making and do not want to feel that the chair is manipulating them or withholding information. Thus, they argued that using supportive communication behaviors such as problem orientation and avoiding strategy, can raise a chair's perceived effectiveness. Surprisingly, the defensive communication behaviors of control and neutrality were also positively related to perceived chair effectiveness (Czech & Forward, 2010). Czech and Forward (2010) speculated that this may have been related to the continuum of wanting academic freedom, but also wanting the departmental chair to take control of issues.

Czech and Forward (2010) also found that when department chairs used the supportive communication behaviors of empathy, spontaneity, and problem solving it raised levels of chair-faculty member relationship satisfaction. Faculty members enjoyed their chair showing empathy for their positions and transparent communication was essential for relational satisfaction (Czech & Forward, 2010). The same study looked at faculty members' job satisfaction and commitment to the organization. They found that high levels of perceived chair supportive communication predicted higher job satisfaction as well as more commitment to the organization in faculty members (Czech & Forward, 2010). In contrast, they found that evaluation and strategy were strongly negatively correlated with both outcomes. Evaluative communication implies blame and contempt and often creates conflict. This lowers commitment to the organization, as members do not want to be treated poorly or manipulated (Czech & Forward, 2010).

2.1.5.4 Supportive and defensive communication and employee burnout.
Emotional exhaustion and leader-member exchange may mediate the relationship

between supportive and defensive communication and employee burnout. When supervisors used supportive communication behavior with their subordinates, it lowered emotional exhaustion and reduced the chance of employee burnout (Becker et al., 2005). As expected, employee burnout was positively related to defensive communication behaviors (Becker et al., 2005).

Becker, Halbesleben, and O'Hair (2005) found high-quality leader-member exchange to be positively correlated with high levels of supportive communication. Becker et al. also found high-quality leader-member exchange was negatively correlated with emotional exhaustion, while defensive communication behaviors were positively related to emotional exhaustion (Becker et al., 2005). When leaders used supportive communication behaviors with their subordinates, they felt included, consequently reducing emotional exhaustion (Becker et al., 2005).

2.1.5.5 Supportive and defensive communication and leadership styles. Leadership styles were also examined in relation to supportive and defensive communication behaviors (Czech & Forward, 2010). Three types of leadership styles were analyzed: (a) Machiavellian, (b) transformational, and (c) bureaucratic. Machiavellian leadership includes notions of strength, power, masculinity, dominance, and persistence (Czech & Forward, 2010). Machiavellian leaders are not above using deceit and manipulation to get what they want. They often believe that employees cannot be trusted and that a clear power structure will enhance influence.

Transformational leaders appeal to their subordinates through morals and ideals. They seek to raise the intelligence and consciousness of followers and to point them towards idealized goals (Czech & Forward, 2010). There is often a spiritual nature to

transformational leadership; leaders using this approach strive to change the values and beliefs of followers to better match the leader's goals and beliefs. Bureaucratic leaders are concerned with communicating through set authority structures, following procedures and rules, and making decisions in an orderly manner. This provides stability and accountability in organizations that have bureaucratic leadership styles (Czech & Forward, 2010). Social power is used to persuade other members to support the power structure in place, creating a fortification for closed decision making.

Czech and Forward (2010) found that the defensive communication behaviors of strategy, control, and evaluation were strongly correlated with Machiavellian leadership. Leaders who used this leadership style were seen as manipulative, aggressive, controlling, and uninterested in the input of others (Czech & Forward, 2010). Transformational leadership was positively correlated with the supportive communication behaviors of problem orientation and spontaneity. Problem orientation and spontaneity promote open information sharing, inclusion in decision-making processes, respect for differences in opinion, and open disclosure of intention (Czech & Forward, 2010). Bureaucratic leadership was predicted by the communication behaviors of problem orientation and control. Czech and Forward (2010) speculated that these two variables predicted bureaucratic leadership due to the way these organizations are run. It is often easy to provide clarification of a policy change to avoid confrontation, but it also exhibits control over the situation (Czech & Forward, 2010).

2.2 Psychological Safety.

2.2.1 Defining psychological safety. Psychological safety is defined as the belief that members feel safe in taking interpersonal risks, such as embarrassment or humiliation,

without the fear of detrimental effects to their status, self-image, or career (Carmeli & Gittell, 2009; Edmondson, 1999; Kahn 1990). High levels of psychological safety allow members to feel comfortable sharing information and ideas without the fear that they will be ridiculed or embarrassed by their team members (Edmondson 1999).

2.2.2 Differentiating psychological safety from Gibb's supportive communication climate. Psychological safety shares some similarity with Gibb's (1961) supportive communication climate, but it is treated in this article as a product of supportive communication climate. When members engage in supportive communication behaviors they create a supportive communication climate. This climate engenders high psychological safety in members, making them more likely to feel comfortable expressing new ideas and sharing feedback.

2.2.3 Literature review of antecedents of psychological safety. Many studies have been performed to determine variables that promote the development of perceived psychological safety (e.g., Carmeli, Brueller, & Dutton, 2009; Carmeli & Gittell, 2009).

2.2.3.1 Psychological safety and leader inclusiveness. Leader inclusiveness has been studied extensively and found to be a key antecedent of psychological safety (Carmeli, Reiter-Palmon, & Ziv, 2010; Hirak et al., 2012; Nembhard & Edmondson, 2006). Leaders that encourage discussion and participation among their subordinates can help facilitate the development of psychological safety (Carmeli et al., 2010). Leaders that display fallibility and openness, welcome employee input, and are available and accessible for questions promote the development of psychological safety in their employees (Rirak et al., 2012).

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2.2.3.2 Psychological safety and high-quality relationships. In addition, high-quality relationships between organizational members have been positively linked to psychological safety in the workplace (Carmeli, Brueller, & Dutton, 2009; Carmeli & Gittell, 2009). Carmeli and Gittell (2009) argue that high-quality relationships are manifested in "shared goals, shared knowledge, and mutual respect" (p. 713), which they claim enhances psychological safety among members. Members who share common goals in the workplace often have to collaborate together to incorporate their knowledge and preform the task that is required of them. They are less likely to blame each other for failures; instead they often take an approach that embraces mistakes as a way of cultivating and learning and enhancing performance (Carmeli & Gittell, 2009).

In a related study, Carmeli, Brueller, and Dutton (2009) analyzed three properties of high-quality relationships and how they relate to psychological safety. The first property was the capacity to carry emotions; when relationships allow a greater spectrum of emotions to be expressed without fear of "interpersonal consequences such as embarrassment" it can contribute to a higher degree of psychological safety (p. 84). The second property states that high-quality relationships also have tensility, which they claim allows relationships to bend and flex under stressful situations or challenges as well as to bounce back after conflicts and setbacks (Carmeli et al. 2009). Having the capability to experience emotional stress among members and recover completely is a predictor of psychological safety (Carmeli et al., 2009). The third property is connectivity, which measures the willingness of an individual to open up and divulge information or accept new approaches to completing tasks. Thus, high connectivity in a relationship enables people to feel more psychologically safe (Carmeli et al., 2009).

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Carmeli et al. (2009) found that these three properties of high-quality relationships were positively correlated with psychological safety (Carmeli et al., 2009). These findings suggest that when members form high-quality relationships within the workplace, they feel more comfortable sharing ideas, making mistakes, and speaking out when they believe something is wrong.

2.2.3.3 Psychological safety and difference in status. The perception of psychological safety in the work environment is also influenced by status differences among the organizational members (Nembhard & Edmondson, 2006). High-status individuals are accustomed to having their opinions sought out and valued; they offer them freely without the fear of being rebuked or embarrassed by other members (Nembhard & Edmondson, 2006). In contrast, low-status members perceive more interpersonal risk associated with speaking up, especially to supervisors. In particular, Nembhard and Edmondson (2006) found that high-status individuals perceive higher levels of psychological safety than do low-status individuals.

2.2.4 Literature review of the effects of psychological safety.

2.2.4.1 Psychological safety and learning behaviors. Early studies of psychological safety in organizational teams have found a positive relationship between psychological safety and learning behaviors (Edmondon, 1999). When individuals feel comfortable sharing mistakes they have made without the fear of retribution or looking incompetent, the group can offer support and feedback on how future mistakes can be prevented (Carmeli et al., 2009; Edmondson, 1999). This principle aligns with more current research done by Carmeli and Gittell (2009) on learning from failures. Recall that perceived psychological safety is concerned with the short-term interpersonal risks

associated with divulging information with negative connotations, such as errors or mistakes. If members feel that their group has a high level of psychological safety, then members are likely to react to failure by suspending skepticism and maintaining an open-minded approach to problem solving (Carmeli & Gittell, 2009; Hirak, Peng, Carmeli, & Schaubroeck, 2012).

2.2.4.1 Psychological safety and quality improvement. Psychological safety has also been tied to quality improvement in the workplace (Nembhard & Edmondson, 2006). Members must be willing to accept and try new ideas, use new technology, and rely on the knowledge and experiences of their team in order to find enhanced and efficient ways to function. A psychologically safe environment fosters the communication and comfort that is needed for this type of discussion to occur (Nembrand & Edmondon, 2006). A psychologically safe environment has also been linked to increased innovation in groups (Baer & Frese, 2003). Innovation often cannot occur without problems occurring along the way. Therefore, it is important to have a high degree of psychological safety among group members so that they can work through any difficulties that may develop (Baer & Frese, 2003). In short, psychological safety is necessary for interpersonal risks and organizational risks to be taken. Such risk-taking makes innovation a possibility (Baer & Frese, 2003).

2.2.4.2 Psychological safety and team performance. Psychological safety has also been shown to be positively related to team performance (Baer & Frese, 2003; Edmondson, 1999; Hirak et al., 2012). Research has shown that psychological safety allows members to feel comfortable admitting their mistakes, which often allows members to learn from their mistakes (Carmeli & Gittell, 2009) and, in doing so, perform

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better (Baer & Frese, 2003). Discussing how errors occurred as well as what can be done to ensure that they do not happen again often increases performance in work teams (Hirak et al., 2012). Such discussion creates a mechanism by which to consistently improve work methods, while ensuring that mistakes can be corrected.

2.2.4.3 Psychological safety and creative work involvement. Psychological safety has also been found to be positively correlated to creative work involvement (Carmeli et al., 2010; Kark & Carmeli, 2009). Thus, initiative and proactive behaviors are more likely to occur when members feel psychologically safe. In addition, making suggestions about changes or innovations that may be controversial is more likely to occur if members are not worried about risk to their image (Carmeli et al., 2010). According to Carmeli et al. (2010) psychological safety fosters an environment where members can share creative ideas, question methods already in place, and collaborate with group members.

2.2.4.4 Psychological safety and vitality. In related research, Kark and Carmeli (2009) found that vitality mediated the relationship between high-quality relationships and psychological safety. They defined vitality as feeling energetic, feeling alive, having enthusiasm, and emanating positive energy (Kark & Carmeli, 2009). Kark and Carmeli's (2009) research found that high-quality relationships at work created feelings of vitality, which in turn fostered a higher degree of psychological safety.

2.3 Hypothesis

2.3.1 Linking supportive and defensive communication to psychological safety.

Czech and Forward (2010) found that relational satisfaction increased when supportive communication behaviors were utilized. High leader-member exchange was also found to be positively linked to supportive communication. Carmeli and Gittell (2009) measured three features of high-quality relationships (a) shared goals, (b) shared knowledge, and (c) mutual respect. They argued that when employees have shared goals, they are more likely to have an understanding of alternative roles in the organization. Shared knowledge is also important as employees who share organizational knowledge are more likely to understand problems that may arise. When employees show mutual respect towards each other, it creates an environment that is open and receptive to criticism and improvement (Carmeli & Gittell, 2009). According to Carmelia and Gitell (2009), these three aspects of high-quality relationships help to foster psychological safety. Through this empirical and theoretical reasoning, I predict that supportive communication behavior is positively related to psychological safety as shown in figure 1.

H: Supportive communication behavior is significantly positively correlated with psychological safety.
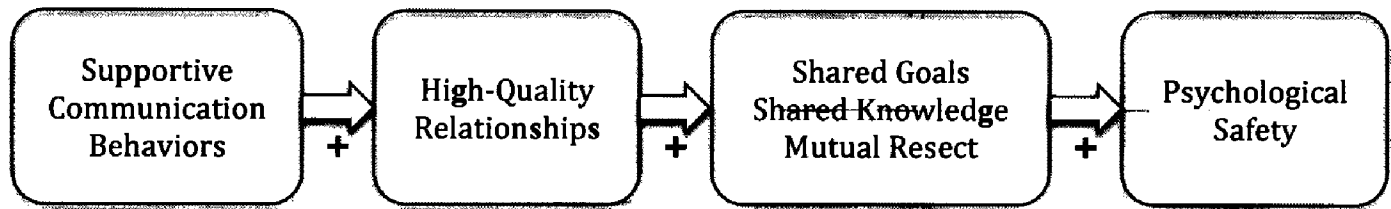
Figure 1. Illustration of a theoretical pathway between supportive communication behavior, high-quality relationships, and psychological safety

Chapter 3 Research Methodologies

3.1 Research Methods

3.1.1 Participants. A paper and pencil survey was administered to 106 participants in the Northwestern United States. The participants' ranged from in age from 18-62 (M=24.3, SD=10.25) with 50 of the respondents being female (47.2%). 71.7% of the participants identified themselves as White non-Hispanic/Caucasian, 4.7% as Alaska Native, 13.2% as Multi-Racial, 3.8% as Hispanic, 1.9% as Black/African-American, 2.8% as Asian, 0.9% as American Indian, and 0.9% identified as 'Other'. Participants were asked which of the following occupations they identified with: 2.8% as Management, Business, and Financial Occupations; 26.4% as Professional and Related Occupations; 25.5% as Service Occupations; 19.8% as Sales and Related Occupations; 10.4% as Office and Administrative Support Occupations; 1.9% as Farming, Fishing, and Forestry Occupations; 5.7% as Construction and Extraction Occupations; 3.8% as Installation, Maintenance, and Repair Occupations; 0.9% as Production Occupations; .09% as Transportation and Material Moving Occupations; 1.9% did not identify with any of these.

3.1.2 Procedures. The paper and pencil survey was distributed in classes at a Northwestern university. Instructors of graduate and undergraduate classes were contacted and asked whether a voluntary survey, lasting approximately 20-25 minutes, could be administered during class time. Some of the instructors offered extra credit for completing the survey, while others did not. Students voluntarily completed the paper and pencil surveys during the afforded class time. Survey responses were then entered into SPSS and statistically analyzed.

3.2 Measures

Two survey instruments comprised the survey along with several demographic questions pertaining to occupation, age, race, and biological sex. The survey measures in this study included Costigan and Schmeidler's (1984) 36-item Communication Climate Inventory and Edmondson's (1999) 7-item Team Psychological Safety measure.

3.1.1 Communication Climate Inventory. The Communication Climate Inventory measures a supervisor's supportive and defensive communication behaviors from the employee's perspective. The measure includes a 9-point Likert-type scale, which ranges from Strongly Disagree (1) to Strongly Agree (9). The measure includes three items for each of the six supportive communication behaviors, and three items for each of the six defensive communication behaviors. Examples of these items are "I feel that I can express my opinions and ideas honestly to my supervisor" (Costigan & Schmeidler, 1984, p. 116) and "My supervisor defines problems so that they can be understood but does not insist that his or her subordinates agree" (Costigan & Schmeidler, 1984, p. 116). Previous studies have found the reliability of the Communication Climate Inventory to be adequate (Czech & Forward, 2010). The reliability for this study was .96. The strength of this measure is identifying specific behaviors that contribute to feelings of defensiveness and supportiveness (Forward et al. 2011). Items measuring defensive communication behaviors were reverse scored. All items were then averaged to find a mean supportiveness score. Response scores ranged from 1.78 to 8.72 (M = .68, SD = 1.52).

3.1.2 Team Psychological Safety. Team psychological safety measures the extent to which team members feel comfortable sharing their ideas and concerns without the fear of taking interpersonal risks (Edmondson, 1999). Items are measured using a 5-point

Likert-type scale ranging from Never (1) to Always (5). Examples of the items are "Working with members of this team, my unique skills and talents are valued and utilized" (Edmondson, 1999, p. 382) and "No one on this team would deliberately act in a way that undermines my efforts" (Edmondson, 1999, p. 382). The reliability in this study was .82. Items measuring low psychological safety were reverse scored and then all items were averaged to create a single measure of psychological safety per participant. One study found the reliability of this measure to be .73 (Nembrand & Edmondson, 2006) and another study found the reliability to be .84 (Carmeli & Gittell, 2009). Response scores ranged from 1.0 to 9.0 ($M = 7.06$, $SD = 1.60$).

Chapter 4 Results

4.1 Correlational Analysis

A two-tailed correlation was conducted to examine the relationship between psychological safety and supportive and defensive communication behaviors. Alpha was set to .05. The hypothesis was supported. There was a significant positive correlation between perceived supervisor use of supportive communication behavior and self-reported employee psychological safety ($r = .71, p < .001$).

Chapter 5 Discussion

5.1 Importance of Study

Effective communication behaviors between supervisors and their employees have many benefits to organizations (Czech & Forward, 2010; Ingwar & Sager, 2015; Meyers & Rocca, 2001; Sager & Gastil, 2006). Supportive communication behaviors are thought to reduce defensive responses and promote mutual respect among members (Gibb, 1961). In addition, supportive communication behavior has been linked to the perception of decreased verbal aggressiveness (Meyers & Rocca, 2001), employee burnout, and emotional exhaustion (Becker et al., 2005).

Creating a psychologically safe environment for employees allows members to feel comfortable bringing up concerns within the organization, as well as to offer new ideas (Edmondson, 1999). Learning more about how to foster higher levels of psychological safety is beneficial to organizations as psychological safety has been associated with higher levels of innovation and team performance (Baer & Frese, 2003; Edmondson, 1999; Hirak et al., 2012), enhanced creative work involvement (Carmeli et al., 2010; Kark & Carmeli, 2009), as well as increased learning from failures (Carmeli et al., 2009; Edmondson, 1999).

5.2 Study Objectives

In the present study, I theorized that supportive communication behavior (Gibb, 1961) is an antecedent of psychological safety. To test this assumption, I explored the correlation between these two variables. No prior research that I have been able to locate

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has linked supportive and communication behavior to psychological safety, and this study seeks to fill that gap.

5.3 Theoretical Model and Findings

Based on both theoretical and empirical grounds, I reasoned that supportive communication behavior creates high-quality relationships, which, in turn, foster higher levels of psychological safety. Thus, supervisor use of supportive communication behavior should be significantly positively related to employee psychological safety. Support was found for my hypothesis. Specifically, there was a significant positive correlation between perceived supervisor use of supportive communication behavior and self-reported employee level of psychological safety.

5.3 Theoretical Implications

This study's research results are consistent with past research on supportive communication. Both the present study and past research suggests that supportive communication behavior produces favorable employee reactions. Beyond the current finding that supportive communication behavior is a possible antecedent to psychological safety, the use of supportive communication has also been shown to increase employee job satisfaction, relational satisfaction, and organizational commitment (Czech & Forward, 2010), reduce employee burnout and emotional exhaustion, and improve leader-member exchange relational quality (Becker et al., 2005).

This study also provides support for Gibb's (1961) original framework. His theory defines supportive communication as defense reducing behavior. Psychological safety can also been seen as a state in which ones defenses are lowered. Thus, the present study

supports Gibb's (1961) claim that supportive communication behavior reduces defensive

responses, whereas defensive communication behavior increases defensive responses.

5.4 Methodological Limitations of the Study

A limitation of this study was possible sampling error due to the use of self-report measures. Participants may not have accurately reported their experiences, consciously or subconsciously. This could be addressed in future studies by using a different research method to measure the same variables. For example, one could observe supervisor communication behaviors and then code them into Gibb's (1961) twelve categories of supportive and defensive communication.

5.5 Suggestions for Future Research

Future research could more fully test the theoretical pathway assumed by my hypothesis. Measuring whether high-quality relationships actually mediates the relationship between supportive and defensive communication behavior and psychological safety could provide support for this study's reasoning, as well as open up a new line of research questions involving the effects of supervisor communication behaviors on employee relationships.

5.1 Conclusion

Organizations need to be aware that the communication behaviors used by supervisors can have significant effects on their organization (e.g., Becker, et al., 2005; Czech & Forward, 2010; Meyer & Rocca, 2001) The present study suggests that when supervisors use supportive communication behaviors they allow psychological safety to grow. Increased psychological safety offers an enormous amount of benefits to any organization (e.g., Baer & Frese, 2003; Edmondson, 1999; Hirak et al., 2012). In conclusion, increasing supportive communication behaviors and psychological safety could allow organizations to run more cohesively and continue appropriate treatment of

employees. Psychological safety creates a working environment that allows the

integration of minds to create the best possible outcomes.

References

Baer, M., & Frese, M. (2003). Innovations in not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behaviour, 24,* 45-68.

Becker, J., Halbesleben, J., & O'Hair, D. (2005). Defensive communication and burnout in the workplace: The mediating role of leader-member exchange. *Communication Research Reports, 22(2),* 143-150.

Carmeli, A., Brueller, D., & Dutton, J. E. (2009). Learning behaviours in the workplace: The role of high-quality interpersonal relationships and psychological safety. *Systems Research and Behavioral Science, 26,* 81-98.

Carmeli, A. & Gittell, J. H. (2009). High quality relationships, psychological safety, and learning from failures in work organizations. *Journal of Organizational Behaviour, 30,* 709-729.

Carmeli, A., Reiter-Palmon, R., & Ziv, E. (2010). Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creative Research Journal. 22(3).* 250-60.

Costigan, J. I., & Schmeidler, M. A. (1984). Exploring supportive and defensive communication climates. *The 1984 Annual: Developing Human Resources.* 112-118.

Czech, K., & Forward, G. L. (2010). Leader communication: Faculty perceptions of department chair. *Communication Quarterly, 58(4),* 431-457.

Edmondson, A. (1999). Psychological safety and learning behaviors in work teams. *Administrative Science Quarterly, 44,* 350-383.

Forward, G. L., Czech, K., & Lee, C. M. (2011). Assessing Gibb's supportive and defensive communication climate: an examination of measurement and construct validity. *Communication Research Report. 28*(1), 1-15.

Garvin-Doxas, K., & Barker, L. J. (2004). Communication in computer science classrooms: Understanding defensive climates as a means of creating supportive behaviors. *ACM Journal of Educational Resources in Computing, 4*(1), 1-18.

Gibb (1961). Defensive communication. *Journal of Communication, 11,* 141-148.

Hirak, R., Peng, A. C., Carmeli, A., & Schaubroeck, J. M. (2012). Linking leader inclusiveness to work unit performance: The importance of psychological safety and learning from failures. *The Leadership Quarterly, 23,* 107-117.

Ingwar, N.I., & Sager, K. L. (2015). Conflict expression in the workplace: Predicting employee use of upward dissent message strategies. *Alaska Journal of Dispute Resolution. 2014(*1), 89-111.

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal, 33*(4), 692-724.

Kark, R., & Carmeli, A. (2009). Alive and creating: The mediating role of vitality and aliveness in the relationship between psychological safety and creative work involvement. *Journal of Organizational Behaviour, 30,* 785-804.

Kingstone, J. C., & Endler, N. S. (1997). Supportive and defensive communication in depression: An assessment of Coyne's interactional model. *Canadian Journal of Behavioural Science, 29(1),* 44-53.

Meyers, S. A., & Rocca, K. A. (2001). Perceived instructor argumentativeness and verbal aggressiveness in the college classroom: Effects on student perceptions of climate,

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apprehension and state motivation. *Western Journal of Communication, 65*(2), 113-137.

Nembhard, I. N., & Edmondson, A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behaviour, 27*, 941-966.

Osborne, J. W. (2013). Best practices in data cleaning. Sage Publications, Los Angeles, CA.

Sager, K. L., & Gastil, J. (2006). The origin and consequences of consensus decision making: A test of the social consensus model. *Southern Communication Journal. 71(*1). 1-24.

Stamp, G. H., Vangelisti, A. L., & Daly, J. A. (1992). The creation of defensiveness in social interaction. *Communication Quarterly. 40(2),* 177-190.

Waldron, H. B., Turner, C. W., Alexander, J. F., & Barton, C. (1993). Coding defensive and supportive communications: Discriminant validity and subcategory convergence. *Journal of Family Psychology, 7(2),* 197-203.