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The Processing of Organizational Change Messages: Implications of Resource Interdependence between Groups and Loss Framing

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ABSTRACT

Organizations comprise of groups who share and compete for resources. During organizational change, resources are often redistributed. Although change messages highlight overarching benefits for the organization, recipients of the message are interested in knowing how they will be affected at the group level, and this affects the way the message is processed.

Using concepts from Social Identity Theory, Elaboration Likelihood Model and Prospect Theory, the effects of messages that outline benefits to a specific independent group (as compared with generic benefits to all), messages that outline benefits to a group the recipient's own group shares resources with (as compared with an independent group), messages that outline specific losses to one's own team (as compared with no mention of specific losses) and messages that outline losses to one's own team and also mention generic gain as well as generic gains and compensatory action (as compared with messages that only mention losses to one's own team) were studied. The dependent variable was negative opinion of the change initiative. The indirect cognitive path resulting from message perception to scrutiny, loss framing and subsequent negative opinion was also studied. The moderating role of in-group identification, out-group bias, and competitive work climate in the indirect cognitive path was studied.

The findings indicated that messages that specify the beneficiary group, that outline gains to an interdependent out-group and those that explicitly state losses to one's own team were likely to lead to the formation of negative opinion. Individuals were seen to directly frame messages that specified the beneficiary group and messages that outlined specific losses for their own team as losses, leading to negative opinion. Messages that offered gains to interdependent groups were scrutinized and framed as losses before the formation of negative opinion. Implications for research and practice of organizational change are discussed.

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For most people, their life is divided into a before and after, with their PhD being that defining event. For me, the journey of my doctoral studies itself is divided into a before and an after. The cataclysmic event that divides these is the unexplained death, in sleep, of our infant daughter Raahi, two days before she would turn three months old. There is no way around or over it, as I write this note, a process I have been unsuccessfully and tearfully imagining, for more than a year now. As such, this is not an acknowledgement note. This is a story. A story that could begin and end in one line: My daughter died. And yet, it did not. Because she stayed in me.

They say it takes a village to raise a child. I have learned over the past three years and ten months that it also takes a village to mourn a child, and to salvage what remains of a bereaved parent. And it takes Professor Michael E. Roloff to advise that parent when she is a lost, broken and directionless graduate student. With steadfastness as dependable as the pole star, Mike guided me through an opaque darkness that drowned all my academic commitment that came before, and engulfed me at a time of my graduate career when most people look for, and find, their direction. I lost my existential, personal, and academic bearing with the loss of my child at the end of my two years of coursework, and I had moved hundreds of miles away. Across four states and a timezone, Mike never let go of my hand when I needed him, let me be when I needed distance, and pushed me gently in the right direction when I stalled. For the past six years, he has been my academic and intellectual anchor, never wavering in his faith, his support, and his affection. His intuition for things in the real world that matter spurred this project, and his limitless knowledge, his sharp focus, and his unconditional generosity, saw me through to the end. Mike: I know it's different in the American education system, but in the Indian education system, a teacher is often compared to a father, and you have been one to me in every sense of

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years, and raising our son. At the end of the second year, as we had barely begun our lives under the same roof again, waiting to raise our children together, we lost our daughter the day after Som started in his new, much-awaited, job. As I froze and sank into a deep pit of despair, Som kept what remained of our lives together, working, running the house, and taking care of our then three-year-old son. He has carried me while walking through fire himself, and supported and encouraged me to complete the degree when nothing mattered to me anymore. Being a business professional himself, his practical input into my academic work has been extensive, and I have learned a lot from our intellectual conversations, during his own graduate studies and now. Bumpum, for twenty-one years we have shared the warmth of friendship and love and are now frozen together in loss. Together we have built a life through unbridled joy and unbearable pain. Thank you for being my home, and for sheltering us from the storm.

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Dedicated to my children, Aahir Kalyan and Raahi Malabika.

Forever together as AAHIRAAHIRAAHI, you are the perfect equation

and the never-ending poem of my life.

~Maani

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CHAPTER 1: INTRODUCTION

Most organizational change programs are mapped out by the leadership and human resources department of the organization (Neves & Eisenberger, 2012), and are implemented at a large-scale level, where they affect entire organizations (Kavanagh & Ashkanasy, 2006). Researchers have shown substantial academic interest in the attitude of employees toward the proposal for change (Avey, Wernsing, & Luthans, 2008; Ford, Ford, & D'Amelio, 2008), especially that which affects and is affected by the dynamics between teams and individuals (Lucas & Kline, 2008; Paulsen, 2003). However, much of the research examining employee reactions to organizational change studies the change process at a macro level (Koschmann & Isbell, 2009; Terry & O'Brien, 2001; Jack Walker, Armenakis, & Bernerth, 2007). Although employee reactions to the quality of the message and its effect on their perceptions of the change initiative have been studied (Lewis, 2006), the cognitive processes involved in the formation of such reactions have evaded scholarly attention. How the employees perceive the proposal for change, and what factors help them in forming an opinion of the change initiative, play a significant role in determining the outcome. This research study is premised on these queries.

Understanding the steps involved in the processing of change is especially significant, since organizational change researchers point out that one-third to two-thirds of major change initiatives, despite their best intentions and promises, fail (Beer & Nohria, 2000), with some researchers suggesting a higher failure rate (Burns, 2004; Cope, 2003). Resistance from organizational employees who are targets of the change initiative is an important reason why organizations are not able to implement initiatives successfully (Ford et al., 2008), in part because little effort is made to assess employees' perceptions of change, and factors that influence these perceptions (Piderit, 2000). For instance, most organizational change proposals

highlight the organization-level benefits of the change. Although the attitude of employees toward organizational change forms the mainstay of research (Avey et al., 2008; Stanley, Meyer, & Topolnytsky, 2005), the focus of analysis has mostly been reactions to the macro-level change. When faced with a proposal for change, however, employees ask the question: "What's in it for me?" (Vakola, 2014; Van den Heuvel, Schalk, Freese, & Timmerman, 2016) Yet, the personal or group-level impact of change has not attracted much academic attention.

There are a few factors that play a role in the personal and group-level impact of organizational change. Organizations are largely political systems where work groups often have resource interdependence with other work groups (Ashforth & Mael, 1989) and resources such as budget are often shared (Trader-Leigh, 2002). Organizational change initiatives can alter equations in the organization, since large-scale transformation often involves reorganization and redistribution of resources by the management (Polzer, 2004). This can cause existing teams to become aware and protective of their own work-group's identity and differentiation from other groups (Paulsen, 2003), which can lead to a competitive stance and zero sum attitudes. Thus, the beneficiary group's identity, and interdependence with one's own team assumes importance.

This project aims to uncover the effects of the specificity of the beneficiary team, of resource interdependence between teams, and the explicit mention of loss to one's own team on one's processing of a message of change, leading to the formation of one's opinion regarding the change initiative. The level of scrutiny one engages in and the psychological loss framing of the message are studied as mediator factors constituting the cognitive processes involved in the formation of negative opinion. Finally, the level of in-group identification, out-group bias, and the competitiveness in the organizational climate one works in are studied as moderating factors in the indirect effect of messages of change on opinion through scrutiny and loss framing.

The processing of a message is a complex cognitive and communicative exercise dependent on several factors. Whether, and the degree to which, an individual thinks about implementation costs associated with a proposal, depends on the group identity that a message invokes in an individual, and the related views of gain and loss to that group. For instance, if one identifies strongly with one's in-group and is biased against an out-group, one may immediately frame an organizational change message favoring the out-group as a loss for the in-group and discard it, even if such loss is not clearly stated in the proposal (Kanner, 2004). Similarly, when a proposal for change is presented, how closely it is scrutinized by an individual depends largely on how relevant the issue is to him/her, and how willing and able they are to evaluate the proposal thoroughly (Petty & Cacioppo, 1979).

Researchers have found that higher quality of implementation communication is related to lower perceived resistance to change (Lewis, 2006). The need for realistic and honest information, including the scale and breadth of the change program and any negative aspect, has been highlighted (Gilley, Gilley, & Macmillan, 2009). Research on persuasive messages emphasizes that the persuader has an obligation to the audience to reveal every detail that is relevant to the argument (O'Keefe & Jackson, 1995). A meta-analysis found significant support for the argument that explicit messages are more persuasive than messages which are not explicit (O'Keefe, 1997). However, researchers are relatively quiet regarding the effect of messages which are explicit regarding negative outcomes for the recipient. This study addresses this feature of messages to explore its effects.

With regards to addressing negative information, research on message features and effects posit that messages that are two-sided, that is, mention positive as well as negative aspects of a proposal, are considered to be more balanced and honest (O'Keefe, 2002). These

types of messages can both provide arguments against the proposal and counterarguments to refute them. Or they can provide arguments against the proposal and counterarguments to overwhelm these arguments, thereby reinforcing the strengths of the proposal. In the context of organizational change, mentioning generic benefits for the organization and also measures to offset any downsides of the change initiative can overwhelm any arguments against the proposal. This study will aim to study the effects of such options to counterbalance any mentioned downsides of the change initiative.

In sum, this project analyzes the cognitively complex steps involved in the assessment of an organizational change message. In doing so, I connect concepts from organizational change research to message processing and gain and loss framing. I examine the concept of group identity from Social Identity Theory (Tajfel & Turner, 1979; Turner, 1982, 1985) as an influencing factor in the evaluation of messages, and how the groups one is affiliated with in an organization shape one's attitude toward their in-group and out-groups. I then draw from Elaboration Likelihood Model (Petty & Cacioppo, 1986; Petty, Cacioppo, Strathman, & Priester, 2005) to lay out the basic processes by which messages are evaluated by recipients, and attitudes toward the position or process advocated by the message are formed. Finally, I study the concepts of gain (positive) or loss (negative) frame from Prospect Theory (Kahneman & Tversky, 1979), which argues that framing is the cognitive exercise whereby one draws from a structure of prior information in organizing and interpreting newly available information.

Chapter Two will present past research that addresses organizational change, group identity in organizations, resource interdependence, zero sum thinking and message features, and the ways in which these concepts could be associated with one another. The chapter begins with a review of organizational change and communication regarding change. A detailed examination

of the concept of group identity in organizations follows, since group affiliation with one's own work team and bias toward one's out-group form the basis of the process involved in the perception of a message proposing change. The chapter continues with a review of literature on resource interdependence and zero sum thinking, scrutiny, gain and loss framing, competitiveness, and message features and reception.

Chapter Three describes the key variables that will be examined in the study, along with details of the hypothesized pathways. The first group of hypotheses tests the direct effects of specificity (of beneficiary out-group), resource interdependence, explicit mention of loss to in-group, and mention of generic gain or generic gain and compensatory action on the formation of negative opinion of change. The second group tests the indirect path from the message contrasts to negative opinion through scrutiny and loss framing. The third group of hypotheses tests the moderating effect of in-group identification, out-group bias, and competitiveness in work climate on the indirect path from message contrasts to negative opinion. Two research questions testing for the effect of compensatory action in addition to generic benefits are conceptualized and will be proposed.

Chapter Four describes the methodology used test the proposed hypotheses. It begins with an explanation of how data was collected and continues with the sample's demographic characteristics. Information is given regarding how data was collected including a description of the recruitment material. Lastly, detailed descriptions of all measures used will be given along with their origins and reliabilities.

Chapter Five consists of the results of the statistical analyses performed to test the proposed hypotheses. Results of the preliminary analyses comprising measurement model, randomization tests and manipulation checks will be presented. This will be followed by results

depicting the relationships among the variables used in the hypotheses, and an analytical overview of the hypotheses testing. Then the reports on the analysis that tested for the direct effects, mediation effects, and moderated mediation effects will be presented along with the statistical significance and effect size. Finally, the statistical data reflecting the fit of the model will be reported.

Chapter Six includes a summary of the findings and how one can interpret the results in light of previous research. Limitations of this study will be discussed and suggestions for future research and practical implications will be provided.

CHAPTER 2: REVIEW OF LITERATURE

The review of literature in this chapter addresses each concept and relevant research on its relationship with other concepts, since the concepts in this study form interlinked relationships rather than flow in a linear argument. The purpose of this review is to outline the possible relationships among differences/contrasts between messages focused on gains and losses, and the opinions and intentions regarding the change proposal based on recipients' interpretations of the messages. The social-psychological and communicative processes that I am interested in uncovering through this study are situated within the context of organizational change, and how the differences in messages announcing change are scrutinized and psychologically framed by the recipients of the messages, resulting in their impact on the opinions and intentions of the recipients.

The first section will outline existing literature on organizational change as a context. Next, a review of literature on group identities, biases and resource interdependence and zero sum thinking will be provided in order to establish and support a link between organizational change messages that focus on gainful outcomes for certain-groups as opposed to others and their impact on one's perception of the change initiative. Along with this, I will also expand on research regarding cognitive processes like scrutiny and psychological framing, which mediate the effects of the message. Additionally, I will review research on competitiveness in the organizational environment, trust in management and academic research on the features and effects of messages of change. These are examined as possible moderating factors that influence the effect of message focus and content on the level of scrutiny and psychological framing the recipient engages in and the subsequent opinions and intentions they form.

Organizational Change and Communication

This section first provides an overview of research on organizational change, and then identifies themes inherent in change that motivated this project. Each of these themes are described in separate sub-sections, and include challenges that are the implementations of change initiatives, change communication, research on individual and group dynamics during change, and the subsequent outcomes such as interdependence and competition that emerge through the interactive processes within organizations and during organizational change.

Organizational change: An overview. Organizations as structures undergo change constantly. New systems are introduced, teams and work units are restructured, employees leave and new ones come in, and there are mergers and acquisitions. The success of an organizational change initiative depends on *context issues*, or an organization's prior history with implementation of change; *content issues,* or the change being implemented, whether in response to external factors or to improve the organization's internal functioning; *process issues*, comprising the actions that would be taken by the change agents; and *individual difference issues,* or the characteristics of employees that may impact their attitudes and behaviors regarding the change (Jack Walker et al., 2007). Any one of these or their interactions may affect the outcome of change initiatives.

Most large-scale organizational changes are initiated by the leadership of the organization (Daly, Teague, & Kitchen, 2003; Lewis, Hamel, & Richardson, 2001; Luscher & Lewis, 2008), and researchers have emphasized the need to acclimatize employees to the change, and for the role of senior management to be transparent, adaptive and flexible (Kavanagh & Ashkanasy, 2006). Literature, however, abounds with instances of resistance to change (Oreg, 2006; Stanley et al., 2005). In fact, despite all the efforts and planning that goes into an organizational change

initiative, one-third to two-thirds of major change initiatives, despite their intentions and promises, fail (Beer & Nohria, 2000; Gustafson, et al., 2003; Hong & Kim, 2002), with some researchers suggesting a higher failure rate (Burns, 2004; Cope, 2003).

In examining the causes for resistance, researchers have mostly looked at the attitudes and perceptions of employees, specifically, how they perceive the proposal, and what factors help them in, or deter them from, implementing it as planned, play a significant role in determining the outcome (Laster, 2008; Lewis, 1997; Ruck & Welch, 2012). Researchers have analyzed the cognitive, emotional and intentional dimensions of positive (Avey et al., 2008) and negative (Stanley et al., 2005) attitudes towards change. Researchers have also examined the role of stress, and organizational commitment associated with change, as factors in employees' attitudes to change (Vakola & Nikolaou, 2005). When there is observed incongruence between one's emotional and cognitive responses to a change, attitudes formed are often ambivalent (Piderit, 2000), and since any change process involves uncertainty, it is often met with resistance (Bovey & Hede, 2001a; Bovey & Hede, 2001b; Trader-Leigh, 2002).

Challenges of organizational change: Resistance, uncertainty & cynicism. Employees have several cognitive and affective reasons to resist organizational change. They can be concerned about the impact of the change, as well as how much control they may expect to have in the process (Kyle, 1993; Qian & Daniels, 2008). Often individuals feel sadness, anger, loss and frustration in face of change (Bordia, Jones, Gallois, Callan, & Difonzo, 2006), which can result in resistance (Spiker & Lesser, 1995; Trader-Leigh, 2002). The more irrational ideas individuals harbor, the more they are inclined to resist change, and their emotions about change also play a role (Bovey & Hede, 2001a). Employees also use adaptive and maladaptive defense mechanisms in response to the change, and maladaptive mechanisms like dissociation,

projection, acting out and denial are correlated to an individual's intention to oppose the change, whereas an adaptive mechanism like humor is seen to be negatively correlated to behavioral intention to resist (Bovey & Hede, 2001b).

There have been broadly three groups of predictors that researchers have identified in explaining resistance. The first group comprises cognitive predictors like uncertainty (Allen, Jimmieson, Bordia, & Irmer, 2007; Bordia, Hobman, Jones, Gallois, & Callan, 2004; Chavez, 2011; Kramer, Dougherty, & Pierce, 2004) and cynicism (Qian & Daniels, 2008; Reichers, Wanous, & Austin, 1997). The second comprises contextual predictors like the organization's prior history with change initiatives (Sarros, Cooper, & Santora, 2008; Schneider, Brief, & Guzzo, 1996) and the background communications happening prior to change (Ford, Ford, & McNamara, 2002). The third group comprises communicative predictors such as inadequacy of information (Zhu, May, & Rosenfeld, 2004) and the prevalence of rumors (Bordia et al., 2006).

The disruption to status quo through a change initiative is often the source of uncertainty (Samuelson & Zeckhauser, 1988), as is the fear and anxiety associated with not knowing or being able to control the consequences of change (Burmeister & Schade, 2007). Researchers have explored ambivalence as one of the key responses to change an employee may have, noting that even after careful deliberation, an employee may feel unsure about the change. There may be incongruity between an employee's cognitive and affective responses, whereby they are angered or frustrated by the proposal, but also recognize its benefits (Piderit, 2000). Uncertainty is alleviated if open and clear communication is shared with the employees (Allen, et al., 2007; Kramer et al, 2004; Lewis, 2006) and if employees are able to participate in the decision-making regarding change (Bordia, et al., 2004; Lewis, 1999). The ability to make decisions regarding

change has also been seen to attenuate the effect of cynicism on resistance to change (Qian & Daniels, 2008).

During any change process, individuals create and rely on their own interpretation of what is going to occur, how others perceive them, and how they think others will behave Coghlan, 1993). This imagined scenario is considered accurate especially when there is not adequate information (Zhu et al., 2004). Lewis emphasizes that transparent and dialogic communication about the change, along with measures to decrease resistance can ensure that employees have a more positive evaluation of change. Her study also finds evidence that superior quality of information shared with the employees is associated with less resistance (Lewis, 2006).

Change communication. In 1998, Lewis and Seibold outlined the importance of communication in all implementation activities (Lewis & Seibold, 1998), and in subsequent work, Lewis has extensively reviewed practitioner and populist literature on organizational change (Lewis, Schmisseur, Stephens, & Weir, 2006). Lewis has also studied various qualities of change messages and their impact on employees' perceptions of the change initiative (Lewis, 2006), and analyzed the use of communication channels by the implementers of change in seeking input from the employees in the change effort, and the effects of various channel use on implementers' perception of change (Lewis, 1999). She found that the most important channel of disseminating information to the employees was informal discussions and general informational meetings; the source of information was mostly the implementation team, employees' input was solicited through informal discussions and checking with the line supervisors; and overall channels for disseminating information were used more than channels for soliciting input (Lewis, 1999). However, she also found that mere frequency of communication, both in disseminating

information as well as soliciting input, was unrelated to employees' perceptions of implementation success. On the other hand, if they perceived that their input would be valid, and they are receiving high quality information, perception of implementation success is more likely and resistance to the change is less likely (Lewis, 2006).

In the span of literature on change recipients and their perceptions, attitudes and actions, the scale of the change being studied, however, has mostly been fairly unanimous – organizational change initiatives that are undertaken on a large scale, and affect entire organizations or departments and employees' attitudes towards them (Drum, 2010; Goodman & Truss, 2004). Even when the unit of analysis has been the individual employee across departments (Trader-Leigh, 2002), hierarchies (Lucas & Kline, 2008; Luscher & Lewis, 2008) and roles (for implementer role see Allen et al., 2007; for recipient role see Barbour, Jacocks, & Wesner, 2013), the change context studied has mostly been generic, and its perceived effects widespread. Implications of the initiatives specific to the individual employee have rarely been studied. And even though the stakeholders are always referred to groups – managers, shareholders, implementers, recipients, and communicators, group-specific concepts like identity and identification are relatively absent in organizational change research. In the next section, I analyze organizational change effects on a micro level involving individual and work groups of stakeholders.

The individual and group during change. Although much of the change in organizations happens at a large-scale, macro level, organizational change has a very individual-level impact. Similar to other organizational processes such as innovation and coopetition (Ritala & Hurmelinna-Laukkanen, 2009), recent organizational change research has examined individual stakeholders' perceptions of and responses to change. As such, different cognitive

processes around organizational change as a phenomenon have ranged from readiness to change (Cunningham et al., 2002), emotions regarding change (Avey, Wernsing, & Luthans, 2008) and perception of its outcome (Lewis, 2006), to cynicism about change (Qian & Daniels, 2008; Reichers, Wanous, & Austin, 1997) and resistance to change (Bovey & Hede, 2001a; Ford et al., 2002). The outcome variables in research have included individual stakeholders' communicative responses and coping behavior regarding change (Laster, 2008; Lewis, 1997).

Focus on recipient of change. Researchers recognize that the stakeholders' existing knowledge, experiences and perspectives contribute to their views regarding organizational change (Ford et al., 2002). The same change initiative may be viewed with different lenses by employees based on their role in the change process, as well as their experience of the organizational reality (Lewis, 2007; Rousseau & Tijoriwala, 1999). In one study, employees' perspectives were very different from those of the implementers of change, with the former focused on losing their autonomy and the latter more focused on imparting more skills to the employees through the change initiative (Gallivan, 2001).

Despite several researchers emphasizing increased need for employees' perspectives in change (Bordia, et al., 2004; Grant, Michelson, Oswick, & Wailes, 2005; Sturdy & Grey, 2003), a recent review of research studies revealed a continuing dominance of management-centric approaches to change assessments (Ruck & Welch, 2012). Ruck and Welch's proposed model recommended more emphasis on employees' reactions to both the content as well as the channel to deliver the change message (Ruck & Welch, 2012). Researchers further found that the perceived effectiveness of form (Self, Armenakis and Schraeder, 2007) and medium of change communication had a significant effect on the actual effectiveness of communication (Drum, 2010).

Group identity and inter-group relations. Organizations are often political systems, with strong power structures and relational dynamics, which have significant effects on resistance to change. Any change effort is a potent context to exert these, with the dominant and powerful entities controlling key aspects of change and tilting it in their favor. On the other hand, organizational change can also alter and change the power equation within the organization, and this can be the basis of resistance (Trader-Leigh, 2002). A work-groups' cohesion, belief in values and ideology, and in-group identity can be heightened during change initiatives, which may be perceived to thwart normative behavior within their peer groups (Amis, Slack, & Hinings, 2004; Lewis & Seibold, 1996; Palgi, 2002), as well as limit the one group's control and power over others (Bordia et al., 2004).

Despite the focus on the heightening of group identity and assessment of one's own group and other stakeholder groups during change, little research examines the outcomes of employees' identity salience during an organizational change process. Terry and O'Brien (2001) applied Social Identity Theory to examine predictors of employee responses to an organizational merger. They found that there was a disparity in the two organizations' statuses before the merger, and this played a strong role in the way employees of both the organizations perceived the merger. Since status is closely tied with identity, as predicted based of the contention of Social Identity Theory, employees of the low-status organization had more negative responses about the merger than those of the high-status organization (Terry & O'Brien, 2001).

As expected, the authors also found evidence of in-group bias among employees of both types of organizations. However, the employees of the low-status organization showed more in-group bias regarding status-irrelevant dimensions like administrative ability and communication skills, whereas employees of the high-status organization showed more in-group bias regarding

dimensions which were status-specific like scientific excellence and relevance to industry (Terry & O'Brien, 2001). The researchers also found that the relationship between status and perceived legitimacy was mediated by the extent to which each group perceived a strong group identity.

In accordance with Social Identity Theory, this study also found that employees of the low-status organization identified less with the new merged organization, were less likely to perceive a common group identity, and more likely to perceive high levels of threat with relations to the merger. There was also significant in-group favoritism among both the groups. However, employees from the low-status organization showed in-group favoritism on issues unrelated to status, whereas employees of the high-status organization showed in-group favoritism over dimensions that were related to their high status. Employees of the low-status organization wanted to use social creativity by focusing on the status-irrelevant issues in assessing their group identity and aligning it with the new organization. On the other hand, members of the high-status organization focused on status-related bias in ensuring their dominance in the new merged organization (Terry & O'Brien, 2001).

In a study examining the role played by inter-group dynamics and organizational culture on organizational learning and change adoption, Lucas and Kline (2008) found that group processes and "us-them" identities had a strong impact on how employees received, shared and managed information. Often groups are interdependent and yet have different roles and contributions in the organization. They may perceive that the change initiatives affect them differently, one group contributing or integrating the change more than the other, and this can cause significant resistance (Lucas & Kline, 2008). Moreover, as noted by communication scholars, the manner and quality of the information presented in a message of change can influence their perceptions of how the change may impact them (Lewis, 1999, 2006).

Connections around change: interdependence and competition. Interpersonal and inter-group connections around organizational change occur in the form of stakeholders' interpersonal relationships (Schneider et al., 1996), work-group cooperation, friendliness and support (Chatman & Barsade, 1995), and trust in peers (Eby, Adams, Russell, & Gaby, 2000), and through social networks and connectivity (Mohrman, Tenkasi, & Mohrman Jr., 2003; Papa & Papa, 1992; Rowley, 1997). This line of thought focuses on implementers of change as active change agents, rather than mere targets of change, and asserts that stakeholders are capable of construing change through communicative behaviors like information gathering, workplace interactions (Lewis, 2007), and seeking of opinion leaders and gatekeepers (Vitale, 2008).

While organizational change can lead to an assessment of stakes, power and the control over information, the success of change implementation depends largely on the degree of interdependence and agreement that is required from interrelated but diverse groups of stakeholders (Lewis, Hamel, & Richardson, 2001). Eby and her colleagues (2000) highlighted the need for mutual trust among employees in order for them to be receptive toward the change. This, they emphasize, is especially true of team environments, where cooperation between members is necessary and expected. Eby and her colleagues argued that if employees trust peers in an organization, then they are more likely to believe that the organization is ready for change. They provide evidence that people who are team-oriented and hold trust for their coworkers view organizational change in a favorable light, especially since change creates new interdependencies and realigns existing work relationships. Although Eby and her colleagues do not probe the complexities of the relationships among colleagues and how that specifically affects perception of change, they initiate the conversation regarding the importance of interpersonal and team dynamics in how comfortable employees are with change (Eby, et al., 2000).

Communication as stake in change. Most of the limited research on the role of groups in organizational change has focused on the formation of coalitions for the purpose of negotiating the change process, and the flow of information as a part of that process. However, early theorists have established that an organization has stakeholders with diverse and often competing interests, and the management often struggles to balance initiatives to adequately cater to most of these groups and their interests (Mitchell, Agle, & Wood, 1997). Researchers recognize that employees are often concerned that an organizational change program would alter their accessibility to and use of important information and other resources (Lewis & Seibold, 1996). Different stakeholders have varying interests in organizations and change initiatives, and adopt a competitive stance as they vie for the most advantageous benefit from the change program (Lewis, 2007).

Lewis and her colleagues draw from stakeholder theory to argue that a negotiation of stakes, or the interests of all groups involved in an organizational change, is an organizational reality, and communication can be a stake on its own (Lewis, Richardson, & Hamel, 2003). Information is a key resource during organizational change, and the timing, sequence, content and channel of communication can all prove to derive from the power structure within an organization, and also realign these structures (Lewis, 1999). Research on stakeholder communication has been robust, and researchers have established that the focus and purpose of the communication determine the manner of communication that implementers adopt in their treatment of various stakeholders (Lewis et al., 2001). These researchers also outline the “quid pro quo” model of stakeholder communication, whereby implementers grant more communicative attention and access to stakeholders who have something they want or need. These could range from resources and expertise to power and approval (Lewis, et al., 2001).

When managers find themselves in unfavorable situations such as limited budgets and resources or an urgent timeline, and they perceive that commitment from the stakeholders is mandated, they tend to adopt this model (Lewis et al., 2001).

Organizational change processes alter the availability and extent of resources, opening new budget and hiring lines, redistributing funds, changing workspaces and work roles, etc (Paulsen, 2003). While allocation of resources to stakeholders based on their relative importance in the organization is a common phenomenon (Harrison & Freeman, 1999), change implementation calls for a heightened negotiation of stakes among various stakeholders. Lewis writes:

> The communication strategies employed by implementers during change episodes in organizations serve as catalysts for the creation, manipulation, and dissolution of relationships among stakeholders surrounding an organization. Communication strategies trigger various concerns for different stakeholder groups and lead some to see opportunity and others to see disaster. Concerns may result in the change being viewed as a necessity for some and as an unreachable goal for others. (Lewis, 2007, p. 193)

Based on these assumptions, Lewis posits that the communication strategies adapted by the implementers of the change initiative will cause the stakeholders to assess the power, legitimacy and urgency of the stakes claimed by the various groups of stakeholders, and these strategies will also encourage the stakeholders to determine the possible alliances or competitions with other groups of stakeholders (Lewis, 2007).

Zero sum in change and focus on self. This is especially relevant in instances when resources are limited, resulting in a zero sum situation, whereby resources are allocated to one group of stakeholders at the expense of another group. Researchers studying group dynamics in the implementation of public policies have posited that changes seldom benefits all, most often change benefits one group at the cost of another. Stakeholders who are more often the recipients

of change are not only aware of their own interests, but often evaluate the complimentary or competitive stakes of others as well (Rowley, 1997).

This transactional nature of change implementation, however, has evaded scholarly attention. Interestingly, one is said to have stakes in an enterprise when one stands to gain or lose from it, as one of the lexical meanings of "stake" suggests. Stakeholders are made aware of the benefits of organizational change like increased diversity, improved social capital and work relationships (Stevens, Plaut, & Sanchez-Burks, 2008), as well as risks of organizational change involving possibility of job loss, restructuring of work hours and conditions, and added stress (Cunningham et al., 2002; Smeltzer & Zener, 1992).

However, research evidence has found that arguably the first question employees think about and consider most important in evaluating a change proposal is, "What's in it for me?" (Vakola, 2014; Van den Heuvel et al., 2016) Indeed, Lewis states:

> "Our individual assessments of the size and scope of change are effected by how directly the change effects [*sic*] us; how profound the change to our own lives may be; what we value in our organizational lives; our own history with change in our personal and organizational life; and perhaps most profoundly, the interactions we have with others about the change." (Lewis, 2011, p. 39)

It can thus be assumed that participants in change are interested in knowing the specific gains and losses they would incur as a result of the change. The limited academic attention regarding gain and loss during organizational change has focused on participants feeling empowered through participation in the change (Bartunek, Rousseau, Rudolph, & DeParma, 2006). However, there has been no systematic investigation of resource gain and loss during organizational change, which can often reflect group dynamic and can be viewed through the lens of one's group identity and bias toward other group.

Summary. Organizational change has received extensive academic attention in recent times. In attempting to uncover reasons why a significant number of implementation efforts fail, several researchers have focused on employee resistance as a hindrance for implementation. Organizational communication researchers have asserted that change and its surrounding processes are constructed through communication, and communication, comprising information about the change, is often an element of contention itself in the organizational politics around change. Change researchers have also noted that while change initiatives are initiated, implemented, and communicated by the management, and span work units, departments and often the entire organization, recipients of the change message are concerned about the individual-level repercussions of the change, and want to know what the change would entail for their own work experience. Within organizational units, this concern can also extend to the specific outcomes the change program would have for a work-group that individuals belong to and identify with closely. However, much of organizational change and communication research has conceptualized communication as information that stakeholders vie for in organizations, and argued that stakeholders form relationships based on what is at stake.

In examining the circumstances of macro-level change initiatives, for instance, the role one's awareness of one's identities plays in how employees view change proposals at the group-level within organizations has largely been overlooked. This is a significant oversight, since mergers, joint ventures, acquisitions and other transformation initiatives are times of structural and functional reorganization within the organization, and often encompass reallocation of resources, and an overhaul of schedules, hierarchical arrangements and reward structures. This can make group identities and inter-group competition salient for employees, and lead them to interpret the change proposal in terms of what it offers to their group in relation to other groups. I

therefore conclude that the research on change communication asserts that the acquisition of information or the way communication flows during change determines the relationships one forms. On the other hand, the aim in this project is to uncover how group identities and inter-group relationships impact the way communication around change is perceived and interpreted. It is pivotal to examine research on group identity and inter-group dynamic within the context of organizational activities and interactions, and the next section expands on this.

Group Identity and Inter-group Relations in Organizations

This section discusses two broad topics: group identification and out-group bias, and inter-group dynamic and resource allocation. As noted earlier, organizational changes are times of reallocation of, and competition for, resources. This may make one's group identity salient, which also encompasses out-group bias. Although the role of identity in the perception of change has been studied peripherally, identity researchers have investigated its role in organizational decisions. They have studied the role of identity in resource allocation. This project aims to uncover the role of group identification and out-group bias in competition for resources during organizational change.

The first section addresses the concept and relevance of identity in the organizational experience, and situates it within the Social Identity Theory concepts of in-groups and out-groups. This section also describes social-psychological mechanisms like identification and bias at play in these organizational structures. The next section addresses the role of identity and inter-group relations in the specific context or resource sharing and allocation, which is related to the premise of this project.

Group identification and out-group bias. The driving question behind one's identification with the organizations they work at is, "How does what I do define who I am?"

Social Identity Theory offers a social-psychological perspective on the categorization of individuals based or shared attributes and ideologies which are an important part of their self concept. Traditional organizational behavior research has focused on several dimensions of identification, like meaning, connectedness and empowerment (Denhardt, 1987; Katz & Kahn, 1978). Recent theoretical inquiry focuses on conceptualizations and functions of organizational identification and the way they serve several individual and institutional outcomes for the organization's members (Ashforth, Harrison, & Corley, 2008).

Organizational identity can be an inclusive superordinate identity which employees hold, but workgroup identities are more specific and proximal (Ashforth & Johnson, 2001). One's identities could be shaped by their allegiance to their workgroup, the division they work in, a union they may belong to, their age cohort, and more (Ashforth, Rogers, & Corley, 2011). For instance, one of the key principles of social identity is that it posits that an individual personally experiences the success and failure of the group, including loss (Brown, 1986), failure at a task (Turner, 1982) or missed benefits (Tajfel, 1981). When one is able to achieve any or all of these motives through their employment in an organization, they are also able to partake in its successes and failures (Oakes & Turner, 1980).

Group identification. Group identification encourages individuals to conform to group norms, develop trust for in-group members and even view their confusing actions favorably (Ellemers & Rink, 2005; Kramer, Hanna, Su, & Wei, 2001). Riketta and van Dick's meta-analysis found that workgroup attachment, which they conceptualize as workgroup identification and commitment, was positively related to group satisfaction and group climate (Riketta & van Dick, 2005). When team identification is low, expertise diversity is negatively related to team learning and performance, but when team identification is high, there is a positive relation

between expertise diversity and team learning and performance (Van der Vegt & Bunderson, 2005). Strong group identification also reduces individual behavior which could be detrimental to the group (Ellemers, de Gilder, & Haslam, 2004).

An important feature of group membership for an individual is social projection. Social projection is a process that can occur within in-groups in which an individual begins to expect others to be similar to him/herself. Social projection is seen to be stronger for experimental groups than for real-life groups, and stronger in-group projection can lead to higher in-group favoritism (Robbins & Krueger, 2005). In-group bias is one of the most researched effects of group identity on attitudes (Aboud, 2003; Brewer, 1979; Castano, Yzerbyt, Paladino, & Sacchi, 2002; Turner, 1975). Researchers studying groups and group identity have explored in-group bias or in-group favoritism as a function of group identity (Rudman, Feinberg, & Fairchild, 2000), exploring its antecedents like in-group identification and entitavity (Castano et al., 2002), as well as its effects like out-group prejudice (Nauta, de Vries, & Wijngaard, 2001). The fundamental assumption of group identity theorists is that members of one group will favor their in-group over a relevant out-group (Turner, Brown, & Tajfel, 1979).

The behaviors that high identifiers exhibit depend on the values, norms and beliefs espoused by the group (Ellemers & Rink, 2005). When high identifiers are confronted with a threat to the group, they can be expected to defend the group and also monitor others' behavior to locate disloyalty (Spears, Jetten, & Doosje, 2001). In this way, their defense can translate to rigidity of the identification for the high identifiers (Brown & Starkey, 2000). When in-group identity is threatened, one's level of identification has also been seen to have a stronger positive effect on in-group bias and a stronger negative effect on trust toward the out-group (Voci, 2006).

Out-group bias. One of the most significant effects of in-group identification is discrimination against out-groups within the organization, which is detrimental to intergroup relationship building and cooperation. Social Identity Theory argues that group members strive to maintain a positive social identity, in order to enhance their self-esteem. They achieve this by comparing themselves favorably against the relevant out-groups (Tajfel & Turner, 2004). These comparisons highlight intergroup differences, and the evaluation of the in-group and out-group identities is often partial, since identification with one's own in-group almost always fosters out-group bias (Turner, 1999). As a result, one group is very likely to harbor animosity toward the salient out-group.

In 1979 Marilynn Brewer's analytical article on in-group bias identified the basis of in-group and out-group differentiation and the way it is reflected in the responses exhibited by the members (Brewer, 1979). She concluded from her review of research that intergroup competition and similarity and difference in status influence out-group bias, since they make the distinction between in-group and out-group salient. Moreover, the extent to which intergroup differentiation plays a role in a particular attitudinal or behavioral response depends on how relevant to the response behavior the intergroup differentiation is, and how favorably the in-group is situated on that dimension. Finally, Brewer posited that bias towards one's in-group is related more to increased in-group favoritism than to increased hostility toward the out-group (Brewer, 1979, 1999).

One's preference for an in-group member and its effect on behavior has been studied in an attempt to uncover the psychological basis of in-group bias and out-group discrimination (Chen & Li, 2009; Kramer & Brewer, 1984). Chen and Li found that induced group identity had effects on participants' social preferences. When participants were matched with an in-group

member, they were 47% more concerned about charity initiatives when they have a higher payoff, and are 93% less envious when their payoff is low. Similarly, they were 19% more likely to offer a reward to an in-group match for good behavior, and 13% less likely to punish an in-group match for misbehaving. They were also significantly more likely to choose philanthropic activities when matched with an in-group member. The authors conclude that participants make their preferences based on their favoritism toward their in-group when matched with their in-group (Chen & Li, 2009).

In conceptualizing bias, researchers have questioned if in-group favoritism and out-group prejudice are the same attitude, concluding that when members are exposed to an environment characterized by diversity, in-group bias does not necessarily correlate with out-group prejudice, whereas the two are correlated where the environment is more homogeneous (Aboud, 2003). In her study, Aboud also found that in-group favoritism relates strongly to the development of social cognition, and although the two attitudes she studied are not reciprocally correlated, out-group members were still devalued as compared to the high level of favoritism awarded to in-group members. Researchers have found that when subjects were primed with "loyalty" against "equality," it increased in-group favoritism (Hertel & Kerr, 2001).

Identity and resource allocation. Groups in natural state organizations often have overlapping boundaries with other groups, and task and goal interdependence with them (Ashforth & Mael, 1989). Bias for one's in-group and against one's out-group is especially strong when people are asked to share or allot finite resources among in-groups and out-groups. In a series of experiments in 1971, Henri Tajfel and his colleagues applied what they termed as the Minimal Group Paradigm to intergroup behavior. They found evidence supporting their claim that merely categorizing individuals into groups, even when such categorization was based

on differences irrelevant to the task, led members to allot more resources to their in-group. The participants favored their in-group even in the absence of any known individual gain or preconceived hostility about the out-group. The researchers also found that the possibility of maximum joint gains did not impact the allotment of rewards, whereas maximum profit for one's own group did. The most significant evidence from the experiments was that the subjects' attempt to maximize the difference between the in-group and out-group had the strongest impact on how they distributed resources, even if that entailed sacrificing a few other advantages (Tajfel et al., 1971).

Turner, Brown and Tajfel assigned participants to high and low-rewards conditions and they were asked to distribute money to an in-group, which was differentiated against a relevant and an irrelevant out-group. The researchers found that participants sacrificed personal gain to achieve maximum differences with the out-group in terms of monetary gains. They were especially discriminatory towards the relevant out-group than the irrelevant out-group, when the rewards were high (Turner, et al., 1979).

Organizational subgroups constantly compete for resources within organizations. When interdependent groups compete for the same resources, people's identification with their workgroup and the resultant in-group favoritism plays a stronger role. One's workgroup identification has been found to be closely tied to their perception of intergroup competition for scarce resources. This results in their discriminatory behavior toward out-groups (Hennessy & West, 1999, p. 365). Hennessy and West found that discriminatory in-group favoritism can be positively related to one's perceived competition for resources between groups, and this will lead to discriminatory behavior towards out-groups in the allocation of resources.

Early researchers of identification in organizations have found that the more distinct groups are from each other, the more they engage in intergroup conflict (Brown et al., 1986). In Brown and his colleagues' study, strong differentiation between groups was positively correlated with more identification, but the strength of identification was not a significant predictor of group differentiation. Bias toward one's in-group and prejudice toward one's out-group causes animosity between groups in organizations that often result in a zero-sum perspective regarding resources. When interdependent groups vie against each other for limited resources, such that when one group wins, another loses, intergroup competition is heightened, as a result of the strong impact of in-group and out-group identity. Friedkin and Simpson found that primary school principals who perceived a decline of resources recommended a resource allocation system that favored their own schools (Friedkin & Simpson, 1985).

Researchers also suggest that identification with one's in-group can lead people to have certain perspectives about out-group members, which include expectation of competitive behavior, and this influences their own behavior (Schopler & Insko, 1992). Such perspectives and expectations are especially heightened when the opposing group has a reputation as an individualistic or a self-focused culture. Social Identity theorists suggest that under these circumstances, people who are generally more inclined to cooperate at the collective level, can change their behavior and cooperate more with their subgroup instead (Tajfel, 1981).

Perhaps the studies on the effects of identity on behavior that are the most consequential for the purpose of this project are those conducted by Marilynn Brewer and Roderick Kramer in 1984. In a series of experiments, they wanted to examine the effects of in-group identity on resource-sharing behavior. The specific context of their studies is resource-sharing in the face of "the tragedy of the commons," or a form of social interdependence, where self-interested

behavior on the part of one group results in an unfavorable situation for everyone. The context refers to interdependence with regards to natural and social resources, with a proclaimed need for cooperation.

However, the evidence from the studies is equally applicable to a context involving interdependent groups in an organization, where they vie for the same resources, and are often engaged in a zero-sum negotiation, where one's gain comes at the expense of the other. One reason for the individual exercising self restraint in the interest of the common good, according to the researchers, is identification with an in-group, which leads to in-group favoritism (Kramer & Brewer, 1984). Brewer and her colleagues also found that when individuals show self-restraint, their expectation of reciprocity from in-group members leads them to cooperate in a resource crisis (Messick, Wilke, Brewer, Kramer, Zemke, & Lui, 1983). Brewer argues that this is because when individuals identify with a group, they become more invested in a collective outcome rather than an individual outcome. The interest in common welfare stems from the reduced social distance between the group members (Brewer, 1979).

A key issue that researchers probing the tragedy of the commons recognize is that people have multiple and possibly hierarchical identities and context determines which identity is salient at a time. Therefore, in order for in-group identification to address a dilemma involving a collective choice, the shared resource and related interdependence need to be the basis of the group identity. The authors argued that when one's in-group identity is salient, one would exhibit the most self restraint in order to preserve the resources for the collective good. On the other hand, when an out-group identity is made salient, one would engage in self-centered behavior, especially as the resource crisis gets worse. The authors found that when the in-group identity was made salient, individuals engaged in more cooperative behavior as the resource was

depleted, whereas those individuals whose out-group identity was salient, became more self-centered as resources were depleted (Kramer & Brewer, 1984). However, there was no perceived effect of one's perception of fellow group members on their behavior across the two identity salience conditions.

Kramer and Brewer's aim was to uncover the reasons for cooperative behavior regarding collective resources, and to probe the effect of group identity on such behavior. The purpose in this dissertation is to uncover if level of identification and out-group bias moderate the effects of a proposal that mentions benefits to an independent as opposed to an interdependent out-group on the way the change proposal is processed. Kramer and Brewer's study indicates that identity salience is closely related to resource interdependence and its significant effect on one's biased behavior. However, this project departs from the premise of their study in situating the inquiry in an organizational environment where individuals and groups are competing for the same resource, and gain for one equals loss for the other. The purpose here is to examine the role of identification and bias in such a situation.

The dependent variable in my project is not allocation or consumption of resources; rather it is the reaction respondents have to a message of change that outlines outcomes for their group and an out-group. This project would examine if the level of identification with one's in-group and bias for one's out-group will play a role in how an employee interprets a message that highlights unequal resource allocation to the in-group and out-group. In this respect, Kramer and Brewer's research provides important evidence on the relationship between identity, interdependence and resource use.

Summary. Researchers of the role of identity in inter-group relations within organizations have established that group distinction and one's identification with one's

subgroup can result in in-group favoritism and out-group bias. When a group competes with another for resources, and its outcome is interdependent with that of the other, these attitudes are heightened. The limited research on the role of group identity in competition for resources, however, has evaluated identities and identification leading people to harbor discriminatory attitude against competing groups, which is manifested in the way they performed tasks like resource allocation.

Although the social psychological foundation of discrimination is prejudice, it is important to note that in situations involving interdependent groups and limited resources within organizations, discrimination may not manifest in resource allocation by a group member to their out-group, since resources are often allocated by external agents like the organization's management (Hennessey & West, 1999; Polzer, 2004). In order to understand the role of discrimination under these circumstances, one thus needs to study participants' cognitive interpretation of the change initiative as favorable or detrimental based on the information contained in the message. This is primarily because in a competitive environment, the actual gain for one group may come at the expense of the other. The next section elaborates on resource interdependence and zero sum thinking as concepts that explain how one psychological interprets an outcome.

Resource Interdependence and Zero Sum Thinking

As noted earlier, competitiveness between groups is especially relevant in organizations, where groups share an organizational affiliation, but are often contesting for the same limited resources (Cox, Lobel, & McLeod, 1991), resulting in zero-sum situations. Researchers studying intergroup relations and competition have consistently found support for their assertion that people who identify strongly with their own high status group show increased prejudice and

discrimination towards the out-group (Pratto & Lemieux, 2001). Perceived competition, whether it results directly, or is induced, from zero-sum beliefs, leads to unfavorable attitudes toward the out-group (Esses, Dovidio, Jackson, & Armstrong, 2001). Groups compete over and harbor zero-sum beliefs over economic resources, such as jobs or monetary rewards, more than any other kind of resources. Competitive behavior between groups, especially between those with shared resources, leads to prejudice and conflict when one group acquires a resource (Esses, Jackson, Dovidio, & Hodson, 2005).

According to the model for intergroup conflict based on resource competition between groups, perceived resource stress and the existence of a competitive out-group leads to intergroup competition for resources. Resource stress results from an imagined scarcity of resources, stemming from the belief that in a given situation, resources are limited and there may not be enough to provide for everyone. The unequal distribution of resources, whether real or imagined, also leads to perceived resource stress. Groups that are low in status may feel that they will be deprived of their share of resources, and in fact, the dominant groups are skeptical as well about a shift in hierarchy leading to loss of resources (Wilkins, Wellman, Babbitt, Toosi, & Schad, 2015).

The salience and distinctiveness of out-groups determine how likely they are to be viewed as potential competitors. Competition with salient out-groups is a function of both similarity on certain dimensions with one's own group and dissimilar on other dimensions from one's in-group. Opponents are considered to be more similar to one's in-group on qualities that are relevant to the acquisition of the resources, such as skills and endeavor. They are considered to be more different than one's in-group on qualities that are not directly related to the resources, such as ethnicity and cultural habits (Esses, Jackson, & Armstrong, 1998).

Esses and her colleagues argue that biases against an out-group in the context of resource sharing stem from "zero sum beliefs: beliefs that the more the other group obtains, the less is available for one's own group. There is a perception that any gains that the other group might make must be at the expense of one's own group. The emotions accompanying these beliefs may include anxiety and fear." (Esses et al., 1998, p. 704). They also highlight the strategies groups adopt in diminishing the competitiveness of the other group. According to the researchers, one strategy that is commonly adopted to is to oppose social programs that benefit the other group (Esses et al., 1998).

Recent research has shown that high-status groups harbor zero-sum beliefs more than low-status groups, and these beliefs increase with perceived threat to the group (Wilkins et al., 2015). The concept of loss aversion, or the propensity of individuals to avoid losses, combined with zero sum thinking leads to the assumption that in order to avoid losing, one must prevent another entity from gaining something. As a result of zero-sum beliefs, groups increase their efforts to improve their own outcome, while also trying to diminish the other group's outcome (Wilkins et al., 2015).

Moreover, recent research has found that even when acquisition of resources does not lessen their supply (Kersten, 2001), people still act like the situation is zero sum (Meegan, 2010). Meegan found that when a desirable resource had been allocated, individuals preferred to hold off on allocating more desirable resources and allocated undesirable resources, even when they were aware that the resource pool was unlimited. He emphasized that people are influenced by a "zero-sum bias" when allocating desirable resources, even when they are aware that resources will not be depleted by such allocation. Meegan explains such behavior by noting that humans are innately competitive, and that individuals, especially in western cultures, are brought up with

the knowledge that they have to compete with peers in order to achieve something, especially in career-related situations (Meegan, 2010).

Summary. Zero sum thinking has been closely related to competition for resources, when one group's gain corresponds to another group's loss. This attitude is stronger when groups harbor biases against each other, and zero sum thinking results in a heightened effort to diminish the other group's competitiveness through a lack of support for proposals and programs that can benefit them. Zero sum thinking usually occurs from resource stress, or a real or imagined scarcity and limitation of resources. In organizational circumstances, this is often real, as organizations mostly operate with fixed and limited budgets. However, excess competition in the environment can also result in the attitude that any gain to any other group is a loss, even if it does not translate into a direct loss for one's own group. Thus, any proposal for change involving a gain to an out-group will be seen to have a significant relevance to one's outcomes, and viewed closely. In the following section, I examine scrutiny as a concept founded on research on elaboration of a person's thoughts based on how relevant the issue is to them.

Scrutiny

The proponents of the Elaboration Likelihood Model of Persuasion found that individuals are willing and able to process a message carefully if the topic is relevant to them (Petty & Cacioppo, 1979). They conceptualize *issue involvement* or personal relevance as the extent to which an issue is consequential in a person's life. Petty and Cacioppo in their 1986 analysis of ELM (Petty & Cacioppo, 1986) draw primarily from concepts like "intrinsic importance" and "personal meaning" in defining personal relevance. When an issue is intrinsically tied to one's values or beliefs, or one's self concept, one would feel motivated to think deeply about a message about that issue. Similarly, when a message presents information which may have

important consequences for oneself and/or a group one identifies with, it will result in careful scrutiny of the information. One's motivation for scrutiny can depend on several dimensions of the consequences, like "the number of personal consequences of an issue, the magnitude of consequences, and the duration of consequences." (Petty & Cacioppo, 1986, p. 145)

An important contribution of ELM is explaining the reason why personal relevance increases motivation to apply the central route of thinking. ELM researchers explained that increased issue involvement results in more detailed scrutiny of the message, since people are aware that their decision will have strong consequences in their lives, and are motivated to engage in the cognitive exercise necessary to make an accurate choice. Importantly, Petty and Cacioppo emphasize the need to distinguish personal relevance from prior knowledge and familiarity, which may enable certain people to process the message better. The premise of Cognitive Response Approach (Greenwald, 1968; Perloff & Brock, 1980) is that in processing messages, people often reach beyond the actual content of the message to their existing repertoire of information. This preexisting information informs their response, which impacts their attitude. This may be seen to enhance *ability* rather than *motivation*, and the ELM researchers therefore highlight the need to focus on messages which may have personal implications for the recipient, rather than merely something that they are familiar with.

However, in most complex decisions, ability and motivation play interrelated, rather than distinct, roles. Those who have preexisting information about a subject will be better able to process the new information in light of this knowledge. However, if the issue does not have personal implications for the individual's personal life, or the individual does not feel personally responsible for the decision, s/he will not be motivated to engage in accessing prior information, even if such information exists. Petty and Cacioppo emphasize the need not to confound personal

relevance with other variables like familiarity; however, they note that processing of messages through the central route requires both motivation derived from personal relevance, as well as a repertoire of prior information and the ability and willingness to access it.

High issue involvement therefore is the relevance of an issue when it has personal consequences for the message recipient, and although familiarity with the issue is not a prerequisite of issue involvement, the recipient needs to believe that s/he is responsible for the outcome of the decision. The underlying contention in persuasion research is that identity can affect attitude in multiple ways depending on the situation. The theorists identify the following ways by which identity can affect attitude – it can act as a cue, it can determine the extent to which one would process the information, it could change the type or valence of the thoughts a message generates, or it can be a supplementary piece of information to that presented in the message (Fleming & Petty, 2000). When a message makes a certain identity salient for a person, s/he may be motivated to selectively find flaws in the argument if the message is framed in a way that does not appeal to his/her self-concept, and regard it more favorably if the message is framed to appeal to one's self-concept (Petty & Cacioppo, 1979).

ELM also notes the use of the peripheral route of processing information, that is, when other factors cause an individual to reach a conclusion without scrutinizing the message. One uses the peripheral route of processing when there is no personal consequence of the decision. The identity of the source of the message can be a peripheral cue. Acceptance or rejection of the proposal could result from not reading or interpreting the message closely when it comes from a source one does not identify with. The content of the message and whether it has personal or group-specific consequences for someone determines how much one would cognitively process

the message. When personal consequences are high, people use the central route of processing, that is, scrutinize the message carefully.

Summary. Elaboration Likelihood Model makes a key contribution in laying out a framework for the role of issue involvement in how thoroughly a message is evaluated. The theory highlights motivation and ability as key components of issue involvement, emphasizing that the existence of prior knowledge about the issue makes one able to judge it better, but personal consequence from the decision determines how deeply one is willing to scrutinize it by accessing this repertoire of information. Additionally, they also theorize that the identity of the recipient can motivate more scrutiny if the message makes a certain identity salient for the individual. Moreover, identity can influence the recipient to evaluate it favorably if the message caters to an important identity, and to view the message in a critical light and emphasize its flaws if it is detrimental to it. They also note that content of the message and its consequences for the decision-maker determine the level of scrutiny, which then leads to an acceptance or rejection of the proposal. When the message does not contain information that makes the outcome of the decision consequential to oneself or one's in-group, one would use the peripheral route and depend of peripheral cues, like prior attitude toward the source of the message, to come to a decision without scrutinizing the message. When the message contains information that makes the decision consequential, one uses the central route and scrutinizes the message before coming to a decision. Based on these principles, it can be argued that one's identification with the in-group will play a role in the effect of the content of a message on the level of scrutiny and decision regarding the message. A person who identifies strongly with their in-group would scrutinize a message which is beneficial to the in-group, frame it as a gain and view it favorably. However, when a message is detrimental to the interests of one's in-group, one would scrutinize

it, but would frame it as a loss, and be critical of it. The next section details the research findings on framing.

Psychological Framing: Gain and Loss Frames

The concepts of frames and framing, with their long-standing history and wide range of applications in diverse disciplines (Benford & Snow, 2000; Camerer, Johnson, Ryson, & Sen, 2003; Creed, Langstraat, & Scully, 2002; Ebner, Freund., & Baltes, 2006) have been a particular area of interest for researchers of inter-group interactions and negotiation (de Dreu & McCrusker, 1997; Fernandez & Rodrik, 1991; Moshinsky & Bar-Hillel, 2010; Small, Gelfand, Babcock, & Gettman, 2007). Scholars in this tradition conceptualize frames in two different states – as a *cognitive construct* and as an *interactional co-construction*. In the former, frames are considered to be an amalgamation of one's beliefs, experiences and references, which provides a knowledge structure against which all future information is processed and decision made. In another conceptualization, frames are co-constructed by interacting partners, and it is a negotiation that provides the underlying meaning and nature of the communication (Dewulf et al., 2009).

Framing an outcome of a choice or decision as a loss or a gain, as studied in this project, is predominantly based on conceptualization of framing as a cognitive interpretation. This explanation of frames has its roots in Minsky's cognitive frame theory (1975) and Bartlett's schema theory of memory (1932). Minsky (as cited in Dewulf et al., 2009, p. 158) writes, "When one encounters a new situation (or makes a substantial change in one's view of the present problem), one selects from memory a structure called a 'frame.' This structure is a remembered framework to be adapted to fit reality by changing details as necessary." (Minsky, 1975, p. 211) Thus, in this tradition, frames are cognitive structures which help an individual in organizing and

interpreting new information into an available framework or schema of reality (Dewulf et al., 2009). People may have several frames, but they are relatively static mental structures comprising a repertoire of beliefs, knowledge and opinions. With these they can frame issues, identities and relationships, and interaction processes (Dewulf et al., 2009).

Prospect Theory (Kahneman & Tversky, 1979; Tversky & Kahneman, 1985) elaborates on the framing of issues, positing that when making a decision that has a financial or other implication in one's life, an individual often conceptualizes the outcome in a gain or loss frame. The researchers define frames as "a decision maker's conceptions of the acts, outcomes, and contingencies associated with a particular choice" (Tversky & Kahneman, 1985, p. 453). In making a decision, an individual evaluates the outcome by comparing it with a reference outcome, which is neutral, derived from the recipient's existing norms, beliefs and characteristics, and something that they have adapted to. Framing can be derived from the way a message is presented, by accessing the reference outcome. The theorists argue that the way the message is framed (as a loss or as a gain) determines the recipient's subsequent decision and behavioral intention. If the outcome is viewed to be less favorable than the reference outcome, people are said to adopt a loss frame, and if they are presumed to be more favorable, then people are said to adopt a gain frame. A loss frame involves the perception of losing something, while the gain frame involves the perception of winning something (Kahneman & Tversky, 1979).

Prospect Theory asserts that loss aversion is a stronger frame of mind than eagerness about an equivalent gain, and people feel more threatened about losses than encouraged about gains. The theorists argue that the difference between two options will be held as more significant when the two options involve losses than when they involve gains (Kahneman & Tversky, 1979; Tversky & Kahneman, 1991). Empirical research of loss aversion in negotiation

has found that the concessions allowed by an opponent negotiator is viewed as more significant when the concession is viewed as the opponent incurring losses rather than as a decrease in the opponent's gain. Moreover, when one is in a gain frame, and the opposing negotiator has communicated their own gain frame as well, the opposing negotiator is considered more cooperative and one is willing to concede more and demand less (de Dreu, Carnevale, Emans, & Van de Vliert, 1994). In a study on managers' adoption of framing in relation to multiple referent points the researchers emphasize that the reference point of prior experience is inherent in the contextual factors for frame adoption. They found that managers are more prone to take risks after a prior gain than after a prior loss (Sullivan & Kida, 1995).

The shifting from the status quo or referent point that one draws on while making the decision (Moshinsky & Bar-Hillel, 2010), is a deviation from the incumbent position, and thus a change. Although this can be a theoretical conceptualization of organizational change, research on framing in organizational change has been relatively limited. Risk aversion for options framed as a gain and propensity to take risks for options framed as losses has been supported in the context of organizational change (Drury & Roloff, 2009). Despite not being at a significant level, those with a more powerful and authoritative role were seen to be more risk averse than those without much power and authority in their role. Similarly, when the option was framed as a loss, those in a lesser powerful role justified their decision to support the option by writing messages highlighting their preference for taking a risk (Drury & Roloff, 2009). It was thus established that framing not only affects the decision one makes about a proposal, but also determines how one is inclined to communicate about their decision.

Drury and Roloff's work explores the differences between the manager and the change recipient with regards to their roles and frames in a context of organizational change and a

reallocation of resources. However, as we have seen within the tradition of research on identity in organizations, often organizational change efforts engender a competition for resources among multiple groups of change agents who are of similar stature in organizations (Schneider et al., 1996) and may be sharing resources with each other. However, the role of framing in a competitive environment has mostly been studied in negotiations research, concluding that those who are competitive, cooperate as little in a loss as in a gain frame (de Dreu & McCusker, 1997).

The complex relationship between framing and behavior in an organizational setting is further explained by Interdependent Theory (Thibaut & Kelley, 1978), which posits that an individual's social motive determines how one would prefer the distribution of outcomes between oneself and another interdependent party. Social motive makes an individual perceive the total given outcome as a sum of the outcome for him/herself and the outcome for an interdependent partner. Therefore, those who are competitive and also view a situation as zero-sum, will cooperate less when they adopt a loss frame, since they view their own loss as exactly their opponent's gain. De Dreu and McCusker synthesize the arguments of Prospect Theory and Interdependent Theory to argue that when an outcome is framed as a loss, competitive individuals tend to reject the issue, whereas those who are cooperative tend to support it (de Dreu & McCusker, 1997).

The methodologies adopted by framing researchers and negotiation researchers, however, have not laid out a clear path between how message framing, or the way information is presented in the message, is psychologically framed by the recipient. Most of negotiation research relies on an experimental design, conceptualizing framing as an interactional co-construction. The studies based on framing in organizational messages as derived from Prospect Theory provide subjects with vignettes that are not in the form of messages that the subject is required to interpret. These

vignettes highlight scenarios which presumably influence the psychological frame of the subjects, which leads them to adopt a certain behavior. However, even communication researchers have not probed the path between content of a message and its psychological framing, when the message is not explicitly stating a frame. Neither previous researchers of message features nor those studying framing have established the link between message features and psychological framing. This study is draws this link by arguing that the manner in which outcomes of an organizational change initiative are communicated in a message influences the way they are psychologically framed by people.

Summary. The traditional approach to framing refers to it as the interpretation of new information in light of one's existing knowledge structure. Prospect Theory conceptualizes framing as a cognitive exercise comprising the decision-makers' perceived cumulative of actions, outcomes and contingencies from the decision. Prospect Theory also posits that people are more loss-averse than gain-focused. In other words, they are more interested in avoiding losses than acquiring gains. The limited research on framing in organizational change and its effect on risk-taking behavior notwithstanding, some negotiation research has found that those who are competitive and perceive a situation as zero sum, tend to cooperate even less when they adopt a loss frame for the outcome. However, this effect of competition and resource interdependence on framing of and behavior towards the proposal does not require that concerned stakeholders be on opposite ends of the negotiation process, but may occur even when the groups are on the same receiving side of an organizational change proposal. Moreover, neither research tradition has examined the effects of the content of a message on psychological framing of an outcome. Therefore a gap remains in the understanding of the way message content can influence psychological framing in a situation involving resource interdependence

and competition. The next section outlines research on competitiveness as a key factor in this analysis.

Competitiveness

A meta-analysis of organizational literature on climate and culture has found that the empirically derived concept of climate across the literature defines it as the way people perceive their work environment (Verbeke, Volgering, & Hessels, 1998). Researchers have found that organizational climate is a significant factor in determining perceptions of attitudes and subsequent behaviors of professionals (Ostroff, Kinicki, & Tamkins, 2003; Reichers & Schneider, 1990). Organizational climate has subsequently been defined as "the way individuals perceive the personal impact of their work environment on themselves." (Glisson & James, 2002, p. 788) Climate is thus the property of the individual, and reflects the perceptions and inferences one makes about the organization. These are based on the "policies, practices, procedures, and routines that they are subject to, as well as on the kinds of behaviors that are expected and that get rewarded and supported." (Schneider et al., 1996, p. 2)

In prescribing ways an organization can change and adapt itself to a required change process, Schneider and his colleagues identify four dimensions of climate that need to be transformed at par with the change being proposed. They are: (1) the nature of interpersonal relationships, or the way employees view their relationships within the organization, and if they feel they need to compete with each other, or they can trust and share with each other; (2) the nature of the hierarchy, or whether workplace decisions are made by management alone or employees are encouraged to participate, and whether teamwork is preferred, or employees are encouraged to be competitive; (3) the nature of work, or whether the work is adaptable by the worker or rigidly defined and whether all necessary tools and resources are provided; and (4) the

focus of support and rewards, or what facets of performance and attitudes are rewarded. Schneider and his colleagues suggest that in order to be receptive to change, all of these dimensions of organizational climate need to be conducive to change (Schneider et al., 1996).

Thus, if the organizational climate is competitive, it can affect the way employees frame the change and interpret the repercussions of the change initiative. Moreover, sometimes, change itself is a context that can foster competition within the organization. Competitive climate has been defined "as the individual-level perceptions of a work environment resulting from structured competition for rewards, recognition, or status or competition inspired by coworkers within a work unit." (Fletcher & Nusbaum, 2010, p. 107) Thus, competition for rewards and recognition, whether financial or in terms of other resources, implies that one must outperform others in order to receive it (Fletcher & Nusbaum, 2010). A competitive work environment thus results in a self-focused attitude among employees (Stajkovic & Luthans, 1997; Ostroff, 1993).

Researchers have also assessed the joint effects of trait competitiveness and perceived competition within the organization on the goal-setting of employees. Employees who are competitive in nature were found to set higher goals when they perceive the organizational climate to be competitive, while those who are not so competitive set lower goals, irrespective of their perceived level of competitiveness in the organization (Brown, Cron, & Slocum Jr., 1998).

Summary. An environment is termed competitive when status, recognition and reward structures are based on comparison between individuals and groups. In such an environment, one focuses on outperforming others, and therefore would not want a change program that places them at a disadvantage against the other group. As has been discussed, competitive work climate and trait competitiveness can influence an individual to adopt a zero-sum bias, even in a situation which is not explicitly zero sum. Competitive behavior between groups, especially between those

with shared resources, can lead to prejudice and conflict when one group acquires a resource. A competitive work climate can thus play a role in how an individual frames a message announcing a change that will affect their own group as well as other work groups. The next section discusses research on message features and reception.

Message Features and Message Reception

This section outlines the expansive research findings on messages of organizational change. As noted earlier, communication in organizational change is mostly conceptualized as information, which is a prized possession for those who can access it, and an object of contention for those who cannot. This section is thematically divided into three sub-sections – the first discusses the effects that messages of change have been associated with, and the features of messages like clarity and balance that outline benefits and downsides; the second focuses on research on message framing as it has been studied in the context of organizational change, and its effects on message favorability, and source honesty and credibility; the third sub-section elaborates on one's intentions regarding the change program based on one's opinion about the message proposing it.

Features of organizational change messages. There is a long tradition of research that suggests that how employees make sense of and evaluate change depends as much on one's environment and interactions as on one's own experience with it (Leonardi, 2009). Communication researchers have also studied the features and design of change messages (Barbour et al., 2013), and their quality comprising adequacy, usefulness and accuracy (Lewis, 2006). Academic perspectives on change management have focused on the need for realistic and honest information, which should include the scale and breadth of the change program, including any negative aspects (Gilley et al., 2009; Saunders, 1999). They have concluded that

communication during organizational change needs to be open, taking into consideration employees' concerns (Zhu, et al., 2004), explaining ways that employees will be affected by the change (Rousseau & Tijoriwala, 1999) and outlining individual and organizational outcomes (Laster, 2008; Drum, 2010). The two features of messages that are especially relevant to the context of organizational change are message explicitness and message-sidedness.

Message explicitness. The key idea of message explicitness is that messages may sometimes explicitly mention the argument, conclusion and recommendation rather than leaving these points implicit or to be inferred. Message explicitness has traditionally been studied within persuasion research as a predictor variable for persuasiveness. It is held as a normative requirement for persuasive messages; in fact, researchers argue that the person who is persuading has an obligation to the audience to reveal every detail that is relevant to the argument (O'Keefe & Jackson, 1995). The reasoning for this expectation is that a detailed message is appropriate for critical scrutiny and discussion, which is the procedure for persuasion. In this respect, explicitness is considered a feature of the message, which, in addition to the mention of an issue that has personal consequence to the recipient (Petty & Cacioppo, 1986), is a prerequisite for careful processing of the information.

O'Keefe's meta-analysis of research on the effect of explicit and non-explicit messages reasons that advocates are averse to being explicit in the message for fear of revealing too much that will be subjected to closer scrutiny, counterarguments, and therefore lessen the effect on persuasiveness (O'Keefe, 1997). Earlier researchers had also cautioned that excessive explicitness in a message can result in a 'boomerang effect,' or an opposite effect from that which was intended, as too much detail in a message can make it appear to be more aggressive

and too prescriptive, which may thwart the recipient's autonomy and cause them to be averse to the argument (Brehm & Brehm, 1981).

O'Keefe states that there are two main ways a message can be inexplicit. First, it can provide all the details, but omit the statement about the derived conclusion. Second, it can provide the conclusion, but mention it in very generic terms (O'Keefe, 1997). Thus, in studies testing the effectiveness of conclusion omission, messages with an explicit conclusion statement and those without one have been contrasted for their effect on persuasiveness (Struckman-Johnson & Struckman-Johnson, 1996). Studies focused on conclusion specificity contrast generic conclusions with specific conclusions for their effect on persuasiveness (Evans, Rozelle, Lasater, Dembroski, & Allen, 1970). Interestingly, although there has been substantial research in the persuasion effects tradition on the impact of conclusion omission on persuasiveness (O'Keefe, 2002; Perloff, 1993; Petty & Cacioppo, 1981), there is scant research on conclusion specificity as a factor of inexplicitness (O'Keefe, 1997). This is particularly intriguing in the context of organizational change communication – as has been noted earlier, employees are eager for specific communication that is focused on the repercussion of the change at the micro-level (Van den Heuvel et al., 2016).

O'Keefe's meta-analysis analyzed the effect sizes from thirty-two articles comparing the effect of explicit and inexplicit messages on persuasiveness, which was measured in dimensions like opinion change, agreement and behavioral intention. He finds an overall significant effect favoring explicit messages. He also finds that messages with a stated conclusion were favored against those that did not have a conclusion statement. The effect size for conclusion specificity was also significant, indicating that audiences of the studies he analyzed overall favored

messages with specific conclusions. Overall there was significant support for the argument that messages that are explicit are more persuasive than those that are not (O'Keefe, 1997).

Based on these findings, it can be contended that messages which are explicit about the argument that they are espousing are viewed to be more persuasive. However, there is little discussion in literature regarding the persuasiveness of messages that are explicit regarding an argument that is detrimental to the interests of the recipient. It is unknown to us if such messages also lead to a favorable opinion and agreement, or are viewed critically and rejected. Given these possibilities, it is also necessary to examine specific message features, aside from the level of explicitness, when the content is unfavorable. The next section addresses this aspect of a message.

Message-sidedness. Messages, as we have seen, are not always singular or unanimous. They can have multiple features, directions and objectives. In recent years researchers have examined specific content of messages in comparing equivocal and unequivocal messages in initial communications regarding corporate challenges (Kline, Simunich, & Weber, 2008, 2009). Kline and her colleagues examine the circumstances under which communicators find it best to use ambiguous messages and whether they think equivocal messages and unequivocal messages have different effects on an organization's reputation. They find that professionals' own judgment about the suitability of each type of messages in addressing the goals of the situation determined the use of equivocal and unequivocal messages. Ambiguous messages are preferred when the situation had unfavorable response options, and yet a message needs to be provided. Under such circumstances, people resort to equivocal or strategically ambiguous responses. When the response options are more favorable to the goals one has in a situation, one is more open to using straightforward messages (Kline et al., 2008, 2009).

These findings are echoed in research that reveals that there is reluctance to deliver bad news and eagerness to deliver good news (Dibble & Levine, 2010), and that people use more euphemisms to deliver bad news when they believe their face, as well as the recipient's face will not be threatened (McGlone & Batchelor, 2003). While ambiguous messages can soften the edges of harsh communication, organizational change researchers have long been curious about the impact of successful messages that provide all necessary information while also minimizing negative effects (Smeltzer & Zener, 1992, 1994, 1995).

In recent times, researchers have examined the effects of one-sided messages highlighting only the benefits of a change initiative, and two-sided messages highlighting benefits as well as downsides of the initiative, on favorability of change and perceived trustworthiness and honesty of implementers (Lewis, Laster, & Kulkarni, 2013). Owing their conceptualization to message-sidedness literature in health communication and persuasion research, Lewis and her colleagues differentiate between two types of two-sided messages – *refutational* and *non-refutational*. In refutational messages, the counterarguments to the proposal are raised and directly undermined and argued against. In non-refutational messages, counterarguments against the proposal are made and overwhelmed by supportive ones in favor of the proposal (O' Keefe, 2002). In the context of organizational change, a two-sided message containing the change proposal may note the downsides of the change initiative. A *two-sided refutational* message may additionally contain arguments directly opposing or refuting the downsides. A *two-sided non-refutational* message, on the other hand, may additionally contain stronger arguments in favor of the change as a way to mitigate the downsides.

A common non-refutational argument in favor of organizational change proposals that aims to overwhelm its downsides comprises the emphasis on the *common good* or *generic*

benefits for the organization as a whole, and its employees. As noted earlier, most organizational change proposals focuses on change projects that are undertaken on a macro level, and affect entire organizations or departments (Drum, 2010; Goodman & Truss, 2004). Most of the existing research or organizational change has also focused on generic change contexts and their widespread perceived effect (Lewis et al., 2013). Even when the individual employees' cognitive responses to change (Avey et al., 2008; Qian & Daniels, 2008) or to the form (Self et al., 2007), quality (Lewis, 2006) or effectiveness (Coghlan, 1993; Drum, 2010) of change communication is studied, the focus of change is mostly on the overall development and benefit of the organization.

Researchers have found that individuals are willing to invest in the common good, although one obstacle in their thinking is the fear that others will not do so as well. A common good is often a collective action like donating to government or charity. People also wonder if the collective action will result in gains (McCarter, Rockmann, & Northcraft, 2010). McCarter and his colleagues use Prospect Theory (Kahneman & Tversky, 1979; Tversky & Kahneman, 1991) to argue that reluctance to invest could result from potential gains and losses from investing in the common good since any costs could reduce investment (McCarter et al., 2010). In the context of organizational change, the proposed change is for the organization as a whole rather than a typical charitable common good. However, change proposals often depict the change initiative as an investment in the organization as a whole and require the individual employees and workgroups to make an investment.

Another type of a two-sided non-refutational message can focus on promising a *solution to compensate* for the loss. As has been seen, people are keen on avoiding loss. Any change message that mentions a loss is expected to activate a psychological loss frame and create

resistance. When mentioning generic benefits to the organization (like increased revenue, competitive edge in the market, etc.), there is an attempt to offset the immediate and specific loss incurred by individual employees or workgroups by shifting the focus to "the bigger picture." This approach, however, may not be entirely effective in mitigating resistance since it still mentions the loss. Adding information regarding compensatory action to a generic gain message may help reduce loss framing.

There is a notable dearth of literature on compensatory action specifically intended to mitigate for losses incurred in the context of organizational change. Some researchers have noted that sometimes change agents are too optimistic and without intending to mislead or misinform, they end up over-promising the benefits of the change initiative (Lovallo & Kahnemann, 2003). As the change initiative unfolds, the actual results may often differ from the promises and predictions. This can cause a perception of being misled and a subsequent breach of trust (Tomlinson, Dineen, & Lewicki, 2004). These researchers find that those change agents who are able to repair relationships and restore trust before and during the initiation and implementation of change are more likely to receive cooperation than those change agents who are not (Tomlinson et al., 2004). This can be achieved by mitigating against damage during the change by promising compensatory action (Ford, et al., 2008).

In Lewis and her colleagues' research on the favorability of one-sided against two-sided messages, recipients of the message who received the one-sided messages were seen to be significantly more in favor of the change than those who received the two-sided messages, although the effects on trustworthiness and honesty were not significant. Lewis and her colleagues also studied the specific context of risky change, that is, change programs that message recipients view as consequential for their job security, schedule and/or relationship with

others in the organization. They found that when the change was risky, there was no significant difference between *one-sided messages* or *two-sided non-refutational messages* that raise opposing arguments and provide supportive arguments against it. However, in low-risk situations, both one-sided and two-sided messages are seen to have positive effects on perceived favorability, honesty and trustworthiness. In high-risk situations, both one-sided and two-sided messages do worse than in low-risk situations. Moreover, two-sided messages did not increase the credibility of the source, which the authors conclude could be attributed to the cynicism of their subjects, real-life employees who may believe the source is withholding some information even when the message mentions downsides, and that the change is actually worse than it is being portrayed (Lewis et al., 2013).

The findings of Lewis and her colleagues' study confirm that providing negative information about the change along with the benefits will make the speaker appear more honest and trustworthy. However, employees are concerned about the specific risks associated with the change initiative, and this determines how favorably they view one-sided or two-sided messages. When the situation is high-risk, that is, it has serious consequences for employees, neither type of message is perceived favorably, while in a low-risk situation, both types are perceived favorably.

Message framing. Much of the research on change messages, even while examining the content of messages, refer to organization-wide changes. However, as noted earlier, employees are focused on the specific gains and losses they will incur because of the change (Coghlan, 1993; Vakola, 2014; Van den Heuvel et al., 2016). They want to know how the change will affect their everyday work schedules, environment and outcomes. Especially during organizational change, which is a time of reallocation of resources and realignment of job requirements and boundaries (Eby et al., 2000), these concerns are salient and need to be noted.

Moreover, members of the stakeholder groups will evaluate the message according to their group membership. For instance, it is important to study how members of one group view change messages that explicitly offer preferential treatment to an out-group. We have seen that people scrutinize as well as psychologically frame the content of a message based on their perception of the outcomes for themselves. However, while the extensive research on the effects of change messages on individual and organizational outcomes assumes that messages are perceived by employees in specific ways, there is scant research that examines the effect of framing a proposal for change on its acceptability.

There has been substantial research on gain and loss-framed messages in health communication and persuasion. Gain framed messages cast an option in a positive light, highlighting its advantages, and result in more engagement with the message (O'Keefe & Jensen, 2008) and more cooperation (De Dreu & McCusker, 1997). They are also viewed as more satisfactory (De Dreu, et al., 1994) and more persuasive in promoting a positive behavior (O'Keefe & Jensen, 2006). There is some research evidence that fear-inducing messages generate more issue-relevant thoughts and capacity to distinguish between a strong and weak message (Slater, Rouner, Karan, & Walters, 2002). However, in their meta-analysis, O'Keefe and Jensen found that gain-framed messages either induced more processing of the message, or there was no significant difference between the two types of messages in evoking thoughts about the subject (O'Keefe & Jensen, 2008). In the rejection of preventive behavior, gain-framed messages are more persuasive than loss-framed messages. For the promotion of disease detection behavior, gain and loss-framed messages do not differ in persuasiveness. Moreover, the persuasiveness of the different types of messages is also not significantly influenced by gain-framed messages focusing on the attainment of desirable states or the avoidance of undesirable

states, or loss-framed messages focusing on the attainment of undesirable states or the avoidance of desirable states (O'Keefe & Jensen, 2006).

The framing of messages has also been referenced by organizational communication researchers, but the theoretical backdrop of the assumptions is persuasion and message effects research. Researchers suggest ways for implementers to cast the message in a gain frame (if the employees adopt the change, then the organization will claim a bigger market share) as opposed to a loss frame (if the employees reject the change, then the organization will lose market share) (Lewis, 2011; Lewis et al., 2013).

However, these suggestions, in their dependence on persuasion research, focus on organizational benefits as opposed to individual gains, and the 'gains' from adoption and 'loss' from rejection. In other words, they use the concept of the 'frame' to predict the outcome – positive or negative – of making a decision about the change. When they analyze the effects of messages which mention benefits and downsides of the change proposal, they borrow the concept of gain-framed and loss-framed messages that compare the positives of adopting a recommendation/behavior with the negatives of rejecting the recommendation/behavior.

However, in organizational contexts, employees are seldom provided a message and then given the explicit choice to reject a behavior, in this context, the adoption of the change initiative. A message stating the 'downside' of a change proposal is thus more likely to highlight the disadvantages of adopting the change. Thus there is need for a theoretical framework that can explain the mechanism of framing a change proposal and comparing it as a gain from adoption with a loss from adoption. Moreover, self and/or group-focused employees are more likely to deliberate about the contents of the message and cast the message in a gain or a loss frame for themselves or their group before thinking about the larger outcome to the organization (benefit of

acceptance and downside of rejection). For instance, employees may be concerned about the loss of resources or a change in work schedule that will ensue specifically for them, as a result of the change, and frame it accordingly, resulting in their opinion of the change. Therefore, we can argue that the features and direction of the message leads to the process of psychological framing, which further leads to their opinion about the message.

Although Lewis and her colleagues examined the impact of the general benefits and downsides of a large-scale change initiative, the change context they used to measure their participants' reactions was generic and not specific to the participant (Lewis et al., 2013). While they found that participants did not favor one-sided or two-sided messages when the change was highly risky for them, we do not know how employees would view a message that addresses exactly how the change initiative will impact their resources as opposed to others. There is thus the need for a theoretical framework that conceptualizes framing as casting an outcome in terms of its gains against casting the same outcome in terms of corresponding losses (Kahneman & Tversky, 1979). Assigning a gain frame to a proposal implies benefiting through it, and assigning a loss frame implies losing something or paying a cost, which, in the organizational change context, may be viewed as implementation costs. Employees may be interested in knowing about these specific gains and losses, and messages are likely to be psychologically framed based on this information. Such interpretation can have effects like perceived adequacy, honesty and lead to specific behavioral intention like acceptance or rejection of the messages.

Opinion and Intention about Change from Perception of Message

As addressed in this chapter, the quality of information received regarding change has strong effects on employees' reactions to change. Quality of information is usually assessed along two dimensions. Information adequacy or the extent to which recipients of change

communication feel that the information they received regarding the change was enough and useful for the purposes of their perception of the change (Miller, Johnson, & Grau, 1994). The next dimension is information expectancy, or the extent to which recipients felt that they received information they expected or deserved to know (Lines, 2004).

Reactions to messages of change have mostly been measured as recipients' perceptions of the message effectiveness (Lewis, 2006), and implementation success (Piderit, 2000). The differential effects of one-sided messages highlighting the benefits of a change initiative against two-sided messages discussing benefits as well as challenges of the proposal on perceived favorability of the message and perceived trustworthiness and credibility of the source has been probed. Employees' behavioral intentions regarding the proposal has primarily been conceived as intention to resist (Oreg, 2003; Qian & Daniels, 2008). Although intention to resist has been positively or negatively associated with several extant factors in organizational change, a deliberation on the cognitive process involved in such intention has not been attempted. Specifically, the cognitive path from psychological framing of the outcome of the message to its impact on opinion formation need to be charted out in order to achieve a better understanding of how messages of change are processed and interpreted.

Summary of Literature Review

A few key findings stand out from the literature review on organizational change communication, and the various factors at play in how employees of change may interpret the messages announcing change. Most organizational change initiatives highlight generic benefits for everyone in the organization as it functions more productively and competitively as a result of the change. However, as we have seen, recipients of change focus on how the change initiative will affect them at an individual and group level, and personal and group identities are

not distinguishable with regards to their effects on cognitive and communicative outcomes. Therefore, messages that speak about outcomes to a specific group will be evaluated carefully by an individual employee. This is especially true of situations where the group is interdependent with the individual, like a group one's own group shares resources with. Literature on psychological framing of the content of messages informs us that people are more focused on losses than on gains, that is, they are keener on avoiding losses than acquiring gains. They are therefore more likely to pay attention to a message that is discriminatory against their in-group, frame it as a loss and view it unfavorably.

Moreover, research on group identity in organizations posits that organizational processes like competition for resources, which are common during organizational change, make identification with the in-group and resultant bias toward the out-group salient in people. Factors relevant to organizational reality, like a competitive organizational climate and resource interdependence between groups, leads to zero sum thinking among individuals, that is, the belief that another group's gain is equivalent to the loss of one's in-group. Moreover, a competitive organizational environment can also make a person non-receptive to any change proposal that benefits an out-group, whether or not such benefit directly impacts one's own group.

Research on persuasive messages has noted that explicit messages containing several details about an argument are favored more by recipients than messages that do not reveal a clear or specific conclusion. Therefore, it can be assumed that messages of change that openly mention downsides of the initiative along with the benefits will be viewed favorably by the recipients. Two-sided messages can be refutational or non-refutational. The former refutes the downsides of the proposal directly, and the latter assimilates supportive arguments for the proposal which overwhelm the downsides. In the context of organizational change research, two-sided non-

refutational messages note the downside of the change initiative, but focus on how these are minor compared to its generic benefits. Moreover, these messages can also outline a promise for compensatory action to offset the downsides of the change initiative. Messages announcing change can thus be psychologically framed as gains and losses by the message recipient.

The next chapter examines the variables to be studied for the purpose of uncovering cognitive and communicative processes that occur during the processing of a message announcing an organizational change initiative. This will be followed by an examination of their relationships, leading to the formulation of hypotheses and research questions that guide this research study.

CHAPTER 3: RATIONALE AND HYPOTHESES DEVELOPMENT

This chapter will consist of a detailed description of the key variables that would be studied based on the literature that has been examined. This will be followed by an explanation of their relationships to form hypotheses that are proposed for understanding how people frame messages of change and form opinions about them.

Independent Variables

Message content specifying beneficiary group. Organizational change initiatives are often large-scale, and involve several processes and steps. Communication about the change can also be aimed at various levels of the organization. While most change initiatives are implemented at the organizational level, they can have specific outcomes for specific work teams. Thus, while a change message may mention generic benefits to the entire work unit (department, division, etc.), it can also outline benefits to a specific group. An independent variable in this study is message specificity regarding the benefiting group. Thus the *specificity contrast* implies the comparison between (1) groups that receive a message of change mentioning specific gains to a specific target beneficiary group and (2) groups that receive a message of change mentioning generic benefits to all.

Message content specifying gain to interdependent out-group. In organizations, budgets and other resources are often shared by groups. Especially proximal groups, or groups that work closely and share tasks and goals, are likely to share resources like budget as well. During organizational change, which is often a time of resource reallocation, this interdependence may result in a zero sum situation, where benefits for one group may imply less or no benefits for the interdependent group. Thus *interdependence contrast* reflects the comparison between (1) groups that receive a message of change explicitly mentioning gains to a

team that one's own team shares budgetary resources with, and (2) groups that receive a message that mentions gains to a team that one's own team is independent of in terms of budgetary resources.

Message with explicit mention of loss to in-group. As we have seen, employees are focused on how the change is going to impact their work specifics, while most organizational change messages outline generic benefits for a large swath of individuals and teams. Employees care to especially know if they or their immediate work-group that they identify with will be incurring any losses as a result of the change, which, in the organizational context may be in terms of rewards, manpower, training and other resources, among others. The *loss contrast* implies a comparison between (1) groups that receive a message where a specific loss to their in-group is explicitly mentioned and (2) groups that receive a message where a loss to their in-group is not explicitly mentioned.

Message with generic benefits/compensatory action. The literature on message-sidedness and persuasion reveal that persuasive messages sometimes offer supportive counter-arguments to the dominant focus of the message, in order to appear more honest and balanced. As noted earlier, these messages are labeled two-sided messages, and are of two types. Two-sided refutational messages acknowledge the downsides of the proposal, but offer direct refutations to undermine them, therefore uplifting the proposal. Two-sided non-refutational messages also acknowledge the downsides of the proposal, but instead of direct refutations, they contain strong supportive arguments for the proposal which overwhelm the downsides.

Two-sided non-refutational messages advocating for an organizational change can be of two broad types – those that mention specific losses one would incur as a result of the change, but note generic benefits to everyone concerned as a strong persuasion to adopt the proposal, and

those that mention specific losses, but in addition to generic benefits, also provide details of specific compensatory plans to offset the losses. The *generic benefit/compensatory action* contrast therefore implies a comparison between (1) groups that receive a message outlining losses to their in-group and (2) groups that receive a message outlining losses to their in-group with promises of generic benefits to everyone in the organization as a result of the change or promises of specific compensatory action to mitigate the losses to their in-group.

Message with generic benefits/generic benefits+compensatory action. The *generic benefit/generic benefits+compensatory action* contrast implies a comparison between (1) groups that receive a message outlining losses with promises of generic benefits and (2) groups that receive a message outlining losses with promises of generic benefits as well as promises of specific compensatory action to mitigate the losses to their in-group.

Dependent Variable

Negative opinion of change initiative. Based on their perception and interpretation of the message of change, employees are expected to have a reaction to it. If the message is beneficial for a rival team they share resources with, or has any feature which is not conducive to their work situation, they are expected to form a negative opinion of the change. Negative opinion about the change is the dependent variable, and it is operationalized as whether employees think the change is necessary, practical, and whether they are favorable or unfavorable toward it.

Mediator Variables

Level of scrutiny. Theoretical and empirical research on ELM illustrates that people are especially likely to deliberate on a message that has personal consequences for them. According to literature on framing, people are also more loss-averse than focused on gains. Therefore,

messages that focus on loss for one's own team are expected to lead to a high amount of scrutiny, which will determine one's opinion of the proposal. Level of scrutiny is a mediator variable and is operationalized by how thoroughly the message was scrutinized and evaluated for logic and implications.

Psychological loss framing. The literature on framing has emphasized that people evaluate information against their repertoire of knowledge, belief, and opinion, and when making a decision that has financial or other serious consequences, they psychologically frame the outcome as a gain or loss. They also focus more on loss than on gain. Individuals belonging to teams that share a fixed amount of resources with other teams can also view outcomes as a zero sum, or in terms of gain for one team and loss for another. Therefore we can assume that a message that outlines loss for one's interdependent in-group will be viewed as zero sum and psychologically framed as a loss, leading to a negative opinion of the proposal. Psychological loss framing is a mediator, operationalized as seeing the implication of the message as a loss.

Moderator Variables

In-group identification. How closely one identifies with one's work group determines how one processes information related to work. Organizational structures and processes are altered and rearranged during organizational change, and thus one's awareness of the distinctiveness from an out-group can make group identification especially salient during this time. Level of in-group identification is operationalized by the extent to which one's own identity is shaped by one's group identity and how much one is similar to and dependent on other group members.

Out-group bias. In-group identity is also related to out-group bias, which indicates that in relation to one's in-group, one would be negatively biased toward one's out-group. Research

has shown that group members want to maintain a positive social identity, and a way they do this is by comparing themselves favorably against the out-group. Although in-group identity does not necessarily translate into out-group bias, group members hold the out-group in a more critical light than the in-group. Out-group bias is operationalized as the level of negative view one holds about an out-group they work with.

Competitive work climate. When someone works in an organizational climate that fosters rivalry between individuals and teams, it is likely to impact their perception and intention regarding a change proposal. Competitiveness in organizational climate therefore is a moderating variable, which will influence the effect of the message on one's scrutiny, framing, and subsequent opinion of it. It is operationalized as the extent to which groups are encouraged to compete within the organization, and rewards and recognitions are awarded based on one's performance as compared with that of others in the organization.

Relationships between Variables and Hypotheses

Direct effects. In organizations, almost all change initiatives focus on the organizational or group level. An organization houses multiple groups which have diverse ways of functioning, significant by themselves as well as with relation to other groups. According to Social Identity researchers, this can make one's in-group identity stronger, and highlight intergroup differences. If one believes that gain to any particular out-group implies a potentially greater loss to one's own group than does a generic benefits (a possible gain to all groups), then one is more likely to be more skeptical of and unfavorable toward a message offering gain to a specific group than one that mentions gains to all. Therefore I argue:

H1: When dependency levels are similar, individuals are more likely to form a negative opinion of an organizational change initiative when the message mentions benefits to a specific out-group than when the message does not specify the beneficiary group.

When interdependent groups compete for the same finite resources like budget, it makes group members view the change situation as zero sum, that is, the perception that if one group gains from it, the other group is will incur losses. Individuals belonging to a group are thus likely to view a proposal in light of whether their in-group is interdependent with or independent of the out-group in terms of resources like budget. One's views would be unfavorable if a proposal offers gains to an interdependent out-group rather than when it offers gains to an independent out-group. Therefore I argue:

H2: Individuals are more likely to form a negative opinion of an organizational change initiative when the message mentions benefits to a specific out-group that shares budgetary resources with one's in-group than when the in-group and out-group do not share budgetary resources.

Research in organizational change has found that individuals place more emphasis on their own outcomes from the change initiative than on its general benefits. Research on loss and gain framing informs us that when decisions involve financial or any other significant outcome, people are more focused on the avoidance of loss than the acquisition of gain. Thus it can be argued that an organizational change message that highlights losses to one's in-group makes them explicit and prompts loss framing more than if losses to the in-group are not explicitly mentioned. Mention of specific losses to one's in-group will thus be negatively evaluated than a message that does not specify losses to in-group. Therefore I argue:

H3: When groups are interdependent regarding resource sharing, individuals who receive a message explicitly mentioning specific losses to their in-group are more likely to form a negative opinion of the change initiative than individuals who receive a message that does not mention specific losses to their in-group.

In the formal and professional context of organizational change, two-sided messages are more likely to be non-refutational, since direct refutation of the downsides of the change

initiative would appear indiscreet and counterproductive. The two non-refutational means by which messages can provide counterarguments to overwhelm the downsides are by mentioning generic benefits to all in the organization, and by mentioning compensatory action to attenuate the losses. Generic benefits promise that "all boats will rise" and although the in-group may suffer immediate losses, they will be offset when the organization gains. Adding the promise of compensatory action assures that the magnitude of losses to the in-group will be reduced.

Both these types of two-sided non-refutational messages are aimed at reducing loss framing and being persuasive and effective. As research in organizational change has noted, two-sided messages are viewed as more honest and trustworthy than one-sided messages that only mention the benefits from the change initiative. Two-sided non-refutational messages that propose a way to attenuate the losses are also more acceptable than messages that only mention the downsides of the initiative or its costs. Thus I argue:

H4: When a message mentions specific losses to the in-group, individuals are more likely to form a negative opinion of the change initiative than when the message mentions specific losses to an in-group but promises generic benefits to all or when the message mentions specific losses to an in-group but promises generic benefits to all and compensatory action to offset losses to in-group.

As has been noted, in the organizational change context, counterarguments against the downsides of a proposal can either highlight generic benefits to all or compensatory action to offset losses. Research on organizational change communication has studied contexts of organizational change where the messages of change highlight the generic benefits to the organization (Drum, 2010; Lewis et al., 2013). However, there is no theoretical explanation or empirical evidence to show if recipients of a persuasive two-sided non-refutational organizational change message would prefer generic gains or compensatory action as the

counterargument in the message. The promise of organizational gains is seen to be a common practice among communicators of organizational change (Goodman & Truss, 2004), and comprises the dominant and pervasive argument in conventional messages proposing change. It is thus extremely likely that a two-sided non-refutational persuasive message proposing a change initiative will contain a promise of organizational/generic benefits.

It would not be productive to compare the effects of promising generic benefits with those of promising compensatory action on loss framing and opinion about the change initiative, since it is highly unlikely that they would be exclusive of each other in a two-sided non-refutational persuasive message of organizational change. Instead, it would be consequential to study the effects of promising generic benefits alone compared to the effects of promising generic benefits as well as promising compensatory action on loss framing and opinion about the change initiative. However, since there is no research evidence to suggest if mentioning generic gains as a counterargument is preferred to compensatory action by recipients, a hypothesis cannot be proposed in this context. Instead, I posit the following research question:

RQ1: To what extent does adding promises of compensatory action aimed at offsetting losses to one's in-group reduce loss framing and negative opinion of a proposal beyond what is achieved by promising generic benefits to the organization?

Indirect effects. As has been argued, specificity contrast, interdependency contrast, and loss contrast have direct effects on the way the message of change is evaluated by the recipients of change. However, there are other cognitive mechanisms such as the level of scrutiny and psychological loss framing that act as process variables and mediate the direct effect of the message on its evaluation. These outline the indirect effects.

As posited by persuasion research, individuals expend more cognitive energy on messages which have personal relevance and consequence for them, and when they believe that

they are responsible for the outcome of the decision. In the context of organizational change, even messages that offer gains to a independent but specific out-group are more likely to be scrutinized before they are evaluated unfavorably. Similarly, when teams share a fixed amount of budget, messages that refer to an interdependent team are likely to lead to more scrutiny than those that refer to independent teams. Finally, since people are more focused on losses than gains, a message that specifies loss for one's in-group will lead to greater scrutiny, resulting in negative opinion of the change. The information contained in the message will lead to the level of scrutiny one engages in.

Organizational change researchers have found evidence that resistance from employees is the strongest reason why organizational change initiatives fail. Although the leadership and management focus on effective ways to manage resistance and encourage employees about the change, they often ignore addressing precise repercussions of the change for the employees, which often are their specific concerns. If the message contains specific information that has consequences for the recipients, they are likely to scrutinize it thoroughly. How the recipients of the message interpret it after scrutinizing it thoroughly is determined by what precise consequences they think the change would have for them. When a decision has serious outcomes, decision-makers are likely to frame the outcome as a gain or loss. Therefore, psychological framing of the change will follow careful scrutiny of the content of the message, and this process will result in the formation of an opinion about the change. The serial indirect effect reflecting the mediated path will thus include level of scrutiny and psychological framing. Thus I propose:

H5: An indirect path will exist between the level of scrutiny of a change message and forming a negative opinion of the change proposal that is mediated by psychological loss framing.

H6: The level of scrutiny and psychological loss framing of a message of change will serially mediate the effect of messages favoring specific groups on opinion about the change initiative.

H7: The level of scrutiny and psychological loss framing of a message of change will serially mediate the effect of messages favoring an interdependent group on opinion about the change initiative.

H8: The level of scrutiny and psychological loss framing of a message of change will serially mediate the effect of messages outlining specific loss to one's in-group on opinion about the change initiative.

Message favoring specific out-group →scrutiny→psychological loss framing→negative opinion.

Message favoring interdependent out-group→scrutiny→psychological loss framing→negative opinion.

Message outlining specific loss to in-group→scrutinty→psychological loss framing→negative opinion.

Moreover, when messages mention generic gains or generic gains and compensatory action to offset the downsides of the change proposal, they may cause lesser loss framing by the recipient, which in turn determines one's opinion about the change proposal. Loss frame thus mediates the effect of a message outlining generic benefits and proposes compensatory action on the opinion one forms about the change proposal. Thus I propose:

H9: The level of psychological loss framing of a message of change will mediate the effect of messages outlining only generic gains to all or generic gains to all in conjunction with compensatory action to one's in-group, on opinion about the change initiative.

Message outlining generic benefits/generic benefits + compensatory action → psychological loss framing → negative opinion.

As seen earlier, research does not inform us about the effect of compensatory action in addition to mention of generic benefits as a means of mitigating against losses to one's in-group.

In order to explore the difference of messages mentioning generic benefits and those mentioning a combination of generic good/compensatory action in their effect on loss framing and subsequently on the opinion of the change proposal, I posit the following research question:

RQ2: To what extent does a loss frame mediate the possible relationship between generic benefits or generic benefits/compensatory action combination on the opinion about the change proposal?

Scrutiny is excluded from this mediation path. As proposed by H6, when messages contain a mitigating factor, they are viewed less negatively than when they only mention losses without a means to mitigate them. As noted, the two-sided non-refutational messages containing a counterargument to mitigate the losses to the recipient's in-group are of two types – those highlighting generic benefits, and those highlighting generic benefits as well as compensatory actions. These messages, as well as those that contain no mitigation at all (only mention gain to the interdependent team and loss to ones' own team) involve mentioning losses to one's in-group. As proposed in H9, messages that outline losses to one's in-group should generate high levels of scrutiny. In keeping with this hypothesis, I argue that all messages mentioning losses to one's in-group, irrespective of whether these losses are mitigated in some way, should prompt scrutiny and should not differ.

Moderated indirect effects. There are factors inherent in the organizational experience for employees that play a role in the way they process information regarding any organizational process like change. I have argued that the inclusion of group-specific information in the message of change impacts the scrutiny and loss framing one is expected to engage in, which further impacts the opinion one forms of the message. Since group identity becomes salient in the processing of message, how well an employee identifies with their in-group and feels bias

toward their out-group is expected to qualify this indirect effect. Similarly, the level of competitiveness in oneself and one's work environment shapes the sharing of resources within the organization, and is thus expected to play a role in this indirect effect.

In-group identification (H6a – H9a). Based on identity research in organizations, and the characteristics of organizational change, one can argue that how much one identifies with one's workgroup can play a moderating role in the indirect mediated relationships between the content and focus of the messages on the amount of scrutiny one engages in, leading to the formation of an opinion of change. Since individual focus more on losses than gains, and avoiding losses is a stronger goal than achieving gains for most decision-makers, a message outlining specific losses to one's in-group will also lead to scrutiny and an opinion about the change initiative. In other words, one's level of identification with in-group will play a role in the effect of a change message offering gains to a specific out-group (as opposed to a general change benefiting everyone), a change message offering gains to an interdependent out-group (as opposed to an independent group the in-group does not share resources with), and a change message outlining specific losses to one's in-group on level of scrutiny and psychological framing, leading to one's opinion about the change. In this regard, I predict:

H6a: The effect of a proposed organizational change message that mentions benefits to a specific out-group on the level of scrutiny and psychological framing individuals engage in, leading to a negative opinion about the change initiative, will be greater among those who identify more with their in-group than among those who don't identify as strongly.

H7a: The effect of a proposed organizational change message that mentions benefits to an interdependent out-group on the level of scrutiny and psychological framing individuals engage in, leading to a negative opinion about the change initiative, will be greater among those who identify more with their in-group than among those who don't identify as strongly.

H8a: The effect of a proposed organizational change message that outlines a specific loss to one's in-group on the level of scrutiny and psychological framing individuals engage in, leading to a negative opinion about the change initiative, will be greater among those who identify more with their in-group than among those who don't identify as much.

Social Identity Theory posits that group members favor their in-group over their out-group and group identification leads one to be aware of the distinctiveness of their own group and differences with other out-groups. Thus those who identify strongly with their in-group are less likely to be assured by generic gains or compensatory action as a means to mitigate specific losses to their own in-group, since their strong in-group identification makes them skeptical of proposals that places their in-group at a disadvantage against a salient out-group, even if compensatory efforts are made to offset the losses. Their strong in-group identification also keeps them from being interested or invested in benefits for everyone. Therefore I predict:

H9a: The mitigating effect of a message mentioning generic gains to everyone in the organization or compensatory action towards one's in-group as means to offset loss to one's in-group on the level of loss framing and subsequent negative opinion about the change initiative, will be weaker among those who identify more with their in-group than among those who don't identify as much.

Out-group bias (H6b – H9b). Social Identity Theory argues that group members achieve a positive social identity by comparing themselves favorably against the relevant out-groups. In-group identity almost always fosters out-group bias against one's out-group if the groups are distinct, but are interdependent with respect to sharing of resources like budget. This will have a stronger influence on the perception of a message if it offers gains to a specific interdependent out-group or implies losses to one's in-group. Thus it can be argued that:

H6b: The effect of a proposed organizational change message that mentions benefits to a specific out-group on the level of scrutiny and psychological framing individuals engage in, leading to a negative opinion about change, will be greater among those who are more biased against their out-group than those who are not as biased.

H7b: The effect of a proposed organizational change message that mentions benefits to an interdependent out-group on the level of scrutiny and psychological framing individuals engage in, leading to a negative opinion about change, will be greater among those who are more biased against their out-group than those who are not as biased.

H8b: The effect of a proposed organizational change message that outlines a specific loss to one's in-group on the level of scrutiny and psychological framing individuals engage in,

leading to a negative opinion about change, will be greater among those who are more biased against their out-group than those who are not as biased.

Group members also achieve a positive social identity and enhance their self-esteem by comparing themselves favorably against the relevant out-groups. Identification with one's own in-group almost always fosters out-group bias, and consequently, one group is very likely to harbor animosity toward the salient out-group. This will thus influence the effect a message with attenuating factors like generic benefits and compensatory action has on the way one frames the message and the opinion one forms about the proposal. Therefore I argue:

H9b: The mitigating effect of a message mentioning generic gains to everyone in the organization or compensatory action towards one's in-group as means to offset loss to one's in-group on the level of loss framing and subsequent negative opinion about the change initiative, will be weaker among those who are more biased against their out-group than those who are not as biased.

Competitive work climate (H6c – H9c).The organizational experience generally involves competition, and change programs, although mostly promising to benefit all, often result in competition between individuals and groups to gain the most advantage from the initiative. When organizations encourage competitiveness and recognition and rewards are based on outperforming others, it impacts employees' attitudes and behaviors. A competitive work climate instills in the employee a feeling of losing out when another specific and interdependent group gains, even if no direct loss to one's own group is mentioned. Moreover, if such loss for in-group is mentioned, one is even more likely to adopt a loss frame and resist the change, since it indicates that one's group would fall behind the beneficiary group, and would lose out on recognition and rewards. Thus I propose:

H6c: The effect of a proposed organizational change message that mentions benefits to a specific out-group on the level of scrutiny and psychological framing individuals engage in, leading to a negative opinion about change, will be greater among those who work in a competitive climate than those who do not.

H7c: The effect of a proposed organizational change message that mentions benefits to an interdependent out-group on the level of scrutiny and psychological framing individuals engage in, leading to a negative opinion about change, will be greater among those who work in a competitive climate than those who do not.

H8c: The effect of a proposed organizational change message that outlines a specific loss to one's in-group on the level of scrutiny and psychological framing individuals engage in, leading to a negative opinion about change, will be greater among those who work in a competitive climate than those who do not.

Those who work in a competitive work environment are also less likely to view generic benefits to everyone in the organization favorably, even as a mitigating factor against specific losses to be incurred by their in-group as a result of the change. In such an environment, every individual and team is expected to compete against the other, and the concept of generic benefit may not appeal to the recipient of a change message, especially when one's in-group is expected to incur losses because of the change. Similarly, compensatory action in response to the impending loss is also not likely to be viewed as effective, since the competitive environment may cause the individual to believe that once their in-group is positioned at a disadvantage against the out-group, it may not be able to measure up to the out-group even when compensatory action is taken. Thus I hypothesize:

H9c: The mitigating effect of a message mentioning generic gains to everyone in the organization or compensatory action towards one's in-group as means to offset loss to one's in-group on the level of loss framing and subsequent negative opinion about the change initiative, will be weaker among those who work in a competitive climate than those who do not.

Summary of Propositions

The research that has been reviewed and the stated hypotheses can be summed up in the following arguments. First, message content specifying a beneficiary group, interdependence between groups, and explicit mention of loss to an in-group, have direct effects on one's opinion of the change initiative. Second, when a message outlines losses for one's in-group, but also

offers promises of generic benefits to everyone in the organization as well as promises to offset losses to one's in-group, it is viewed more favorably than when they do not mention any such promise. Third, messages offering gains to a specific out-group, those offering gains to an interdependent out-group, and those offering gains to an interdependent out-group while explicitly mentioning corresponding losses for one's in-group will be serially scrutinized thoroughly, framed as a loss and unfavorably evaluated. Finally, the level of one's identification with the in-group, bias for the out-group and the competitiveness in one's work environment moderate the serially mediated relationship between message content and opinion regarding the change, as well as the mitigating effect of generic gains and compensatory action on loss framing and opinion about the change proposal.

CHAPTER 4: METHODOLOGY

This chapter will be divided into five broad sections. The first will focus on the study design and the procedure of data collection. The second section will discuss the participants. The third section describes the response rates and demographic details of the sample. The fourth section will describe the manipulation checks, realism checks and message feature checks that were used in the study. The fifth and final section will describe the measures I used to assess the independent, mediator, moderator and dependent variables.

Study Design and Procedure

The design of the study was an online survey with six conditions, each of which was followed by identical survey questions that participants responded to.

Message conditions. The six message conditions were as follows: (1) No interdependence, does not mention specific beneficiary group, (2) No interdependence, mentions gains to specific out-group, (3) Interdependence, mentions gains to specific out-group, provides detailed promise of generic benefits to all, (4) Interdependence, mentions gains to specific out-group, brief generic benefits to all, and corresponding loss to in-group, (5) Interdependence, mentions gains to specific out-group, brief generic benefits to all, corresponding loss to in-group, and specific promises to offset loss to in-group, and (6) interdependence, mentions gains to specific out-group, and corresponding loss to in-group.

Contrasts. The six conditions were related to the five contrasts described as the independent variables in the hypotheses. Although six message conditions were used, the hypotheses and research questions cluster them into categories (e.g., specific, interdependence, explicit loss, generic benefits, compensatory action). Since I needed to understand how clusters of message conditions differ, I chose to use orthogonal contrast coding rather than testing all six

conditions. The contrasts were (1) specificity contrast, which compared groups that received messages of change that mentioned gains to a specific independent out-group against those who received messages of change that did not specify the beneficiary independent out-group, (2) interdependence contrast, which compared groups that received messages outlining gains to an out-group one's in-group shares resources with against groups which received messages that offered benefits to an out-group one's in-group does not share resources with, (3) loss contrast, which compared groups that received messages with explicit details of the loss their in-group will incur as a result of the change, compared to groups that received messages where the mention of the loss to in-group was not explicit, but rather needed to be inferred, (4) generic gain/compensatory action contrast, which compared groups that receive a message outlining losses to their in-group and groups that receive a message outlining losses to their in-group with promises of generic benefits to everyone in the organization as a result of the change or promises of specific compensatory action to mitigate the losses to their in-group, and (5) generic gain/generic gain+compensatory action contrast, which compared groups that receive a message outlining losses with promises of generic benefits with groups that receive a message outlining losses with promises of generic benefits as well as promises of specific compensatory action to mitigate the losses to their in-group.

The messages, corresponding to the six types of conditions, which were read by the participants, are listed in the Appendix.

The organizational context. The specific context of the organizational change was carefully chosen. It had to be broad in scope without being too generic. It also needed to be a situation that most participants would be able to identify with. Since I anticipated participants to be from all possible sectors (for-profit, not-for-profit, government, public, etc.), industries

(education, finance, manufacturing, retail, consulting, media, entertainment, technology, etc.), countries and organizations, I used the regional office of a corporation as the setting, since referring to an entire corporate organization as the setting could be too large scale and potentially alienate participants from smaller organizations.

I chose the distribution of human resources and large-scale hiring of personnel as the change context. The rationale for choosing this context was that it would not be too industry or organization-specific, while being unambiguous about the sharing of the budget. The annual budget, which is often shared between interdependent teams, becomes a matter of contention during organizational change initiatives like large-scale hiring of personnel.

Researchers studying organizational change have studied the implementation and adoption of technology (Leonardi, 2009), alterations in the reporting structure (Lewis et al., 2013), mergers (Terry & O'Brien 2001), and operational changes (Jack Walker, et al., 2007). However, these contexts do not overtly and admittedly affect individual employees, and do not make group identification and zero sum perceptions salient. Although Leonardi addresses the role played by human relationships and interactions in the reaction to organizational change (Leonardi, 2009), the specific concept of group identification and inter-group competition, however, required me to study a realistic organizational change scenario that involved human capital and would invoke a sense of person or group-centric gain and loss.

Procedure. The online survey was hosted on Qualtrics. Participants were randomly assigned to one of the six conditions by the software. Prior to accessing the survey, participants were required to sign an electronic consent form approved by the IRB. Participation in the study was voluntary and respondents were assured that all data would be unidentifiable. After reading and approving the online consent form, they were asked to complete two screening questions

about their age (18 or above) and about their work experience in the present or past with two or more work groups. Then they answered a set of questions regarding their in-group identification, out-group bias and competitiveness in organizational climate. They were subsequently randomly assigned to a message condition, following which they were asked questions about the message, and about their opinion regarding the change proposal based on their perception of the message. This was followed by demographic questions.

At the end of the survey, participants from the snowball sample had the option to enter into a raffle to win a $20 electronic gift card. In order to enter, they had to visit a page inaccessible by me and maintained by a Qualtrics employee, where they had the option to provide information about their country of residence and their email. The Qualtrics sample was not entered into the raffle, since Qualtrics has its own process of compensating survey participants.

Participants

In order to participate in the study, subjects needed to work or have worked in an organization comprising two or more work teams. Recruitment commenced after approval from the Institutional Review Board of Northwestern University. I emailed my personal and professional networks as well as contacted them via the social networking site Facebook. I described the study and the eligibility criteria in the email and provided the survey link along with a request to send the link to their own personal and professional networks. Since this was an online study and was not related to the race or culture of any particular country, network members were recruited from all over the world.

Participants for the study were 491 employees of organizations who were recruited via two methods. I recruited 265 participants through snowball sampling from my own personal and

professional networks. I also employed Qualtrics for a fee to recruit a participant panel of 226 eligible subjects. I started recruiting with the snowball sample but after three weeks the number of participants stalled and lots of subjects were accessing the survey but were not completing it. Consequently, I sought an additional source of recruitment.

Focus on employees. I specifically focused on recruiting employees who now work or have worked in organizational contexts involving two or more work teams. Since I used snowball sampling from my own personal and professional networks, the sample was not a scientifically random sample, making generalizability of the findings to all working adults not strictly possible. However, the sample was chosen since its demographic characteristics most closely matched my target sample, as shown in other research projects on communication regarding organizational change (Lewis et al., 2013).

Moreover, the sample is more diverse and realistic than samples in other message effects studies, which have focused on studied an undergraduate student populations (O'Keefe, 1999), or organizational change and communication studies which have focused on employees from a single organization (Dutton, Ashford, O'Neill, & Lawrence, 2001, Terry & O'Brien, 2001; Jack Walker et al., 2007) or have compared responses to change from the employees of more than one organization (Goodman & Truss, 2004). None of these samples would have been appropriate for the inquiries being made in this study. Therefore I recruited professionals across countries, sectors and industries, who work or have worked in and with teams, and are likely to have experienced organizational change in real life. Qualtrics was also instructed to generate a sample that met these criteria.

I deliberately did not require participants to have gone through an organizational change as part of the eligibility criterion to participate in the study. Change programs are organization-

specific and often mean different processes to different employees. Referring to a change initiative would therefore have required me to provide details that would run the risk of not being appropriate to the participant's experience. Since this was an online experimental study with message manipulations, participants in the different conditions were asked to read each of six imaginary messages, rather than being requested to refer to details of their work. Moreover, employees of organizations, while being closest to the target sample in demographic properties, are also wary of participating in research studies about their work, for fear of breaching professional contracts with their employers. I therefore did not want to be too specific in the description of the change, which would have deterred them from being honest in their responses.

Response Rates and Demographic Details

A total of 491 participants accessed the survey, 265 of whom were recruited via snowball sampling (53.97% of total sample), and 226 (46.02% of total sample) participants were recruited by Qualtrics. Out of the 265 responses from the snowball sample, 145 (response rate of 54.7%) participants had answered enough questions for their responses to be used for the analysis. Qualtrics collected data using the eligibility criteria and provided a panel comprising complete responses from 226 participants. Thus, of the entire participant pool, 371 responses were complete and usable with a response rate of 75.5%.

The first set of 19 questions referred to the moderator variables – in-group identification, out-group bias and competitive work climate. Questions 1—5, and 7, 10, 11, 15 and 17 were answered by 445 participants, with 46 missing responses (9.4%). Questions 6 and 12 were answered by 443 participants with 48 (9.8%) missing responses. Questions 8, 9, 14, 16, 18 and 19 were answered by 444 participants with 47 (9.6%) missing responses.

Participants were then randomly assigned to each of the six conditions mentioned earlier. A total of 77 participants were assigned to the "No interdependence, does not mention specific beneficiary group" condition, with 64 complete responses and 13 responses with missing data. A total of 73 participants were assigned to the "No interdependence, mentions gains to specific out-group" condition, with 62 completed responses and 11 incomplete responses. A total of 74 participants were assigned to the "Interdependence, mentions gains to specific out-group, highlights generic benefit to all" condition, with 60 completed responses and 14 incomplete responses. A total of 74 participants were assigned to the "Interdependence, mentions gains to specific out-group, generic benefit to all, and corresponding loss to in-group" condition, with 63 complete responses and 11 incomplete responses. A total of 74 participants were assigned to the "Interdependence, mentions gains to specific out-group, generic benefits to all, corresponding loss to in-group, and specific promises to offset loss to in-group" condition, with 59 complete responses and 15 incomplete responses. A total of 75 participants were assigned to the "Interdependence, mentions gains to specific out-group and corresponding loss to in-group" condition, with 63 complete responses and 12 incomplete responses.

After participants read the messages, they were asked 17 questions about the messages. The first five of these questions were manipulation checks (please refer to section on manipulation checks for questions and descriptive statistics), questions 6 – 10 measured the mediator variable of level of scrutiny. Questions 11-17 measured psychological loss framing as a mediator variable. The response rate dropped once participants reached the questions regarding the messages. Questions 1 and 4 – 6 were answered by 376 participants with 115 missing responses (23.4%). Questions 2, 3 and 7 – 10 were answered by 375 participants with 116 missing responses (23.6%). Questions 11 – 13 and 15 – 17 were answered by 374 participants

with 117 (23.8%) missing responses. Question 14 was answered by 372 participants with 119 (24.2%) missing responses.

Participants were then asked 4 questions regarding their opinions about the change proposal. Questions 1-4 were answered by 373 participants with 118 (24%) missing responses.

The next section comprised 6 questions. Two questions were realism checks to test for how realistic the participants felt about the change context and the message that described it, and four questions checked if the message manipulations worked. All questions were answered by 374 participants, with 117 (23.8%) missing responses.

The final section of the survey comprised demographic questions. The demographic details are provided next.

Demographic characteristics of sample. Of the 371 participants, 369 in total responded to the question about their gender, 369 in total responded to the question about their ethnic identity, 371 provided their country of residence, 369 responded regarding the highest level of education they have received, 367 answered about their job type, 368 provided information on the number of years in total that they have been employed, 368 answered a question regarding their job type, 369 responded regarding their age, 368 responded to a question asking them about their experience with organizational change, 364 chose to answer about their role within the change.

I also ran tests to compare the demographic variables across the two samples from snowball sampling and Qualtrics. The results are reported for each demographic variable.

Gender. 143 participants among the snowball sample, and 226 among the Qualtrics sample answered questions about their gender. Two participants from each of the snowball sample and the Qualtrics sample did not wish to answer, and one person from the Qualtrics

sample identified as other. Among the snowball sample, 57 were male (39.9% of snowball sample, 15.4% of total sample), and 84 were female (58.7% of snowball sample, 28.8% of total sample). Among the Qualtrics sample, 110 were male (48.7% of Qualtric sample, 29.8% of total sample), and 113 were female (50% of Qualtrics sample, 30.6% of total sample).

The difference between gender across the two samples was not significant, χ^2 (3, 369) = 3.602, p = .308, Phi = .099.

Ethnic identity. 143 participants among the snowball sample, and 226 among the Qualtrics sample answered questions about their ethnic identity. The options for ethnic identity were European/Caucasian, Hispanic or Latino/a, Asian/Asian American, African/African American, American Indian/Alaska Native, Australasian and Other. At 227 participants (61.5% of total sample), European/Caucasian participants comprised more than half of the sample. Twenty (5.4% of total sample) identified as Hispanic or Latino/a, 68 (18.4% of total sample) identified as Asian/Asian American, 25 (6.8% of total sample) identified as African/African American, 2 (0.5% of total sample) identified as American Indian/Alaska Native, 1 (0.3% of total sample) identified as Australasian, and 26 (7% of total sample) identified as Other.

Among the snowball sample, 69 identified as EuropeanCaucasian (48.3% of snowball sample, 18.7% of total sample), 2 identified as Hispanic or Latino/a (1.4% of snowball sample, 0.5% of total sample), 58 identified as Asian/Asian American (40.6% of snowball sample, 15.7% of total sample), 2 identified as African/African American (1.4% of snowball sample, 0.5% of total sample), and 12 identified as Other (8.4% of snowball sample, 3.3% of total sample). No participant identified as Australasian or American Indian/Alaska Native in the snowball sample. Among the Qualtrics sample, 158 participants identified as European/Caucasian (69.9% of Qualtrics sample, 42.8% of total sample), 18 identified as Hispanic or Latino/a (8% of Qualtrics

sample, 4.9% of total sample), 10 identified as Asian/Asian American (4.4% of Qualtrics sample, 2.7% of total sample), 23 identified as African/African American (10.2% of Qualtrics sample, 6.2% of total sample), 2 identified as American Indian/Alaska Native (0.9% of Qualtrics sample, 0.5% of total sample), 1 identified as Australasian (0.4% of Qualtrics sample, 0.3% of total sample), and 14 identified as Other (6.2% of Qualtrics sample, 3.8% of total sample).

The difference between ethnic identities across the two samples was significant, χ^2 (6, 369) = 88.162, $p < .001$, V = .489.

Education. A total of 143 participants from the snowball sample and 226 participants from the Qualtrics sample answered the question about the education level they had achieved. The options for education level were: High school graduate, some college, Associate's Degree, Bachelor's Degree, Master's Degree, Professional School Degree (MBA/MD/JD etc.) and Doctorate Degree. The maximum number of participants replied that they have a Bachelor's Degree (*n*=135, 36.6% of total sample). Thirty participants said that they a high school graduate (8.1% of total sample), 50 participants (13.6% of total sample) said that they attended some college, 34 (9.2% of total sample) participants said they have an Associate's Degree, 70 participants (19% of total sample) said that they have a Master's Degree, 37 participants said they had a degree from a Professional School (10% of total sample), and 13 participants (3.5% of total sample) said that they have a Doctorate Degree.

No participant from the snowball sample was a high school graduate, whereas 30 (13.3% within Qualtrics sample, 8.1% of total sample) participants from the Qualtrics sample were. Four participants (2.8, 1.1) of the snowball sample were from some college, whereas 46 (20.4, 12.5) participants from the Qualtrics sample were. Two participants from the snowball sample (1.4% of snowball sample, 0.5% of total sample), and 32 (14.2% of Qualtrics sample, 8.7% of total

sample) from the Qualtrics sample had an Associate's Degree, 44 participants from the snowball sample (30.8% of snowball sample, 11.9% of total sample) and 91 participants from the Qualtrics sample (40.3% of Qualtrics sample, 24.7% of total sample) had a Bachelor's Degree, 49 participants from the snowball sample (34.3% within snowball sample, 13.3% of total sample), and 21 participants from the Qualtrics sample (9.3% within Qualtrics sample, 5.7% of total sample) had a Master's Degree, 32 participants from the snowball sample (22.4% within snowball sample, 8.7% of total sample), and 5 participants from the Qualtrics sample (2.2% within Qualtrics sample, 1.4% of total sample) had a Professional School Degree, and 12 participants from the snowball sample (8.4% within snowball sample, 3.3% of total sample), and 1 participant from the Qualtrics sample (0.4% within the Qualtrics sample, 0.3% of total sample) reported having a Doctorate Degree.

The difference between the education groups across the two samples was significant, χ^2 (6, 369) = 136.564, $p < .001$, V = .608.

Age. A total of 143 participants from the snowball sample and 226 participants from the Qualtrics sample answered the question about their age. The options for age were given in ranges: 18-29, 30-39, 40-49, 50-59, 60-69, and 70 and up. The maximum number of participants reported being between 30 and 39 (n=164, 44.4% of total sample). Eighty-five participants (23% of total sample) said they were between 18 and 29 years of age, 76 (20.6% of total sample) said they were between 40 and 49 years old, 32 (8.7% of total sample) said they were between 50 and 59 years of age, and 12 (3.3% of total sample) said they were between 60 and 69 years of age. No participant reported being 70 or above.

Of the snowball sample, 29 participants (20.3% of snowball sample, 7.9% of total sample) and 56 participants from the Qualtrics sample (24.8% of Qualtrics sample, 15.2% of

total sample) reported being between 18 and 29. Of the snowball sample, 58 participants (40.6% of snowball sample, 15.7% of total sample) and of the Qualtrics sample 106 participants (46.9% within Qualtrics sample and 28.7% of the total sample) said that they were between 30 and 39 years of age. Of the snowball sample 35 participants (24.5% of snowball sample, 9.5% of total sample), and 41 participants of the Qualtrics sample (18.1% within the Qualtrics sample, 11.1% of the total sample) said that they were between 40 and 49 years of age. Among the snowball sample, 13 participants (9.1% of snowball sample, 3.5% of total sample) and among the Qualtrics sample 19 participants (8.4% within Qualtrics sample and 5.1% of total sample) said that they were between 50 and 59 years of age. Of the snowball sample, 8 participants (5.6% of snowball sample, 2.2% of total sample), and among the Qualtrics sample, 4 participants (1.8% of Qualtrics sample and 1.1% of total sample) said that they were between 60 and 69 years of age.

The difference between the age groups across the two samples was not significant, χ^2 (4, 369) = 7.255, p = .123, V = .140.

Job type. A total of 367 participants replied to the question about their job type. The options for job type were full-time, part-time and volunteer. Within the snowball sample, 141 participants (38.4% of total sample) replied, while among the Qualtrics sample 226 participants (61.6% of total sample) replied. A total of 353 participants (96.2% of total sample) said that they had a full-time job, whereas 14 participants (3.8% of total sample) said that they had a part-time job. No one chose the Volunteer option.

Among the snowball sample 132 participants (93.6% of snowball sample, 36.0% of total sample), and among the Qualtrics sample 221 participants (97.8% within Qualtrics sample, 60.2% of total participants) said that they held a full-time job. Among the snowball sample 9 participants (6.4% within snowball sample, 2.5% of total sample) and among the Qualtrics

sample 5 participants (2.2% of Qualtrics sample and 1.4% of total sample) replied that they had a part-time job.

The difference across the two samples between participants who held different job types was significant, χ^2 (1, 367) = 4.116, $p < .05$, V = .106.

Years of employment. A total of 368 participants responded to the question regarding the years they have been employed. Of these 142 were from the snowball sample (38.6% of total sample), and 226 were from the Qualtrics sample (61.4% of total sample). The options for years of employment were provided in ranges: 0-5, 6-10, 11-15, 16-20, 21-24 and 25 and more. A total of 66 participants (17.9% of total sample) chose the first option, 82 participants chose the second option, (22.3% of total sample), 81 participants (22% of total sample) said they had been employed for 11 and 15 years, 52 participants (14.1% of total sample) chose the fourth option, 25 participants (6.8% of total sample) said that they were employed for 21 to 24 years, and 62 participants (16.8% of total sample) said that they had been employed for 25 years or more.

Among the different samples, 30 participants in the snowball sample (21.1% within snowball sample, 8.2% of total sample) and 36 participants in the Qualtrics sample (15.9% within Qualtrics sample and 9.8% of total sample) said they had been employed for 0-5 years. Within the snowball sample, 30 participants (21.1% of snowball sample, 8.2% of total sample), and within the Qualtrics sample 52 participants (23.0% of Qualtrics sample, 14.1% of total sample) said that they had been employed for 6 to 10 years. Thirty-two participants of the snowball sample (22.5% of snowball sample, 8.7% of total sample) and 49 participants of the Qualtrics sample (21.7% of Qualtrics sample, 13.3% of total sample) said that their years of employment were between 11 and 15. Twenty participants from the snowball sample (14.1% of snowball sample, 5.4% of total sample) and 32 participants from the Qualtrics sample (14.2% of

Qualtrics sample and 8.7% of total sample) said that they had been employed for 16 to 20 years. Among the snowball sample 8 participants (5.6% of snowball sample, 2.2% of total sample) and among the Qualtrics sample 17 participants (7.5% of Qualtrics sample, 4.6% of total sample) said that their years of employment fell between 21 and 24 years. Among the snowball sample, 22 participants (15.5% of snowball sample, 6.0% of total sample) and among the Qualtrics sample 40 participants (17.7% of Qualtrics sample, 10.9% of total sample) said that they had been employed for 25 years or more.

The difference across the two samples between the groups based on their years of employment was not significant, χ^2 (5, 368) = 2.191, p = .822, V= 0.077.

Job level. A total of 368 participants responded to the question about their job level. From the snowball sample 142 participants (38.6% of total sample) responded, while 226 participants (61.4% of total sample) from the Qualtrics sample responded to this question. The options provided were: Entry level, Experienced Non-manager, Assistant Manager, Manager, Mid-management and Senior management. A total of 25 participants (6.8% of total sample) said they had an entry level job, 126 participants (34.2% of total sample) said that they were an experienced non-manager, making this the largest group, 22 participants (6.0% of total sample) said that they were an assistant manager, 89 participants (24.2% of total sample) said they were a manager, 62 participants (16.8% of total sample) said that they held a mid-management job, and 44 participants (12.0% of total sample) said that they had a senior management position.

Within the samples, 11 subjects from the snowball sample (7.7% of snowball, 3.0% of total sample) and 14 subjects from the Qualtrics sample (6.2% within Qualtrics sample, 3.8% of total sample) had an entry level job, 43 participants from the snowball sample (30.3% of snowball, 11.7% of total sample) and 83 from the Qualtrics sample (36.7% of Qualtrics, 22.6%

of total sample) had an experienced non-manager job. Nine participants from the snowball sample (6.3% of snowball, 2.4% of total sample) and 13 participants from the Qualtrics sample (5.8% of Qualtrics, 3.5% of total sample) had an assistant manager's job. Twenty-six participants from the snowball sample (18.3% of snowball, 7.1% of total sample) and 63 participants from the Qualtrics sample (27.9% of Qualtrics, 17.1% of total sample) had a manager's job. Twenty-four participants from the snowball sample (16.9% of snowball, 6.5% of total sample) and 38 participants from the Qualtrics sample (16.8% of Qualtrics, 10.3% of total sample) had a mid-management job. Lastly, 29 participants from the snowball sample (20.4% of snowball, 7.9% of total sample) and 14 participants from the Qualtrics sample (6.6% of Qualtrics, 4.1% of total sample) had senior management job.

The difference across the two samples between the participant groups with different job levels was significant, χ^2 (5, 368) = 18.578, $p < .005$, V = .225.

Experience with organizational change. A total of 142 participants from the snowball sample (38.6% of total sample) and 226 participants on the Qualtrics sample (61.4% of total sample) answered the question about their experience with organizational change. The options were: "I have been through several organizational change initiatives," "I have been through a few organizational change initiatives," and "I have no experience with organizational change initiatives." A total of 181 participants (49.2% of total sample) said that they had been through several organizational change initiatives, 178 participants (48.4% of total sample) said that they had been through a few organizational change initiatives, and only 9 participants (2.4% of total sample) said that they had no experience with organizational change initiative.

Within the two samples, 68 participants from the snowball sample (47.9% of snowball sample, 18.5% of total sample), and 113 participants from the Qualtrics sample (50.0% of

Qualtrics sample, 30.7% of total sample) said that they had been through several organizational change initiatives. Seventy-one participants from the snowball sample (50.0% of snowball sample, 19.3% of total sample), and 107 participants from the Qualtrics sample (47.3% of Qualtrics sample, 29.1% of total sample) said that they had been through a few organizational change initiatives. Three participants from the snowball sample (2.1% of snowball sample, 0.8% of total sample), and 6 participants from the Qualtrics sample (2.7% of Qualtrics sample, 1.6% of total sample) said that they had no experience with organizational change initiatives.

The difference across the two samples between groups based on their experience with organizational change was not significant, χ^2 (2, 368) = 0.311, p = .856, V = 0.029.

Role in organizational change initiative. Participants were then asked to respond regarding their role in an organizational change initiative. If they had not been through one, they were asked to skip this question. A total of 364 participants responded to this question, of whom 138 were from the snowball sample, and 226 were from the Qualtrics sample. The options for the role within an organizational change initiative were: "I have been an initiator of the change," "I have been an implementer of the change," "I have been a recipient of the change," and "I have been the communicator of the change." Fifty-three participants in total (14.6% of total sample) chose the first option, 111 participants (30.5% of total sample) chose the second option, 186 participants (51.1% of total sample) chose the third option, making them the largest group, and 14 participants (3.8% of total group) chose the fourth option.

Among the two samples, 20 participants from the snowball sample (14.5% of snowball, 5.5% of total sample) and 33 participants from the Qualtrics sample (14.6% of Qualtrics sample, 9.1% of total sample) said that they had been an initiator of the change. Forty-three participants from the snowball sample (31.2% of snowball, 11.8% of total sample) and 68 participants from

the Qualtrics sample (30.1% of Qualtrics sample, 18.7% of total sample) said that they had been an implementer of the change. Seventy participants from the snowball sample (50.7% of snowball, 19.2% of total sample) and 116 participants from the Qualtrics sample (51.3% of Qualtrics sample, 31.9% of total sample) said that they had been a recipient of the change. Finally, 5 participants from the snowball sample (3.6% of snowball, 1.4% of total sample) and 9 participants from the Qualtrics sample (4.0% of Qualtrics sample, 2.5% of total sample) said that they had been a communicator of the change.

The difference across the two samples between the participant group based on their role in organizational change was not significant, χ^2 (3, 364) = .068, p = .995, V = .014.

Number of teams one's own team works with. Participants were asked to indicate the maximum number of teams their own team has worked with directly. The options were 1-2, 3-5 and 6 and more. A total of 369 participants responded to this question. Of them, 143 participants (38.8% of total sample) were from the snowball sample, and 226 participants (61.2% of total sample) were from the Qualtrics sample. Fifty participants (13.6% of total sample) said that their team had worked with 1-2 teams, 170 participants (46.1% of total sample) said that their team had worked with 3-5 teams, and 149 participants (40.4% of total sample) said that their team had worked with 6 and more teams.

Among the different samples, 18 participants from the snowball sample (12.6% of snowball, 4.9% of total sample) and 32 participants from the Qualtrics sample (14.2% of Qualtrics sample, 8.7% of total sample) said that their team has worked with 1-2 teams. Fifty-seven participants from the snowball sample (39.9% of snowball, 15.4% of total sample) and 113 participants from the Qualtrics sample (50.0% of Qualtrics sample, 30.6% of total sample) said that their team has worked with 3-5 other teams. Finally, 68 participants from the snowball

sample (47.6% of snowball, 18.4% of total sample) and 81 participants from the Qualtrics sample (35.8% of Qualtrics sample, 22.0% of total sample) said that their team has worked with 6 or more teams.

Across the two samples, the difference based on the number of teams participants' team has worked with was moderately significant, χ^2 (2, 369) = 5.089, p = .078, V = .117.

Manipulation Checks, Realism Checks and Message Feature Checks

Several questions were inserted following the message to test if the message manipulations functioned effectively, if the messages were realistic and clear (O'Keefe, 2003). The questions measuring these checks and their respective means and standard deviations are provided below.

Manipulation checks. The questions acting as manipulation checks were measured on a 5-point Likert scale where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree. The questions were as follows: "The message explicitly mentioned resources the other team will lose from this new proposal" (n = 370, M = 3.63, SD = 1.162), "The message explicitly mentioned resources that my team will gain from this new plan" (n = 370 , M = 2.71, SD = 1.24), "The message explicitly mentioned resources that my team will lose from this new plan" (n = 371, M = 2.98, SD = 1.26), "The message did not mention gains or losses either to my team or to the other team" (n = 371, M = 2.73, SD = 1.32), "The message I just read described the benefits of the proposed change" (n = 371, M = 3.05, SD = 1.08), "The message I just read described both the benefits and downsides of the proposed change" (n = 371, M = 2.69, SD = 1.09), and "The message I just read described neither the benefits nor the downsides of the proposed change" (n = 371, M = 3.18, SD = 1.16).

Realism checks. Participants were also asked to rate the message on realistic/not realistic on a scale of 1-7, with 7 indicating realistic and 1 indicating not realistic. Results indicated that participants thought the message was realistic (n = 371, M = 4.47, SD = 1.543). On a Likert scale of 1-5 (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree), participants were asked how likely it was that the situation described in the message could happen in their current or previous organization. Participants agreed that it was likely (n = 371, M = 3.66, SD = 1.01). Participants were also asked how similar the message they read was to messages of organizational change they have read in reality, and participants agreed that it was similar (n = 371, M = 3.29, SD = 1.07).

Message feature check. Participants were also asked to rate the message on clear/not clear on a scale of 1-7, with 7 indicating clear and 1 indicating not clear. Results showed that participants thought the message they read was clear (n = 371, M = 3.90, SD = 1.81).

Measures

I measured one dependent variable, two mediating variables, and three moderators. For each variable, respondents indicated the degree to which they agreed (1 = strongly disagree, 5 = strongly agree) with statements about their reactions and perceptions. The final score for each variable was the average of the participants' response to the items in the scale. In the following section I will describe the origin of the scale, its reliability, and mean and standard deviation.

Dependent variable. There was one dependent variable, opinion of change initiative. I constructed the scale by adapting two items (I am *not* in favor of this change, reverse-coded; I think this is a positive change for the regional office) from Lewis and her colleagues' measure of favorability of change initiative (Lewis et al., 2013). The scale reliability was high (α = .88). I constructed two other items for this study (I believe this change is practical; this change is *not*

necessary, reverse-coded). Reliability for the entire scale was high (α = .81). Respondents reported a moderate opinion about the change initiative, M = 2.905, *SD* = .804.

Mediator variable. There were two mediator variables: level of scrutiny and psychological loss framing. I constructed a scale with five items derived from ELM's theoretical emphasis on level of scrutiny of a message that has consequences for the recipient. These items were – I read the message thoroughly, I thought in detail about the proposal, I evaluated the logic of the message thoroughly, I thoroughly considered the implications of the change, and I have scrutinized the change thoroughly for its effects on team performance. The reliability of the message was high (α = .85). Respondents reported a high level of level of scrutiny, M = 3.845, *SD* = .677.

Psychological loss framing was measured using a scale I constructed. The scale comprised nine items, four of which were adapted from an existing scale (Esses et al., 1998) with α = .96. These were supplemented with five items that I created based on research on zero sum thinking and Prospect Theory. The reliability for the combined scale was high (α = .85). The scale is provided in the Appendix.

Since I was combining items from two scales, I decided to perform an exploratory factor analysis to see if they formed a single factor. I used a principal component factor analysis with varimax rotation. I allowed factors greater than 1 to emerge. Two factors emerged. The first factor accounted for 48% of the variance and the second for 16%. I looked at factor loadings. I used the rule that an item should have a factor loading of at least .60 on the primary factor and no higher than .40 on the secondary. Of the nine items, seven loaded on the first factor and two on the second. The two on the second were both items that had to be reversed coded, which may have reduced their correlation with the others. I then conducted another factor analysis on the

seven items that loaded on the first factor. Only one factor emerged. Consequently, I used the seven-item measure. Its reliability was acceptable, α = .89. The respondents reported a moderate level of psychological loss framing (M = 3.29, *SD* = .84).

Moderator variables. Three moderator variables were measured. In-group identification was measured using a scale developed by Henry, Arrow and Carini (1999). The scale had three factors – affective, behavioral and cognitive. I adapted four items from this scale, with one from affective, one from behavioral and two from the cognitive sub-scales. The reliability for the scale was modest, α = .66. Participants reported a high level of in-group identification, M = 3.866, *SD* = .672.

Out-group bias was measured using a two-item scale that I developed based on research on out-group prejudice. The two items were: "The other teams I work with do not seem to have much initiative or energy," and "I feel that the other teams I work with do not accomplish enough to deserve real respect from others." The reliability for the scale was moderate, α = .67. Participants reported a low level of out-group bias, M = 2.545, *SD* = .912.

Competitive work climate was measured using a scale for which nine items were adapted from the competitive work environment scale (Fletcher & Nussbaum, 2010). The five dimensions in the scale were tangible rewards, non-tangible rewards, recognition, status, and coworker. In order to cater to the requirements of the present study, I adapted one item from the tangible dimension, one item from the non-tangible dimension, three items from the recognition dimension, two items from the status dimension, and two items from the coworker dimension. The reliability of the scale was modest, α = .65. Participants reported a moderate level of competitiveness in their work climate, M = 3.317, *SD* = .655.

CHAPTER 5: RESULTS

This chapter will be divided into three main sections. In the first, I will describe results for the preliminary tests that were aimed at evaluating the quality of measurement, randomization and manipulations. The second section will contain an overview of how the hypotheses and research questions were tested. The final section will report the results from the statistical tests of the hypotheses and the research questions.

Preliminary Tests

Prior to testing the hypotheses and predictions, it was essential that I evaluate the adequacy of my measures, randomization procedure, manipulations and relationships among the measures.

Measurement model. The measures used in this study relied upon self reported predispositions and reactions to the messages. Because they come from a single source, they may reflect an underlying factor rather than constituting measures of unique constructs. Some argue that the underlying factor reflects a methodological artifact arising from using a common source (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In order to determine whether a single latent factor could account for variance among the items, I used the Harmon single-factor test (Podsakoff et al., 2003) to perform an exploratory factor analysis of the items composing the thirty one total items of the six scales used in this study: in-group identification (four items), out-group bias (two items), competitive climate (eight items), level of scrutiny (five items), psychological loss framing (eight items), and negative opinion (4 items). An unrotated principal components analysis limited to one factor showed that the factor accounted for only 18% of the variance, which falls below the 50% proportion of variance level for indicating common methods variance.

In addition, I wanted to determine whether the items used to assess the two mediators (scrutiny and psychological loss framing) and those assessing the dependent variable (negative opinion) formed into three distinct factors. To do so, I conducted a confirmatory factor analysis using AMOS 24.0. I used three standards to assess how well a three factor fit the data: a non-significant goodness of fit chi-square, Bentler's (1990) comparative fit index (CFI) greater than .90, and Steiger and Lind's (1980) root mean square error of approximation (RMSEA) between .05 and .08 and no greater than .10. The first model I tested did not allow the error terms of each item to correlate. The model met all but one standard of fit, χ^2 (101, N = 370) = 324.43, $p < .001$; CFI =.92; RSMEA= .077, 90% CI = .068, .087. I examined behavior modification indices to see if the chi square fit could be improved by allowing error terms among items composing a given construct to correlate. Often correlated error terms indicate methodological artifacts arising from items appearing next to each other in a questionnaire or similar phrasing. I looked for modification indices greater than 10. Two of the items in the negative opinion scale had indices greater than 10 and two indices among the items in the psychological loss framing scale were greater than 10. I then tested the three-factor model that allowed the aforementioned error terms to correlate. Fit improved on two measures, CFI = .956; RSMEA= .058, 90% CI = .048, .068, but although the chi-square was smaller, it remained statistically significant, χ^2 (97, N = 370) = 317.63, $p < .001$. In cases in which a large sample size affords ample statistical power, the chi-square is often statistically significant even when other indicators show that fit is acceptable. That may be the case in my study.

I also examined the standardized factor loadings. All sixteen exceeded the recommended minimum of .50. Fifteen were greater than .60 and ten were greater than .70. With regard to the three latent factors, small, standardized parameters were found between level of scrutiny and

psychological loss framing (.18) and scrutiny and negative opinion (.04). However, the parameter between psychological loss framing and negative opinion was larger (.60), although below the .80 threshold that indicates the latent factors are the same.

Overall, the preliminary tests indicated that the measurement model was adequate.

Randomization tests. Since respondents were randomly assigned to one of the six message conditions, the probability of sample section biases (e.g., greater proportions of males in some conditions than in others) should have been attenuated. However, it was important to verify whether randomization successfully mitigated selection biases. Using the SPSS V. 24 Crosstabs routine, I conducted a series of tests that looked at the distribution of sample characteristics across the six message conditions. Because there were more than two conditions, I computed Cramer's *V* to look at the relationship between conditions and a given sample characteristic and tested its statistical significance with an independent group's chi-square. When *V* was statistically significant, I examined the standardized residual for each cell to see if it was greater than 1.69. If it was, then the frequency within the cell was greater than expected by chance ($p < .05$).

I examined the relationship between the message conditions and the seven sample characteristics that were included in the survey. The message conditions were not significantly related to whether sampling was done through snowball or Qualtrics, $V = .035$, χ^2 (5, $N = 371$) = 0.458, $p = .994$, participant gender, $V = .103$, χ^2 (5, $N = 364$) = 3.886, $p = .566$, participant ethnic identity, $V = .107$, χ^2 (30, $N = 369$) = 20.992, $p = .888$, participant level of education, $V = .125$, χ^2 (30, $N = 369$) = 28.884, $p = .524$, participant total years of employment, $V = .107$, χ^2 (25, $N = 371$) = 21.035, $p = .691$, participant experience with organizational change, $V = .062$, χ^2 (10, $N =$

368) = 2.807, p = .986, or the number of teams with which the respondent had worked, V = .089, χ^2 (10, N = 369) = 5.843, p = .828.

Thus, randomization successfully mitigated selection bias on these characteristics and they should not confound the interpretation of tests involving the message conditions.

Manipulation checks. Although six message conditions were used, the hypotheses and research questions cluster them into categories (e.g., interdependence, explicit loss). Hence rather than testing all six conditions, I chose to use orthogonal contrast coding that would allow me to assess how clusters of message conditions differ. Contrast codes allow one degree of freedom comparisons that increase statistical power, and limit tests to a priori comparisons rather than to all possible comparisons. Moreover, because they are orthogonal, the small correlation among the contrasts mitigates multicollinearity.

In order to use orthogonal contrast coding, several conditions must be met (see, Cohen, 1983). First, to provide complete information about each condition, there must be g -1 contrasts. Because there are six conditions, I needed to have created five contrasts. Second, to make the contrasts orthogonal, for each pairs of contrasts, the sum of their products should have been 0.

I created five contrast codes that corresponded to the message conditions in my hypotheses and research questions. As they reader may recall, my design used six message conditions. The first two conditions focused on situations in which benefits from a proposal would go to units whose budgets were not shared with the respondent's team (low budgetary interdependence). Message condition 1 proposed a change that would benefit unspecified teams whose budgets were independent of the respondent's team. Message condition 2 described a

proposal in which a specific team would benefit, but that team's budget was independent of the budget of the respondent's team.

The next four message conditions focused on messages in which the team who would benefit from the proposal shared a budget with the respondent's team (high budgetary interdependence). Message Condition 3 advanced a proposal that would benefit a specific team whose budget was shared with the respondent's team but the proposal did not mention any losses to the respondent's team. Details of generic benefits to all were mentioned. Message Condition 4 proposed a change that would benefit a specific team whose budget was shared with the respondent's team and noted that change would result in losses to the respondent's team but promised that the change would benefit all groups. Message Condition 5 proposed a change that would benefit a specific team whose budget is shared with the respondent's team and that the change would benefit all groups, but acknowledged losses would occur to the respondent's team and actions would be taken to mitigate the losses. Message Condition 6 described a change that would benefit a specific team whose budget was shared with the respondent's team and acknowledged that would entail losses to the respondent's team but the message made no mention of gains to all groups or compensation for the losses.

From those conditions, I created the following five orthogonal contrasts. The first I labeled the Specific Contrast and Message Condition 1 was coded -1, Message Conditions 3, 4, 5, and 6 were all coded 0 and Message Condition 2 was coded 1. Contrast 2 was labeled the Interdependency Contrast and Message Conditions 1 and 2 were both coded -2, and Message Conditions 3, 4, 5, and 6 were all coded 1. Contrast 3 represented the Loss Contrast and Message Conditions 1 and 2 were each coded 0, Condition 3 was coded -3, and Conditions 4, 5, and 6 were all coded 1. Contrast 4 reflected the degree to which the message offered general

gains or compensation to offset the costs to the respondent's group and Message Conditions 1, 2 and 3 were all coded 0, Message Conditions 4 and 5 were each coded -1 and Message Condition 6 was coded 2. The final condition examined whether a proposal that promised general benefits differed from one that promised both general gains and compensatory action to offset costs. Message Conditions 1, 2, 3, and 6 were all coded 0, Condition 4 was coded 1 and Condition 5 was coded -1.

Orthogonal contrasts are assumed to be relatively uncorrelated with each other. To verify that they were orthogonal, I correlated the five contrasts. Of the ten correlations, none were statistically significant, three correlations were .000, and the other seven ranged from -.019 to .013.

I then examined whether the message contrasts were perceived as similar with regard to qualities unrelated to the hypotheses. By doing so I could determine whether the messages were perceived to differ in ways that might confound the interpretation of the results. Consequently, I ran a series of multiple regressions in which I regressed one of three message characteristics against the set of contrast codes.

I first examined whether the set of message contrasts were perceived to be realistic (1 = unrealistic, 7 = realistic). On average, the participants saw the messages to be moderately realistic (M = 4.47, SD = 1.543). The multiple regression analysis indicated that the set of contrasts did not account for a significant increment of variance in realism judgments, R^2 = .023, $F(5,365)$ = 1.753, p = .122. Of the five contrasts, only the Loss Contrast (Contrast 3) was statistically significant, β = -.112, p < .031. This means that respondents who read the three messages that explicitly mentioned the costs to their group (Message Conditions 4, 5 and 6) felt that the message was less realistic than did the respondents who read the message that did not

explicitly mention costs (Message Condition 3). This could mean that individuals do not think that change messages are upfront about their costs to specific groups.

Next I sought to determine whether the respondent agreed that the proposed change was something that could happen in the respondent's current or prior company (1 = strongly disagree, 5 = strongly agree). On average, respondents moderately agreed that something like the change could be proposed (M =3.66, SD = 1.015). The regression analysis showed that the set of contrasts did not account for a significant increment of variance in these judgments, R^2 = .012, $F(5,365)$ = 0.891, p = .487 and none of the contrasts was a significant predictor.

I also investigated whether the contrasts were related to the respondent agreeing that the message they read was similar to other change messages they had received in the past (1= strongly disagree, 5 = strongly agree). In general, they moderately agreed that the messages were similar (M = 3.29, SD = 1.073). The regression analysis showed that the set of contrasts did not account for a significant increment of variance in similarity, R^2 = .010, $F(5,365)$ = 0.731, p = .601 and none of the individual contrasts was significantly related to it.

Finally, I evaluated how respondents judged the clarity of the message (1= unclear, 7 = clear). Respondent felt that the message was moderately clear (M = 3.90, SD = 1.810). The regression analysis indicates that the contrasts did not account for a statistically significant increment of variance in clarity judgments, R^2 = .018, $F(5,365)$ = 1.344, p = .245, and none of the contrasts was a statistically significant predictor.

Although the aforementioned results show that the message contrasts were generally perceived in the same way, they do not address whether the messages were perceived as I intended them. In other words, did the respondents accurately perceive the gains and costs expressed within the messages? In order to assess the effectiveness of the contrasts, I conducted

a series of tests in which I regressed respondent perceptions of how the messages described gains and losses against the five contrasts.

I first looked at whether the respondents agreed that the message explicitly mentioned losses incurred to their own team as a result of the proposed change (1= strongly disagree, 5 = strongly agree). In general, agreement fell just above the midpoint of the scale (M = 2.98, SD = 1.263). The regression analysis shows that the set of contrasts accounted for a statistically significant increment in the judgment, $R^2 = .142$, $F(5,365) = 12.082$, $p < .001$. Of the six contrasts, significant associations were only found for the Interdependency Contrast, $\beta = .260$, $p < .001$ and Loss Contrast, $\beta = .271$, $p < .001$. This means that subjects were significantly more likely to agree that losses were explicitly mentioned when they shared a budget with the group that would benefit from the change (high interdependency, Message Conditions 3, 4, 5, and 6) than when they did not share a budget (low interdependency, Message Conditions 1 and 2) and when the change message explicitly mentioned losses (Message Conditions 4, 5, and 6) than when it did not (Message Condition 3). The latter indicates that the loss manipulation worked as expected. The former may be an artifact of the composition of the interdependency contrast. Of the four high interdependency message conditions, three explicitly mentioned costs to the respondent's team whereas in the low interdependency conditions, none explicitly mentioned costs.

I then examined whether respondents agreed that the message explicitly mentioned that the other team would gain from the plan (1 = strongly disagree, 5 = strongly agree). Overall, there was moderate agreement that gains were explicitly mentioned ($M = 3.63$, $SD = 1.162$). The regression analysis found that the five contrasts accounted for a significant increment of variance in agreement $R^2 = .118$, $F(5,364) = 9.739$, $p < .001$. Only two of the contrasts were

significantly related to agreement. Positive relationships were found between agreement and the Specific Gain Contrast, $\beta = .227$, $p < .001$, and the interdependency contrast, $\beta = .253$, $p < .001$. This means that respondents agreed that the gains to the other team were explicitly mentioned in messages in which the beneficiary team shared a budget with their team (high interdependency, Message Conditions 3, 4, 5, and 6) than when budgets were not shared (low interdependency, Message conditions 1 and 2) and when there was low interdependency but the gains were to a specific team (Message Condition 2) rather than to general organization (Message Condition 1). In both cases, the messages did explicitly state gains to a specific team.

Next, I tested whether respondents agreed that a message explicitly mentioned that their own team would gain something (1 = strongly disagree, 5 = strongly agree). In general agreement was at the midpoint of the scale, $M = 2.71$, $SD = 1.236$. The regression analysis found that the set of contrasts did not account for a significant increment of variance, $R^2 = .027$, $F(5,364) = 1.992$, $p = .079$. However, one contrast was significantly related to agreement. A negative relationship with agreement was found for Contrast 4, $\beta = -.118$, $p < .023$. This means that respondents were more likely to agree that gains were mentioned when they read a message that promised general gains to the organization (Message Condition 4) or that mentioned both general gains and compensation for losses (Message Condition 5) relative to a message in which no promises were made (Message Condition 6). Interestingly, Contrast 5 that compared a message that promised general gains (Message Condition 4) with that which promised general gains and compensation for losses (Message Condition 5) was not significantly related to agreement. Hence, offering compensation did not add to the perception that gains were promised.

I also wanted to determine whether respondents recognized that the two conditions in which the proposal benefitted groups with whom they did not share a budget (Message Condition 1 and 2) did not promise gains to either their own team or the team with which they shared a budget (Message Conditions 3, 4, 5, and 6). Respondents were asked if they agreed (1 = strongly disagree, 5 = strongly agree) that the proposal did not mention gains or losses to their own or the other interdependent team. Overall, agreement was moderate (M = 2.73, SD = 1.317). The regression analysis showed that the contrast accounted for a significant increment of variance in agreement, R^2 = .158, $F(5,365)$ = 13.693, $p <$ .001. Agreement was significantly related to only two of the contrasts. Negative relationships were uncovered between agreement and the Specific Contrast, β = -.152, $p <$ .002, and the Interdependency Contrast, β = - .363, $p <$ .001. This means that respondents expressed greater agreement that gains and losses to their own group and another group with whom they were interdependent were explicitly mentioned when there was low interdependency (Message Conditions 1 and 2) rather than high (Message Conditions 3, 4, 5, and 6) and especially when benefits were to the general organization (Message Condition 2) than to a specific group (Message Condition 1).

Overall, the contrasts that I created to test the hypotheses and research questions proved to be orthogonal, were not strongly related to extraneous message characteristics and respondents recognized their key content.

Relationships among the variables. Prior to testing the hypotheses and research questions, I wanted to determine the relationships among the predictors (five message contrasts), mediators (level of scrutiny and psychological loss framing), moderators (in-group identification, out-group bias and competitive climate) and the dependent variable (negative opinion). In order to do so, I created a correlation matrix among the eleven variables. Since these are bivariate

correlations, they may reflect associations that change when statistical controls are used in later analyses. This is especially true of the correlations involving the message contrasts. With that caution in mind, several correlations are statistically significant and noteworthy. The absence of strong relationships between predictors and moderators is desirable.

The five contrasts are not significantly correlated with in-group identification or with competitive climate. Out-group bias is not significantly related to any of the contrasts other than the Interdependency Contrast (Contrast 2). Hence, there is no evidence of a problem.

I then examined the relationships involving the two mediators. Scrutiny is positively related to the Interdependency Contrast (Contrast 2), in-group identification, and out-group competitive climate. It is not significantly related to four of the contrasts. That could indicate that the hypothesized serial mediation may not be found for all but one contrast. Psychological loss framing is positively related to the Specific Contrast (Contrast 1), Interdependency Contrast (Contrast 2), Loss Contrast (Contrast 3), out-group bias, competitive climate, and scrutiny. This pattern suggests that Contrasts 1 and 3 may only influence psychological loss framing and subsequently influence negative opinion.

Negative opinion is positively related to the Specific Contrast (Contrast 1), Interdependence Contrast (Contrast 2), the Loss Contrast (Contrast 3), and psychological loss framing, but is negatively related to in-group identification. These patterns may indicate that three of the contrasts are related to negative opinion and those relationships may be mediated by psychological loss framing.

Analytic Overview of Hypotheses Testing

All of the statistical analysis was conducted with Mplus 8.0. The first set of hypotheses was focused on the relationship between the message contrasts and holding negative opinions

about the proposal. I jointly tested these hypotheses by regressing negative opinions against the set of five contrasts. Two criteria were used to determine if the hypotheses were confirmed. First, I looked at whether the set of contrasts accounted for a significant amount of variance in negative opinions. Second, I examined each of the standardized regression weights (β) associated with the contrasts to determine if they were statistically significant and in the predicted direction.

The second set of hypotheses and research questions focused on the degree to which the associations between the message contrasts and negative opinions were mediated by the serial relationships between scrutiny and psychological loss framing. Mediation implies that there is an indirect relationship between the independent and dependent variable through one or more mediating variables. To evaluate mediation, I examined the regression coefficient associated with an indirect relationship. Because the distribution of indirect relationships is not normally distributed, I could not evaluate the hypotheses using standard significance tests that assume normal distributions. Instead, I used bias corrected, bootstrapped 95% confidence intervals to evaluate the standardized regression coefficients associated with an indirect path. Bootstrapping involves randomly creating samples from the data and determining how often the observed relationships occur. I used 5000 samples. If the confidence interval associated with a contrast does not contain 0 and if the regression coefficient is in the predicted direction, then the hypothesis is confirmed. I then reported the effect size of the indirect path. Since currently there is no accepted measure of the effect size of an indirect path, I report the unstandardized coefficient. It gauges how much a change in the path is associated with a change in the dependent variable and provides a rough approximation of the effect size. Because direct effects are normally distributed, I will report the traditional significance tests associated with them.

The final set of hypotheses focused on the degree to which the indirect relationships between the message contrasts and negative opinion are moderated by in-group identification, out-group bias and competitive climate. I evaluated moderation by examining the indirect relationships at different levels of the moderator (10^{th} percentile, 25^{th} percentile, 50^{th} percentile, 75^{th} percentile and 90^{th} percentile). I examined whether their bias-corrected 95% confidence intervals contained 0 and whether the pattern of relationships conformed to those specified in my hypotheses.

At the end of this chapter, I report the results of a test to see if the significant relationships that were uncovered provided a model that fit the data. I used the following standards to evaluate fit – a non-significant goodness of fit chi-square, Bentler's (1990) comparative fit index (CFI) greater than .90, and Steiger and Lind's (1980) root mean square error of approximation (RMSEA) between .05 and .08 and no greater than .10.

Hypotheses Testing

For ease of presentation, I am clustering the tests into four groups, (1) direct effects of message contrasts on negative opinion, (2) mediation of the relationship between message contrasts and negative opinion, (3) moderation of mediated relationships between message contrasts and negative opinion and (4) tests of the final model.

Direct Effects of Message Contrasts on Negative Opinion. Hypotheses 1 to 4 predicted direct effects of the specific contrast (H1), interdependence message contrast (H2), loss message contrast (H3) and promising general benefits/compensation action (H4). H1 predicted that when a proposal offers benefits to groups whose budgets are independent of one's own team, individuals are more likely to form negative opinions when a specific group is mentioned than

when the benefits are to the general good. The contrast was coded so that a positive regression weight is in the predicted direction. H2 predicted that negative opinions are less likely to be formed when benefits accrue to teams whose budgets are independent of one's own team than when budgets are shared. The coding of the contrast was such that a positive regression weight is anticipated by the hypothesis. H3 predicted that negative opinions are more likely when a proposal explicitly mentions losses to one's own team than when they do not. Given the coding of the contrast, a positive regression weight is expected. H4 posited that negative opinions are less likely when a proposal that benefits a team whose budget is shared with the respondent's team promises general benefits to the organization or general benefits plus compensatory action to the respondent's team than when the proposal does not offer such actions. A negative regression weight is predicted. The first research question asked if the likelihood of rejection is different when a message promises general benefits to all than when a message offers general benefits to all plus specific compensation to the respondent's team for its losses. In this case, no directional prediction is made and a statistically significant regression weight can be taken as an affirmative answer.

The set of five contrasts accounted for a significant increment of variance in holding a negative opinion toward the proposed change, R^2=.053, F = (5,365) 4.11, $p < .001$. Of the five contrasts, only three were statistically significant predictors and each was in the direction predicted by the hypotheses. Positive regression weights were found between negative opinion and the specific contrast, $\beta = .112$, $p = .029$, the interdependency contrast, $\beta = .164$, $p < .001$ and the loss contrast, $\beta = .099$, $p = .053$. The contrast focused on promising general gains or general gains with compensation was positive and not close to being statistically significant, $\beta = .054$ p =

.289 and the contrast comparing promising general gains vs. general gains plus compensation was negative and not significant, $\beta = -.018$, $p = .726$.

Thus, Hypotheses 1, 2, and 3 are confirmed, Hypothesis 4 is not and in answer to the first research question, I found no evidence of a statistically significant response.

Mediation of the relationship between message contrasts and negative opinion. H5 predicted that an indirect relationship would exist between message scrutiny and negative opinion mediated by psychological loss framing. I found support for the prediction. The 95% confidence interval for this indirect relationship did not contain 0, $\beta = .086$, 95% CI = .038, .139). The positive coefficient arose from the positive association between message scrutiny and psychological loss framing, $\beta = .185$, $p < .001$, and between psychological loss framing and negative opinion, $\beta = .466$, $p < .001$. The unstandardized regression coefficient was .103, which means that an increase in one unit of the indirect relationship resulted in an increase in the dependent variable of .103. Therefore, although statistically significant, the effect size is small. It is noteworthy that the direct relationship between scrutiny and negative opinion was not statistically significant, $\beta = -.042$, $p < .417$.

Hypotheses 6 through 8 predicted that the indirect relationships between the specific, interdependence, and loss message contrasts and negative opinion would be serially mediated by scrutiny and psychological loss framing. I also predicted (H9) that the relationship between promising general benefits either alone or in conjunction with compensation and negative opinion would be mediated by psychological loss framing. RQ2 asked the question whether psychological loss framing would mediate the contrast between promising general benefits and offering both general benefits and compensation.

I found no support for the hypothesized indirect path from the specific message contrast to negative opinion through scrutiny and psychological loss framing (H6). The confidence intervals for the specific message contrast included 0, β = -.004, 95% CI = -.002, .016. The absence of a significant relationship resulted in part from the nonsignificant relationship between the specific message contrast and scrutiny, β = .068, p = 213. I did find a shorter indirect path that was nearly significant, β = -.042, 95% CI = .000, .091 and the 90% confidence interval for the indirect effect did not include 0, 90% CI =.008, .091. This shorter path in part resulted from a marginally significant relationship between the specific contrast and scrutiny, β = .095, p < .058.

I found support for H7. The regression weight for the indirect relationship between the interdependence message contrast and negative opinion mediated by scrutiny and psychological loss framing was positive and the confidence interval did not include 0, β = .009, 95% CI = .002, .023. This path arose from a positive relationship between the interdependence message contrast and scrutiny, β = .127, p = .016, scrutiny and psychological loss framing, β = .167, p = .002, and psychological loss framing and negative opinion, β = .443, p < .001. The unstandardized regression weight was .005, which indicated a small effect size. However, there was also evidence of a shorter indirect path from the interdependence message contrast to negative opinion through psychological loss framing, although the confidence intervals contained 0, β = .044, 95% CI = .000, .092. The 90% confidence interval for the path did not include 0, 90% CI = .007, .083. In part, this path reflects that the interdependence contrast was significantly related to psychological loss framing when controlling for scrutiny, β = .099, p = .049.

I found no support for H8 which predicted an indirect relationship between the loss contrast and negative opinion serially mediated by scrutiny and psychological loss framing. The

confidence interval contained 0, β = .002, 95% CI = -.005 .012. The result partly stemmed from the small and nonsignificant relationship between the loss contrast and scrutiny, β = .023, p = .659. However, the confidence interval associated with the indirect path from the loss contrast to negative opinion through psychological loss framing did not contain 0, β = .059, 95% CI = .015, .113. The relationship between loss contrast and psychological loss framing was statistically significant, β = .134, p = .011 as was the relationship between psychological loss framing and negative opinion, β = .443, p < .001.

There was no support for H9, which predicted an indirect relationship between promising generic benefits or compensation to the team and negative opinion mediated by psychological loss framing. The indirect path contained 0, β = -.001, 95% CI = -.010, .006. The contrast was not significantly related to scrutiny, β = -.017, p = 742, psychological loss framing, β = .006, p < .897 or negative opinion, β = .051, p < .277.

Finally, I found no support for RQ2, which inquired about the indirect relationship between promising generic benefits, or generic benefits and compensation, and negative opinion, mediated by psychological loss framing. The indirect path contained 0, β = -.025, 95% CI = -.072, .017. The contrast was not significantly related to scrutiny, β = .055, p = .235, psychological loss framing, β =-.056, p < .269 or negative opinion, β = .006, p < .910.

Overall, two mediation hypotheses were supported, and three unanticipated paths were also discovered.

Moderated mediation tests. Nine hypotheses posited that the indirect paths from the message contrasts to negative opinion through scrutiny and psychological loss framing would be moderated by in-group identification, out-group bias and competitive climate. Since the two

contrasts involving promised general gains and compensation were not significantly related to either mediator, the dependent variable, or to the indirect relationship among them, there was no need to test to see if the indirect relationships were influenced by the three moderators. Those hypotheses (H9a, H9b, H9c) are thus not supported.

To test for H6a – H8a, I examined whether the indirect path from the specific, interdependence and loss message contrasts to negative opinion were moderated by in-group identification. There was no evidence confirming the hypotheses. The confidence intervals for the indirect path for the specific message contrast included 0 at the 10^{th} percentile (β = -.019, 95% CI = -.610, .045), 25^{th} percentile (β = -.023, 95% CI = -.712, .052), 50^{th} percentile (β = -.026, 95% CI = -.813, .059), 75^{th} percentile β =-.028, 95% CI = -.864, .063) and 90^{th} percentile (β = -.031, 95% CI = -.966, .071) of in-group identification. The same pattern emerged for the interdependence contrast at the 10^{th} percentile (β = .014, 95% CI = -.030, .158), 25^{th} percentile (β = .016, 95% CI = -.035, .184), (50^{th} percentile, β = -.019, 95% CI = -.040, .211), 75^{th} percentile (β = .020, 95% CI = -.043, .224), 90^{th} percentile (β = -.022, 95% CI = -.048, .250), and for the loss contrast, 10^{th} percentile (β = .000, 95% CI = -.008, .003), 25^{th} percentile, β = .000, 95% CI = -.011, .004), (50^{th} percentile, β = .000, 95% CI = -.014, .005), 75^{th} percentile (β = .000, 95% CI = -.016, .006) and 90^{th} percentile (β = .000, 95% CI = -.022, .008).

Next, I tested whether the indirect path from the specific, interdependence and loss contrasts to negative opinion were moderated by out-group bias (H6b – H8b). There was no evidence supporting the hypotheses. The confidence intervals for the indirect path for the specific contrast included 0 at the 10^{th} percentile (β = .009, 95% CI = -.053, .100) 25^{th} percentile (β = .012, 95% CI = -.070, .133), 50^{th} percentile (β = .015, 95% CI = -.088, .167), 75^{th} percentile

β = .015, 95% CI = -.088, .200) and 90th percentile of out-group bias (β = .024, 95% CI = -.141, .267). The same pattern emerged for the interdependence contrast at 10th percentile (β = -.008, 95% CI = -.092, .003), 25th percentile (β = -.010, 95% CI = -.122, .004), 50th percentile (β = -.013, 95% CI = -.153, .005), 75th percentile (β = -.015, 95% CI = -.183, .066), (90th percentile, β = -.020, 95% CI = -.244, .008) and for the loss contrast, 10th percentile (β = .000, 95% CI = -.008., .003), 25th percentile (β = .000, 95% CI = -.011, .004), 50th percentile (β = .000, 95% CI = -.014, .005), 75th percentile, β = .000, 95% CI = -.016, .006), 90th percentile (β = .000, 95% CI = -.022, .008).

Finally, I tested whether the indirect path from the specific, interdependence and loss contrasts to negative opinion were moderated by competitive climate, as predicted by H6c through H8c. As with the other two moderators, the hypotheses were not confirmed. The confidence intervals for the indirect path for the specific contrast included 0 at the 10th percentile (β = -.013, 95% CI = -.115, .039) 25th percentile (β = -.016, 95% CI = -.142, .048), 50th percentile (β = -.019, 95% CI = -.169, .058), 75th percentile β =-.021, 95% CI = -.186, .063) and 90th percentile of competitive climate (β = -.023, 95% CI = -.202, .069). The same pattern emerged for the interdependence contrast, 10th percentile (β = -.000, 95% CI = -.005, .039), 25th percentile (β = .000, 95% CI = -.006, .049), 50th percentile (β = .000, 95% CI = -.007, .058), (75th percentile, β = .000, 95% CI = -.008, .064), 90th percentile (β =.000, 95% CI = -.009, .068) and for the loss contrast, 10th percentile (β = .000, 95% CI = -.022, .009), 25th percentile (β = -.000, 95% CI = -.027, .011), 50th percentile (β = .000, 95% CI = -.032, .013), 75th percentile (β = .000, 95% CI = -.036, .015) and 90th percentile (β = .000, 95% CI = -.039, .016).

Thus, all hypotheses that posited moderation were not supported.

Final Model. The previous analyses discovered five significant paths that lead to negative opinions. As predicted, scrutiny was positively associated with negative opinion and the relationship was mediated by psychological loss framing. The serial relationship between scrutiny and psychological loss framing mediated the association between the interdependence message contrast and negative opinion of the change initiative. I also found two variations of predicted associations. The specific message contrast, interdependence message contrast and the loss message contrast were positively related to negative opinions but mediated only by psychological loss framing. As an additional test, I wanted to see if a path model containing these five paths would adequately fit the data.

The results indicated that the model fit the data well, $\chi^2(25, 371) = 10.20$, $p = .596$; CFI = 1.00; RSMEA = 0, 90% CI = 0, .046. As in earlier tests, the confidence interval for the path from scrutiny to negative opinion through psychological loss framing did not contain 0, $\beta = .061$, 95% CI = .010, .019, neither did the confidence interval for the path from interdependence contrast to negative opinion mediated by scrutiny and psychological loss framing, $\beta = .008$, 95% CI = .001, .021. I also found that the confidence intervals did not contain 0 for paths in which psychological loss framing was a mediator of the relationship between specific message contrast, $\beta = .068$, 95% CI = .020, .118, interdependence message contrast, $\beta = .080$, 95% CI = .030, .135, loss message contrast, $\beta = .070$, 95% CI = .014, .132, and negative opinion.

Summary of Results

Overall, three of the four hypothesized direct relationships between message contrasts and negative opinion were confirmed. A research question uncovered no significant relationship

between one contrast and negative opinion. Support was found for the three-step mediated relationship from scrutiny to negative opinion through psychological loss framing. As predicted, the sequential link between scrutiny and psychological loss framing also mediated the relationship between the interdependence message contrast and negative opinions. However, contrary to predictions, there was no evidence that scrutiny and psychological loss framing mediated any of other four contrasts. For the specific and loss message contrasts, only psychological loss framing mediated their relationship to negative opinions and this was also true for the interdependence contrast. Contrary to my hypotheses, I found no evidence that in-group identification, out-group bias or competitive climate moderated the indirect relationships.

CHAPTER 6: DISCUSSION

In this chapter, I will provide a summary of the results, highlight contributions, report limitations, and discuss potential future research directions.

Summary of Results

The purpose of this study was to probe how employees cognitively respond to messages of organizational change, and the role that message features and contextual factors play in their responses. Organizations are comprised of employees who mostly belong to work teams that often share resources with other work teams. Periods of organizational change, often times when resources are reallocated, makes this interdependence between work groups salient for employees. This may also result in zero sum thinking, that is, the belief that others' gain is one's own loss. The objective of this study was to understand these phenomena inherent in organizational change as a context, and the way information about these in messages is processed.

There were three key relationships that this project explored. The first probed the *direct effects* on the formation of negative opinion of the change proposal. These are: (1) information contained in the organizational change message regarding the allocation of human resources to a specific but independent beneficiary team, (2) the allocation of human resources to a specific team one's own team shares finite resources with, (3) the explicit mention of resultant losses to one's own team, and (4) the mention of generic benefits to all in the organization and generic benefits supplemented by compensation for the loss. The second tested the *indirect cognitive path* from the message content to the recipient's opinion about the change initiative through the level of scrutiny the recipient of the message engages in, resulting in the psychological loss framing of the message. The third examined the *moderating role* played by one's level of

identification with in-group, out-group bias, and the competitiveness in their work climate in the indirect effect of the message features on opinion of change proposal through the level of scrutiny and psychological loss framing.

Confirmed hypotheses. First, I studied the direct effects on negative opinion of the change initiative of messages mentioning a specific beneficiary out-group, interdependent beneficiary group, messages explicit regarding loss for one's in-group and the promise of generic benefits and compensatory action to mitigate losses. The confirmation of the first three hypotheses indicates that negative opinions of the change initiative are likely to form when messages specify the out-group that will benefit from the change, when the beneficiary group shares its budget with the recipient's own team, and when the message explicitly mentions losses the recipient's own team will incur as a result of the change program. I also tested the indirect path from message contrasts to negative opinion through scrutiny and psychological loss framing. The indirect path from scrutiny to opinion through loss framing was confirmed, although the effect size was small.

Unanticipated findings. The study revealed some unexpected findings comprising shorter indirect relationships between the independent variable, a mediation variable and the dependent variable. The specific message contrast, interdependence message contrast as well as loss message contrast had significant effects on negative opinion of the change initiative, mediated by psychological loss framing. Although the effect size was small for the statistically significant indirect relationship between interdependence message contrast and negative opinion through scrutiny and loss framing, the shorter path from interdependence contrast to negative opinion through loss framing was significant. Therefore, it can be concluded that the interdependence contrast was significantly related to psychological loss framing when

controlling for scrutiny. Also, the shorter path from loss contrast to negative opinion through loss framing was significant, as was the relationship between loss contrast and psychological loss framing, and the relationship between psychological loss framing and negative opinion. The shorter path from specific contrast to negative opinion through loss framing was almost significant.

Disconfirmations. The relationship between specific contrast and loss contrast and negative opinion is mediated by loss framing but not by scrutiny. This may be because cognitive intermediacy leads to scrutiny and loss framing in a manner which is similar to peripheral processing in ELM (Petty & Cacioppo, 1979). People look to see if the proposed change benefiting a specific group and one which would result in losses for them would influence their budgets and if it does, they don't think about it much, but immediately discard it. The specific contrast and loss contrast automatically prompt a loss frame with minimum thought. This could be like peripheral processing where cues cause people to resist without necessarily analyzing the arguments in a detailed manner. These message cues could create a reflexive response of loss, resulting in disapproval of the change initiative. This can be explained by assuming that the features of the message make the loss to their teams so obvious to people that they spontaneously reject the message without deliberating on it. A positive relationship was seen to exist between scrutiny and psychological loss framing. However, when information contained in the message is factored in, people might not have needed or wanted to spare more thought on it in order to discover the loss, and directly engaged in loss framing. If the specificity of the beneficiary out-group or loss to in-group were implied rather than explicit, people might have scrutinized the message more before framing it as a loss.

There were two significant paths from the interdependence message contrast to negative opinion of the change proposal. One had been predicted and involved both scrutiny and loss framing as mediators. The other one only involved loss framing. The effect size for the shorter path is larger and more replicable. Although opting for the shorter path as valid would be parsimonious, it is necessary to discuss the possibility and reason that both could be valid relationships. The exclusion of scrutiny from this path indicates the peripheral route. While the central and peripheral routes of thinking involve different cognitive motivation and effort, ELM theorists note that some people may be inclined toward one path rather than the other. For instance, ELM theorists identify the need for cognition as a variable that can influence whether a person adopts the central route or peripheral route. Some people are prone to adopt the central path because they like to deliberate, while those who aren't inclined to think often adopt the peripheral path. This implies moderation, that is, those high in need for cognition follow the three-step path including scrutiny, and those low in need for cognition follow the two-step path excluding scrutiny. Both of these groups process the message sufficiently to identify interdependency, following which they process the message differently. Those who are high in need for cognition might think more about the message about an interdependent group, which activates a loss frame, resulting in the formation of a negative opinion of it. When those who are low in need for cognition read the interdependency message, it automatically activates a loss frame for them, and they form a negative opinion about the proposal without sparing much thought.

Trust in management can also play a role in how employees respond to an interdependent message with a loss frame. Those who have low trust for management may automatically respond to a message offering gains to an interdependent out-group with a loss frame and

disapproval. Since they are suspicious of management, they might think of the message as discriminatory and as a loss for their team and discard it without having to deliberate about it. After identifying interdependency, high trusting employees may read the message more closely and deliberate more, trying to understand the details. More scrutiny may activate a loss frame, leading to negative opinion.

A possible model would thus be:

Interdependence X need for cognition—>scrutiny—>loss frame—>negative opinion

Interdependence X trust in management—>scrutiny—>loss frame—>negative opinion

None of the hypotheses studying the association of message contrasts with promises of general gains or general gains plus compensatory action was confirmed. Associated hypotheses predicting the mediating effect of loss framing on how a message outlining generic benefits to all or generic benefits and compensatory action for one's in-group impacts negative opinion was also insignificant. There was no statistically significant response for the first research question, which asked if there is any additional benefit of providing specific compensations to the respondent's team for its losses, beyond promises of generic benefits to the entire organization. There also was no significant response for the second research question that asked about the extent to which loss frame mediates the impact of a message mentioning generic benefits or generic benefits and compensatory action combination on negative opinion. Finally, since the message contrasts outlining generic benefits and generic benefits and compensatory action were not significantly related to scrutiny, psychological loss framing, negative opinion or their indirect relationship, the hypotheses regarding the moderating roles of strong in-group identification, out-group bias, or competitive work climate on these indirect relationships were automatically disconfirmed.

This disconfirmation may be because of a relative lack of trust in management, which will determine how one perceives a promise of generic gain or generic gain and compensatory action as mitigation against impending losses. Any evaluation of promises requires trust in those making them, and this is especially true during the stressful and often indeterminate time of organizational change. In this time of uncertainty, employees need to be able to trust the motive, benevolence, competence and integrity of the colleagues who propose the change (Schoorman, Mayer, & Davis, 1995). Empirical studies on trust during organizational change have found that the framing of the change message depends on managers' use of social accounts describing the change and explaining the rationale for it, and this leads to their perceived trustworthiness (Lines, Selart, Espedal, & Johansen, 2005).

The association between trust and message-sidedness in organizational change research has been ambiguous. Researchers have found no difference in the perceived trustworthiness of the implementer of change when stakeholders received a message of change highlighting only the implementer's point of view (one-sided message) versus when they read a message highlighting a counterargument as well (two-sided message). Recipients' perceptions of implementers' trustworthiness was dependent on the riskiness of the organizational change context. However, whether they read a one-sided or two-sided message in either a high-risk or a low-risk situation had no impact on their perceptions of implementers' trustworthiness (Lewis et al., 2013). However, it has to be noted that the messages that participants in Lewis and her colleagues studied described generic benefits of the change, and perceived trustworthiness was studied as a dependent variable in keeping with message-sidedness literature (O'Keefe, 2002).

However, trust for the sender of the message can also be a predictor variable, which determines how the message is evaluated, especially if the message contains promises. In the

present study, it could be that once the loss frame was evoked, it was so strong that no promise of generic gains or compensatory action could attenuate it. Moreover, most participants reported that the message was similar to messages of organizational change that they had read. As employees who have had experience with organizational change and change messages, they may have been cynical regarding the excessive promises that are made during organizational change. Trust in the management's discretion might have been eroded through the discriminatory messaging, and employees might have felt that those who can put a team at a disadvantage against another one will not fulfill the promises to offset those disadvantages. Thus trust in the initiator of the change and the sender of the message would be a necessary variable to study in order to assess the effects of message contrasts promising generic benefits and generic benefits plus compensatory action.

Interestingly, no significance was found for the moderating role of in-group identification, out-group bias, and competitive work climate. Moreover, the effect sizes of the contrasts were small, and hence, I cannot argue that the message overwhelmed the moderators. It can be assumed that the lack of influence reflects the hypothetical nature of the study. The individual differences might not have been activated to reflect in responses to the message contrasts. Also, the reliabilities of the scales were at best moderate, which may have hurt the results.

Contributions to Prior Research

This research study aimed to examine how individual employees frame and evaluate messages of organizational change based on their work-group affiliations and zero sum thinking. In this regard, this study contributes to literature on organizational change and communication, as well as to research on persuasion and psychological framing of messages.

Organizational change and communication. Organizational change research has been a robust area of study, with topics involving challenge like uncertainty around change, and cynicism and resistance of employees attracting their due academic attention. Organizational change communication researchers have studied the channel, content and adequacy of information in messages of change, and the impact of these on how employees perceived the change initiative (Lewis, 2006), as well as their satisfaction with the messages (Lewis et al., 2001). This study adds to the academic conversation regarding organizational change and communication in the following ways.

Focus on specific target and specific outcome. Much of the research on change has focused on large-scale, often organization-wide change programs, which highlight their overall benefits for the organization and all its employees. Although employees are focused on the consequences the change program would have for them at a personal or group level (Vakola, 2014), these micro-level outcomes have mostly evaded scholarly attention. Data from this study shows that if the message of change specifies the out-group which will benefit from the change program, employees react strongly to the change initiative, even if the team is not related to their own in any way. Although the dependent variable was negative opinion, the impact of group specificity on negative opinion informs us that employees want to know the specific beneficiary of the initiative rather than being told that "all boats will rise" with the tide.

This study also specified and quantified the outcome of the change rather than leaving it generic. Much of research in organizational change focuses on outcomes that are overarching and sweeping across entire organizations or large work units (Leonardi, 2009; Jack Walker et al., 2007). While these are consequential, they also have relatively micro-level components about which employees only come to know once the change initiative is underway. Organizational

change initiators may not know upfront about these specific details, but when they do, sharing them with the targets of change may bring forth disapproval or resistance, which may be too late if the implementation has begun. This research showed that the explicit mention of a specific gain and corresponding loss elicits an honest reaction from employees. The dependent variable, as has been mentioned, was negative opinion, and the gains were to an out-group and the losses to the recipient's own team. However, there undoubtedly is an effect of straightforward and specific approach to communication.

Focus on inter-group relationships. Interpersonal and within-network communication regarding change has been a well-researched topic (Kahn, Cross, & Parker, 2003). Researchers have studied the way communication with other organizational members affect one's response to change (Leonardi, 2009), and have identified the people one communicates with regarding the change during and after implementation (Lewis et al., 2013; Qian & Daniels, 2008). Much of the literature on target response to change, situates resistance as a quality or reaction in the recipients (Ford et al., 2002), and researchers have highlighted the need to examine the relationship between change initiator and recipient (Ford et al., 2008). Most of these studies, however, take a social networks approach to the processing of change, mostly viewing employees in organizations as change agents rather than individuals and work-group members.

This study examines the awareness of group identity and affiliation as key elements in one's experience of organizational processes, specifically organizational change. Findings indicate that when resources like budgets are shared, a change message mentioning benefits to an out-group is viewed negatively. This information is psychologically framed as a loss to one's own team and viewed unfavorably. Similarly, when losses to one's own team are mentioned explicitly in the message, the change proposal is framed as a loss and evaluated negatively. Thus

this study reviews organizational change as a context of resource allocation, and a time of heightened group identity and competition, and contributes to the understanding of change message perception by studying how resource interdependence, the specificity of the beneficiary group's identity, and explicitly mention of loss to one's own team determine how an employee processes a message proposing change.

Content and sidedness of message. As mentioned earlier, most real-life change proposals as well as the situations studied by change researchers highlight the benefits of the change for the entire organization (Lewis et al., 2013). This study did not find any significant difference in negative opinion of messages that mention losses to one's own team (one-sided message) and messages that mention specific losses and generic benefits to organization, or messages that mention losses, generic gains and measures that would be adopted to compensate for the losses (two-sided non-refutational messages). The findings thus reinforce that once costs of change are clearly mentioned, employees are no longer concerned about generic benefits or how the losses would be attenuated.

This indicates that organizational change research should focus on the effects of implementation costs as well as the effects of communicating them clearly. Even when messages outlining benefits and downsides of a change proposal are studied, the mentioned downsides are usually large-scale and generic (Lewis et al., 2013). This may provide reliable data on the recipients' perceptions of the quality of the message or the trustworthiness of the sender (Lewis et al., 2013), but they provide incomplete estimates of the employees' perception of the change proposal as a whole. As Lewis and her colleagues note, "the skepticism of the working adults" (Lewis et al., 2013, p. 300) makes them question the level of transparency in the message. Since the effects of attenuation on reducing negative opinion are non-significant, it can be assumed that

explicit description of the impending losses upfront may provide the change initiators an opportunity to address the disapproval of employees before implementation begins. This may eventually ensure less resistance and more success.

Scrutiny and loss framing. This study also examined the role of cognitive processes such as scrutiny and psychological loss framing during the formation of an opinion regarding an organizational change program. A close examination of the message seemed to lead to psychological loss framing, which led to negative opinion of the message. However, data also revealed that when the message specified the beneficiary group, when the beneficiary group shared resources with the recipient's own group, and when losses to the recipient's own group were explicitly mentioned, participants no longer engaged in scrutiny of the message. Instead, they directly framed it as a loss and formed a negative opinion of the change proposal. Loss framing was seen to play a key role in the cognitive sequence, since scrutiny and the formation of negative opinion were not statistically significant.

Studying scrutiny and psychological loss framing in conjunction with each other revealed some interesting findings. According to ELM, people engage in scrutiny, or adopt the central route of thinking, when something has personal consequence for them (Petty & Cacioppo, 1979). However, when the personal consequence comprised of losses for one's own team or gains for another specific or interdependent team, especially in a professional context like organizational change, people no longer engaged in scrutiny. Prospect Theory and empirical research on gain and loss framing posit that frames are cognitive structures that help people organize and interpret new information (Dewulf et al., 2009), and that people are keener on averting loss than acquiring gains (Drury & Roloff, 2009; Kahneman & Tversky, 1979; Tversky & Kahneman, 1991). In this study, the direct path from the message content to psychological loss framing without the need

for scrutiny indicates that in circumstances of obvious and impending loss, the consequence itself acts as a cue which activates the peripheral route of processing. This connection to the theoretical framework of framing extends our understanding of ELM.

Practical Implications of the Study

Change is a potent context in organizations of all sizes and from all sectors and industries. Initiators and implementers of change are always trying to maximize its impact and reduce resistance from the targets of change. But as we have seen, more often than not, change programs do not unfold in the expected and desired way. With this perspective, this study aimed to contribute to the academic as well as practical understanding of how change messages are perceived by employees and what factors emerge as important during this process.

The findings reveal that when processing information regarding the change initiative, not all employees closely analyze the message. They report scrutinizing the message only when the change impacts a team that they share resources with. In some cases, scrutinizing a proposal can lead to negative framing and resistance. This occurs when the message contains information that the change initiative can benefit a team with whom the respondent's team is interdependent. Resource interdependence is common in organizations, and practitioners initiating and implementing change should consider interdependence between teams and comparative benefits and losses when announcing change to the teams.

In some cases, a negative frame and resistance may result even when there is little scrutiny. These instances occur when even an independent specific group benefits from the change, more so than when overall benefits for the organization are mentioned. This is especially relevant to practitioners who propose change. Although mention of gain for specific team results in negative opinion, it can be deduced from the study that messages that specify the impact a

change initiative is going to have on employees are framed more strongly than those that only mention generic benefits for the entire organization. Therefore, if specific losses to the message recipient's team are mentioned, change initiators should create a preemptive plan to address the resultant resistance. The findings from this study indicate that promising general gains or offering compensation doesn't seem to help prevent resistance, so alternative plans should be made. Moreover, while the findings imply that change initiators should avoid mentioning specific losses to an in-group, they also imply that mention of specific gains to the in-group may result in a positive evaluation of the change proposal.

The study also revealed that an employee's level of in-group identification, out-group bias, and the level of competitiveness in the work climate does not influence their perception of the change message. However, findings from the study indicate that awareness of one's own group and its distinction from out-group, and competition for resources is inherent in the organizational reality and experience for employees. Change initiators would benefit from keeping this in mind, even if the moderating effects of these concepts were not confirmed.

Limitations of Study

There were several limitations of this study. The effect sizes were significant but small for (1) the indirect relationship between scrutiny and negative opinion through loss framing, and (2) the indirect relationship between interdependence message contrast with negative opinion through scrutiny and loss framing. This could reflect employees' general suspicion about change that is hard to overcome with a single message. In other words, it is not easy to overcome resistance to change.

The study used only one type of message for each of the six conditions, and the findings might be restricted to these. Different forms might have created different results. Fixed effects

fallacy, when different forms of a type of message can produce different findings, might have been in effect. This was caused by limitations regarding the number of available participants, since eligible real-life employees of organizations were recruited. If resources for more participants were available, at least two different versions of each of the six messages might have been used.

The manipulation checks indicated that the messages were perceived to be moderately clear, realistic, and similar to messages of organizational change that the participants have received. Although there were no differences among the six messages on these standards and none were reported as unrealistic or unclear, they were not highly realistic, clear or similar either. This might have been caused by the effort to keep the messages universal so that they would appeal to employees from any industry, sector, organization, and country. Moreover, the need to provide enough detail without influencing the subjects might have played a role. We need to remember that messages of change are diverse, and the need to create neutral messages might have contributed to them not being too realistic, clear or similar to real-life messages of change.

This study focused on only one type of change, that is, a change situation involving redistribution of personnel. Organizational change can be of numerous other types, and the findings might have changed had they been used. However, focusing on only one type of change was necessary for the objective of this study, which was to study the effects of the different contrasts in the messages. If the messages outlined different types of change, they would have had contextual factors that could confound the effects.

Moreover, the study was purely hypothetical. The limitations of a hypothetical scenario apply to it, in that people might respond differently if the proposal was real. Since the messages were manipulated, participants could not be asked to recall real-life change messages. Aside

from the requirements of the design, hypothetical scenarios were also required in order to maintain uniformity among the message conditions, and also not to burden the participants into thinking that details about their real-life professional experiences were being sought, which would compromise their anonymity.

Scrutiny, loss framing and resistance were measured with self-reports, and were not based on thought listing. ELM researchers typically ask subjects to list their thoughts as an indicator of message scrutiny. That was not necessary or possible in this study, since the purpose of the study was to measure the effects of the message contrasts on cognitive processes including, but not limited to, scrutiny.

Additionally, it is impossible to know about the serial ordering of cognitive processes leading to resistance. Could exposure prompt resistance and afterwards scrutiny and/or loss framing? Based on the notion that preferences do not require reasons, one could argue that people could read a change message, decide to resist and then afterward think about it and engage in loss framing as a justification. Different sequential order of the cognitions could be tested in future studies to determine the more dominant and prevalent order.

Some of the measures were developed for this study and had modest validity. This was because there were few established measures that could test the specific variables and relationships that were the focus of this study. Also, I opted for relevant items from established measures instead of using the entire instrument, since I wanted to reduce subject burden by keeping the survey relatively short.

A substantial number of statistical tests were performed, and only a few were significant. They could result from chance rather than a true pattern, since more tests lead to a greater chance

that a significant effect will be found. There were many moderation hypotheses and none were confirmed. If we had not tested them, there would be fewer confirmations.

Future Directions for Research

Although a few of the confirmed hypotheses had small effect sizes and some others were disconfirmed, as discussed earlier, this study provides some interesting insights into the processes involved in the perception of organizational change messages, resulting in the formation of an opinion about the change program. Additionally, the study opens up possibilities for further research that can offer a more robust understanding of organizational change and communication.

One of the key elements that could be probed in the process is trust for management. Trust for management could play a significant role in the way promises of generic benefits and especially compensatory action would be processed. Researchers have found that integrity of senior management led to trust in senior management, which reduced cynicism about change (Albrecht, 2002). Therefore it can be assumed that if an employee trusts the management of the organization, s/he would value their promise for compensatory action to mitigate the losses incurred by their own team. Therefore the effect of messages of loss including such promises leading to the formation of negative opinion would be significantly less than the effect of messages that do not include such promises.

Owing to Prospect Theory's position that people are more inclined to avoid loss than acquire gains, I aimed to study the effect of loss messages on the formation of negative opinion through loss framing. Future research may focus on gains to reveal if the opposite effect is true when one's own team gains from the change initiative. This would provide a more holistic view

of the effects of in-group-specific gains and losses on recipients' perceptions, and would be beneficial for change initiators.

It would also be interesting to study any unmeasured variable that might lead to scrutiny/loss frame/negative opinion and on the other hand, any variable that leads to lower negative opinion. It could be collectivism or individualism. In the context of the organization, those with a collectivistic orientation who have stronger identification with the organization (e.g., belief in the well being of the organization in which their team is embedded) may be more willing to accept in-group losses if the losses help other teams in the organization. In essence, they believe that their own team's losses are acceptable if they benefit the organization. For these employees, promises of generic benefits for the organization as a measure to offset their losses may also have a significant effect in reducing their loss framing and negative opinion. If employees are individualistic, they are more focused on any potential threat to their team and themselves and are more determined to oppose a proposal that benefits others.

Conclusion

The purpose of this study was to examine the effects of specific organizational change message content on the recipients' cognitive processes in the perception of the message, leading to the formation of negative opinion of the change proposal. This study was premised on the fact that organizations comprise of interdependent groups who share resources and compete for them. During organizational change, resources are often redistributed. Although messages of change highlight overarching benefits for the organization and its employees, the recipients of the message are interested in knowing how they will be affected individually or at the group level. These perceptions and preferences affect the way the message is processed.

This project examined the effects of messages that outline benefits to a specific independent group (as compared with generic benefits to all), messages that outline benefits to a group the recipient's own group shares resources with (as compared with an independent group), messages that outline specific losses to one's own team (as compared with no mention of specific losses) and messages that outline losses to one's own team and also mention generic gain as well as generic gains and compensatory action (as compared with messages that only mention losses to one's own team). The dependent variable was negative opinion. This study also examined the cognitive path resulting from message perception to scrutiny, loss framing and subsequent negative opinion. Finally, the moderating role of in-group identification, out-group bias, and competitive work climate in the indirect cognitive path was studied.

The findings indicated that messages that specify the beneficiary group, that outline gains to an interdependent out-group and those that explicitly state losses to one's own team are more likely to lead to the formation of negative opinion than messages they were compared against. The effect of generic benefits and compensatory action could not be established. Individuals were seen not to scrutinize messages that specified the beneficiary group and messages that outlined specific losses for one's own team, and directly framed these messages as losses, leading to negative opinion. Messages that offered gains to interdependent groups were seen to both lead to scrutiny and loss framing before the formation of negative opinion, as well as lead directly to loss framing and negative opinion. The effects of the moderating variables could not be established.

This study thus provided evidence for the need to focus on employees' specific concerns regarding how the change initiative is going to affect them. It also showed that when specific out-groups gain from the proposal, when interdependent teams gain, and when one's own team

loses, people disapprove of the proposal. The study also found that once loss to one's own team has been outlined, no promise of generic benefits or compensatory action can mitigate its effect on negative opinion. Thus change initiators need to weigh the gains and losses to specific teams to the best of their ability, and share them upfront with employees at the pre-implementation stage of the change program. Although this will lead to immediate negative repercussions, it will also clear the air and help the change initiators in assessing the true concerns of the employees before rolling out the revised implementation phase. Rather than merely focus on the perceived trustworthiness of the management when messages outline downsides of the change initiative, this study takes a realistic approach to change communication which will be beneficial for practitioners in organizations and change researchers alike.

TABLE

Correlation Matrix Among Contrast Codes, In Group Identification, Out Group Bias, Competitive Climate, Scrutiny, Loss Framing and Negative Opinion.

Variables	1	2	3	4	5	6	7	8	9	10	11
Specific Contrast 1	----	0.013	0	0	0	0.017	0.061	-0.043	0.068	.108*	.114*
Interdepend[a] Contrast 2		----	0.007	0.008	0.013	-0.013	-.126*	0.059	.128*	.123*	.167***
Loss Contrast 3			----	0.008	0.013	-0.062	0.048	-0.05	0.024	.139**	0.1
Gen Gain/Comp[b] Contrast 4				----	-0.019	0.019	0.011	0.045	-0.017	0.005	0.056
Compensation Contrast 5					----	-0.075	0.015	0.009	0.057	-0.045	-0.015
In Group Identification						----	-.121*	-.186***	.152***	-0.038	-.269***
Out Group Bias							----	.222***	0.02	.275***	0.034
Competitive Climate								----	.229***	.128*	-0.097
Scrutiny									----	.185***	0.044
Loss Framing										----	.460***
Negative Opinion											----

Notes: N = 371 except correlations with Competitive Climate, N = 367; Scrutiny N = 370; Loss Framing N = 370; a Interdependency, b General Gain/Compensatory Action; * p < .05, ** p <.01, *** p < .001

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APPENDIX A: CONSENT FORM

Title of Research Study: Whose change is it and where: The effects of group identification and organizational climate on the processing and framing of change messages
Principal Investigator (P.I.): Michael. E. Roloff, PhD
Student Investigator: Mrittika Sen

Supported By: This research is supported by Northwestern University.

Why am I being asked to take part in this research study?

You are being asked to take part in a study on different aspects of a professional's work environment in the way they perceive and react to messages of change. You will be asked questions about your overall professional environment and then given a hypothetical scenario and message of an impending change initiative. We are asking you to take part in this research study if you are 18 years or older and if you work or have worked in an organization with two or more work teams. We value your insight as a professional and believe that it will be valuable for the research study.

What should I know about a research study?

- Whether or not you take part is up to you.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- You can ask all the questions you want before you take part in this study.
- All information you share, including demographic information and your responses will be strictly anonymous and confidential.

Important contact information:

If you have questions, concerns, or complaints, or think the research has hurt you, please talk to the P.I.: Michael E. Roloff at m-roloff@northwestern.edu or the student researcher: Mrittika Sen, at (646) 884 1822 or at MrittikaSen2015@u.northwestern.edu.

This research has been reviewed and approved by an Institutional Review Board ("IRB"). You may talk to them at (312) 503-9338 or irb@northwestern.edu, with the study reference no. **STU# 00204715,** if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research participant.
- You want to get information or provide input about this research.

Description:

You are one of about 400 people we are asking to complete an online survey that focuses on how you would process and react to a change initiative in your organization. The study will take about 20-25 minutes to complete. Upon completion of this survey, you will have the opportunity to enter a raffle to win one of several $20 gift cards from Amazon. Please note that for privacy purposes you will not be asked to share your contact information with the researchers or during the survey. After submission of your survey, you will be redirected to a page which has been created and maintained by a person unrelated to the research team, and for the purpose of payment only. On this page, you will be asked to provide your name and email ID where you would like the gift card to be sent, should you win. Your information will not be used or shared for any other purpose and this page will be deactivated once all the gift cards have been distributed.

Please note that entry into the raffle is optional. If you do not wish to provide your information and enter into the raffle, you can submit the survey and exit by closing your browser.

Also, you will have the opportunity to enter into the raffle even if you do not complete the survey and/or skip questions. You will simply need to go to the end of the survey and submit it, irrespective of how many questions you have answered. Once you submit, you will be redirected to the raffle entry page.

Right to withdraw from study:

You can withdraw from the research study at any time and it will not be held against you, and no additional follow-up procedures will occur. Data collected until the point of withdrawal will be considered part of the study.

M**inimal risks:**

There are no known risks associated with participation in this study beyond what you would encounter in daily life. However, there may be discomfort if some of the questions remind you of incidents and/or people in your own professional life. Please remember that you can skip any question you do not wish to answer, or exit the survey at any point.

Potential benefits:

There are no direct benefits of your participation in this study. However, by participating, you may gain an insight into how you respond to change messages in your organization.

Participant privacy:

Efforts will be made to limit the use and disclosure of your personal information, including research study and medical records, to people who have a need to review this information. We cannot promise complete secrecy. Organizations that may inspect and copy your information include the IRB and other representatives of this institution. Results of this study will be retained for a minimum of 5 years after the study for future research, teaching, publications, or presentations at scientific meetings. If your individual results are discussed, your identity will be protected by using a study code number rather than any identifying information.

What else do I need to know?

If you agree to take part in this research study, we will provide you with an opportunity to enter into a raffle to win one of several $20 gift cards from Amazon, which will be sent to the email address you provide at the end of the survey. The study number for this project is: **STU# 00204715**

Consent:

If you wish to participate, please click the “I Agree” button and you will be taken to the survey.

If you do not wish to participate in this study, please select “I Disagree” or select X in the corner of your browser.

APPENDIX B: SURVEY QUESTIONNAIRE

Screening questions:

1. What is your age?
   Years* __ __ (if less than 18, survey automatically ends)

2. Do you work or have you ever worked in an organization with two or more work teams?
   __ Yes
   __ No* (If selected, survey automatically ends)

   Survey exit: Thank you for your interest in our survey. Unfortunately you are not eligible for the study. Please understand that our selection criteria are not a reflection of you personally, but a result of the requirements of the study. We appreciate the time that you gave!

The purpose of this survey is to understand how employees of organizations perceive and react to messages of change. This questionnaire is recommended to be completed in one sitting.

In this section, you will read and respond to questions about yourself as a working professional, and your work environment. Please think of a team as any group of people you work or have worked with on a regular basis, and with whom you share or have shared resources, tasks and goals.

Section A.

1. I think of my team as part of who I am as a professional.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

2. I see myself as quite similar to other members of my team.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

3. The amount of recognition I get in my company depends on how my performance compares with other employees.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

4. My company/employer believes in cooperation between the employees.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

5. Members of my team like each other.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

6. The organization I work in encourages coworkers to frequently compare their performances with each other.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

7. I enjoy working in situations involving competition with others.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

8. It is important to me to perform better than others on a task.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

9. The other teams I work with do not seem to have much initiative or energy.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

10. I feel that winning is important in both work and games.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

11. My team accomplishes things that no single member could achieve alone.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

12. My workplace has a formal team recognition program (team of the month).

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

13. People in my company try to outperform each other even in the absence of rewards.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

14. Good team performance in my organization is only recognized when it is better than another team's performance.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly

Disagree Agree

15. I try harder when I am in competition with other people.

☐ Strongly ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly

Disagree Agree

16. I feel that the other teams I work with do not accomplish enough to deserve real respect from others.

☐ Strongly ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly

Disagree Agree

17. I would not say that people in my company are competitive.

☐ Strongly ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly

Disagree Agree

18. In my company teams outperforming other teams are given more perks (higher bonuses, vacation time, further education and training).

☐ Strongly ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly

Disagree Agree

19. There are frequent contests in this company in which the best team wins a prize.

☐ Strongly ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly

Disagree Agree

You will now read a hypothetical scenario and a message of change, and be asked to respond to questions about these. For the purpose of this study, we are going to refer to a change initiative at the department level.

Please note that we are interested in your experiences and views as an employee and professional. Please refer to teamwork situations at your current or any previous workplace, and apply that experience to the scenario. We would appreciate it if your responses are as close as possible to those you would have had if you were in a real-life situation in your workplace as described in the scenario provided.

Condition 1 (No interdependence, no mention of specific beneficiary team): You work in a regional office of a big corporation. The regional office has two teams, Team A and Team B, and an annual revenue of $300 million. You belong to team B. This week both teams received an email from the regional manager. The text of the email is as follows:

Dear colleagues,

Per the recent annual meeting of the management, I am writing to inform you of the regional office's plans to execute some changes in the upcoming quarter. In order to expedite all our projects and meet the annual targets, we will be hiring forty associates to our teams. We are looking to hire people with at least two years of experience, and the hiring process will commence soon. We expect to wrap up the hiring within 8-10 weeks, and you will soon be contacted by the recruitment team for your inputs and recommendations. Please feel free to share your thoughts with your respective team leads.

I know and appreciate that a decision like this requires everyone's active participation. Therefore, I am requesting the team members' open and honest feedback, which would help us decide on the future allocation of projects in our region. As per company policy, of which you are aware and have seen practiced at all levels, your feedback is strictly confidential and will be valued.

Please know that our organization appreciates your sustained efforts towards the projects and is cognizant of your contributions in keeping our organization competitive in this economy.

Sincerely,
Chris

Condition 2 (No interdependence, mention of specific beneficiary team): You work in a regional office of a big corporation. The regional office has two teams, Team A and Team B, and an annual revenue of $300 million. You belong to team B. The two teams work on mostly independent projects, and their annual performances are measured by their performance on these projects. This week both teams received an email from the regional manager. The text of the email is as follows:

Dear colleagues,

Per the recent annual meeting of the management, I am writing to inform you of the regional office's plans to execute some changes in the upcoming quarter. In order to expedite all our projects and meet the annual targets, we will be hiring forty associates for Team A. We are looking to hire people with at least two years of experience, and the hiring process will commence soon, and we expect to wrap up the hiring within 8-10 weeks. You will soon be contacted by the recruitment team for your inputs and recommendations. Please feel free to share your thoughts with your respective team leads.

I know and appreciate that a decision like this requires everyone's active participation. Therefore, I am requesting the team members' open and honest feedback, which would help us decide on the future allocation of projects in our region. As per company policy, of which you are aware and have seen practiced at all levels, your feedback is strictly confidential and will be valued.

Please know that our organization appreciates your sustained efforts towards the projects and is cognizant of your contributions in keeping our organization competitive in this economy.

Sincerely,
Chris

Condition 3 (Interdependent teams, specific gain to out-group, detailed description of generic benefits, no mention of loss to in-group): You work in a regional office of a big corporation. The regional office has two teams, Team A and Team B, and an annual revenue of $300 million. You belong to team B. The two teams work on both independent and joint projects, and their annual performances are measured by their performance on both kinds of projects. The two teams also share the fixed annual budget for their expenses, including salaries, bonuses, and raises. This week both teams received an email from the regional manager. The text of the email is as follows:

Dear colleagues,

Per the recent annual meeting of the management, I am writing to inform you of the regional office's plans to execute some changes in the upcoming quarter. In order to expedite all our projects and meet the annual targets, we will be hiring forty associates for Team A, each with at least two years of experience. The funds for the new hires would be allocated from the annual budget, and we estimate that the new associates will reduce execution time for the regional projects by 20% on an average. The hiring process will commence soon, and we expect to wrap up the hiring within 8-10 weeks.

Our predictions estimate that the new team structure will improve our performance on future projects for both teams. We are hopeful and excited that this will significantly increase our annual revenue, and the regional outfit will benefit tremendously from this new initiative.

A decision like this requires everyone's active participation. Therefore, I am requesting the team members' open and honest feedback, which would help us decide on the future allocation of projects in our region. As per company policy, your feedback would be valued, and remain strictly confidential.

Sincerely,
Chris

Condition 4 (Interdependent teams, specific gains to out-group, generic benefits, explicit loss to in-group): You work in a regional office of a big corporation. The regional office has two teams, Team A and Team B, and an annual revenue of $300 million. You belong to team B. The two teams work on both independent and joint projects, and their annual performances are measured by their performance on both kinds of projects. The two teams also share the fixed annual budget for their expenses, including salaries, bonuses, and raises. This week both teams received an email from the regional manager. The text of the email is as follows:

Dear colleagues,

In order to expedite all our projects and meet the annual targets, we will be hiring forty associates for Team A, each with at least two years of experience. The funds for the new hires would be allocated from the annual budget, and we estimate that the new associates will reduce execution time for the regional projects by 20% on an average.

However, as you know, the annual budget has already been approved for the current year. We would therefore reduce regional spending to fund the costs for hiring the new associates. Since the annual training program for Team A would be a part of the on-boarding process for the new hires, we will proceed with Team A's annual training program per our current plans. However, in order to balance the spending, I propose that we postpone Team B's annual training program that is scheduled towards the end of the current year.

A decision like this requires everyone's active participation. Therefore, I am requesting the team members' open and honest feedback, which would help us decide on the future allocation of projects in our region. As per company policy, your feedback would be valued, and remain strictly confidential.

Sincerely,
Chris

Condition 5 (Interdependent teams, specific gain to out-group, generic benefits, explicit loss to in-group, compensatory action): You work in a regional office of a big corporation. The regional office has two teams, Team A and Team B, and an annual revenue of $300 million. You belong to team B. The two teams work on both independent and joint projects, and their annual performances are measured by their performance on both kinds of projects. The two teams also share the fixed annual budget for their expenses, including salaries, bonuses, and

raises. This week both teams received an email from the regional manager. The text of the email is as follows:

Dear colleagues,

In order to expedite all our projects and meet the annual targets, we will be hiring forty associates for Team A, each with at least two years of experience. The funds for the new hires would be allocated from the annual budget, and we estimate that the new associates will reduce execution time for the regional projects by 20% on an average.

However, as you know, the annual budget has already been approved for the current year. We would therefore reduce regional spending. Since the annual training program for Team A will be a part of the on-boarding process for the new hires, we will proceed with Team A's annual training program per our plans. However, in order to balance the spending, I propose that we postpone Team B's annual training program for this year. This may adversely affect Team B's future performance. We will re-schedule the training program to the first quarter of next year, and provide need-based job aids to Team B during this year.

A decision like this requires everyone's active participation. Therefore, I am requesting the team members' open and honest feedback, which would help us decide on the future allocation of projects. As per company policy, your feedback would be confidential and valued.

Sincerely,
Chris

Condition 6 (Interdependent teams, specific gain to out-group, explicit loss to in-group, no generic benefits): You work in a regional office of a big corporation. The regional office has two teams, Team A and Team B, and an annual revenue of $300 million. You belong to team B. The two teams work on both independent and joint projects, and their annual performances are measured by their performance on both kinds of projects. The two teams also share the fixed annual budget for their expenses, including salaries, bonuses, and raises. This week both teams received an email from the regional manager. The text of the email is as follows:

Dear colleagues,

In order to expedite all our projects and meet the annual targets, we have decided to hire forty new associates for Team A, each with at least two years of experience. The funds for the new hires would be allocated from the annual budget. The hiring process will commence soon, and we expect to wrap up the hiring within 8-10 weeks.

However, as you know, the annual budget has already been approved for the current year. We would therefore reduce regional spending to fund the costs for hiring the new associates. Since the annual training program for Team A would be a part of the on-boarding process for the new hires, we will proceed with Team A's annual training program per our current plans. However, in

order to balance the spending, I propose that we postpone Team B's annual training program that is scheduled towards the end of the current year.

A decision like this requires everyone's active participation. Therefore, I am requesting the team members' open and honest feedback, which would help us decide on the future allocation of projects in our region. As per company policy, your feedback would be valued, and remain strictly confidential.

Sincerely,
Chris

Section B. The following questions address your reaction and thoughts regarding the message sent by the department manager.

20. The message explicitly mentioned resources the other team will lose from this new proposal.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

21. The message explicitly mentioned resources the other team will gain from this new plan.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

22. The message explicitly mentioned resources that my team will gain from this new plan.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

23. The message explicitly mentioned resources that my team will lose from this new plan.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

24. The message did not mention gains or losses either to my team or to the other team.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

25. I read the message thoroughly.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

26. I thought in detail about the proposal.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

27. I evaluated the logic of the proposal thoroughly.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

28. I thoroughly considered the implications of the proposal.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

29. I have scrutinized the proposal thoroughly for its effects on team performance.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

30. I would not want to review this proposal since it does not impact my team directly.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

31. I would want to know more about the proposal since my team works with this team closely.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

32. I would want to review the proposal since I suspect this proposal could be detrimental to my team in some way.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

33. The more resources the other team receives, the harder it will be for my team to get ahead.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

34. I think the change will reduce resources to my team.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

35. The change will impede my team's performance.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

36. The proposal offers benefits to the other team which will make things more difficult for my team.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

37. I think that if adopted, the change may benefit me.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

38. This change will put my team at an advantage against the other team.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

39. If the other team receives more resources, it will be to my team's disadvantage.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

40. Resources that go to the other team are likely to take away resources from my team.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

41. The other team's performance will improve at the expense of my team.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly

Disagree Agree

Section C. The questions in the following section are about what you want to do regarding the proposal. If you recall, the manager had said that your responses would be confidential and seriously considered for the decision, so please respond accordingly.

42. I believe this proposal is practical.

☐ Strongly ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly

Disagree Agree

43. This change is not necessary.

☐ Strongly ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly

Disagree Agree

44. I am *not* in favor of this change.

☐ Strongly ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly

Disagree Agree

45. I think this is a positive change for the regional office.

☐ Strongly ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly

Disagree Agree

46. I believe people introducing this change will keep everyone's best interests in mind.

☐ Strongly ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly

Disagree Agree

47. I am concerned that the people introducing this change are not being completely honest about it.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

48. I think important information about this change is being withheld.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

49. I would *not* want to share feedback regarding this change.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

50. I would embrace this proposal as necessary.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

51. I would want to co-operate in the matter of this change.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

52. I would want more clarification of the information provided in the message.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

53. I would not be comfortable accepting this proposal.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

54. I would want more details of what is happening.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

Section D. This section requires you to share your views regarding the communication of the proposal.

55. Please rate the proposal you read on the following characteristics, with 7 being most and 1 being least:

Not Truthful ☐ ☐ ☐ ☐ ☐ ☐ ☐ Truthful

Not Practical ☐ ☐ ☐ ☐ ☐ ☐ Practical

Not Persuasive ☐ ☐ ☐ ☐ ☐ ☐ Persuasive

Not Trustworthy ☐ ☐ ☐ ☐ ☐ ☐ Trustworthy

Not convincing ☐ ☐ ☐ ☐ ☐ ☐ Convincing

Not motivating ☐ ☐ ☐ ☐ ☐ ☐ Motivating

Not Realistic ☐ ☐ ☐ ☐ ☐ ☐ Realistic

Incomplete, needs more details ☐ ☐ ☐ ☐ ☐ ☐ Complete, has all the necessary details:

Unclear ☐ ☐ ☐ ☐ ☐ ☐ Clear

Unbalanced with regard to benefits and costs ☐ ☐ ☐ ☐ ☐ ☐ Balanced with regards to benefits and costs:

Section E. Please let us know about how close you thought the message was to something you have experienced, and/or would expect in real life.

56. The change I read about (to add new personnel to one work group) is something that could happen in my current or previous company.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

57. The message I just read was similar to messages I have read that announced organizational change.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

58. The message I just read described the benefits of the proposed change.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

59. The message I just read described the downsides of the proposed change.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

60. The message I just read described both the benefits and downsides of the proposed change.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

61. The message I just read described neither the benefits nor the downsides of the proposed change.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

Section F. The following questions are about your overall preferences for messages of organizational change. Please draw upon your own experiences with organizational change in responding.

62. I think the primary focus of a message for change should be to motivate people.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

63. I prefer honest communication regarding change.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

64. When it comes to change, I would want the message to provide an optimistic account of the benefits of the change.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

65. When it comes to change, I would want the message to provide a realistic account of the benefits as well as risks and costs of the change.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

66. It always helps when the message of change mentions what it will take to implement it.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

67. I do not think messages of change should focus too much on the downsides of change.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

68. I prefer all the information about the change in the initial message.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

69. I prefer a step-by-step dissemination of information regarding change.

☐ Strongly Disagree ☐ Disagree ☐ Not sure ☐ Agree ☐ Strongly Agree

70. In three sentences, please identify any additional key details about a change initiative that as someone who will be involved in the change, you prefer to be highlighted in the message you get. Please limit your response to 50 words.

_____

_____

_____

Section G. Demographic Questions (Responses to these will not be matched with the survey data)

1. What is your gender?
   __ Male
   __ Female
   __ Other
   __ Do not wish to answer

2. How do you define your ethnic identity (select all that apply)?
   __ European/Caucasian
   __ Hispanic or Latino/a
   __ Asian/Asian American
   __ African/African American
   __ American Indian or Alaska Native
   __ Other

3. What is your country of residence? _____

4. What is the highest level of education that you have completed?
   __ Below High school
   __ High school graduate
   __ Some college
   __ Associate's degree
   __ Bachelor's degree
   __ Master's degree
   __ Professional school degree (MD, MBA, JD, etc)
   __ Doctorate degree

5. What is your age?
   __ 18-29
   __ 30-39
   __ 40-49
   __ 50-59
   __ 60-69
   __ 70 and older

6. What is your job type?
   __ Full time
   __ Part time
   __ Volunteer

7. How many years have you been employed in total?
   __ 0-5
   __ 6-10
   __ 11-15
   __ 16-20
   __ 20- 25
   __ 25 and more

8. What is your job level?
   ☐ Entry level
   ☐ Experienced, non-manager
   ☐ Assistant Manager
   ☐ Manager
   ☐ Mid-Management
   ☐ Senior Management

9. Please specify your experience with organizational change.
   ☐ I have been through several organizational change initiatives.
   ☐ I have been through a few organizational change initiatives.
   ☐ I have no experience with organizational change initiatives.
10. Please specify your role within a change initiative if you have been through one. If you have not been through an organizational change, please skip to the next question.
   ☐ I have been an initiator of the change.
   ☐ I have been an implementer of the change.
   ☐ I have been a recipient of the change.
   ☐ I have been the communicator of the change.

11. Please mention the sector (for-profit, not-for-profit, government, other) and industry (Education, Finance, Healthcare, Media, Information Technology, Retail, Hospitality, Consulting, etc.) you work in.
   _____

12. What is the approximate number of teams that your team works or has worked with directly?
    __ 1-2
    __ 3-5
    __ 6 and more

Submit ☐

End of survey message:

Thank you for participating in our study! This survey completion code indicates that you have successfully completed the survey: ${e://Field/ResponseID}

You will now be redirected to a page specifically created for the purpose of the raffle. You will be required to provide your name and email ID for a chance to enter into this raffle to win a $20 Amazon gift card. If you win, the gift card will be emailed to the address you provide. Please note that the email address will not be used for any other purpose, and this page will be deactivated once all gift cards have been distributed.

Participation in the raffle is optional. If you do not want to share your information or enter into the raffle, simply close your internet browser to exit.

Please consider sending this survey to your personal and professional networks for their participation. Anyone who is at least 18 years of age and works or has worked in an organization with two or more work teams can participate in the survey. Please copy this link to forward. https://academictrial.az1.qualtrics.com/ (Note to IRB: this link is made up for the purpose of this script. The real one is not available until after the IRB approval.) You will also receive a single email from Qualtrics with this link if you share your email on the following page.

Thank you again for participating in our study!