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An exploratory study of work-related imagined interactions with real-life coworkers

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AN EXPLORATORY STUDY OF WORK-RELATED IMAGINED INTERACTIONS WITH REAL-LIFE COWORKERS

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ABSTRACT

Communication between individuals in social systems includes not only interpersonal, external acts of discourse, but also intrapersonal communications within each person's interior cognitive space. One type of intrapersonal communication, imagined interactions, involves mentally imagining communication encounters with others in an internal dialogue symbolic of real-life conversations.

This research project explored the phenomenon of imagined interactions with real-life coworkers as a component of the interior lives of working adults. The research question was: How do supervisors utilize imagined interactions to make sense of and manage workplace relationships? An existing survey instrument, the Survey of Imagined Interactions, was modified to limit responses to imagined interactions in work-related scenarios and with real-life coworkers. A total of 88 participants completed the questionnaire. All respondents reported engaging in work-related imagined interactions with their coworkers.

A mixed methods data analysis resulted in findings related to the frequency, variation, topics, conversational partners, and emotional valence of work-related imagined interactions. The findings provide insight into how working adults engage imagined interactions for self-understanding, relationship maintenance, emotional catharsis, conversational rehearsal, job preparation, and navigating difficult relationships, especially with their boss. The analysis also provided insight into methodological approaches and suggests that researching work-related imagined conversations through qualitative methodologies provides greater insight than quantitative methods. Taken as a whole, the results of this dissertation research project provide an important baseline for

understanding the emotional and relational dynamics that trigger imagined interactions in real-life work scenarios.

This exploratory research study makes an interdisciplinary connection between the communication sciences and the organizational sciences, and introduces the construct of imagined interactions into the organizational, leadership, and common vernacular. The findings lay the groundwork for continued scholarship on how the ubiquitous phenomenon of imagined interactions contributes to workplace relationship maintenance and overall job performance.

Chapter 1: Purpose of the Study

Introduction

Individuals in modern work environments need to successfully develop and manage multiple relationships throughout their workplace and across levels of organizational hierarchy. Relationship management with superiors, subordinates, and peers is related to effective influence, leadership, team performance, and strategic change management (Amabile & Kramer, 2011; Goleman, Boyatzis, & McKee, 2002; Rouleau & Balogun, 2010). Within relationally-oriented workplaces, leadership and influence can be understood as communicative processes where language, conversation, and other forms of discourse are employed by all actors in the system to navigate and manage interpersonal relationships (Gergen, 2009; Uhl-Bien, 2006).

Relationship management occurs not only through real-life interpersonal interactions, but also through intrapersonal communication processes. The broad concept of intrapersonal communication incorporates a range of interior cognitive activities, often referred to as *internal conversation* or *self-talk* (Archer, 2003; Fields, 2002; Hardy, 2006) Through these intrapersonal communication activities, people invoke words, language, statements, and dialogues spoken to oneself mentally but not verbalized aloud. Intrapersonal communication processes can serve as a substrate for external communications and be a pre-communicative activity for external forms of communication. What individuals say or write in their real-life workplace encounters with coworkers is often first scripted and rehearsed mentally. Through intrapersonal communication, individuals develop meaning, mental structures, schema, labels, and memories (Roberts, Edwards, & Barker, 1987; Shedletsky, 1989).

Theorists from perspectives as broad as philosophy, cognitive science, communications, sociology, and artificial intelligence have postulated the purpose and utility of humans' nearly constant internal conversations (Archer, 2003; Damasio, 1999; Fields, 2002; Vicente & Martinez Manrique, 2011). Internal conversations are a conscious process with both communicative and cognitive functions, including clarifying for ourselves what we are thinking, self-regulating, planning, decision-making and constructing identity (Vicente & Martinez Manrique, 2011). People may employ self-talk to speak only to oneself, or people may imagine themselves in dialogic interchanges with real life others by imagining conversations (Archer, 2003; Honeycutt, 2003).

Within the context of relationship management, researchers have extensively investigated the role of a particular type of internal conversation, known as *imagined interactions* (Honeycutt, 2003, 2010b). Imagined interactions are a subset of intrapersonal communication that involve mentally talking to others in an internal conversation symbolic of real-life conversations. Imagined interactions have been defined as a "process of social cognition whereby actors imagine and therefore indirectly experience themselves in anticipated and/or past communicative encounters with others" (Honeycutt, 2003, p. 2). Similarly, Allen and Berkos (2005-2006) define imagined interactions as "an intrapersonal communication activity that may be described as a type of self-controlled daydream in which individuals envision themselves in the act of discoursing with others" (p. 307).

Through prior validation of the construct of imagined interactions, Honeycutt (2003) has identified eight dimensions of imagined interaction (frequency, proactivity, retroactivity, variety, discrepancy, valence, specificity, and dominance) and six functions

of imagined interactions (relationship maintenance, conflict linkage, rehearsal, self-understanding, catharsis, and compensation). These eight dimensions and six functions of imagined interactions are fully defined in Chapter 2.

Imagined interactions are differentiated from self-talk, internal conversations and other internal mental activities in that they involve envisioning the act of talking and or otherwise communicating with real-life others. Imagined interactions are not monologues, but dialogues during which prior conversations are relived, future conversations are rehearsed, and conversations that may never occur in real life are played out in detail in one's mind (Honeycutt, 2003). The individual conducting the imagined interaction envisions the roles of all actors involved in the interaction, both oneself and others. For example in a workplace-based imagined interaction where a leader needs to inform her boss of bad news, she may imagine herself telling the boss, the boss' reaction, how she reacts to the boss' reaction, and so forth.

The concept of imagined interactions has been well researched in the communications literature, often within the context of personal relationships, such as married couples and parent-child relationships. The research findings indicating that people use imagined interactions in their daily life to make sense of conversations, rehearse for upcoming interactions, manage long-term relationships, experience emotional catharsis, compensate for the absence of significant others, and better understand oneself (Honeycutt, 2003, 2010b). Benefits of imagined interactions may include improved emotional intelligence (Fragouli, 2009), goal achievement (Honeycutt & Gotcher, 1991), better fluency in real-life conversations (Honeycutt, 2003), and greater self-understanding and identity construction (Honeycutt, 2003; Weick, 1995).

Disadvantages of imagined interactions may include rumination (Allen & Berkos, 2005-2006), mulling (Cloven & Roloff, 1991), anxiety (Allen & Honeycutt, 1997) and keeping conflict alive (Honeycutt, 2003-2004).

Less research has been conducted on the role of imagined interactions in the daily lives of working adults in the context of real-life workplace situations. Research studies with managers demonstrate that they use imagined interactions when preparing for employee counseling sessions and performance evaluations (Bryan, as cited in Honeycutt, 2003). Other research on imagined interactions has also shown that they are used by job seekers in rehearsing for job interviews (Kelley & Croghan, 2010). Additional research findings indicate that the topics of work-related imagined interactions can include difficult conversations (Stone, Patton, & Heen, 1999; Weeks, 2001), conflicts (Honeycutt, 2003-2004; Wallenfelsz & Hample, 2010), emotionally charged events or threatening work situations (Rock, 2008; Weick, 1995), norms violations (Berkos, Allen, Kearney, and Plax, 2001; Bolkan & Goodboy, 2011), public speaking (Honeycutt, Choi, & DeBerry, 2009), and other scenarios yet uncovered by prior research.

Within the field or organizational sciences, little research on organizational discourse and workplace relationship management has examined the intrapersonal communication processes and how they are intertwined with external, social dynamics (Marshak, Keenoy, Oswick, & Grant, 2000; Uhl-Bien, 2006). In managing social relations in the workplace, positional authority between the two actors can be an overriding context that frames and limits the acceptable types of workplace conversations (Detert & Edmondson, 2011; Rouleau & Balogun, 2010). For example, conversations (both interpersonal and intrapersonal) that an individual may have with coworkers about

a sensitive organizational issue are likely to have different tone and content depending upon whether the conversation is with a superior, a subordinate, or a peer.

Despite a proliferation in the organizational sciences literature about flat organizations and decentralized decision-making (Brafman & Beckstrom, 2006; Jarvis, 2009), most organizations continue to employ formal, explicit hierarchies that involve differentiation of roles and vertical reporting structures. Magee and Galinski (2008) suggest that hierarchy "is prevalent in so many groups and organizations that it appears to be one of the most fundamental features of social relations" (p. 352). Even when work groups are organized as teams or project implementation requires cross-departmental collaboration, hierarchies tend to implicitly emerge. Further, research has shown that team leaders and direct supervisors have the most affect on the inner work lives of those below them in the organizational hierarchy (Amabile & Kramer, 2011).

What is not known is how the intrapersonal communicative processes of mentally imagining conversations with coworkers might also vary depending on the relational dynamics and status differentials existing within organizational hierarchies. The use of imagined interactions in real-life workplace situations may be a component of how individuals manage themselves as they navigate work-related interpersonal relationships with superiors, subordinates, and peers. The findings from this dissertation research project provide insight into whether and how hierarchical relational dynamics factor into internally imagining work-related conversations. By using vicarious and symbolic mechanisms such as imagined conversations, people may be able to rehearse for real life situations, influence themselves to alter their future external communicative actions, manage their emotional responses to difficult situations, and improve job performance

(Amabile & Kramer, 2011; Honeycutt, Zagacki, & Edwards, 1990; Zagacki, Edwards, & Honeycutt, 1992).

Research Question

The purpose of this research study is to explore the phenomenon of mentally imagining conversations with real-life coworkers as a component of the interior work lives of working adults. The target population was adults currently employed in the United States in a work situation where they have at least one superior, subordinate, and peer. Individuals with a supervisory role in an organization were recruited to participate in a mixed-methods survey which explored the usage of imagined interactions in the workplace, as well as the topics of those imagined interactions. In addition, this research study assessed whether workplace hierarchical status relationships with imagined interaction partners–superiors, subordinates, and peers–was related to the usage and topics of imagined conversations.

Research question: How do supervisors utilize imagined interactions to make sense of and manage workplace relationships?

Sub question 1: How do supervisors utilize the eight dimensions and six functions of imagined interactions in work-related imagined conversations with coworkers?

Sub question 2: With whom do supervisors most frequently engage in work-related imagined interactions: superiors, subordinates, or peers?

Sub question 3: How does the usage of imagined interactions in the workplace vary by the most frequent imagined interaction partner (superior, subordinate, or peer)?

Sub question 4: What are the work-related topics supervisors report discussing in their imagined interactions?

Sub question 5: How do the work-related topics supervisors discuss in imagined interactions vary by imagined interaction partner (superior, subordinate, or peer)?

Research design summary. The research question and related sub questions were addressed through a survey research design which utilized the Survey of Imagined Interactions, an existing, validated instrument (Honeycutt, 2003). Working adults in the United States who have at least one superior, subordinate, and peer were recruited through a convenience sample of the researcher's and the researcher's colleagues' professional and social networks. Participants completed a modified version of the Survey of Imagined Interactions, which was altered to limit responses to work-related imagined interactions with real-life coworkers. The survey included a variety of closed-ended (quantitative) questions related to imagined interactions in the work environment and open-ended (qualitative) questions about the topics of work-related imagined interactions, including a sample dialogue involving the coworker with whom they most frequently imagine conversations.

The research employed a cross-sectional survey design, with participants completing all aspects of data collection at a single point in time via the website SurveyMonkey. The survey was available for completion online during a six week period in early 2012. Because the Survey of Imagined Interactions included both quantitative and qualitative questions, a mixed methods approach to data analysis included descriptive statistics, analysis of variance (ANOVA), and topical and thematic coding of responses to the open ended questions.

Significance of the Study

This research study makes a significant contribution to the literature on the interior cognitive and communicative processes that underpin interpersonal communications and behaviors in the workplace. Organizational scholars have suggested that insufficient research has been conducted on the less visible aspects of workplace behaviors (Kreamer, 2011; Marshak et al., 2000). Yet, individuals' inner thoughts and feelings, as well as their relationships with their leaders and coworkers, have been shown to affect job performance, strategic change management, progress on team-oriented projects, and overall leadership abilities (Amabile & Kramer, 2011; Goleman et al., 2002; Rouleau & Balogun, 2010).

While prior research has demonstrated that imagined interactions with real-life others is a common and frequent intrapersonal communication activity (Honeycutt, 2003), overall little is known about how and why individuals mentally imagine conversations with real-life coworkers. Data on mental simulations suggests that imagining interactions with others is a key component of socially constructing reality and "our capacity for imaginative thought is central to the human experience" (Crisp, Birtel, & Meleady, 2011, p. 262).

Despite the seeming centrality of imaginary interactions to human the psyche, as well as our emotional, social and self-regulatory responses, no terminology exists in the common vernacular to discuss this phenomenon. Thus, a key significance of this study is the introduction of the construct of imagined interactions into both the organizational sciences literature and the common vernacular of those who are attempting to improve the work performance of themselves and others. Providing a terminology for

understanding and discussing a less visible contributor to organization behavior and job performance opens the possibility of using imagined interactions as a point of influence for leadership and change.

Theoretical Foundations

This dissertation research project was grounded within the perspective of organizations as social systems, produced and reproduced through language (Capra, 1996; Luhmann, 2006; Seidl & Becker, 2006). Such language manifests itself through external communication acts in the interpersonal communicative space between individuals as well as intrapersonal communications within an individual's interior cognitive space (Roberts et al., 1987; Shedletsky, 1989).

Three theories provide meaningful insights into the process of organizing, making meaning, and facilitating change through communication: symbolic interactionism, sensemaking, and organizational discourse (Grant & Marshak, 2011; Mead, 1934; Weick, 1995).

- *Symbolic interactionism* – a social psychological theory which posits that humans understand our identities and our world through symbols. The theory seeks to explain the ways in which individuals construct meaning through social interaction (Mead, 1934). Symbolic interactionsism has been cited throughout the literature on imagined interactions as the theoretical foundation underpinning the construct of imagined interactions and its functionalities in relationship management (Honeycutt, 2003).
- *Sensemaking* – theory which articulates the mechanism by which people retrospectively understand and give meaning to events, literally making sense of

what has occurred, and prospectively enact that meaning into subsequent social interactions (Weick, 1995).

- *Organizational discourse* – a collection of theories and methods which focuses on the role of language in the ongoing creation of relationships, meaning, and change within organizations (Grant & Marshak, 2011; Marshak & Grant, 2008).

Key Definitions

Many of the key terms in this paper have been derived from the literature on imagined interactions, intrapersonal communication, and organizational sciences, and are defined below with their sources. Additionally, some constructs relevant to workplace relationships which have common language usage, such as "peers," have been defined by the author for the purposes of this study and are defined below without citation.

Communicative processes.

- *Imagined Interactions* (or *imagined conversations*) – "a process of social cognition whereby actors imagine and therefore indirectly experience themselves in anticipated and/or past communicative encounters with others" (Honeycutt, 2003, p. 2). Within this research study, the terms *imagined interactions* and *imagined conversations* are used interchangeably as a reflection of the existing literature, construct definitions, and survey questions about imagined interactions which emphasize the conversational aspect of such interactions (Honeycutt, 2003, 2010b).
- *Interpersonal communication* – external communication activities between two or more actors which can include spoken dialogue, written exchanges, and non-verbal gestures (Bradbury & Lichtenstein, 2000; Grant & Marshak, 2011).

- *Intrapersonal communication* – all the internal, symbolic thought and related psychological and physiological processes involved in understanding and interacting with external stimuli (Roberts et al., 1987; Shedletsky, 1989).
- *Rumination* – a conscious, interior cognitive activity that involves an individual dwelling on a situation, usually in a negative manner (Wallenfelsz & Hample, 2010).
- *Self-talk* – intrapersonal communication activities that invoke words, language, statements, and dialogue spoken to oneself mentally, but not verbalized aloud. (Fields, 2002; Hardy, 2006). In this study, *self-talk* is differentiated from *imagined interactions* in that self-talk incorporates a broad range of interior linguistic, unidirectional statements towards oneself (e.g., "what am I going to do about this situation?"), whereas imagined interactions are bi-directional, imagined conversations or dialogues with multiple actors.

Workplace Relationships.

- *Coworkers* – anyone employed by the same organization with whom an individual has a working relationship, be it a superior, subordinate, or peer.
- *Peer* – a coworker in an organization generally on par in the organizational hierarchy, with whom work is done collaboratively.
- *Subordinate* – a direct report, or a coworker lower in the organizational hierarchy to whom work is delegated.
- *Superior* – a direct manager or supervisor, or someone higher in the organizational hierarchy who assigns work.

Summary

Positioned at the intersection of organizational sciences and communication studies, this research project provides an important translation of the concept of imagined interactions from the communications literature into the knowledge base about relationship management within organizations. This exploratory study will contribute to our understanding of the phenomenon of mentally imagining conversations with real-life coworkers in day-to-day work life. Additionally, role differentiation based on organizational hierarchies is incorporated to assess how the usage and topics of imagined interactions vary with the relational dynamics among superiors, subordinates, and peers. The next chapter will position this research study within the context of existing research and theories about organizations as language systems, intrapersonal communication, and imagined interactions.

Chapter 2: Literature Review

This chapter reviews the literature relevant to the question of why the interior cognitive activity of mentally imagining conversations with real-life others, known as imagined interactions, is an important area of investigation within the field of organizational change. The first section of this chapter will overview the theoretical frameworks that set the context for viewing organizations as living social systems which are constructed and reconstructed through the ongoing processes of interpersonal and intrapersonal communications. The theoretical review focuses on three frameworks that shed light on the dynamic interplay of internal and external communication in making sense of our world, understanding ourselves, interacting with others, and functioning effectively in socially-oriented work environments: symbolic interactionism, sensemaking, and organizational discourse studies.

The second section of the chapter delves into the construct of intrapersonal communication, with an emphasis on imagined interactions, a specific type of intrapersonal communication that involves mentally imagining conversations and other communication encounters. Details will be provided on the eight dimensions of imagined interactions, the six functions of imagined interactions, and the research findings from imagined interactions relevant to the workplace setting.

Organizations as Living Social Systems

Within the broad field of organizational studies, a variety of theories have been offered to explain how people organize to accomplish goals. Systems theory emphasizes a holistic view which focuses on the interrelatedness of subcomponents of a system. General systems theory was first articulated in the 1960s by Austrian biology Ludwig

von Bertalanffy (Bertalanffy, 1968). The theory was intended to explain phenomena in the natural and social sciences by identifying generalizations common to all branches of sciences (Hatch & Cunliffe, 2006). Autopoietic systems are self-organizing, meaning they consist of "a network of production processes, in which the function of each component is to participate in the production or transformation of other components of the network" (Capra, 1996, p. 98). Autopoiesis has become one of the dominant metaphors by which organizations are understood as living social systems (Morgan, 2006).

The theory of living social systems conceptualizes change as emergent and continuous, meaning that organizations are in a state of continuous change, that change is driven by naturally occurring instability in the social system, and that change is non-linear without clear beginnings or endings (Burke, 2008; Tsoukas & Chia, 2002; Weick & Quinn, 1999). In these autopoietic or living social systems, all members of the system are participants in the emergent and continuous process of making meaning and making change.

German philosopher Niklas Luhmann proposes a theory of social systems which self-organize through communications between participants in the system. Thus, language is the mechanism by which social systems self-organize and are produced and reproduced (Hernes, 2008; Luhmann, 2006; Seidl & Becker, 2006). Organizing through language "is understood essentially as a conversational process, an inescapably self-organizing process of participating in the spontaneous emergence of continuity and change" (Shaw, 2002, p. 11).

Within an autopoietic language system, all members of the system are involved in the continuous process of enacting meaning, stability, and change through their communications. System members create language communities which set the boundaries for dialogue in the workplace. "The forms of speaking we have available to us regulate the forms of thinking, feeling, and meaning making to which we have access, which in turn constrain how we see the world and act on it" (Kegan & Lahey, 2001, p. 7).

As living social systems, organizations are produced and reproduced through communications in the relational sphere, as depicted in Figure 1. The relational sphere, or "the space between" (Bradbury & Lichtenstein, 2000) represents the dynamic space of social interaction and relationship management between two or more actors (A and B), and includes both their external (interpersonal) and internal (intrapersonal) communications.

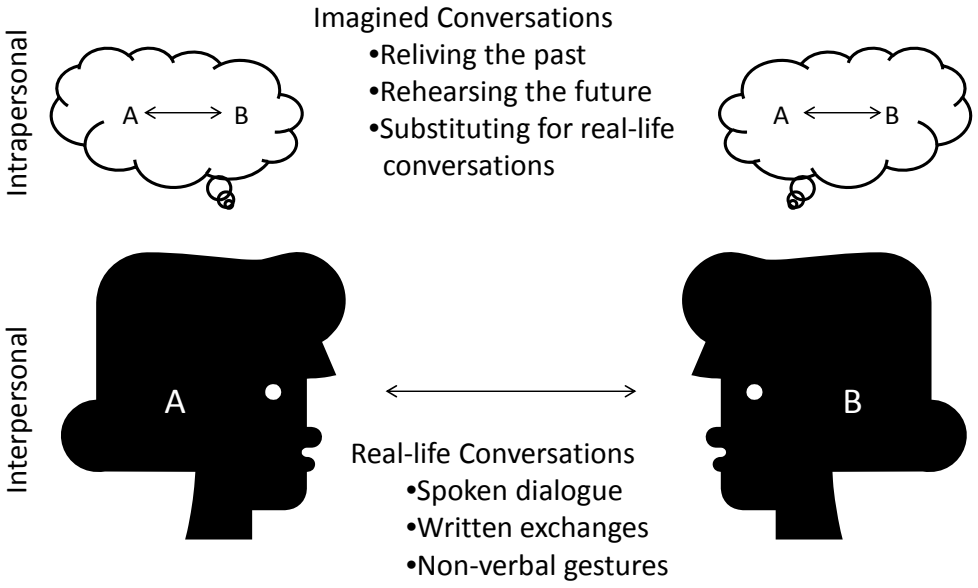

Figure 1. Relational sphere: Communicative space between individuals. Displays types of interpersonal and intrapersonal communication that serve as the basis of social interaction and relationship management.

Within the relational sphere, conversations are the primary form of communication, and these conversations can happen both interpersonally, through real-life conversations that include spoken dialogue, written exchanges, and non-verbal gestures, as well as intrapersonally through imagined conversations that involve reliving the past, rehearsing the future, and/or saying things internally that would not be said in real-life. The relationship management that occurs in the relational sphere is, according to Gergen (2009), the mechanism by which

> The organization comes to life. Organizations live or die in the swarm of daily interchange–in complimenting and criticizing, passing and retaining information, smiling and frowning, asking and answering, demanding and resisting, controlling and consenting. What injects meaning into one's work is derived neither from the individual alone, nor environmental forces, but from participation in the swarm. (pp. 312-313)

From this relational, living systems perspective, leadership is a social process enacted through communication rather than a series of traits or an offshoot of positional authority. This view of leadership recognizes organizations as living social systems, and employees as actors within the system who continuously co-construct meaning and change. Relational leadership, as defined by Uhl-Bien (2006), "can be seen as a two-way influence relationship between a leader and a follower aimed primarily at attaining mutual goals" (p. 656). The processes of leadership, influence, and change, "emerge from the generative interchange among the participants . . . relational leading is not the task of a specific individual. Rather, it emerges from within the micro-processes of everyday interchange" (Gergen, 2009, p. 334).

In summary, the thematic framework of this dissertation aligns with the view of organizations as human social constructions, produced and reproduced through systems of language. Such language manifests itself through external communication process in the relational space as well as intrapersonal communication within the interior cognitive space (discussed below). Within these language systems, the processes of leadership and change are co-constructed through conversations. The three theories discussed below, symbolic interactionism, sensemaking, and organizational discourse studies, all provide further insight into the dynamic processes of organizing, making meaning, and making change through language.

Symbolic interactionism. Symbolic interactionism is a social psychological theory which posits that humans understand our identities and our world through symbols. Grounded in the writings of George Herbert Mead, symbolic interactionism seeks to explicate the ways in which individuals construct meaning through social interaction (Mead, 1934). According to Mead, the ability to think in symbols, communicate through language, and hold multiple possible outcomes in one's conscious thought are unique attributes of the human psyche.

In symbolic interactionism, identity is socially constructed, and communication is a core component of both identity and social organizing. The theory suggests that individuals do not thoughtlessly react to environmental stimuli, instead they determine what stimuli to pay attention to, then process, organize, make meaning, and determine a response (Mead, 1934, p. 25). Blumer (1969) offers three premises of symbolic interactionism: (a) people act towards objects, both things and other people, based on the meanings that those have for them, (b) the meaning stems from social interactions with

those objects, and (c) meanings are generated and modified through processes of internal interpretation and intrapersonal communication (pp. 2-5).

This meaning making requires at least two actors, although it does not require the physical presence of the other; it can occur through imagining the role of the other. As Mead (1934) proposes,

> In all conversations of gestures within the social process, whether external (between different individuals) or internal (between a given individual and himself), the individual's consciousness of the content and flow of meaning involved depends on his thus taking the attitude of the other toward his own gestures (p. 47).

By taking the role of the other via reflection and imagined conversations, individuals can construct multiple future alternatives possibilities and incorporate those possibilities into present conduct and behavior (p. 98). Mead suggests that individuals need to form communication in a way that others understanding it, so they mentally practice seeing or hearing the communication in the presence of others to predict their response. This is a planning, scripting, or testing aspect of pre-communication.

Sensemaking. The theory of sensemaking articulates the mechanism by which people retrospectively understand and give meaning to events. Sensemaking is the process of, literally, making sense of what has occurred. To quote sensemaking theorist Karl Weick, "to talk about sensemaking is to talk about reality as an ongoing accomplishment that takes form when people make retrospective sense of the situations in which they find themselves" (Weick, 1995, p. 15). Management research on sensemaking has defined it as "a social process of meaning construction and

reconstruction through which managers understand, interpret, and create sense for themselves and others of their changing organization context and surroundings" (Rouleau & Balogun, 2010, p. 3)

Sensemaking is a linguistic theory, partially influenced by symbolic interactionism, which seeks to explain how individuals and organizations understand and co-create shared realities. Sensemaking takes place primarily through conversation and written text. Linguistic symbols, such as metaphors and visual images, may also be important to sensemaking, particularly during times of change (Weick, Sutcliffe, & Obstfeld, 2005). Sensemaking can be triggered when the events or stimuli occurring in the external environment do not match existing understanding of reality. Similarly, Cloven and Roloff (1991) suggest that sensemaking occurs after interpersonal conflictual interactions for two reasons: to understand the underlying cause of the conflict and to determine the severity of the conflict (p. 135).

As a process, sensemaking consists of seven components (Weick, 1995):

1. Sensemaking is *grounded in identity construction* – the establishment and maintenance of one's identity.
2. Sensemaking is *retrospective* – meaning is made from things that have already occurred.
3. Sensemaking is *enacted* – people produce their environments and construct their realities.
4. Sensemaking is *social* – the meaning assigned is contingent upon others.

5. Sensemaking is *ongoing* – There are no real starts or stops – we are always sensemaking. New sensemaking often occurs when there is an interruption in flow or expectations.
6. Sensemaking is *focused on and by extracted cues* – we selectively intake data/cues from the environment, and make meaning that is often much broader than the data itself to complete a cognitive map.
7. Sensemaking is *driven by plausibility rather than accuracy* – it is relative and subjective; it is more important for the person/organization to make sense than to be objectively accurate.

Similar to Mead's description of symbolic interactionism, Weick emphasizes that the social component of sensemaking does not necessitate the physical presence of others. According to author, "sensemaking is never solitary because what a person does internally is contingent on others. Even monologues and one-way communications presume an audience. And the monologue changes as the audience changes" (Weick, 1995, p. 40). Weick also notes that enactment can occur solely in the cognitive space, where alternative actions and conversations can be imagined as a mechanism for sensemaking.

Organizational discourse. Organizational discourse is a collection of theories and methods which focuses on the role of language in the ongoing creation of relationships, meaning, and change within organizations (Grant & Marshak, 2011; Marshak & Grant, 2008). Discourse, as defined by Grant and Marshak (2011) constitutes,

> A set of inter-related texts that, along with the related practices of text production, dissemination and consumption, brings an object or idea into being. Discourses, therefore, play a central role in constituting reality; they produce rules, identity, context, values, and procedures and these in turn determine social practices through the ways in which they shape what can be said and who can say it. (p. 208)

In discourse theory, conversations and dialogue are considered part of the text, and are an integral mechanism by which organizational relationships are developed, maintained, and understood.

Discourse, however, is not limited to external communicative activities such as dialogue and writing text, but also includes internal communicative activities such as how people "talk to themselves" (Grant & Marshak, 2011, p. 206). Grant and Marshak offer a model for understanding and analyzing levels of discourse in organizations. Their multi-level model of *linked discourse* suggests that the discourses at different levels do not exist independently of each other, "the texts within any level of discourse are linked to, and informed by, discourses and the texts that operate from other levels" (p. 215). Analysis of conversations in the workplace can take place at each of five levels, or across multiple levels.

1. The *intrapsychic* or *intrapersonal* level of stories, schema, and beliefs as part of the internal self-talk, including both conscious and unconscious aspects.
2. The *micro* or *personal* level of discourse spoken by an individual, including their use of metaphor, storytelling, influence, and topic selection as a reflection of their perceptions, opinions, and attitudes.

3. The *meso* or *interpersonal/group* level where interaction between two or more individuals occurs in the external communicative space through conversation and other text (e.g., e-mail).
4. The *macro* or *organizational* level where enterprise-wide communications such as mission statements, slogans, and accepted or unaccepted conversational topics define the dominant discourse.
5. The *meta* or *socio-cultural* level where the discourses occurring in the larger environment, such as financial trends or social change, may shape or influence the other levels.

While a robust body of literature focuses on discourse at the personal, interpersonal, organizational, and group levels, less research has explored the role of the intrapersonal level in organizational communications research. Marshak, et al. (2000) suggest that organizational scholars tend to focus on the more visible social interaction aspects of discourse, such as e-mails and document analysis, rather than the internal communicative process. Similarly, Archer (2003) points out that some researchers question methodological approaches available for investigating internal discourse, since the researcher cannot listen to or read internal discourse in the same way that can be done conversation and text.

In summary, the theories of symbolic interactionism, sensemaking, and organizational discourse each seek to provide a framework for how we understand ourselves, others, and our environment through communicative interaction with others. These theories each incorporate aspects of interpersonal communication (spoken dialogue, written text, non-verbal gestures) and intrapersonal communication (imagined

dialogue and message scripting). The next sections of this literature review will delve more deeply into the construct of intrapersonal communication, with an emphasis on self-talk, internal conversations, and imagined interactions.

Intrapersonal Communication

The concept of intrapersonal communication is an integral aspect of each of the theories summarized above: symbolic interactionism, sensemaking, and organizational discourse. Although different terminology has been used by different theorists, each of the theories offers insight into the internal cognitive processes through which individuals talk to themselves or others to make meaning, plan for the future, and manage social relationships.

Defined broadly, intrapersonal communication can incorporate all the internal, symbolic thought and mental processes involved in understanding and interacting with stimuli (Shedletsky, 1989). Roberts includes the biological aspects of intrapersonal communication as well, defining it as, "all of the physiological and psychological processing of messages that happens within individuals at conscious and non-conscious levels as they attempt to understand themselves and their environment" (Roberts et al., 1987, p. 2). Intrapersonal communication can processes serve as a substrate for external communications and be conceptualized as a pre-communicative activity for external forms of communication. Through intrapersonal communication, individuals develop meaning, mental structures, schema, labels, and memories (Roberts et al., 1987; Shedletsky, 1989). Both conscious and unconscious processes are believed to contribute to intrapersonal communicative activities, and they are highly linked with emotions (Damasio, 1999; Marshak et al., 2000).

Shedletsky (1989) notes that researching intrapersonal communication "does not allow us to isolate the individual from society . . . study of intrapersonal communication is, in fact, the investigation of the interface between the individual and the social-cultural environment" (pp. 96-97). As depicted in Figure 1, the intrapersonal communication processes exist in the dynamic relational sphere with interpersonal communication. Thus, research and theories on intrapersonal communication, often using the more common terminology of *self-talk* or *internal conversation*, tend to involve communicative and cognitive processes in the internal domain as they relate to the public or social domain. Some prime examples from the literature are provided below.

Self-talk. Self-talk is defined as intrapersonal communication activities that invoke words, language, statements, and dialogue spoken to oneself mentally, but not verbalized aloud (Fields, 2002; Hardy, 2006). In this study, *self-talk* is differentiated from *imagined interactions* in that self-talk incorporates a broad range of interior linguistic activities, such as unidirectional statements towards oneself (e.g., "what am I going to do about this situation?"), whereas imagined interactions are bi-directional, imagined conversations or dialogues with multiple actors. The umbrella term *self-talk* has been used broadly by many theorists and philosophers to encompass the entire range of internal communications, including both mentally talking to one's self and mentally talking to others.

In his exploration of self-talk, "*Why do we talk to ourselves?*" Fields (2002) postulates eight potential reasons that humans talk to themselves using intrapersonal communication: (a) learning through practice, (b) reflection and deliberation, (c) awareness of what we are thinking, (d) sense of self, (e) maintaining private thoughts, (f)

concentration, (g) focusing attention, and (h) using conversational strategies for problem solving (pp. 263-269). The last function, using conversational strategies for problem solving, is conceptually similar to the construct of imagined interactions. Fields notes that we use this function "as a way of allowing ourselves to play multiple roles and adopt multiple points of view about some topic. The inner conversation, in this case, is a simulation of a public conversation with several participants" (p. 267).

Vincente and Martinez-Manrique (2011), in their review of the nature and functions of inner speech, suggest that self-talk is a conscious process with both communicative and cognitive functions, including clarifying for ourselves what we are thinking, self-regulation, planning, decision-making and identity construction. They note that people also engage in more complex rehearsal and sensemaking when self-talk is

> Carried out in full sentences. This is especially noteworthy in cases such as when we prepare a lecture, think hard about an argument, or imaging possible conversations . . . what our inner speech is doing can be characterized as a sort of rehearsal of the utterances that the subject will eventually make public. (p. 211)

However, Vincente and Martinez-Manrique suggest that most of what people say to themselves in the self-talk realm is intended for private deliberation and clarification, rather than as precursor for real-life communicative activities.

Internal conversation. Exploring in depth the theme of the conversations we have with ourselves, Archer (2003) conducted an interview-based study designed to better understand the nature of internal conversations. Among her research questions, she considered: "Do different people devote their self-talk to different matters? Do all people engage in the same range of deliberative mental activities? Do subjects conduct their

internal conversations in the same way, or can one speak of different modes of reflexivity?" (p. 163).

Archer's (2003) interviews began with an open-ended conversation about the theme of internal conversations. She further prompted participants to discuss their internal conversations related to ten types of self-talk derived from her pilot testing (p. 161):

1. Planning (the day, the week, or longer-term future)
2. Rehearsing (practicing what you will say or do)
3. Mulling-over (dwelling on a problem, a situation or a relationship)
4. Deciding (debating what to do)
5. Re-living (an event, period or relationship)
6. Prioritizing (workout out what matters most)
7. Imagining (the future, what if)
8. Clarifying (sorting out what you think about an issue, person or problem)
9. Imaginary conversations (held with people you know or know of)
10. Budgeting (estimating what you can afford in terms of time, money or effort)

Archer found that all of her 20 subjects were able to easily grasp the idea of internal conversations and spoke freely and at length–as much as three hours–about their own internal conversations. Although Archer did not begin her research with any pre-determined typology, three distinct patterns emerged which she has labeled *communicative reflexives*, *autonomous reflexives*, and *meta-reflexives*.

Communicative reflexives characterize those individuals who may initiate internal conversations or deliberations, but complete their decision-making with real-life others

through interpersonal communication. This group tended to "regard their own internal conversations with suspicion, if not negativity" (p. 168). These individuals have close family ties and life-long friends whose advice and counsel they frequently seek, often engaging their confidants to complete their decision-making rather than their internal processes. Additionally, participants in this category did not speak as frequently about imaginary mental activities such as re-living, imagined conversations, daydreaming or speculating (p. 171).

Autonomous reflexives, conversely, have active internal dialogues which they infrequently supplement with interpersonal communication. They feel that they know themselves well, and tend to make their decisions internally, feeling confident with those decisions. They are more self-contained in their reflective thoughts, and may be perceived as highly independent or even loners. Participants in this group tended to prioritize work over family ties and close relationships. For autonomous reflexives, imaginary conversations often take the form of preparation or rehearsal for future conversations within the work realm (Archer, 2003, pp. 210-214).

Meta-reflexives characterizes those individuals whose internal conversations are self-oriented, constantly questioning and examining their own motives and reactions. Their overarching concern in life is neither relationships like the communicative reflexives nor work like the autonomous reflexives, but searching for meaning and achieving certain ideals or self-actualizations. Participants in this category describe their internal dialogue as nearly endless, consisting of all the ten types of internal self-talk Archer investigated, and involving a great deal of soul-searching. They report reliving events and episodes involving difficult interpersonal dynamics, and mulling things over

in a self-admonishing way. Their imaginary conversations can be vivid and emotionally charged (Archer, 2003, pp. 255-259).

Although Archer did not directly utilize the construct of imagined interactions in her study, her category of self-talk called imaginary conversations seems to represent the same internal cognitive process of mentally envisioning conversations with real-life others. Similarly, Archer investigated reliving and rehearsing, which are essential functions of the process of imagined interactions. Her findings thus suggest that individuals with more active internal conversations–autonomous reflexives and meta-reflexives–may have more imagined interactions and may be more likely to utilize them for sensemaking, planning, rehearsing, and self-understanding.

Emotions and intrapersonal communications. An increasing amount of literature provides insight into the biological interconnectedness of emotions, cognitions, intrapersonal communications, and self-identity (Damasio, 1999, 2010; Rock, 2008; Siegel, 1999). Siegel (1999) suggests that the brain's structure and chemistry are influenced by social relationships, and that identity is created through the interaction of internal biophysiological processes and interpersonal relationships. Such research is situated within the emerging field of social neuroscience, which

> explores the biological foundations of the way humans relate to each other and to themselves and covers diverse topics . . . [including] theory of mind, the self, mindfulness, emotional regulation, attitudes, stereotyping, empathy, social pain, status, fairness, collaboration, connectedness, persuasion, morality, compassion, deception, trust and goal pursuit (Rock, 2008, p. 1).

A theme in the social neuroscience literature is that social relationships are governed by the brain's innate desire to maximize reward and minimize threat, and that the brain perceives social rewards and threats through the same biochemical mechanisms that it perceives physical and survival-oriented rewards and threats (Gordon, et al., 2008; Rock, 2008). Biochemical emotional responses in the brain's limbic system (the part of the brain responsible for emotions) and the amygdala (the portion of the limbic system which responds to threat by increasing fear and anxiety) can occur within one-fifth a second in response to threat in the environment (Goleman, 1995). The result is that our body's neurochemical mixture changes reflexively before we are consciously aware or linguistically able to articulate reason behind the feeling of threat.

In the workplace, interpersonal communicative interactions can be perceived through the lens of social reward and threat. Rock (2008) suggests that there are five aspects of workplace social dynamics most influential to the social reward and threat neuro-activation: status, certainty, autonomy, relatedness, and fairness. Threats in the workplaces to any of these five domains will activate the brain's emotional threat responses.

Once a threat response is triggered in the amygdala, the brain reacts by engaging higher cognitive and intrapersonal communication functions, attempting to label the emotion and the nature of the threat, which should dampen the limbic system's response and alleviate the emotional activation to the stressful situation (Lieberman et al., 2007). However, in the workplace or other situations of threats to social identity, the brain's ability to calm triggered emotional responses may not be straightforward. The amygdala is "more tuned to threats than rewards, the threat response is often just below the surface

and easily triggered. Just speaking to one's supervisor or someone of higher status is likely to activate this response" (Rock, 2008, p. 3). In short, the evolutionary advantage of the limbic system's quick and powerful response to threat in the environment may be contributing to an overactive sense of threat and heightened anxiety in the modern, social-oriented work environment (Kreamer, 2011).

Thus, emotions are nearly constantly occurring in the workplace, and the negative or threatening emotions have a stronger sway on inner work lives and motivation to perform work that positive feelings of reward (Amabile & Kramer, 2011; Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Rock, 2008). In a review of over 12,000 workplace diaries, Amabile and Kraemer found that

> the power of setbacks to diminish happiness is more than twice as strong as the power of progress to boost happiness. The power of setbacks to increase frustration is more than three times as strong as the power of progress to decrease frustration (p. 93).

Intrapersonal communications, such as mentally imagining conversations with real-life others, may be one of the brain's cognitive functions for managing the emotional aspects of difficult, threatening, or negative social interactions (Honeycutt, 2003). Imagined conversations involve not only linguistic aspects but also an emotional valence which can be positive, negative or mixed emotions. The emotions in an imagined interaction may reflect and even reinforce the actual emotions experienced during real-life social interactions. Research on the physiology of imagined interactions shows that blood pressure and heart rate increase when imagining difficult conversations with real-life others (Honeycutt, 2010a). Further, imagined conversations serve a cathartic

function, to vent and purge emotional responses to real-life situations (Honeycutt, 2003). In total, these findings suggest that imagining conversations may be one of the brain's internal cognitive responses to heightened emotional states triggered by social threats.

Summary. As this review has demonstrated, researchers and theorists from perspectives as broad as philosophy, cognitive science, communications, sociology, and artificial intelligence have postulated the purpose and utility of humans' nearly constant internal conversations (Archer, 2003; Damasio, 1999; Fields, 2002; Vicente & Martinez Manrique, 2011). The internal cognitive process of mentally imagining conversations with real-life others appears throughout this literature as an essential aspect of the way in which humans' intrapersonal communications processes contribute to understanding of self, others, and the environment. Additionally, emotional responses to threatening social encounters can trigger intrapersonal cognitive and communicative activities, including imagined interactions. The next section focuses exclusively on this aspect of intrapersonal communication processes by defining the construct of imagined interactions and detailing Honeycutt's model of the eight dimensions and six functions of imagined interactions (Honeycutt, 2003).

Imagined Interactions

Imagined interactions are a specific type of intrapersonal communication activity which involves mentally talking with others in an internal conversation symbolic of real-life conversations. The concept of imagined interactions stems primarily from the theoretical tradition of symbolic interactionism (Mead, 1934), and is postulated to have multiple functions related to communication planning, identity construction, and relationship maintenance (Honeycutt, 2003). The main differentiator between imagined

interactions and other forms of self-talk or intrapersonal communication is the dialogic nature of imagined interactions. The individual who is engaged in the imagined interaction creates or recreates not only their role in the conversation, but also the other's role.

The construct of imagined interaction, as is most commonly referenced in the literature and utilized in imagined interactions research, has been defined by communications scholar James Honeycutt, who describes imagined interactions as the "process of social cognition whereby actors imagine and therefore indirectly experience themselves in anticipated and/or past communicative encounters with other." (2003, p. 2). Similarly, Allen and Berkos (2005-2006) define imagined interactions as "an intrapersonal communication activity that may be described as a type of self-controlled daydream in which individuals envision themselves in the act of discoursing with others" (p. 307). Although the emphasis on imagined interactions is the communication experience, e.g., imagining verbal dialogue, imagined interactions also tend to include other aspects of imagery, such as the physical setting, body language, and emotional affect.

Honeycutt's model describes eight dimensions of imagined interactions and six functions of imagined interactions, as confirmed through repeated studies utilizing the Survey of Imagined Interactions (Honeycutt, 2003, p. 15). The next section will review the eight dimensions and six functions of imagined interactions in detail, followed by a review of research findings relevant to the use of imagined interactions in workplaces settings.

Eight dimensions of imagined interactions.

***Proactivity*.** The dimension of proactivity refers to imagined interactions that occur before or in anticipation of real-life conversations that have not yet happened. Proactive imagined interactions are strongly linked with the rehearsal function (described in the next section). A person may have multiple, different proactive imagined interactions to mentally assess the likely outcomes of various conversational strategies, or may repeatedly rehearse the same dialogue, for example in preparation for a public speaking engagement or a debate (Honeycutt et al., 2009; Honeycutt & Gotcher, 1991).

***Retroactivity*.** The dimension know as retroactivity refers to imagined interactions that involve mentally reliving real-life conversations after the encounter has taken place. Retroactive imagined interactions may be used to reflect on the real-life encounter, make sense of it, and clarify one's thoughts and feelings about the encounter. People may also relive prior real life conversations as part of the rehearsal for future conversations in a phenomenon known as "linking." Mentally linking retroactive and proactive imagined interactions may be especially important in relationship maintenance and conflict management and resolution (Honeycutt, 2003, 2003-2004).

***Discrepancy*.** The dimension of discrepancy measures how similar or dissimilar the imagined interaction is to the real-life conversation. Discrepancy is a characteristic of both proactive and retroactive imagined interactions. Conversations can be relived differently than they actually occurred and rehearsed conversations can turn out to be quite different in real life than anticipated. Honeycutt (2003) suggests that discrepant proactive imaged interactions may reflect an inability to anticipate others' responses and

plan for conversational alternatives. However, rehearsing conversations, even discrepant ones, can boost self-confidence prior to a real-life event.

Frequency. The dimension known as frequency refers to how often people have imagined interactions. Studies on imagined interactions find them to be common and frequent, and more common in women than men (Edwards, Honeycutt, & Zagacki, 1989). In a three-day sampling, 75% of respondents reported having at least one imagined interaction (Honeycutt, 2003).

Specificity. The dimension of specificity describes how much detail is involved in the imagined interaction, including verbal, imagary, and emotions (Honeycutt, 2003). For example, when reliving a real-life conversation, someone may be able to recall their own and the other's specific word choice, elements of the physical environment, and facial gestures or other non-verbal conversational aspects. In terms of rehearsal, a highly specific imagined interaction would involve very clearly articulated sentences being uttered by all actors involved as well as visualization of the scene of the conversation.

Dominance. The dimension of dominance refers to how much the person having the imagined interactions speaks within conversation compared to the imagined partner(s) or other(s). Research conducted using the methodology of subjects writing their imagined dialogues found that the individual tends to initiate the imagined conversation and speak more during it (Zagacki et al., 1992). Dominance is also higher when the imagined interaction is conflictual in nature (Honeycutt, 2005-2006).

Valence. The dimension of valence refers to the measure of whether the imagined interaction is pleasant or unpleasant (Honeycutt, 2003). For example, an individual may positively recall a pleasant encounter with a mentor and rehearse for an

upcoming meeting with that person. Similarly, a person may emotionally relive a previous conflictual episode with a coworker by mentally replaying the interaction. The repetitive replay of negative life events can lead to mulling or rumination.

Variety. Variety is the dimension that describes the diversity of topics and conversational partners during the imagined interactions. Research studies on imagined interactions have shown that people tend to imagine conversations with a wide variety of partners, such as significant others, co-workers, and roommates (Allen & Berkos, 2005-2006). Similarly, imagined interaction topics tend to employ a great deal of variety including work and school situations, dating, conflict, and important life events (Edwards et al., 1989; Honeycutt, 2003). Variety is also correlated with conversational alternatives, meaning that having a variety of imagined interactions with a range of conversational partners is linked with being able to reword or rephrase thoughts in a multitude of ways (Honeycutt, 2003).

Six functions of imagined interactions.

Relationship maintenance. Relationship maintenance occurs not only through real-life interpersonal encounters, but also through intrapersonal communication processes such as imagined interactions. Within the context of relationship maintenance, one purpose of imagined interactions is the linking of multiple interpersonal encounters with real-life relational partners in order to make meaning of the interactions that have occurred and prepare for future interactions (Honeycutt, 2003-2004). Through this linking activity, "a person recalls a prior conversation and replays it in his or her imagination, while anticipating what could be said differently for an ensuing encounter" (p. 8).

Imagined interactions can be useful in determining which relationships to prioritize, by reliving interactions and making meaning about them. Similarly, by creating themes and memories for the relationship, imagined interactions play an important role in relationship maintenance and the future trajectory of the relationship (Honeycutt, 2003). For example, an individual may replay a confusing conversation or encounter with a co-worker and determine that the co-worker is untrustworthy. This categorization will affect the individual's future interactions with that co-worker, both real-life and imagined.

Conflict management. Conflict is a common topic of imagined interactions, representing about 40% of imagined interactions in multiple studies (Allen & Berkos, 2005-2006; Edwards et al., 1989). The conflict management function of imagined interactions represents a particular aspect of relationship maintenance, the linking of conflictual interactions. Honeycutt (2003-2004) describes the internal process of conflict-linkage as,

> How arguments or fights are ruminated on in the mind. People often remember episodes of disagreement, arguing, or fighting and dwell on them . . . a series of conversations can be linked together through memory. Recalling a prior argument may create expectancies for the next anticipated interaction with the relevant individuals. (p. 4)

Conflictual imagined interactions are closely linked with a similar cognitive process, rumination. Rumination occurs when an individual consciously dwells on a situation, usually in a negative manner which results in the situation seeming more severe and less likely to resolve than real-life indicators suggest. Individuals who perceive

conflict to be stressful, take conflict personally, or ruminate rate the valence of conflict-related imagined interactions negatively, whereas individuals who perceive conflict to be a positive aspect of relationship management tend to rate their conflict-related imagined interactions more positively (Wallenfelsz & Hample, 2010)

Rehearsal. The rehearsal function is used for planning future conversations and serves roles such as message scripting, imagining multiple alternative outcomes, and making decisions about how to proceed. The rehearsal function is highly correlated with the proactivity dimension, since proactive, future-focused imagined interactions are the mechanism by which rehearsal occurs (Honeycutt, 2003, 2010b).

High usage of the rehearsal function has been linked to emotionally charged situations (Berkos, et al., 2001; Zagacki et al., 1992). Rehearsal via imagined interactions can be used as a mechanism for practicing how to best deliver an emotionally charged message or manage a difficult situation. This rehearsal function allows for not only the proactive scripting of one's own messages, but also the imagining of the other's responses and the potential emotions that may result during a real-life conversation. Rehearsal has been shown to be linked with anxiety-inducing activities such as public speaking (Honeycutt et al., 2009) and employee job interviews (Kelley & Croghan, 2010). Studies on the rehearsal function of imagined interactions demonstrate that pre-conversational practicing can be useful in reducing anxiety related to the upcoming interaction and may increase the fluency of message delivery (Honeycutt, 2003).

Self-understanding. The self-understanding function refers to the role of imagined interactions in better knowledge and understanding of oneself. This includes

understanding views, opinions, responses, priorities, reactions, and emotions (Honeycutt, 2010b).

Self-understanding through retroactively reliving real-life conversations represents a similarity between imagined interactions and sensemaking. As previously discussed, one of the primary components of sensemaking is identity construction (Weick, 1995). Additionally, by practicing multiple conversational alternatives, we may cultivate a better sense of ourselves, including clarifying our thoughts and opinions about a situation or an individual.

Catharsis. The catharsis function of imagined interactions refers to the use of internal conversations to release emotions or "say" things in one's mind to resolve a negative response usually without saying it via external communications (Honeycutt, 2003). Theoretically, the catharsis function is a positive one, allowing people to emotionally work through their heightened emotions about a situation before or instead of having a real-life conversation. Ideally, after a cathartic imagined interaction, a person would feel less angry and be able to rehearse more emotionally neutral future encounters (Allen & Berkos, 2005-2006; Honeycutt et al., 2009).

However, there is also the possibility that the catharsis function of imagined interactions can lead to repetitively replaying negative interactions or imaging future conflictual encounters. This may create a negative loop where imagined interactions, "may amplify negative moods such that there is a closed loop in which bad moods lead to negative [imagined interactions], which makes current moods worse, resulting in more negative [imagined interactions]" (Honeycutt, 2003-2004, p. 12).

Compensation. Compensation refers to the use of imagined interactions as a substitute for actual real-life encounters. The majority of the studies on compensation have investigated the use of compensatory imagined interactions when an individual is distant from his/her significant other or after the death of a significant other (Honeycutt, 2003, 2010b).

Compensation may or may not be an important function in workplace related imagined interactions. Although no research has been published to date on compensation as a substitute for real-life encounters in workplace settings, Honeycutt (2003-2004) suggests that "future research should investigate compensation in more conflictual situations that may inhibit real interaction, such as with disagreement between an employee and an employer" (p. 22). For example, an employee who does not have direct communication access to her CEO may use the compensation function to express her thoughts and opinions. Even when a workplace relationships exist, research on implicit voice theories suggests that employees will remain silent rather than publicly disagreeing with their boss or expressing a viewpoint that may have negative career consequences (Detert & Edmondson, 2011).

Research findings on imagined interactions. The previous research findings on imagined interactions provide a glimpse into the likely findings of this research study. For the purpose of this literature review, a large body of research on imagined interactions has been excluded. The excluded research findings represent research on imagined interactions which has been conducted in the context of personal relationships, such as married couples and parent-child relationships as well as research related to use of the compensation function in situations of distant or deceased loved ones.

The literature included relates to the central purpose of this dissertation: exploring the role of mentally imagining conversations in workplace relationship management. The previous section has already provided examples from the literature on how individuals utilize the eight dimensions and six functions of imagined interactions. The section below provides a summary of research findings related to the types of workplace situations which may stimulate imagined conversations.

Conflict. A 2005 study by Allen and Berkos employed a guided journaling methodology to determine a variety of features about imagined interactions including how often they are conflictual, the conflict partners in the imagined interactions, and the amount of linking of multiple imagined interactions about the same person or conflict episode(s). Their sample was 105 undergraduate students in a large lecture course with a mean age of 26. The participants wrote journal entries about any type of imagined interaction; the context was not limited by situation or scenario. They found that 41% of the imagined interactions were conflictual in nature, and the conflict partners included significant other (27%), friend (18%), boss (18%), family member (12%), coworker (8%), stranger (8%), roommate (7%), and potential partner (2%). Among the journal entries, 33% involved imagined interactions that were linked to one another, meaning that participants tended to journal about ongoing issues within the same relationship(s). (Allen & Berkos, 2005-2006). Based on these results, individuals are likely to have imagined interactions with their boss and other coworkers, and such imagined conversations may involve ongoing conflict or other stressful issues within the working relationship.

Norms violations. In a study on norms violations in the classroom environment, Berkos, Allen, Karney, and Plax (2001) assessed the role of imagined interactions as an internal cognitive mechanism for making sense of the norms violating behavior and determining a response. Their study included 237 undergraduate students from a communications course who provided a real life example of a professor who violated norms within the classroom. Participants completed a modified version of the Survey of Imagined Interactions which was focused on the functions of rehearsal, self-awareness, and catharsis. They also responded to three open-ended questions on the likelihood of relying on imagined interactions during real interactions with the professor who violated norms. The researchers found that participants used imagined interactions to process teacher norms violations, however they were more likely to engage in imagined conversations with the professor than to have a real-life conversation with the professor. The authors suggest that imagined interactions in the context of norms violations "serve as a coping mechanism . . . not for rehearsal to take action, but to replace action" (Berkos, et al., 2001, p. 298). This research indicates that violation of norms in the other environments, such as the workplace, may similarly trigger imagined interactions, and that employees may engage imagined interactions as a compensatory mechanism to substitute for real-life interactions.

As a follow-up to the Berkos, et al study, Bolkan and Goodboy (2011) conducted a study on norms violations in an organizational setting. Participants read one of four scenarios of varying levels of norms violations regarding a failure with a hotel reservation. Participants for the study were 235 undergraduate students from communication courses, with an age range of 18-25 years. After reading their scenario,

the respondents completed a modified version of the Survey of Imagined Interactions as well as other scales designed to measure attitudes and communication style. The findings indicate that people used imagined interactions as: (a) a coping mechanism for dealing with norms violations related to business' failure to meet customer experiences and (2) a rehearsal strategy for preparing for future conversations with the organization. Additionally, "when people are highly apprehensive about communicating with others, they may use imagined interactions as a tool to learn about their feelings and then practice what they are going to say in an attempt to reduce their apprehension when it comes time to confront an organization" (p. 477). However, contrary to their expectations, the researchers found that usage of imagined interactions did not vary by the severity of the organization's failure or the organization's response to the norms violation.

Employee counseling and performance feedback. A study by Bryan (as cited in Honeycutt, 2003) sought to assess the role of imagined interactions when managers in the banking industry were conducting counseling sessions with their subordinates. Specifically, the study focused on the rehearsal and the catharsis functions of imagined interactions, hypothesizing that these two functions would be most useful in the providing efficacious employee counseling. The 77 participants, who had an average of 9.2 years of management experience, completed the Survey of Imagined Interactions. Their findings indicated that managers reported having imagined interactions about their employees' counseling session, more experienced managers were more likely to report mentally rehearsing counseling sessions, and managers used imagined interactions for both rehearsal and catharsis. Additionally, the managers who reported higher use of

imagined interactions also reported more feelings of self-confidence and relaxation prior to an employee counseling session than those participants with lower frequency of imagined interactions.

Job interviews. In a study about the use of imagined interactions in the context of job interviews, Kelley and Croghan (2010) examined whether years of work experience was a factor in how individuals utilize imagined interactions when preparing for a job interview. They found that individuals with more work experience had more varied and frequent imagined interactions as a rehearsal for job interviews, where as individuals with less work experience scored higher on the compensation function of imagined interactions. This finding is consistent with the assumption that familiarity with a context allows individuals to more effectively rehearse for real-life communication encounters.

Public speaking. Honeycutt, Choi, and DeBerry (2009) surveyed 174 undergraduate students to study the relationship between imagined interaction and communication apprehension, defined as anxiety about real or anticipated communication encounters. The study was limited to the discrepancy, rehearsal and catharsis aspects of imagined interactions in relation to overall communication apprehension as well as apprehension in four scenarios: group discussions, meetings, one-on-one interactions, and public speaking. The researchers found that individuals with all levels of communication apprehension tended to rehearse for anticipated encounters in each of the four scenarios. Although the research was not explicitly framed within the workplace context, each of the four scenarios represents common workplace interpersonal interactions, indicating that the intrapersonal communication strategy of rehearsal through imagined interactions may also be commonly utilized at work.

Electronic communications. Extending the concept of imagined interactions into the realm of electronic communications, Berkos (2010) conducted a study on the frequency, partners, topics, and roles of imagined interactions related to e-mails, instant messages, and other forms of online communicating. The six most prevalent topics in online-related imagined interactions among the sample of 119 students (age range 17-44) were school, social plans, dating, sports, conflict, and recent events/gossip. The partners involved in these imagined electronic communications were romantic partners, friends, families, potential romantic partners, and professors. Rehearsal was a common theme of imagined interactions in the electronic environment, with the majority of respondents saying that they often or very often edit their electronic messages based on how they imagine the other person will interpret or respond to the message. Finally, in response to the question asking "how else do your imagined interactions play a role in your online communication," the researcher identified five themes: emotion management, communication improvement, rehearsal, situation management, and professionally communicating. Because this study was conducted with undergraduate students, the topics and partners of their imagined interactions are skewed towards their lifestyle (e.g., social plans and friends). However, given that e-mail is becoming a predominate method of communication in the workplace, this study gives insight into the role that imagined interactions may be playing in managing relationships and maintaining professional image that may be applicable to working adults.

Summary

The research conducted on imagined interactions generally and within the context of professional and workplace settings sheds light onto this intrapersonal communication

activity. First, individuals engage in imagined interactions in a variety of work-related settings, with varied conversational partners, and for a multiple reasons such as conflict management, rehearsal, compensation for real-life confrontations, coping with norms violations, emotional management, and reducing communication apprehension (Allen & Berkos, 2005-2006; Berkos et al., 2001; Berkos, 2010; Bolkan & Goodboy, 2011; Honeycutt et al., 2009; Wallenfelsz & Hample, 2010). Overall, imagining conversations as a component of workplace relationship management appears to be a common intrapersonal communication experience.

More research is needed on the role of intrapersonal communication processes as a contributing factor in managing oneself and others in the workplace. In particular, explicit organizational hierarchies and role delineating may be factors that influence the topics and variability of imagined interactions by working professionals in real-world situations.

The dynamic interplay of communication between actors within living social systems involves a complex set of interpersonal and intrapersonal communication processes, many of which are not fully understood. This research study attempts to provide insight into one particular aspect: the role of mentally imagining work-related conversations through the intrapersonal communication process known as imagined interactions. The next chapter provides the detailed methodology for how the Survey of Imagined Interactions was modified and implemented to provide insight into the role of imagined interactions in workplace relationship management.

Chapter 3: Methodology

The research findings on imagined interaction in the work settings, as reviewed in Chapter 2, indicate that individuals engage in imagined conversations with real-life others in a variety of work-related scenarios. Although the literature assessing the use of imagined interactions by managers or supervisors is somewhat limited, results suggest that imagining conversations is a common intrapersonal communication experience, especially in situations which involve conflict, meetings, public speaking, giving performance feedback, or preparing for difficult conversations such as employee reviews (Allen & Berkos, 2005-2006; Honeycutt, 2003, 2010b; Honeycutt et al., 2009; Kelley & Croghan, 2010). Furthermore, exploratory research about internal conversations indicates that work-related dynamics are a frequent topic of internal conversations among individuals with active self-talk (Archer, 2003).

This study expands the research on imagined interactions, exploring the use of the construct in workplace relationship management through the completion of an online questionnaire. The purpose of this chapter is to provide details about how this research study was conducted, including research design, research questions, data collection through the modified Survey of Imagined Interactions, participant selection and recruitment, human subjects considerations, data collection, and data analysis.

Research Design Overview

This exploratory research study investigated the use of imagined interactions in workplace situations. The research employed a cross-sectional survey design, with all data collected at a single point in time via online data collection. Working adults in the United States who hold a supervisory role in their organization were recruited.

Participants completed an online questionnaire consisting of a modified version of the Survey of Imagined Interactions, which prompted participants to respond to a variety of closed-ended (quantitative) questions about their imagined interactions in the work environment and open-ended (qualitative) questions, including a sample dialogue of a recent imagined interaction with a superior, subordinate, or peer. Thus, the research project consisted of a mixed-methods approach, which resulted in both quantitative and qualitative analysis of data.

Research Questions

The overarching research question and related sub questions were addressed through analysis of the data collected via the online questionnaire.

Research question: How do supervisors utilize imagined interactions to make sense of and manage workplace relationships?

Sub question 1: How do supervisors utilize the eight dimensions and six functions of imagined interactions in work-related imagined conversations with coworkers?

Sub question 2: With whom do supervisors most frequently engage in work-related imagined interactions: superiors, subordinates, or peers?

Sub question 3: How does the usage of imagined interactions in the workplace vary by the imagined interaction partner (superior, subordinate, or peer)?

Sub question 4: What are the work-related topics supervisors report discussing in their imagined interactions?

Sub question 5: How do the work-related topics supervisors discuss in imagined interactions vary by the imagined interaction partner (superior, subordinate, or peer)?

Detailed Methodology: Survey Research

Survey research is a common methodology in the social and organizational sciences, especially for research designed to measures individual's experiences, preferences, and behaviors (Creswell, 2003; Sue & Ritter, 2007). Surveys are a suitable methodology when "we may simply be interested in documenting the distribution of some variable of interest in some population. We may also be interested in establishing whether or not two variables are related, regardless of whether that relationship is causal" (Judd, Smith, & Kidder, 1991, p. 126).

The Survey of Imagined Interactions was developed in the 1980s by Honeycutt and colleagues, who conducted confirmatory factor analysis and tests of internal validity on the instrument. Honeycutt (2003) acknowledges that "measuring mental states is a lofty and difficult task" (p. 14) and designed the instrument to incorporate measurement of imagined interactions on a Likert scale, and to elicit introspective self-report via open-ended questions. Archer (2003), whose research also investigates internal conversations, postulates that,

> The relationship between our internal conversations and their investigation is fundamentally no different from the relationship between our 'attitudes' and 'attitudinal research' . . . All research touching upon our 'attitudes', 'beliefs', 'outlooks' or 'intentions' taps into syntheses of our mental activities; to explore the 'internal conversation' does not entail qualitatively different difficulties (pp. 155-156).

Thus, the methodology for this research study aligns with prior research on imagined interactions and internal conversations by employing questionnaire

methodology incorporating both closed-ended and open-ended questions to elicit individuals' assessments of their imagined conversations.

Survey of Imagined Interactions

The Survey of Imagined Interactions is a validated questionnaire that includes 60 closed-ended, Likert scale questions related to the eight dimensions and six functions of imagined interactions. Additionally, the survey includes a section that prompts respondents to recall recent imagined interactions and provide details about them, including sample lines of imagined dialogue.

The Survey of Imagined Interactions was chosen for this research study because it is an existing, validated survey in the field and has been employed repeatedly by researchers investigating the construct of imagined interactions (Allen & Berkos, 2005-2006; Edwards et al., 1989; Honeycutt, 2003, 2010b; Honeycutt et al., 2009; Kelley & Croghan, 2010; Wallenfelsz & Hample, 2010; Zagacki et al., 1992). The Survey of Imagined Interactions uses multiple different iterations of questions about the same constructs to ensure construct validity and internal reliability. Details on the survey's internal reliability, both in a previous implementation and this implementation, are provided in Chapter 4.

Modifications to the survey of imagined interactions. Modifications to the Survey of Imagined Interactions were made for this research study to limit the participants' responses to imagined interactions in the workplace or involving coworkers. Honeycutt, who has published the reliability data on the Survey of Imagined Interactions, encourages such modifications of the survey as needed to provide the contextual boundaries when studying imagined interactions in specific settings or relational

dynamics. In past studies, the Survey of Imagined Interactions has been modified to limit the range of dimensions and functions of imagined interactions measure and/or to limit the situational context of responses (for example, Berkos et al., 2001; Honeycutt et al., 2009). Three major modifications were made for this study.

First, the Likert scale survey questions were modified such that participants were asked to respond to the closed-ended questions within the frame of their imagined interactions with real-life coworkers or within the workplace setting. For example, a question from the Survey of Imagined Interactions that was originally worded "my imagined interactions are with different people" was modified to read "my work-related imagined interactions are with different people from my job." Similarly, when responding to the open-ended questions and providing sample dialogue, respondents were asked to limit their responses to the workplace, and to identify whether the topics of their work-related imagined interaction were with superiors, subordinates, and/or peers.

The second modification for this research study related to the implementation of the survey via the online SurveyMonkey system. The paper version of the Survey of Imagined Interactions employs a 7-point scale from very strong disagreement (NO!) to very strong agreement (YES!). For this research project, the descriptors of very strong disagreement to very strong agreement were used as labels for the 7-point scale, without the no/yes verbiage. This change was implemented so that the data collection interface was more similar to the common implementation of Likert scale questions in organizational research. In the web-based interface on the SurveyMonkey website, respondents clicked on the radio buttons that represented their agreement with the item,

rather than circling no/yes in the paper administration of the survey. This represents the common format of scale-based survey questionnaires in the online environment.

Thirdly, in implementing this survey via the website, the Likert scale questions were automatically randomized using SurveyMonkey's question randomization feature. Because the survey asked multiple questions about the same construct, the questions were randomized so that similar questions did not follow each other in sequence. This modification was designed to assist participants in not feeling as though the same question was being asked multiple times.

In preparation for this research project, the researcher contacted Dr. Honeycutt via e-mail to ensure that no copyright authorizations were needed to conduct the research. Dr. Honeycutt authorized the use of the Survey of Imagined Interactions and provided insight and advice to the researcher about the modifications and implementation of the survey instrument (J.M. Honeycutt, personal communication, September 4, 2011).

Survey Administration

For this research study, the modified version of the Survey of Imagined Interactions was administered via an online data collection process facilitated by SurveyMonkey (www.surveymonkey.com). Online data collection was the ideal approach for this study because it allowed for (a) access to the questionnaire for supervisors from around the country via the internet, (b) anonymity of responses, (c) as much or as little time as necessary to complete the survey, (d) privacy when completing the responses, and (e) automatic aggregation of data for the data analysis (Bryman & Bell, 2007; Sue & Ritter, 2007).

The online questionnaire consisted of the six sections. Appendix A provides the full text of each of these six sections, downloaded directly from the SurveyMonkey website. A summary of the importance of each of the six sections is provided below.

1. Brief introduction to imagined interactions. The first section of the online questionnaire provided a brief introduction to the concept of imagined interactions in layperson's language. Potential participants were introduced to the concept of imagined interactions through a clear definition and some examples of how we mentally imagine conversations with people from real life. The brief introduction also introduced the purpose of the study ("better understand the role of imagined interactions in managing workplace relationships") and asked potential participants to only begin the questionnaire when they had 20-30 minutes of uninterrupted time to complete it.
2. Inclusion criteria. The second section of the online questionnaire asked potential participants to respond to six inclusion criteria. Each question was worded such that a response of "yes" qualifies the participant and a response of "no" disqualifies the participant. Potential participants were asked to confirm that they responded "yes" to all six inclusion questions in order to proceed with the survey. A "no" response to any of inclusion question resulted in the prospective participant being directed to a webpage with a note thanking them for their interested but letting them know that they were not being offered participation in the study.
3. Informed consent. The third section of the online questionnaire provided the informed consent. The language in the informed consent section was taken

from the Pepperdine University Graduate School of Education and Psychology template, with minor modifications to align with this research study (for example, language around HIPPA and medical records was eliminated). In order to proceed with the survey, participants were required to electronically consent on the informed consent web page. Further information about the informed consent and the protection of research participants is provided later in this chapter.

4. Closed-ended questions about imagined interactions in the workplace. The fourth section of the questionnaire asked 60 Likert-scale questions about the eight dimensions and six functions of imagined interactions. When answering each of the questions, respondents were instructed to "consider imagined interactions you have involving all of the coworkers from your workplace. Coworkers includes everyone with whom you work–your superiors, subordinates and peers." For each question, respondents indicated their level of agreement on a scale of 1 (very strong disagreement) to 7 (very strong agreement). Furthermore, participants were provided with the following definitions to facilitate consistency of responses:
    - A superior is direct manager, supervisor, or someone else above you in the organizational hierarchy who assigns work to you.
    - A subordinate is someone who is your direct report, or someone else below you in the organizational hierarchy.
    - A peer is someone in your organization with whom you collaborate who is generally on par with you in the organizational hierarchy.

5. Questions about recent work-related imagined interactions. The fifth section of the survey asked respondents questions related to their recent work-related imagined interactions. They were asked to list up to three topics they remembered discussing during a recent work-related imagined interaction, and identify the coworker(s) involved. Additionally, participants selected the one coworker with whom they have the most work-related imagined interactions, reported their frequency of work-related imagined interactions with that co-worker, and provided a sample dialogue of a recent work-related imagined interaction. The section ended with an open space for the participant to tell the researcher anything else they would like to report about their work-related imagined interactions.
6. Demographic information and employment related questions. The sixth and final section of the survey asked demographic and employment related questions. This information was captured to describe the population of individuals who completed the survey. Demographic and employment information collected were: age, gender, years of work experience, years of supervisory experience, number of direct reports, and current job role.

Protection of Research Participants & Ethical Considerations

IRB approval. The Institutional Review Board (IRB) at Pepperdine University monitors research conducted on human subjects to ensure that all appropriate safeties are employed in the conduct of such research in compliance with U.S. federal regulations (http://services.pepperdine.edu/irb/). Approval from the Pepperdine IRB was sought and

obtained prior to recruitment of participants or collection of data. A copy of the IRB approval letter is provided in Appendix B.

Informed consent. The online questionnaire included an informed consent page which was presented to participants who meet the inclusion criteria. Appendix A provides the full text of the informed consent, which has been constructed based on the template provided by the Pepperdine IRB. Participants were informed of the potential benefits of participation in the study, which included contributing to our understanding of the role of imagined interactions in workplace relationship management and the potential for an increased awareness of their own use of imagined interactions in their leadership/management repertoire. Participants were also be informed of the potential harm of participating in the study, which may have included reliving an unpleasant imagined interaction or an increase in their discomfort or distress about a current workplace situation.

Participants were informed that they could stop participating at any time, their participation was voluntary, the data would only be used for research purposes, and that their responses were anonymous. Furthermore, participants were informed that completion of the online questionnaire would take approximately 20-30 minutes, they could take as much time as needed, and they did not have to answer every question. In order to proceed with the questionnaire, participants were required to select "yes" to the question "I agree to participate in the research study being conducted by Paula Thompson under the direction of Dr. Susan Nero." The researcher's e-mail address was provided for participants with questions or who wished to report a case of distress associated with participating in this survey.

Research Participants & Qualifications

The target population for this study was adults in the United States who were employed in a work situation with at least one superior, subordinate and peer. The reason behind these overarching inclusion criteria was that the research question sought to assess the role of imagined interactions in relationships with superiors, subordinates, and peers. Thus, the target population was limited to individuals who have current working relationships in all three relational categories. Any potential subject who answered negatively to any of the inclusion criteria was excluded from the study.

Pilot testing. A round of pilot testing was conducted prior to actual data collection. For the pilot testing phase, three individuals from the researcher's professional network were asked to complete the online questionnaire without anonymity. The researcher asked those individuals completing the pilot testing to provide feedback on: (a) time it took to complete the online questionnaire, (b) confusion about the wording any of the survey questions, (c) typographical and other editorial feedback, and (d) issues with the functionality of the online questionnaire or technical glitches.

All three pilot testers reported spending approximately 25 minutes to complete the survey. The first pilot tester provided substantial feedback which resulted in editorial changes for clarification as well as technical redesign of one question to facilitate user experience. Thus, the responses provided by the first pilot tester were not included in the final analysis. However, the second and third pilot testers provided only slight grammatical changes which did not result in redesign, so their responses were maintained for the data analysis.

Sampling. This study employed a non-probability sampling technique known as accidental sampling (Judd et al., 1991) or convenience sampling (Bryman & Bell, 2007). With non-probability sampling, "there is no way to estimate the probability each element has of being included in the sample and no assurance that every element has some chance of being included" (Judd et al., p. 133). In this study, the use of a non-probability, convenience sampling technique meant that anyone who wished to complete the survey and met the inclusion criteria was eligible, regardless of whether the final sample of participants was representative of the larger population of working adults in the United States.

This sampling technique was chosen because the effort involved in gathering data on the details of the larger population and conducting a probability sample (such as a random sample or quota sample) would not provide significant additional value to the quality of the data to warrant the effort. This was an exploratory study, intended to gather initial findings about imagining conversations as a component of workplace relationship management. Sue and Ritter (2007) suggest that "the non-probability samples that can be selected quickly for Internet surveys work well for exploratory research" (p. 6). The findings will be useful to providing a general overview of the construct of imagined interactions in the work environment as well as qualitative information about the topics and content of such imagined interactions. This study was not designed to make conclusions that can be generalized in a statistically valid way, and thus the convenience or accidental sample was sufficient to address the research question and related sub questions.

With non-probability sampling, "no formulas for statistical inference exist for estimating sample size" (Sue & Ritter, 2007, pp. 33-34). However, Sue and Ritter suggest some convenience sampling "rules of thumb" including that the sample size be at least 10 times larger than the number of variables. Because there are eight dimensions of imagined interactions, the researcher set 80 as the minimum number of completed surveys to conduct the analysis in this study.

Recruitment. Recruitment of subjects was conducted after IRB approval through the researcher's professional network and social networking sites such as Linked In and Facebook. Recruitment proceeded in a snowball type of manner, where individuals who received the request to participate in the survey were also asked to share the invitation with their colleagues. Additionally, certain colleagues of the researcher were asked to share the survey recruitment e-mail and web link through their professional network and/or their social networking websites.

The survey participant request e-mail (see Appendix C) was designed to present an overview of the study in layperson's language in a manner that promoted interest in participating without falsely representing the study. It was also designed to embed a direct link to the survey webpage within the e-mail invitation, thus facilitating the ease of recruitment via e-mail and social networking websites.

Data Collection, Storage, and Analysis

Data collection was conducted online during a six week period in early 2012 via the internet survey provider SurveyMonkey. Data security on SurveyMonkey was ensured via their secure sockets layer which sends encrypted URLs to users. SurveyMonkey encrypted all collected data and the IP addresses and e-mail addresses

were masked to protect the anonymity of the participants. Therefore, there was no ability to link the survey responses back to any particular participant. The responses were maintained by SurveyMonkey in a personal password protected account accessible exclusively to the researcher. Upon completion of data collection, the responses were exported from Survey Monkey to the researcher's computer with sole access by the researcher and a password protected login. Limited, controlled access to the downloaded data was granted to the dissertation chairperson, a qualitative researcher, and a statistician only as necessary to facilitate data analysis.

Quantitative analysis. The quantitative analysis for this dissertation research study was conducted on the closed-ended questions, and primarily involved descriptive statistics and analysis of variance (Moore & McCabe, 1993; Sue & Ritter, 2007). The quantitative analysis was conducted to address the following research sub questions:

Sub question 1: How do supervisors utilize the eight dimensions and six functions of imagined interactions in work-related imagined conversations with coworkers?

Sub question 2: With whom do supervisors most frequently engage in work-related imagined interactions: superiors, subordinates, or peers?

Sub question 3: How does the usage of imagined interactions in the workplace vary by the most frequent imagined interaction partner (superior, subordinate, or peer)?

The quantitative analysis consisted of three phases: (a) data cleaning, (b) descriptive statistics, and (c) analysis of variance.

Data cleaning. After data collection was complete, the responses were downloaded from the SurveyMonkey website into Microsoft Excel. Data collection

began by reviewing the survey responses to determine which were sufficiently complete to include in the final data analysis. Twenty-three people consented to participate in the study, but voluntarily withdrew prior to completion of the survey. Almost all of these participants withdrew during the first data collection screen, a fairly lengthy series of Likert scale questions related to the eight dimensions of imagined interactions. These 23 participants who initiated the survey but did not complete it were excluded from the final data analysis.

After limiting the dataset to the 88 respondents who had completed all sections of the online questionnaire, additional data cleaning was conducted on the closed-ended questions. First, the Likert scale responses downloaded from SurveyMonkey in text form (e.g., strongly agree) rather than numeric form (e.g., 6). Using the Excel find and replace feature, all responses were converted from text to numeric to facilitate subsequent data analysis in SPSS. Next, certain Likert scale questions in the Survey of Imagined Interactions had to be reverse coded because they are asked in the negative rather than the positive. For example, the question "I rarely imagine myself interacting with someone from my workplace" is actually an inverse measure of frequency of imagined interactions. Thus, the numeric order of the participant's responses to these questions was reversed so that all means could be calculated on a scale of one to seven with one always being low and seven always being high.

Descriptive statistics. Descriptive statistics are "values that describe the characteristics of a sample or population" (Salkind, 2011, p. 432). In this quantitative analysis, descriptive statistics were employed to analyze the Likert scale questions as well as the other closed-ended responses. Because the Likert scale section of the Survey

of Imagined Interactions used multiple different iterations of questions about the same constructs (e.g., there are four questions measuring the construct "self understanding"), SPSS was used to combine the responses to the questions within constructs, and mean averages and standard deviations were calculated for each of the eight dimension and six functions of imagined interactions.

Finally, Excel was used to calculate simple frequency distributions. The responses to demographic information and employment status questions were tabulated to determine the number and percent in the categories of gender and current role in organization. For the characteristics of age, years of work experience, years of supervisory experience, and current number of direct reports, range, mean and median were determined in Excel. Similarly, the responses to the multiple choice questions about most-frequent work-related imagined interaction partner and emotions during sample imagined interaction were also tabulated to determine the number and percent of responses to each option.

ANOVA. Analysis of variance (ANOVA) is conducted to compare the means of two or more different groups, and the results of the ANOVA indicate whether a significant difference exists between the groups on the construct(s) being measured. (Salkind, 2011). In this study, analysis of variance was conducted for each of the eight dimensions and six functions of imagined interactions to see whether the mean averages varied by the most frequent workplace imagined conversational partner: superior, subordinate or peer.

Qualitative analysis. The qualitative analysis conducted on the open-ended questions of the Survey of Imagined Interactions addressed the overall research question:

how do supervisors utilize imagined interactions to make sense of and manage workplace relationships? Additionally, two research sub questions were considered during qualitative analysis:

Sub question 4: What are the work-related topics supervisors report discussing in their imagined interactions?

Sub question 5: How do the work-related topics supervisors discuss in imagined interactions vary by the imagined interaction partner (superior, subordinate, or peer)?

The qualitative analysis proceeded in two parallel yet interrelated activities: topic coding and theming. Richards and Morse (2007) describe topic coding as an analytic method of reviewing the open-ended responses to determine the full range of topics provided in the data. Topic coding was used primarily to analyze the responses to the question, "recall up to three topics you remember discussing during recent work-related imagined interactions." The researcher reviewed the topics and iteratively developed a coding scheme based on the participants' responses. The qualitative analysis software NVivo 9 was employed to facilitate this process. In NVivo, a node was identified for each topic code, and similar responses were coded with the same node. As new topics were identified, new nodes were created. The process was repeated through multiple rounds of review of the data, until the researcher determined that an exhaustive list of topic codes had been gleaned from the data.

A full list of topics and their operational definitions is found in Appendix D. Once the researcher completed topic review, a copy of the topics, their codes, and the operational definitions was shared with an expert in qualitative research who conducted

an inter-rater reliability review of the coding. Based on the inter-rater reliability review, modifications were made to the final assignment of topic codes.

In parallel to the topic coding, the researcher kept what Richards and Morse (2007) call "memos" documenting reflections, reactions, hunches, and emerging impressions of the meaning of the qualitative data. Memos were kept during review of all three open-ended questions: (a) the question about topics of recent work-related imagined interactions, (b) the sample dialogue of a recent imagined interaction, and (c) the field for providing other information about work-related imagined interactions.

These memos served as a bridge to the second aspect of qualitative analysis, *theming*. Themes are pervasive concepts that recur from the data across responses (Richards & Morse, 2007). Themes are broader than topics in that they may incorporate multiple topics. For example, as will be detailed in Chapter 4, the theme of using imagined interactions to compensate for lack of real-life communication with a "bad boss" emerged from the topics, the sample dialogue, and the open field for additional information. Finally, the discussion of the themes in Chapter 4 relies heavily on thick and rich description, meaning that direct quotes from the participants are incorporated in the findings to allow for synthesis without losing the descriptive detail provided by participants in their own voices (Richards & Morse, 2007).

Summary

This exploratory research study aimed to expand knowledge about the construct of imagined interactions into the realm of workplace relationship management by collecting and analyzing data about imagined interactions with superiors, subordinates, and peers. A modified version of an existing, validated questionnaire, the Survey of

Imagined Interactions, was employed via the online system SurveyMonkey. The questionnaire consisted of open-ended and closed-ended questions about participants' use of imagined interactions in the workplace. Adults employed in the United States were recruited via convenience sampling of the researcher's professional network. A mixed methods approach to data analysis included descriptive statistics, analysis of variance (ANOVA), and topical and thematic coding of responses to the open ended questions. Findings from the data collected are presented in Chapter 4.

Chapter 4: Results

This chapter analyzes and discusses the findings from the data collected through an online survey about imagined interactions in the workplace. The results include both quantitative and qualitative analysis. Seven specific findings from this data are presented about the participants' work-related imagined interactions with their real-life coworkers. Finding 1 resulted primarily from quantitative analysis conducted to address research sub questions 1, 2, and 3. Finding 2 resulted from both qualitative and quantitative analysis conducted to address research sub questions 4 and 5. Findings 3, 4, 5, and 6 resulted from qualitative discovery about the open-ended responses, using both coding and theming as described in Chapter 3. Finding 7 is a methodological finding which emerged from the researcher's experience working with the data.

Prior to presenting each of the seven findings, the demographics about the participants in this research project are described in detail. Additionally, the internally reliability of this modified version of the Survey of Imagined Interactions is compared against prior of implementation the survey instrument.

Participant Response and Demographics

As discussed in Chapter 3, the recruitment for this survey research project was conducted electronically through a convenience sample of the researcher's and the researcher's colleagues' professional and social networks conducted via e-mail and social networking websites. Data was collected anonymously and confidentially via the SurveyMonkey website during a six week period in early 2012. A total of 143 potential participants clicked through to the SurveyMonkey survey, 139 of whom indicated they wanted to participate. Of those potential participants, 116 met the inclusion criteria and

111 agreed to the informed consent. However, of the 111 who consented, 23 voluntarily withdrew prior to completion of the survey. These 23 participants were excluded, resulting in a total of 88 completed surveys being included in this analysis.

Of the 88 participants, 66 (75.0%) were female, 21 were male (23.9%) and one person did not complete the demographics questions. Table 1 provides a summary of the demographic, employment, and supervisory information about the survey respondents. The mean age of the respondents is 46.5 years, with an average of 26 years of work experience and 15 years of supervisory experience. The current number of direct reports ranged from 1 to 50, with a mean average of 7.5 and a median of 4.

Table 1

Demographics of Survey Participants

Characteristic	Range	Mean	Median
Age	27 – 64	46.5	46
Years of work experience	5 – 46	26.0	27
Years of supervisory experience	1 – 45	15.1	13
Current Number of Direct Reports	1 – 50	7.5	4

As displayed in Table 2, the participants tended to have fairly senior roles in their organization. Over half of participants (48, 55%) reported that they are currently an executive, vice president, or director. The eight individuals who selected the "other" category on the question about their current role in the organization described their role as: dean, professor, attorney, co-owner of an LLC, state office resource teacher, leadman, deputy director, and director/advisory.

Table 2

Participants' Current Role in Their Organization

Role	*n* (%)
Executive (e.g., CEO, CFO, Executive Director)	11 (12.5%)
Vice President	10 (11.4%)
Director	27 (30.7%)
Manager	25 (28.4%)
Supervisor	5 (5.7%)
Other	8 (9.1%)
Unknown	2 (2.3%)

Internal Reliability

Cronbach's α measures the internal reliability of a survey instrument by determining the correlations between items designed to measure the same construct (Bryman & Bell, 2007). Within the Survey of Imagined Interactions, multiple different Likert scale questions are used to measure the same construct. For example, there were four questions related to dominance, the construct assessing how much the person having the imagined conversation spoke during it. The questions designed to measure a certain construct should produce similar scores by the same participant (Salkind, 2011). The internal reliability of the Survey of Imagined Interactions has been previously reported by Honeycutt (2003) using Cronbach's α.

Table 3 provides the Cronbach's α scores based on Honeycutt's (2003) validation of the survey instrument in comparison to this implementation of the survey. Bryman and Bell (2007) suggest that Cronbach's α scores of .70 and above denote sufficient internal reliability. Using these criteria, this implementation of the Survey of Imagined

Interactions achieved sufficient internal reliability on the constructs of discrepancy, valence, frequency, specificity, retroactivity, proactivity, self-understanding, rehearsal, and relationship maintenance. However, with the constructs of dominance, variety, catharsis, conflict management, and compensation the internal reliability may be more questionable.

Table 3

Internal Reliability of the Survey of Imagined Interactions

	Cronbach's α from Honeycutt (2003)	Cronbach's α from this implementation
Dimensions of Imagined Interactions		
Discrepancy	.84	.78
Valence	.85	.72
Frequency	.76	.82
Dominance	.77	.62
Specificity	.73	.71
Retroactivity	.80	.83
Variety	.67	.50
Proactivity	.73	.78
Functions of Imagined Interactions		
Self-understanding	.70	.70
Rehearsal	.75	.78
Catharsis	.61	.60
Conflict management	.81	.62
Relationship maintenance	.70	.82
Compensation	.73	.48

The low internal consistency for six constructs–two dimensions and four functions of imagined interactions–are a byproduct of respondents not providing similar answers to questions designed to measure the same construct. These findings may

indicate that the questions for these constructs are measuring more than one latent variable. For example, for the construct conflict management, one question asked participants whether they agree that "imagined interactions help me manage workplace conflict," which is a fairly direct statement about conflict management. However, another question suggested "it is sometimes hard to forget old disagreements with coworker," which appears to contain elements of retroactivity and rumination in addition to conflict management.

An additional threat to internal reliability is the fact that the researcher modified all of the questions for this research study to limit them to imagined interactions in the workplace or with coworkers. The low internal reliability scores, especially for the functions of imagined interactions, indicate that further question modification would be needed in future research to most reliably assess the constructs intended to be measured.

Study Findings

Finding 1: Engaging in work-related imagined interactions with real-life coworkers is a universal phenomenon that varies from person-to-person. The closed-ended survey questions measured the eight dimensions and six functions of imagined interactions, as previously defined and validated in the literature. For this research project, the Survey of Imagined Interactions was modified such that the survey questions were framed within the context of imagined conversations with coworkers from the participants' current workplace. These closed-ended, Likert scale questions were analyzed quantitatively to address research sub question 1: How do supervisors utilize the eight dimensions and six functions of imagined interactions in work-related imagined conversations with coworkers?

For each of the eight dimensions and six functions of imagined interactions, four or five different but related questions were asked. The responses to the questions for each construct were combined and mean averages and standard deviations were calculated (see Figure 2 and Figure 3).

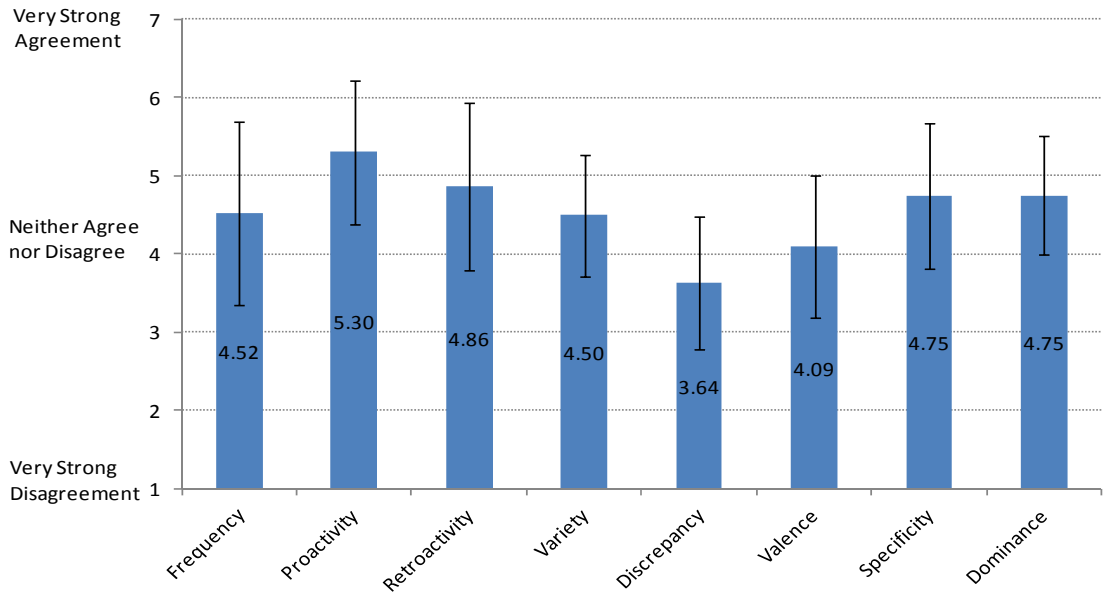

Figure 2. Dimensions of imagined interactions: Mean averages and standard deviations.

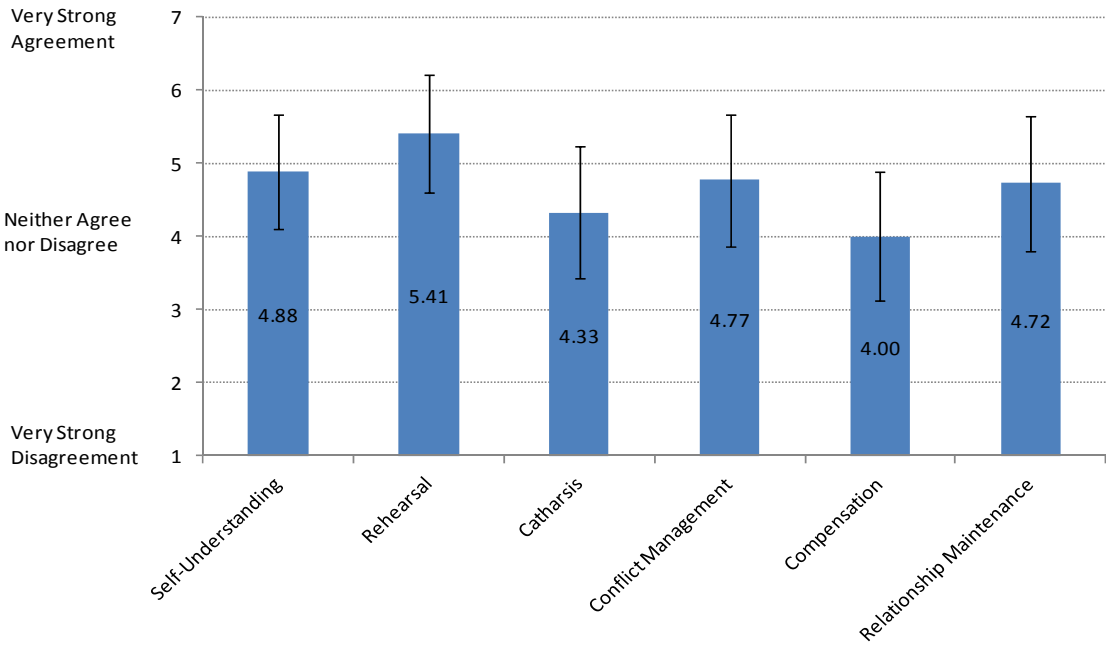

Figure 3. Functions of imagined interactions: Mean averages and standard deviations.

As demonstrated in Figure 2 and Figure 3, all respondents to this survey are engaging in work-related imagined interactions and were able to assess their utilization of all eight dimensions and six functions of their imagined interactions with their co-workers. On the Likert scale for the closed-ended questions on the Survey of Imagined Interactions, a mean of 4.0 indicates that respondents "neither or agree nor disagree" with the questions related to the construct, whereas a mean average of 5.0 indicates agreement with questions related to the construct. For example, questions about the construct compensation asked respondents whether they agree that they use imagined conversations to compensate for lack of real-life, face-to-face communication or to "say" things to a coworker that they would not say in real-life. The mean average for compensation in this population is 4.00, indicating that respondents neither agree or disagree that they engage in compensatory work-related imagined interactions. However, questions about the construct of rehearsal asked respondents whether they agree that they use imagined conversations to practice what they are going to say prior to real-life work encounters. The mean average for rehearsal is 5.41, indicating that participants are in between agreement and strong agreement that they use imagined conversations to rehearse for work-related conversations.

The two constructs which are most utilized by working adults in their imagined conversations are rehearsal (M=5.41) and proactivity (M=5.30). These two constructs have been correlated in prior imagined interactions literature, because proactivity is the dimension by which future-oriented conversations are rehearsed (Honeycutt, 2003). Other constructs highly rated by this group of participants include self-understanding (M=4.88), dominance (M=4.74), and relationship maintenance (M=4.72). Discrepancy,

which measures participants' perceptions of how different their imagined conversations are from their real-life conversations, has a low mean average of 3.64. This result indicates that participants disagree with statements that their imagined conversations are discrepant from real-life conversations. Or, said another way, a low score on discrepancy indicates that participants believe that their real-life conversations are similar to their imagined conversations.

Standard deviation measures the average amount of variability in the sample, or how much the responses from the individual participants varied from each other (Salkind, 2011). The standard deviations range from a low of .76 (dominance) to a high of 1.18 (frequency). These values indicate a fairly wide spread among the participants' responses to the questions about the eight dimensions and six functions of imagined interactions. The data table in Appendix E provides further details on the spread and variability of responses to the questions about the eight dimensions and six functions of imagined interactions. The interpretation of this variability is that the phenomenon of imagining interactions tends to differ from individual-to-individual, and in this study the mean averages for the dimensions and functions muted individual differences.

While mean averages and standard deviations are presented for this implementation of the Survey of Imagined Interactions, these descriptive statistics are not compared or normed against prior means and standard deviations from other implementations of the survey. There are two main reasons why such a comparison would not be methodologically valid. First, no standard or national norms for the eight dimensions and six functions of imagined interactions have been published in the literature, meaning that no normative data exists for comparison purposes. The second

reason is that the Survey of Imagined Interactions was substantially modified by the researcher for this implementation, as described in detail in Chapter 3, making these findings specific to the context and situation of work-related imagined interactions among currently employed supervisors in the United States.

Frequency. None of the participants in this research project answered "very strong disagreement" to all four of the questions measuring frequency of imagined interactions. Thus, all 88 respondents have work-related imagined interactions with their real-life coworkers, indicating that work-related imagined interactions are a universal phenomenon in the workplace.

The mean average of the responses to the four questions about frequency was 4.52, placing the responses between neutral and agreement with statements that they frequently have work-related imagined conversations with their co-workers (e.g., "I often have work-related imagined interactions throughout a day"). Frequency also has the largest standard deviation (1.18), which suggests that individuals differ on how often they imagine interactions with their coworkers. In the open-ended questions, participants provided commentary about work-related imagined interactions including examples making the point their imagined interactions are rare as well as very frequent. One participant reported, "I do not rehearse or imagine interactions at work (coworkers) as much as you might think," and another offered, "I use work-related imagined interactions (though I had no idea that's what they were called!) regularly to gather my thoughts before interacting with colleagues as well as process at the end of the day."

In addition to the Likert scale questions about frequency, respondents were asked to report how frequently they relive or rehearse conversations with the one coworker with

whom they have the most work-related imagined interactions. Figure 4 displays that exactly half of the respondents (*n*=44) relive and rehearse conversations with their primary workplace imagined conversant once a week or less frequently, while the other half (*n*=44) report these imagined conversations occur a couple of times per week, once a day, or more than once a day. The bimodal distribution of frequency suggests that there may be infrequent users of work-related imagined interactions who engage in imagined conversations with their primary conversant once per week or less, and frequent users who imagine such conversations multiple times per week to multiple times per day.

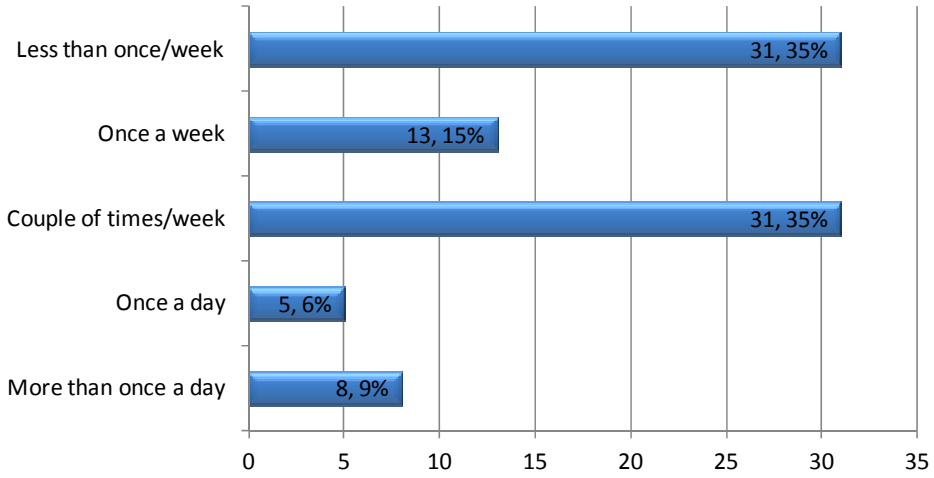

Figure 4. Frequency of reliving or rehearsing conversations with the one coworker with whom respondents have the most work-related imagined interactions.

Reliving and rehearsing. Imagined interactions tend to fall into two temporal orientations, those which are retroactively reliving a prior conversation and those which are proactively rehearsing a future conversation. In this study, the mean average for proactivity was 5.30, making it the highest utilized dimension of work-related imagined interactions. This average for proactivity demonstrates that participants agree to strongly agree that they imagine what they will say to their coworkers prior to real-life

conversations or meetings. The responses to open-ended questions further support this assertion, with participants discussing their use of proactive imagined interactions for purposes such as problem-solving, anticipating other's responses, rehearsing how to deliver difficult conversations, and preparing for meetings and presentations.

The opposite of proactivity, retroactivity measures the frequency of imagining a conversation after it occurs, or mentally reliving a conversation. The mean average of 4.86 makes retroactivity the second most highly utilized dimension of imagined interactions and indicates that participants agree that they frequently relive or replay conversations in their mind after the fact. The act of mentally reliving real-life conversations in the workplace can serve a variety of functions, including making meaning of what has occurred, managing emotional response to a situation, engaging in catharsis to vent anger or frustration, and replaying prior communications in order to link the past with preparation for future interactions (Allen & Berkos, 2005-2006; Honeycutt, 1991, 2003; Honeycutt & Gotcher, 1991).

Primary imagined interaction partner. Participants were asked to indicate the one coworker with whom they have the most work-related imagined interactions. The options provided were superior, subordinate, peer or other. The results address research sub question 2: With whom do supervisors most frequently engage in work-related imagined interactions: superiors, subordinates, or peers? Figure 5 displays the results, with superior being the most common imagined conversant, followed by subordinate, peer, and other. Among those participants who selected other, they provided the following description of the others: "groups of peers and managers (in meetings)," "outside organization that we must collaborate with," "peer but a decision-maker in an

area by which I am affected," "superior's superior," and "varies dramatically - I think through many conversations with peers, subordinates, and my superior on a daily basis."

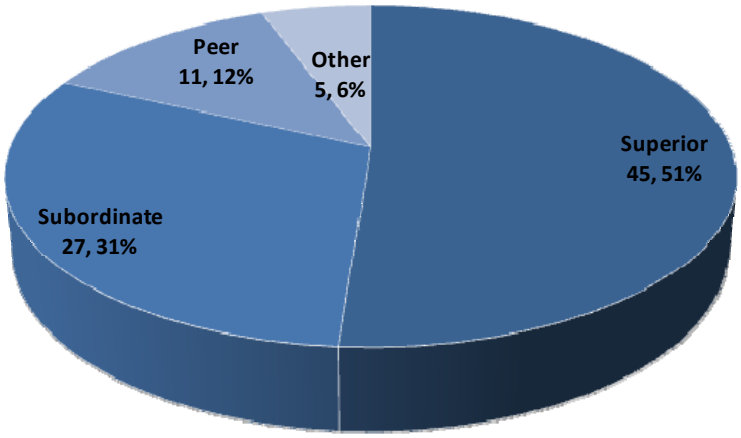

Figure 5. The one coworker with whom respondents have the most work-related imagined interactions.

Research sub question 3 asks: How does the usage of imagined interactions in the workplace vary by the most frequent imagined interaction partner (superior, subordinate, or peer)? Analysis of variance (ANOVA) was conducted for each of the eight dimensions and six functions of imagined interactions to see whether the mean averages varied by the most frequent workplace imagined conversational partner: superior, subordinate or peer. The ANOVAs were not significant for any of the constructs (see Appendix F). All p values were >0.2, which is substantially above a value that would indicate significance ($p < 0.05$).

The lack of significant variability in the dimensions and functions of work-related imagined interactions by primary conversant is likely due to the design of this implementation of the Survey of Imagined Interactions. All of the quantitative, Likert scale questions advised participants to "consider imagined interactions you have

involving all of the coworkers from your workplace. Coworkers includes everyone with whom you work–your superiors, subordinates and peers." Thus, when answering the Likert scale questions, respondents were prompted to think about all work-related imagined conversations, and were not limiting their responses to those imagined conversations with their primary imagined interaction partner. This design choice was selected because of the exploratory nature of this study. Follow-up research can be designed to prompt respondents to differentiate their responses to the Likert scale questions by their primary imagined interaction partner, which would be a more valid design to assess whether the eight dimensions and six functions of imagined interaction do indeed vary by the one coworker with whom individuals have most of their work-related imagined conversations. Thus, while all participants in this research study utilize imagined interactions in the workplace, their responses to the questions about the eight dimensions and six functions of imagined interactions do not vary by the coworker with whom the participant most frequently imagines conversations.

In summary, the analysis of the Likert scale questions about the eight dimensions and six functions of imagined interactions demonstrates that engaging in work-related imagined interactions with real-life coworkers is a universal phenomenon. All respondents to this survey reported engaging in this intrapersonal communication process, with a high level of variability from person-to-person. Additionally, participants utilize imagined interactions to both relive and rehearse conversations with their real-life superiors, subordinates, and peers. While participants were able to identify the one coworker with whom they primarily imagine interactions, the eight dimensions and six

functions of imagined interactions did not significantly vary by that primary imagined conversant.

Finding 2: A variety of topics are discussed in work-related imagined conversations, and these topics vary by the imagined conversant: Superior, subordinate, peer, and groups. Participants were asked to report the topics of their recent work-related imagined interactions, and the coworker(s) involved in the imagined conversations. The survey prompted them to list up to three topics they remembered discussing in a recent work-related imagined interaction, and for each topic they selected which coworker(s) were involved in the imagined conversation: superior, subordinate and/or peer. The data from their responses addresses research sub question 4 and research sub question 5 of this study:

> *Sub question 4*: What are the work-related topics supervisors report discussing in their imagined interactions?
>
> *Sub question 5:* How do the work-related topics supervisors discuss in imagined interactions vary by the imagined interaction partner (superior, subordinate, or peer)?

Prior research with working adults asked them to report on their use of imagined interactions during specific work-related activities, such as conducting a performance review (Bryan, as cited in Honeycutt, 2003) or going on a job interview (Kelley & Croghan, 2010). However, no prior research has asked currently employed supervisors to recall the topics of their recent work-related imagined interactions in an open-ended format that allowed respondents to report the topics using their own words. Thus, this

study contributes to the existing literature by providing a broad landscape of the range of topics which serve as the content of work-related imagined interactions.

The dimension of imagined interactions known as variety measures the diversity of topics and conversational partners in imagined interactions. Research studies on imagined interactions have shown that people tend to imagine conversations on a wide variety of topics and partners (Allen & Berkos, 2005-2006; Honeycutt, 2003). In this study, respondents were asked five Likert scale questions about variety, such as "my work-related imagined interactions are with different people from my job" and my work-related imagined interactions tend to be on a lot of different topics." The mean averages of these responses to the Likert scale questions on variety, as reported in Figure 2, was 4.50, indicating that the participants' responses were between neutral and agreement. The mean average of 4.50 might suggest a moderate amount of variety in work-related imagined interaction topics and conversational partners.

Yet, the results of the open-ended questions asking participants to recall topics of recent work-related imagined interactions display a great deal of variety. The 88 participants in this study provided a total of 238 unique topics of recent work-related imagined interactions. One interpretation of this seeming contradiction could be that within individuals, people do not imagine a variety of work-related topics, but the variability across individuals is high. However, among the 88 participants, all provided at least one topic of a recent work-related imagined interaction, 82 provided two topics, and 68 provided three topics. Thus, within individuals, the vast majority are able to spontaneously recall three topics of recent work-related imagined interactions. Similarly, as shown in the prior section in Figure 5, the imagined conversational partners represent a

spread of superiors, subordinates, peers and others. These findings indicate that mean average of variety at 4.50 may be an underestimate of the participants' actual diversity of imagined interaction topics and partners.

As described in detail in the qualitative analysis section of Chapter 3, the researcher reviewed the topics provided by participants and iteratively developed a topic coding scheme based on the trends in the data. A second rater reviewed the data and the coding to ensure reliability. In Table 4, each of the topics coded five or more times is listed, along with the number of times coded, and direct quotations from participants exemplifying the topic. A complete listing of codes and their operational definitions can be found in Appendix D. The researcher notes that topics related to e-mails and a "bad boss" are excluded from this table because they are discussed subsequently in this chapter as themes that warrant their own findings.

Table 4

Topics of Recent Work-Related Imagined Interactions

Topic	Number of times coded	Quotations characteristic of the topic
Job Performance	23	Performance issues – direct report not living up to expectations. Lack of work getting accomplished
Personnel Actions	21	Disciplinary action of an employee Raising an issue related to violation of compliance
Performance Review	18	Annual performance evaluation How to tell the subordinate that (s)he got a poor performance rating
Project or Process Management	17	Business process Organization of work for a project

(continued)

Topic	Number of times coded	Quotations characteristic of the topic
Work Hours	11	Discussing work schedule with an employee Employee absences
Career Management	11	My satisfaction with my current position Seeking a departmental transfer
Behavioral Feedback	10	Corrective behavior with a subordinate staff On the job coaching
Conflict or Disagreement	10	Conflict between two staff members Disagreement of allocation of power
Budget	9	Budget issues Funding for a project
Managing Up	7	Bringing a significant problem to my boss How to tell the superior that I disagreed with him/her on an important topic
Presentation	7	Preparing for a presentation Presenting to a VP on a new process
Meeting (general)	7	Bi-weekly one-on-one meeting with my boss 1:1 with Subordinate
Leaving Job	6	How to tell the superior that I am leaving my job Resignation of staff member
Customer or client issue	5	Customer issue Patient complaint
Role delineation	5	Roles and responsibilities of coworkers Work division of duties
Salary	5	Someone asked me for a salary raise My salary level

An additional 35 topics were provided by participants that did not fit into a coding category. Some topics were too vague to be accurately coded (e.g., “worthiness”), some

were unique and the researcher could not code them within a category (e.g., "why my subordinate betrayed me"), and others exemplified functional aspects of imagined interactions rather than being topic specific (e.g., "thinking of a 'what if' scenario and use imagined interactions to prepare if that scenario becomes a reality").

Topics in relation to supervisor's role. The topics iteratively identified in this data set align well with the roles and key competencies of a manager as described by Quinn, Faerman, Thompson, and McGrath (2003). Commonalities between their model of managerial competencies and the topics of work-related imagined interactions provided by participants in this study include developing employees, managing conflict, monitoring individual performance, managing processes and projects, designing work, organizing, presenting ideas, and managing change. In addition, similar topics have been found in previous research on imagined interactions, including conflict, meetings, public speaking, giving performance feedback, or preparing for difficult conversations such as employee reviews (Allen & Berkos, 2005-2006; Honeycutt, 2003, 2010b; Honeycutt et al., 2009; Kelley & Croghan, 2010).

Taken as a whole, the topics of imagined interactions reflect the cognitive, emotional, and relational challenges of supervisors in today's workplace. They are expected to perform in tasks as broad as budgeting, behavioral feedback, performance review, and role delineation. Any of these tasks can become to fodder for difficult conversations, which involve facts, emotions, and issues of identity (Stone et al., 1999). A majority of these topics are related to the relationship maintenance and conflict management functions of imagined interactions. Both of these functions were among the higher scoring constructs on the Likert scale questions of this survey, with responses to

questions about relationship maintenance having a mean average of 4.72 and conflict management averaging 4.77. These mean averages indicate that supervisors agree that imagined interactions are useful in managing relationships and conflicts with their real-life co-workers.

Topics in relation to imagined interaction partner. For each topic of a recent work-related imagined interaction, the participants identified the coworker(s) involved in the imagined conversation. Participants were given the option of selecting all categories that applied from the options of superior, subordinate, or peer. As described in Chapter 3, the researcher reviewed the topics sorted by imagined interaction partner and found that these topics vary by the imagined conversant: superior, subordinate, peer, and groups.

Imagined interactions with superiors. A total of 90 topics were identified by participants as involving only a workplace superior as the imagined interaction partner. The scope of many of these imagined interaction exemplify the types of conversations employees have with their superior. For example, nine of the eleven instances of a career management related imagined conversations are with a superior, on topics such as "career advancement and my career path" and "new roles and responsibilities." Similarly, six of the seven examples of managing up occurred in a dyadic imagined conversation between the participant and his/her superior. Eight individuals imagined themselves having a conversation with their boss about their performance review, and five imagined their boss giving feedback to them about their job performance. Other common topics of the employee-superior dyadic imagined conversation include budget, personnel actions, project or process management, and rehearsing a presentation.

Imagined interactions with subordinates. Imagined interactions involving a dyadic conversation with a subordinate were also frequently reported, with 69 topics falling into this category. These imagined interactions centered strongly on topics involving the formal supervision and management of the subordinate. Specifically, there were thirteen imagined conversations about job performance, nine imagined conversations about a performance review/evaluation, nine imagined conversations about work hours (e.g., absences, timesheets, work schedules), and four imagined conversations during which the supervisor was giving behavioral feedback to the subordinate. Furthermore, there were specific instances of an imagined interaction about a personnel action against the subordinate, such as "reprimanding an employee" and "employee theft."

Imagined interactions with peers. Participants reported 40 recent work-related imagined interactions involving a coworker who is their peer. The topics reported with this imagined conversant were the most diverse, with no topic area identified more than four times. The two topics that did appear four times were behavioral feedback and project or process management. Further, the examples of imagined interactions with peers often stood on their own as unique examples, such as "sharing of human resources" and "peer's constant negative perception of the work our office does now compared to before." The more nuanced and complex peer-to-peer relationship, as opposed to the more hierarchically superior-subordinate relationship, may be making the topics of these conversations more unique and less likely to fit within the iteratively developed coding scheme. Also, because these peer relationships rely more on collaboration than authority,

they may be less likely to trigger a person's internal process of reliving or rehearsing a conversation.

Imagined interactions with groups. Participants reported 39 topics of recent work-related that involved more than one other person in the conversation. Eighteen of these involved a superior and a peer; ten involved a superior, subordinate and peer; eight involved a superior and a subordinate; and three involved a subordinate and a peer. Five of these topics involved a personnel action: "disciplinary action of an employee," "raising an issue related to violation of compliance," "relieving someone of an administrative role," "who to hire," and "firing a subordinate." These imagined conversations may be associated with more than one coworker because they tend to involve multiple perspectives or an additional person in the conversation as a witness. Similarly, the topic of presentation appears four times with more than one imagined partner, indicating that participants are rehearsing an upcoming work-related presentation to a group.

In summary, the findings related to the topics and partners of work-related imagined interactions indicate that they used by supervisors in their work lives as a mechanism for communicative, cognitive, task, and emotional management of themselves in relation to their work and their coworkers. Participants reported discussing a wide variety of topics in their work-related imagined conversations. Further, the topics of these conversations vary depending on who is involved: superior, subordinate, peer and groups. Because imagined conversations involve real-life others in addition to oneself, the topics of work-related imagined interactions tend involve aspects of the job at the interface of workplace relationship management.

Finding 3: Emotionally negative and cathartic imagined interactions occur retroactively in response to difficult or threatening work situations. Analysis of both quantitative and qualitative data identified a theme of participants mentally reliving work-related conversations that involve a difficult or threatening situation. These imagined interactions are retroactive (occur after the event), cathartic (emotionally purging), and tend to involve negative emotional valence which participants labeled and described in their open-ended responses.

Negative reliving. As discussed under the section about reliving and rehearsing, one of the key dimensions of imagined interactions is whether they are retroactively reliving a conversation that has already taken place in real life or proactively imaging or rehearsing a conversation which may take place in the future. A third dimension of imagined interactions, known as valence, measures the pleasantness of a conversation, such that high scores on valence indicate that the imagined interaction is positive/pleasant and low scores on valence indicate it is negative/unpleasant.

In this study, the mean averages for proactivity (5.31) and retroactivity (4.86) demonstrate that participants mentally relive and rehearse work-related conversations.

The mean score for valence at 4.09 indicates that both pleasant and unpleasant imagined interactions were reported by the participants. Figure 6 shows the feelings evoked in participants when they recalled a recent work-related imagined interaction (which could have been proactive or retroactive). Only 12% of the recent work-related imagined interactions were emotionally neutral, whereas 49% were mostly negative, 21% were mostly positive, and 18% were a mixture of positive and negative emotions. Thus,

negative emotional feelings occurred in 67% of work-related imagined interactions (49% mostly negative and 18% positive and negative).

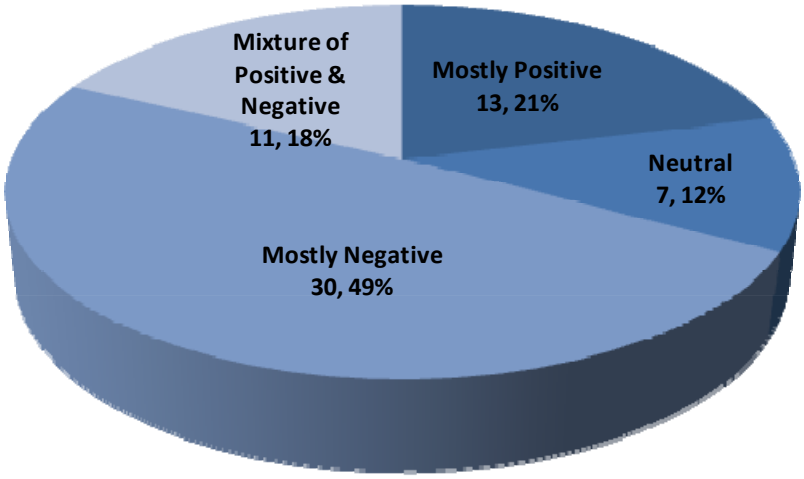

Figure 6. Feelings while recalling recent work-related imagined interaction.

Prior research on imagined interactions makes the association between retroactivity and negative emotional valence. Zagacki, Edwards, and Honeycutt (1992) found that people are less likely to relive positive encounters than to relive encounters that were negative or mixed in emotional valence. Participants in this study confirmed this finding, verbalizing the dichotomy between positive rehearsing (discussed in the next section of this chapter) and the negative emotional experience of reliving work-related encounters. One participant said,

> I think there are two different scenarios with two different outcomes. In other words, imagined conversations are all so unique – some are helpful some aren't. For example, when I'm mentally preparing for a difficult conversation, these imagined conversations are extremely positive and useful and I feel better as a result. I feel prepared and I am much more diplomatic and sensitive to the other person. However, when I'm pissed

> AFTER a conversation, I use imagined conversations to vent and take out frustration. In this case, I think these mental conversations are not helpful and get me worked up even further.

Similarly, another participant noted the emotionally different experience of reliving neutral or positive events in comparison to negative real-life events.

> I relive conversations also–some completely innocuous, and they just come and go, and I enjoy it sort of like remembering vacation or something funny someone said. But the worst imagined interactions come after negative interactions or events, and those I relive over and over and over, multiple times a day for days on end.

Thus, participants in this study described how difficult or threatening workplace situations can trigger the repetitive mental reliving of such interactions, usually with a negative emotional valence.

Catharsis. The catharsis function of imagined interactions also occurs as a component of the negative reliving of work events. Catharsis is the use of imagined conversations to vent and purge emotional responses to real-life situations (Honeycutt, 2003). One participant called this "angry imagined mode" and another said "I mostly use imagined interactions to blow off steam and settle myself before an interaction when I've been dwelling on a situation." A third described how the use of catharsis to internally vent at coworkers is creating a negative feedback loop between his real-life environment and his inner cognitive environment:

> I find that most of my work-related imagined interactions are those where I've found that open discussion of the topic has simply hit a road-block.

> Thus, I find that I'm more screaming in my mind at those who refuse to work to remove the road-block. The venting is certainly useful for letting off steam in the work place without losing it to my colleagues/supervisor, but at the same time, I find that the continued general negative trend of my imagined interactions leaves me with a generally angry tenor at work. Sigh.

Catharsis is postulated to be a positive psychological coping mechanism, leading to the relief and purging of pent-up emotional tensions (Honeycutt, 2003). However, in this study, some participants described their cathartic imagined interactions as helpful, while others' indicated that continued cathartic reliving of work-related interactions negatively affects their job perception and leads to rumination. For example, while one participant commented that reliving conversations "help me become comfortable with what happened," another participant ruminates on prior conversations that did not go well and relives them in a discrepant way, stating that "many of my work related imagined interactions are more ruminations; however as time goes on my responses change and become more of what I could have said."

Prior studies on the cathartic mental reliving through imagined interactions indicate that this process may be effective at working through negative emotions, but other studies indicate that continued mentally reliving negative encounters and yelling at others in one's mind may lead to rumination, dwelling, catastrophizing, and a decreased ability to see alternative options in the situation (Cloven & Roloff, 1991; Honeycutt, 2003-2004). The findings from this research project provide additional supporting

evidence for both possible outcomes: cathartic reliving of difficult work-related situations can be healthy or unhealthy.

Emotional labeling. While cathartic imagined interactions usually have a negative emotional tone, the Survey of Imagined Interactions does not directly measure specific emotional states and experience. However, participants in this study provided examples of specific emotions that occur during their imagined interactions and linked the emotion-laden nature of the imagined conversations with real-life work events.

In reviewing the responses to open-ended questions, very few participants offered positive emotional descriptors related to their work-related imagined interactions. However, there were multiple instances of the participants providing negatively-oriented emotions such as anger, frustration, anxiety, and a single instance of the terms nervous, rumination, ashamed, overwhelmed and stressed out. One participant wrote that, "in a negative work environment, it seems to me that work-related imagined interactions are something in between Post-Traumatic Stress Disorder and Battered Spouse Syndrome." These findings align with Kraemer's (2011) study, who surveyed 701 professionals from all fifty states and a range of occupations about the kinds of emotions they have experienced in their workplace during the last year. She found that frustration is the most common emotion, with 73% of respondents saying they have felt frustrated at work. Anger and anxiety were other common emotions in her study, with nearly half of her respondents reporting anger and anxiety at work in the past year.

What's behind the negative emotional valence in work-related imagined interactions, and why are people more likely to relive negative encounters? As discussed in Chapter 2, the brain is highly attuned to threats in the environment, an evolutionary

advantage in the realm of physical survival which can also be activated in the social realm in response to threats to status, certainty, autonomy, relatedness, and fairness (Rock, 2008). Research has also shown that emotionally charged events are more easily recalled in the memory, and negative emotions generate even stronger memories than positive emotions (Amabile & Kramer, 2011; Baumeister et al., 2001; Kreamer, 2011; Zagacki et al., 1992). Weick's (1995) theory of organizational sensemaking suggests that people need to retroactively relive and give meaning to prior events when those events do not match existing understanding of reality. For example, if a supervisor perceives herself to have a positive relationship with her direct report, and then her direct report disrespects her during a meeting, a biochemical emotional response to the threat will occur and through cognitive sensemaking the supervisor attempts to understand the event.

Finally, the internal cognitive processes of emotional labeling and sensemaking in response to threatening events in the environment also relate to the self-understanding and relationship maintenance functions of imagined interactions. Working adults are attempting to maintain their identities and their relationships with others as they survive the social threats of the modern workplace (Amabile & Kramer, 2011). As one participant in this study noted about imagined interactions, "I use these mind scenarios to gauge how I have communicated with others and unfortunately base my perception of myself on their responses."

In summary, negative emotions are a natural biological response to perceived threats in the work environment. While professionalism dictates that emotions be tempered in the workplace, participants in this research project demonstrated that real-life work situations do ignite frustration, anger and anxiety. Reliving difficult or threatening

workplace encounters through imagined interactions may be an effective mechanism for venting unpleasant emotions. Retroactively reliving encounters in order to make sense of the situation can have important implications for self-understanding and relationship maintenance (Honeycutt, 2003). However, repetitive reliving of negative work-related interactions can also lead to rumination, dwelling and excessive worrying (Cloven & Roloff, 1991; Honeycutt, 2003-2004). There appears to be a fine line between the use of imagined interactions to improve emotional resilience and imagined interactions using us and depleting our emotional resilience.

Finding 4: Proactive imagined interactions are purposefully employed in the workplace as rehearsal and preparation for job performance. As was alluded to in Finding 3, the act of proactively rehearsing an upcoming imagined interaction with a coworker tends to have a more positive emotional valence, as well as a contribution to improved communication effectiveness and job performance. This finding aligns with previous studies, which indicate that imagined interactions are likely to occur proactively, as a positive or functional rehearsal activity that has been demonstrated to improve speech fluency and conversational options (Honeycutt & Gotcher, 1991; Zagacki et al., 1992) while decreasing communication apprehension (Honeycutt et al., 2009).

The theme of rehearsal and preparation for job performance occurred throughout both the quantitative and qualitative responses. As displayed in Figure 3, the mean average of responses to questions about rehearsal was higher than any of the other functions of imagined interactions. Participants were in between agreement and strong agreement with statements such as “imagined interactions help me plan what I am going to say for an upcoming conversation in the workplace” and “imagined interactions make

me feel more confident and relaxed before I actually talk with a coworker." Additionally, many of the self-reported topics of imagined interactions incorporated a rehearsal component, with participants offering examples like "practicing a presentation for colleagues" and "how to deliver a negative review to a subordinate."

Conversational preparation. Many of the participants discussed purposefully engaging in proactive imagined interactions as preparation for difficult or conflictual conversations. One participant reported

> I find most of these imagined interactions occur in preparation for negative interactions . . . When I face a potentially negative situation, I want to leave nothing to chance, so I try to find the perfect argument ahead of time rather than "hope" the right words come when needed.

Similarly, another participant observed,

> Mainly I have work-related interactions with something I feel may be a little tricky or ill-perceived by another worker . . . I just want to run it through so that I can state the information in the most effective and least argumentative way. I want to be encouraging and offer solutions.

This finding supports prior research which suggests that imagined interactions serve "an important planning function, particularly when the communicator is engaged in a conflict situation" (Zagacki et al., 1992, p. 66). Rehearsal has been shown to be triggered by anxiety-inducing activities such as public speaking (Honeycutt et al., 2009) and employee job interviews (Kelley & Croghan, 2010). Further, research findings demonstrate that pre-conversational practicing can be useful in reducing anxiety related to the upcoming interaction and may increase conversational options and the fluency of

message delivery (Bolkan & Goodboy, 2011; Honeycutt, 2003; Honeycutt et al., 2009; Zagacki et al., 1992). One participant described using imagined interactions for conversational fluency as "I come up with better questions to ask the other parties in the conversation. It helps the real conversation be more productive."

Thus, imagined interactions can be used in the workplace proactively to rehearse for upcoming meetings or conversations, test out conversational options, practice for difficult conversations or presentations, and enhance a person's overall performance in their role. A participant in this study discussed his lifelong use of this function of imagined interactions as,

> Foresightedness, including the active practice of imagining events and scenarios has been a technique I have sought to hone throughout my 30 years of management. Mentally picturing events helps to deal with contingencies in a more positive and emotionally detached manner.

Self-understanding. Although a difficult, conflicted, or stressful work-related situation can also be the prompt for future-oriented, preparatory imagined interactions, supervisors view these imagined interactions as helpful to their self-understanding, self-leadership and ability to perform well in their role. In the imagined interactions literature, the function of self-understanding is described as utilizing imagined interactions to understand the self in relation to others. Through rehearsal, one can practice conversational alternatives as well as cultivate a better sense of one's self, thoughts, and opinions (Honeycutt, 2003). One participant commented that "prep work helps me to identify areas of potential negative feelings (frustration, etc.) to get at the

heart of the issues for me." In another example of self-understanding, the participant takes on the role of the other to better understand both the situation and herself:

> During my imagined conversation, I try to put myself in the other's role and see things from that perspective. It helps me to identify my own assumptions of what should be done and thus be better prepared for a conversation or meeting.

In summary, participants in this research project confirmed the existing literature on the role of imagined interactions as preparation for difficult work-related interpersonal interactions. Further, the rehearsal function of imagined interactions is purposefully employed by the participants in their real-life work scenarios to practice conversations, test conversational options, anticipate the other's response, understand themselves better, and envision positive outcomes. Thus, the rehearsal function of imagined interactions appears to serve a positive, preparatory function for supervisors to enhance their overall sense of themselves as professionals and their performance in their roles.

Finding 5: Work-related imagined interactions include not only verbal dialogue, but other aspects of communication such as imagery, body language, and written e-mails. Throughout this study, the terms imagined interactions and imagined conversations have been used interchangeably, as a reflection of the existing literature, construct definitions, and survey questions about imagined interactions. The brief introduction to imagined interactions that participants read at the beginning of the survey defined imagined interactions as "the mental conversations we have in our minds with other people from our lives, usually when they are not physically present." While the emphasis on imagined interactions in the literature is the verbal dialogue component of

interpersonal communication experience, Honeycutt (2003) suggests that imagined interactions can also include other aspects of the imagined event, such as imagery, the physical setting, and body language. The data collected from this study indicate that some participants report their work-related imagined interactions include not only verbal dialogue, but also other aspects of communications such as imagery, body language, and written communication via e-mail.

Although the data analysis conducted for this study found a relatively small amount of qualitative data related to non-verbal dialogue and e-mail, the finding raises the fundamental question of what constitutes an interaction or a conversation in today's work environment. One participant reported that "interactions is a word that better applies to my inner musings. Conversations are really rare." In terms of imagery and body language, another participant wrote, "I usually forget what I say but remember responses from others (and replay body language BIG TIME)" and a third participant described "mentally picturing events."

In terms of imagined interactions about e-mails, some of the examples are about face-to-face conversations related to the content of the e-mail, and other examples are of imagining the e-mails themselves. Two participants provided examples about confronting a colleague on an e-mail that was sent, as them mentally rehearsed telling the coworker that the tone or content of an e-mail was incorrect and unappreciated. A third participant merely stated that the topic of their imagined conversation was discussing with a subordinate an "email that should not have been sent." A fourth participant had an imagined conversation accusing a peer of purposefully removing their e-mail address from a string of communications. A fifth participant provided a sample dialogue with a

superior, in which they discussed whether bad news should be delivered to subordinates via e-mail or a face-to-face conversation. A sixth participant provided a sample dialogue of using imagined interactions to narrow down what to say in an email to a superior. This dialogue reads more as a monologue imagined to explore multiple conversational options, most of which would never be said in real-life:

> ME: "Yeah, no shit."
>
> ME: "ARGH!!!!"
>
> ME: "Yeah, I'm not the expert, you are, so you are going to have to actually look at this stuff."
>
> ME: "I'm not an expert in this, and they've asked you to provide your expert opinion. I can't predict what your opinion might be for all the required points, so you're going to actually have to look at some of this."
>
> ME: "To fill out the request more completely, I will need your expertise. Perhaps you could take a look at the damn annotated publications list and tell me what you think is important and give a few freakin' bullets about the impact of those publications. Do you think?"
>
> From there, I came up with an appropriate email to send.

The appearance of imagined e-mails in this data set may indicate the construct of imagined interactions can include mentally reliving and rehearsing things we say (or might say) to each other in e-mails or text rather than face-to-face conversations. Imagined interactions, as a conceptual framework for all types of intrapersonal dialogues involving real-life others, is broad enough to include electronic conversations. Prior research with college students (Berkos, 2010) indicates that the construct translates into

the realm of conversations we have in electronic mediums, but no research has directly investigated imagined e-mails among working adults.

As an increasing amount of workplace communication occurs via e-mail, the linguistic aspects of the conversation dominate, and imagery and body language may be completely eliminated. Previous research indicates that in verbally-oriented imagined interactions, the self dominates the conversation whereas in imagined interactions that incorporated imagery the self plays a more passive and reflective role (Zagacki et al., 1992). So, if the communication medium eliminates the visual and imagery cues, would imagined interactions about e-mails be more dominate and less sensitive to the other's role and perspective in the conversation–both real and imagined? Further research is needed to fully understand how imagined interactions play a role in e-mail oriented workplace conversations. Additionally, more data is needed to understand how the current definition of imagined interactions, and related data collection instruments, may need to be modified to allow for the incorporation of other aspects of communication such as imagery, body language, and electronic communication.

Finding 6: Imagined interactions are used as a substitute to say mentally things to the "bad boss" that would not be said in real-life. When considering relationships in the workplace, an employee's relationship with his/her boss is an influential and central aspect of productivity, engagement, and job satisfaction (Amabile & Kramer, 2011). The findings from this study support the importance of the superior-subordinate workplace relationship. Specifically, superiors are the coworker with whom participants had most of their work-related imagined interactions (see Figure 5) and were the most frequent imagined conversant involved in recent work-related imagined

interactions. Similarly, as discussed under Finding 2, the topics of the imagined conversations with superiors that participants reported in this study reflect important professional issues such, as one's own career management, job performance, and formal performance evaluation.

Beyond the issues of frequency and topics of imagined interactions with their superiors, a trend emerged in the data of some participants giving voice to their displeasure with their "bad boss" in explicit and critical ways. Often times a participant was very brief and to the point with their perception of their boss. Responses to the question about topics of recent imagined conversations included "how much my boss sucks in general at managing the office," "my boss' lack of effort on important assignments," "why my supervisor is such an idiot," "lack of direction and motivation of supervisor," and the superior's "negative attitude toward pretty much everything." One respondent elaborated further, noting that she used an imagined interaction to rehearse multiple reasons for telling a bad boss why she was leaving her job:

> I imagine a real answer which involves explaining that he is a horrible boss and the job is nothing like he described before I took it. I also imagine how I would tell him if I'd like to hide why I'm leaving to keep the peace.

These examples illustrate the function of imagined interactions known as compensation. Compensation refers to the use of imagined interactions as a substitute for actual real-life encounters (Honeycutt, 2003). Sometimes compensation is employed when the other is geographically distant and a conversation is not possible. However, in the context of difficult workplaces relationships with a perceived "bad boss,"

compensatory imagined interactions are employed to say things to the boss that cannot be said in real life. For example, these participants are unlikely to be actually saying to their boss "I'd like to talk with you about why you are an idiot and suck at your job." Yet, participants are using imagined conversations as a mechanism to give voice to such things internally.

Thus, in the context of workplaces, the use of the compensation function is not based in geographic absence of the other, but the absence of authentic dialogue that exists as a result of personalities, the hierarchical relationships in the workplace, or other organizational aspects that lead to lack of voice (Detert & Edmondson, 2011). One participant summarized the use of compensation in the workplace by noting that her imagined conversations

> typically involve my boss because I don't have a real opportunity to speak with him. He talks a lot in real life and is very condescending. He doesn't listen to others and especially not his female subordinates with any level of respect. I can't tell him most of my thoughts about what he says or does because I feel it would jeopardize my relationship with him (as perceived by him).

Similarly, another participant compared a prior employment situation, where she worked for a supervisor she referred to as "Terrible Boss," to her current more healthy work dynamic. The participant's own conclusion was that imagined conversations serve as a compensatory mechanism when real-life workplace communications are unsuccessful:

> When I was working with someone who drove me insane, I had imagined conversations all the time. I started having the imagined conversations

> when after attempting actual conversations I was met with defensiveness and negativity. When I stopped feeling heard I started imagining conversations. Now that I'm not in that kind of situation, I cannot recall the last imaginary work conversation I've had lately. My conclusion is that when you strongly dislike a co-worker, or are unable to feel heard, the imaginary conversations become more frequent, more necessary.

An interesting aspect of the use of imagined interactions by some participants to give voice to displeasure with their "bad boss" is the overt dislike and even name calling towards their boss. Overall, the data from the open-ended questions of this survey tended to show cautious and thoughtful phrasings about the quality and performance of peers and subordinates. In contrast, the text about superiors included multiple examples of language such as "idiot", "sucks", and "terrible". These participants tended to select their superior as their primary interaction partner, and rate their feelings during their imagined interaction with their boss as mostly negative. Further, some of the sample dialogues demonstrated internal verbalization of the boss's perceived lack of accountability, poor leadership, or insufficient support on a key project. One participant provided the following imagined dialogue:

> Superior: A lessons learned for you would be to apply more rigor in your project timeline estimates. You were late on x project.
>
> Me: Please keep in mind that I was 4 weeks late on a year-long project and you took 1 month to review the Project Charter and then continued to tell the team that the dates could slip. Procurement used 2 more months of

time because you unwound the pressure I put on them. If you weren't here, I would have delivered this at least 2 months early.

The theme of the "bad boss" indicates that subordinates may be viewing their boss from a perspective that positions the boss as the scapegoat for workplace difficulties. In the "bad boss" examples, participants put the blame squarely on the boss to manage the relationship and perception of subordinates. This finding aligns with what Attribution Theory suggests about people attributing success to internal characteristics, such as their own skill or talent, but attributing failure to external factors, such as their boss (Martinko, 1995). In this dynamic, individuals may be de-humamizing their boss–viewing the superior as an idiot rather than a struggling person in the workplace.

A contributing factor of this attribution of blame may be the important role that the direct supervisor plays in an employee's inner work life. Amabile and Kramer's (2011) analysis of workplace diary entries indicates that team leader behavior has a strong sway on employee's inner work lives, with employees being more likely to recall negative leader actions in more detail, and to write longer diary entries about them. In total, they found that the interpersonal relationships with team leaders exerted the strongest influence on employee's perceptions of their jobs, emotion, and motivation.

Taken as a whole, the data from this dissertation research project demonstrate the use of imagined interactions as a substitute to mentally say things to the "bad boss" that would not be said in real-life. This finding is supported by the frequency of imagined interactions with superiors, the topics of imagined conversations with the boss that were about the participants' perception of the boss' performance, the use of explicit and negative labeling of the boss, and examples of imagined interactions compensating for

real-life authentic dialogue with the "bad boss." This finding reflects the importance of the superior-subordinate relationship at work as well as the practice of attributing blame and failures to others in the organizational hierarchy.

Finding 7: The qualitative data collected in this study provide greater insight into the phenomenon of work-related imagined interactions than the quantitative data. In this research project, 88 working adults in a supervisory position in the United States completed an online questionnaire consisting of closed-ended and open-ended questions. All questions were modified from the existing, validated Survey of Imagined Interactions (Honeycutt, 2003). The Survey of Imagined Interactions has previously been used extensively in research with adults; however, this was the first time that it was modified to limit responses to imagined conversations with real-life coworkers.

The closed-ended questions predominately consisted of Likert scale questions which asked respondents to indicate their agreement or disagreement with 60 statements about the eight dimensions and six functions of imagined interactions. The results from these questions, as presented in Finding 1, tended towards the center of the Likert scale. Of the fourteen constructs being measured (eight dimensions and six functions), twelve of constructs scored a mean average within one point of the center of the scale. Additionally, six of the fourteen constructs had internal reliability scores (see Table 3) which call into question the reliability of this modification of the Survey of Imagined Interactions.

Although such Likert scale surveys are a common methodology in the social and organizational sciences for research designed to measures individual's experiences,

preferences, and behaviors (Creswell, 2003; Sue & Ritter, 2007), the quantitative data collected in this research project did not produce meaningful insights into the phenomenon of imagined interactions in the work environment. The findings call into question the ability to readily modify the Survey of Imagined Interaction for the workplace settings. Perhaps additional modifications to the questions or reducing the Likert scale to five options instead of seven could improve the internal reliability of the instrument in workplace settings. Alternatively, the scale may simply not be the best methodology for investigating work-related imagined interactions.

In contrast to the Likert scale questions, the responses to the open-ended questions provided insightful, thick and rich description of participants' experiences and metacognitions about their work-related imagined interactions. Despite the absence of the terms "imagined interactions" or "imagined conversations" as commonly used language in either the workplace or personal lives, the 88 participants in this survey research project were able to answer questions about the construct and 61 provided sample dialogues that aligned with the functional definition provided in the introductory language to the online survey. The open-ended data provided the foundations of the findings 2, 3, 4, 5, and 6. Prior research similarly supports the proposition that insights into imagined interactions, internal conversations, and inner work lives are gleaned through qualitative inquiries such as direct journaling, daily diaries, and oral interviews (Allen & Berkos, 2005-2006; Amabile & Kramer, 2011; Archer, 2003).

Finally, the researcher notes that previous published studies on imagined interactions employed a paper version of the scale and either written or oral completion of the open-ended questions. This study may be the first time that the Survey of

Imagined Interactions was implemented via an online data collection mechanism. The online approach appears to have been a successful way to capture information about work-related imagined interactions. Prior to implementation of the study, the researcher was concerned that participants would be more likely to answer closed-ended questions and would skip the open-ended questions. However, all 88 participants provided topics of recent work-related imagined interactions and the majority wrote a sample dialogue and offered additional commentary on their work-related imagined interactions. Given that most professionals are increasingly likely to express themselves in writing via their computers than via paper and pencil mechanisms, this research projects indicates that electronic data collection mechanisms are effective for conducting research with this population. Further, online data collection facilitated broad distribution of the survey as well as ease of data cleaning and analysis for the researcher.

Overall, a finding from this research study is that open-ended questions about work-related imagined interactions provide more insight into understanding the phenomenon than the quantitative, Likert scale questions about the eight dimensions and six functions of imagined interactions. Future research on work-related imagined interactions should emphasize qualitative methodological approaches. Specific suggestions for future research are provided in Chapter 5.

Chapter Summary

The quantitative and qualitative analysis of data collected for this exploratory research project on imagined interactions in the workplace resulted in seven findings which make a significant contribution to the understanding of this intrapersonal communication process.

Finding 1: Engaging in work-related imagined interactions with real-life coworkers is a universal phenomenon that varies from person-to-person.

Finding 2: A variety of topics are discussed in work-related imagined conversations, and these topics vary by the imagined conversant: superior, subordinate, peer, and groups.

Finding 3: Emotionally negative and cathartic imagined interactions occur retroactively in response to difficult or threatening work situations.

Finding 4: Proactive imagined interactions are purposefully employed in the workplace as rehearsal and preparation for job performance.

Finding 5: Work-related imagined interactions include not only verbal dialogue, but other aspects of communication such as imagery, body language, and written e-mails.

Finding 6: Imagined interactions are used as a substitute to say mentally things to the "bad boss" that would not be said in real-life.

Finding 7: The qualitative data collected in this study provide greater insight into the phenomenon of work-related imagined interactions than the quantitative data.

Viewed as a whole, these seven findings provide an important baseline for understanding the range topics and partners of imagined interactions, as well as the emotional and relational dynamics that trigger imagined interactions in real-life work scenarios. Imagined interactions are an unseen aspect of relationship management and self-understanding, and their content and emotional valence provides an image of what is occurring in organizational life. Thus, they are a mirror of individuals and their relationships in the workplace.

Given the exploratory nature of this research project, the findings raise as many questions about work-related imagined interactions as they answer. In the final chapter of this dissertation, the findings will be summarized in the context of their significance for the organizational sciences, as well as managing oneself and others. The limitations of the study will be reviewed, as will suggestions for future research.

Chapter 5: Discussion

The final chapter of this dissertation reviews the findings from this exploratory study on imagined interactions as a component of the interior cognitive lives of working adults. The significance of the findings and the implication of these findings for managing oneself and others are discussed. The chapter ends with suggestions for future research which can continue to enhance our understanding of the role of this intrapersonal communication activity in workplace relationship management.

Summary of the Study

This research study explored the use of imagined interactions in workplace relationship management through the completion of an online questionnaire. The questionnaire consisted of a modified version of the Survey of Imagined Interactions, which prompted participants to respond to a variety of closed-ended, Likert scale (quantitative) questions related to imagined interactions in the work environment and open-ended (qualitative) questions, including a sample dialogue of a recent imagined interaction with a superior, subordinate, or peer. Participants were recruited through a convenience sample of the researcher's and researcher's colleagues' professional and personal networks. Inclusion in the study was limited to individuals currently employed in the United States in a work situation in which they have at least one superior, subordinate and peer. A total of 88 participants completed the questionnaire during a six week period in 2012.

The overarching research question was: How do supervisors utilize imagined interactions to make sense of and manage workplace relationships? In addition, the quantitative and qualitative data analysis addressed five research sub questions:

Sub question 1: How do supervisors utilize the eight dimensions and six functions of imagined interactions in work-related imagined conversations with coworkers?

Sub question 2: With whom do supervisors most frequently engage in work-related imagined interactions: superiors, subordinates, or peers?

Sub question 3: How does the usage of imagined interactions in the workplace vary by the most frequent imagined interaction partner (superior, subordinate, or peer)?

Sub question 4: What are the work-related topics supervisors report discussing in their imagined interactions?

Sub question 5: How do the work-related topics supervisors discuss in imagined interactions vary by the imagined interaction partner (superior, subordinate, or peer)?

As discussed in detail in Chapter 4, seven findings emerged from analysis of the quantitative and qualitative data. The findings are:

Finding 1: Engaging in work-related imagined interactions with real-life coworkers is a universal phenomenon that varies from person-to-person.

Finding 2: A variety of topics are discussed in work-related imagined conversations, and these topics vary by the imagined conversant: superior, subordinate, peer, and groups.

Finding 3: Emotionally negative and cathartic imagined interactions occur retroactively in response to difficult or threatening work situations.

Finding 4: Proactive imagined interactions are purposefully employed in the workplace as rehearsal and preparation for job performance.

Finding 5: Work-related imagined interactions include not only verbal dialogue, but other aspects of communication such as imagery, body language, and written e-mails.

Finding 6: Imagined interactions are used as a substitute to say mentally things to the "bad boss" that would not be said in real-life.

Finding 7: The qualitative data collected in this study provide greater insight into the phenomenon of work-related imagined interactions than the quantitative data.

In the next two sections of this chapter, the findings are placed within the context of the significance of the study and the implications for the practice of leadership.

Significance of the Findings

From the researcher's perspective, the most significant contribution of this exploratory study was creating an interdisciplinary connection between the communication sciences–which has conducted substantial research on imagined interactions–and the organizational sciences–which is concerned with how a variety of interior cognitive, communicative, and subconscious processes affect workplace dynamics. Since the 1930s, theorists have sought to explain how symbols such as language are employed within the human psyche to understand ourselves and our worlds. Historical writings by Mead (1934) and Blumer (1969) on symbolic interactionism have provided the theoretical foundation for investigating a variety of intrapersonal communication activities through which individuals develop meaning, mental structures, schema, labels, and memories (Roberts et al., 1987; Shedletsky, 1989).

In the communication sciences, scholars have extensively researched a particular aspect of intrapersonal communications, imagined interactions, which is the act of

mentally envisioning oneself in communication with real-life others (Honeycutt, 2003). Imagined interactions have multiple functions including making sense of conversations, rehearsing for upcoming interactions, managing long-term relationships, experiencing emotional catharsis, compensating for the absence of real-life communication with others, and better understanding oneself (Honeycutt, 2003, 2010b). Prior research suggests that the benefits of imagined interactions may include goal achievement (Honeycutt & Gotcher, 1991), better fluency in real-life conversations (Honeycutt, 2003), and greater self-understanding and identity construction (Honeycutt, 2003; Weick, 1995).

In parallel fashion, research in the organizational sciences has been investigating questions related to understanding individual's internal processes as a pathway to more effective behaviors and relationships in the workplace. Constructs investigated include sensemaking (Rouleau & Balogun, 2010; Weick, 1995; Weick et al., 2005), organizational discourse (Grant & Marshak, 2011), emotions at work (Goleman et al., 2002; Kreamer, 2011) and inner work life (Amabile & Kramer, 2011). The findings from these organizational researchers suggest that such internal cognitive and emotional processes are associated with effective influence, leadership, relationship maintenance, self-regulation, and strategic change management.

The exploratory research study conducted for this dissertation makes an interdisciplinary connection between the communication sciences and the organizational sciences, and lays the groundwork for understanding how the ubiquitous phenomenon of imagined interactions contributes to workplace relationship maintenance and overall job performance. Because imagined conversations involve real-life others in addition to oneself, the topics of work-related imagined interactions tend to involve relationship

management aspects of the job. Thus, imagined interactions are a mirror of relationships in the workplace. They are among the unseen aspects of relationship management and self-understanding, and their content and emotional valence provides an image of what is occurring in organizational life.

In addition to the broader significance of making the interdisciplinary connection between the communication sciences and the organizational sciences, the results of this research project make important contributions to the existing literature. This study provides three significant contributions: (a) exploration of the phenomenon of imagined interactions specific to work environments, (b) evidence of improved job performance through mental rehearsal of conversations, and (c) management of emotional responses to difficult or threatening work situations.

Exploration of the phenomenon of imagined interactions specific to work environments. This research project found that engaging in work-related imagined interactions with real-life coworkers is a universal phenomenon which varies in content and frequency from person-to-person. All participants were able to recall topics and partners of recent work-related imagined conversations and to answer both closed-ended and open-ended questions about their work-related imagined conversations. Their responses indicate that the concept of imagined interactions is readily understood by working adults and they were able to generate examples of having recently engaged in imagined interactions with their real-life coworkers. Further, in the open-ended responses and sample dialogues, participants demonstrated a competence at discussing imagined interactions as a component of managing themselves in the workplace. These work-related imagined conversations include retroactively reliving conversations that

have already taken place, proactively rehearsing and preparing for upcoming conversations or meetings, and compensatory conversations that are used as a substitute for real-life conversations.

Despite the finding that all participants are engaging in mental conversations with real-life others, no terminology exists in the common vernacular or the leadership and organizational literature to discuss this phenomenon. This research study suggests that a phrase such as "imagined interactions" or "imagined conversations" needs to be introduced into the lexicon to provide a label for making more visible this hidden, yet universal, internal aspect of organizational life. A clear and common terminology for discussing the construct will facilitate awareness of it and our ability to discuss it in work-related contexts. Thus, a major contribution of this research study is the introduction of the construct of imagined interactions into the organizational, leadership, and common vernacular.

Evidence of improved job performance through rehearsal of conversations. The topics and partners of recent work-related imagined interactions, as provided by the participants in this research study, reveal that an impressive variety of task-related, interpersonal, behavioral, and strategic activities in the workplace prompt imagined conversations. Additionally, participants spoke at length about their perception of the positive usefulness of proactive imagined interactions to rehearse for upcoming meetings or conversations, test out conversational options, practice for difficult conversations or presentations, and enhance their overall performance in their role.

The rehearsal function of imagined interactions reduces fears and communication apprehension, while improving conversational fluency (Honeycutt et al., 2009; Honeycutt

& Gotcher, 1991). Previous research on rehearsal through imagined interactions has shown that individuals find them helpful in preparing for meetings, public speaking, giving performance feedback, or difficult conversations such as employee reviews (Allen & Berkos, 2005-2006; Honeycutt, 2003, 2010b; Honeycutt et al., 2009; Kelley & Croghan, 2010). Honeycutt and Gotcher (1991) suggest that imagined interactions are an effective rehearsal mechanisms because they allow individuals to "consciously take the role of others, imagining how they might respond to one's messages, and thus . . . test and imagine the consequences of alternative messages prior to communication" (p. 140). This purposeful, preparatory rehearsal for job performance has a mindfulness aspect to it, with individuals envisioning plans, actions, and encounters necessary to accomplish their outcome (Honeycutt, 1991).

The findings from this research projects contribute to the literature on understanding how rehearsal of job tasks, especially for difficult work-related conversations, can occur through mentally imagery such as proactive imagined interactions. In sum, the use of proactive imagined interactions to rehearse work-related conversations appears to serve a positive, preparatory function enhancing one's overall performance in job role.

Management of emotional responses to difficult or threatening work situations. Analysis of both the quantitative and qualitative data collected in this dissertation research study found that participants mentally relive work-related conversations that involve a difficult or threatening situation. These imagined interactions are retroactive (occur after the event), cathartic (emotionally purging), and tend to involve negative emotional valence. Further, some participants employed

compensatory imagined interactions to voice to their negative emotions towards their "bad boss" in explicit and critical ways.

These findings align with existing theories in social neuroscience which stipulate that the brain responds to threats to social relationships in the same way as it responds to physical threats (Gordon, Barnett, Cooper, Tran, & Williams, 2008). Further, mentally imagining conversations creates the same physiological effects on heart rate and blood pressure as real-life conversations (Honeycutt, 2010a). Our minds and bodies do not know the difference between social threat and survival threat, nor the difference between an encounter that is occurring in real-time and one that is mentally relived. So, retroactively reliving negative workplace experiences with a boss or other coworker keeps the conflict alive both psychologically and biophysiologically (Honeycutt, 2003-2004).

The importance of managing emotional responses in the workplace is well documented by Goleman and his colleague's work on emotional intelligence, who propose that one's ability to navigate the emotional aspects of social interactions is key to leadership success (Goleman et al., 2002). Further, Kraemer (2011) stipulates that "one essential skill in building greater emotional intelligence is metacognition, or the ability to step back and think about ourselves thinking about ourselves" (p. 70). The results from this research project make a significant contribution to our understanding of emotional regulation through imagined interactions. The findings indicate that emotional management in the workplace can be improved by greater awareness and self-regulation of the negative, cathartic, and compensatory imagined interactions triggered by real-life work situations which are threatening to one's sense of identity.

In summary, research on imagined interactions in the workplace makes a significant contribution to the organizational science's continuing understanding of how internal cognitive, communicative, and emotional processes interface with workplace relationships. A variety of implications of this line of research exist for both the individual working professional who seeks better self-understanding and self-management, as well as professionals who have a responsibility for the work lives of others. The next section provides insight into the implications for practice.

Implications for Practice

Research on imagined interactions in the workplace provides implications for practice, primarily with relational issues rather than systems-level approaches. However, as discussed in Chapter 2, the theoretical perspective of organizations as living social systems produced and reproduced through language suggests that conversational processes–both intrapersonal and interpersonal–are continuous contributors to making meaning and making change in organizations (Hernes, 2008; Luhmann, 2006; Seidl & Becker, 2006; Shaw, 2002). Leadership, when viewed from this theoretical perspective, involves processes of influence and change which emerge from day-to-day communicative encounters (Gergen, 2009; Uhl-Bien, 2006)

Thus, the findings of this study contribute to our understanding the management of self and others in the workplace. Managing oneself involves emotional regulation, situational preparedness, greater self-understanding, empathy for others, and the ability to mentally visualize multiple options and scenarios (Goleman et al., 2002; Kelley & Croghan, 2010; Kreamer, 2011; Neck & Manz, 2010). Managing others involves awareness of the hidden barriers to communication and change in the workplace,

understanding power dynamics, the role of the manager in facilitating organizational sensemaking, and assisting employees with keeping intact their sense of identity and safety in the workplace (Magee & Galinsky, 2008; Rock, 2008; Rouleau & Balogun, 2010; Segal, 1997).

Management of oneself. Management of oneself, also referred to as self-leadership, involves a purposeful understanding of oneself and how one's strengths, preferences, assumptions, and behaviors affect success and satisfaction with work (Neck & Manz, 2010). Individuals can develop and improve their relational proficiency through greater self-awareness, including better awareness of thoughts, emotions, and other internal cognitive activities (Fragouli, 2009; Goleman et al., 2002; Senge, Scharmer, Jaworski, & Flowers, 2005).

As discussed earlier in this chapter, this dissertation research project suggests that awareness may be a first step to improved self-leadership through imagined interactions. Senge and colleagues (2005) also refer to this a presence, and suggest that individuals engage their imagination to better understand their experiences in response to threatening incidents. For example, envision a person who every time he meets with his boss, subsequently he finds himself yelling at the boss inside his head for the rest of the workday. Senge et al. suggest that individuals,

> look at the incident that engaged you emotionally. Using your imagination, take time to re-create how you felt and what you thought as the incident played out. It can be helpful to talk through your experiences with a colleague or perhaps write them down" (pp. 48-49).

In the example from the previous paragraph, the person who has cathartic imagined interactions with his boss could recreate the imagined interaction, whether purposefully in the mind, with a colleague, or in writing, which may lead this person to better insights into how and why the boss's actions trigger this response. Further, the individual can ask himself whether this cathartic venting through compensatory imagined conversations is helping or hindering his coping with the situation. Thus, awareness and presence about work-related imagined interactions can lead to reflection, which can lead to better self-understanding and the development of new strategies to maintain workplace relationships (Neck & Manz, 2010).

Improved management of oneself through imagined interactions can also be accomplished through the purposeful practice of proactively rehearsing for upcoming workplace encounters. As demonstrated in both prior research and this dissertation study, job performance can be improved through mental rehearsal, and this seems to be especially true for job performance that involves interpersonal communication with others (Honeycutt & Gotcher, 1991; Kelley & Croghan, 2010). Individuals may benefit from setting aside time prior to difficult conversations or important work meetings to envision multiple conversation options and the reactions of others. At the very least, this practice has been shown to reduce performance anxiety (Honeycutt et al., 2009), and at best it may improve job outcomes (Kelley & Croghan, 2010).

Finally, when considering the use of imagined interactions for managing oneself in work situations, cathartic reliving of communicative encounters can be either beneficial or ruminative. The beneficial aspects of catharsis include mentally purging emotions by decreasing the limbic system's biophysical response to threat (Lieberman et

al., 2007) and relieving tension and uncertainty about the actions of others (Honeycutt, 2003). However, other research indicates that repetitive reliving of negative events can result in increased rumination, decreased conversational options, and decreased empathy towards the other person (Cloven & Roloff, 1991). Thus, the self-aware individual pays attention to the fine line between healthy and unhealthy reliving of negative, conflicted, or threatening real-life workplace interactions.

Managing others. Managing relationships with others in the workplace involves leading and influencing them toward the achievement of common goals (Northouse, 2007). Leadership can include formal hierarchical roles in which one person has direct supervision of the other as well as influence relationships in which an individual influences others to attain mutual goals (Uhl-Bien, 2006). However, research has found that direct supervisors and team leaders have more influence on their subordinates inner work lives than more distant, top-level managers (Amabile & Kramer, 2011).

One aspect of managing others is the ability to recognize and discuss the less visible contributors to organization behavior and performance, such as imagined interactions. Leaders can cultivate a comfort with talking about their own and other's imagined interactions and other forms of self-talk. The effective manager is aware of hidden barriers to change, which can include a variety of psychological and intrapersonal factors not readily visible or obvious to the leader (Segal, 1997). This inner work life, as defined by Amabile and Kramer (2011) has three major components: (a) perceptions, which include thoughts and cognition used for sensemaking about daily work events, (b) emotions and feelings, both positive and negative, in response to daily work events, and (c) motivation or drive to do the work. Imagined conversations are one of the internal

mechanism by which individuals symbolically work through their perceptions, emotions and motivations in their inner lives. Thus, imagined interactions may be a point of influence that can be used to facilitate development of others and organizational change.

Knowing that their subordinates are employing imagined conversations to make sense retroactively of workplace encounters, the supervisor can assist subordinates in making sense of confusing workplace situations in the interpersonal sphere, so that less sensemaking may need to occur in the intrapersonal sphere. Rouleau and Balogun (2010) suggest that "skilled managers are able to use their knowledge of their organizational context and their colleagues/subordinates/seniors to influence those around them" (p. 1). This influence can occur through strategic sensemaking, during which managers craft and share messages with others to facilitate interpretation and meaning of potentially threatening workplace events such as reorganization and personnel changes. Setting the context and facilitating interpersonal sensemaking conversations may be a mechanism to reduce the kinds of workplace ambiguity that may otherwise be resolved by subordinates through cathartic or ruminative imagined interactions.

Additionally, managers can assist their subordinates in proactively preparing for upcoming events through mental simulations. Creating a better awareness among working adults of their work-related imagined interactions is a precursor to implementation of such strategies. For example, if a manager suggests to her subordinate, "mentally rehearse multiple conversational options for telling the board we have gone over budget," will the subordinate understand what this means and why mentally rehearsing conversational options is a useful preparatory process?

Finally, supervisors will benefit from acknowledging that individuals use compensatory imagined conversations to voice things in their minds that they do not feel comfortable saying in real-life work situations. They may be able to address this dynamic through cultural changes in the organization which value employee's voice and ensure that threats to status and identity are protected (Detert & Edmondson, 2011; Rock, 2008). A supervisor who allows feedback and open dialogue from subordinates may reduce employees' need to use imagined conversation to compensate for real-life conversations.

Summary of implications. The findings from this dissertation study on imagined interactions in the workplace have multiple practical implications for managing onself and others. Although implications for practice can be considered based on this research, ultimately more research will be needed to better understand imagined interactions in the workplace and how to best construct interventions based on the phenomenon. The next two sections summarize the limitations of this research project and ideas for future research to expand the understanding and implications of work-related imagined interactions.

Limitations

The research design and non-probability sampling technique employed in this exploratory research project create certain limitations on the findings. A primary limitation of this study is external validity, or the ability to generalize the findings to the larger population of interest. Because the study was conducted using a convenience sample, completion of the survey may be somewhat biased towards individuals with an active internal dialogue, or those who inherently identified with the idea of imagined

interactions. Potential participants who received the e-mail invitation to the study but did not identify with the topic, did not understand it, do not have imagined interactions, or did not feel comfortable answering questions about the construct likely opted against participation. Thus, the findings from this study will not necessarily apply to the entire population of adults working in the United States.

At the outset of the study, the potential for respondent fatigue, non-completion, and survey abandonment (Sue & Ritter, 2007) were of concern to the researcher. The survey was somewhat lengthy, with 60 closed-ended questions, multiple open-ended questions, a request for sample dialogue, and a demographics section. The expected completion time was 20-30 minutes, depending on how much detail respondents provide in the open-ended questions. Twenty-three people consented to participate in the study, but voluntarily withdrew prior to completion of the survey. Almost all of these people withdrew during the first data collection screen, a fairly lengthy series of Likert scale questions related to the eight dimensions of imagined interactions. However, all participants who completed the first data collection screen completed the whole survey. Thus, survey abandonment at the beginning of the study was more of an issue than respondent fatigue. Similar to the sampling technique, survey abandonment limits the ability to generalize the study's findings.

A third limitation is other intervening and confounding factors associated with imagined interactions which were not measured by this study. For example, previous research has investigated the influence of personal characteristics on an individual's use of imagined interactions and found that known confounding factors include locus of control, personality traits, mental health, communication apprehension, rumination, and

taking conflict personally (Cloven & Roloff, 1991; Honeycutt, 2003; Wallenfelsz & Hample, 2010; Zagacki et al., 1992). Measurement of these, and other unknown, confounding factors was beyond the scope of this research project, and thus the influence of confounding variables on participants' responses to the questionnaire will remain unknown.

A fourth and final limitation relates to the finding that qualitative data collected in this study provide greater insight into the phenomenon of work-related imagined interactions than the quantitative data. The mean responses to the questions about the eight dimensions and six functions of imagined interactions tended towards the middle of the 7-point Likert scale. Rather than demonstrating trends in the utilization of these constructs, the calculation of the mean averages appears to have obscured the person-by-person variability in the sample. While the quantitative data do support the finding that engaging in work-related imagined interactions with real-life coworkers is a universal phenomenon, only limited conclusions can be made about the specific utilization of the eight dimensions and six functions of work-related imagined interactions.

Future Research

This exploratory research study on individual's imagined interactions with their coworkers sets the framework for a variety of future research endeavors that can delineate this phenomenon in more detail. Further, this research project makes a methodological contribution to the art of investigating imagined interactions with working adults. The findings suggest that qualitative, open-ended lines of inquiry provide more insight into the construct than the quantitative, Likert scale components of the Survey of Imagined Interactions. Additionally, electronic mechanisms for collecting

data from working adults on their utilization of imagined interactions in the workplace appear to be an effective vehicle for collecting both quantitative and qualitative data.

Proposed future research projects on imagined interactions in the workplace are differentiated below between additional analysis of existing data and avenues for new investigations of imagined interactions in the workplace.

Additional analysis of existing data. All data analysis presented in this dissertation included the full set of responses from the 88 participants and sought to address the research question and sub questions as articulated prior to data collection. However, review of the findings suggests two potential additional analyses, focused on subsets of respondents.

First, a gender analysis of the data can be conducted, comparing the responses of the 66 female participants with the 21 male participants. In organizational and psychological research studies, gender analysis is conducted to assess whether patterns in the data vary between men and women (Bryman & Bell, 2007). Existing literature on both leadership and imagined interactions suggest the existence of gender differences in internal cognitive processes. For example, one study found that women report more frequent imagined interactions than men, and that the valence of women's imagined interactions tend to be more positive (Edwards et al., 1989). The data collected for this dissertation can serve as the basis for assessing whether men and women tend to have different experiences with imagined interactions in the workplace.

Second, further analysis of the existing data can be conducted differentiating the frequent users of imagined interactions from the infrequent users. The variability in responses to questions about frequency of imagined interactions in the workplace

suggests that adults differ in how often they imagine conversations with their coworkers. Figure 4 shows a bimodal frequency, with half of the respondents reliving or rehearsing conversations with their primary workplace imagined conversant once or week or less frequently, while the other half reliving and rehearsing imagined conversations in the range of a couple of times per week to multiple times a day. Sub-analysis of the eight dimensions and six functions of imagined interactions by frequent and infrequent users may provide greater differentiation in the utilization of imagined interactions than was found when analyzing the full data set. Further, the qualitative data collected for this dissertation study could be differentiated by frequent and infrequent users of imagined interactions to assess whether the topics and themes (e.g., managing relationship with the "bad boss" or difficult work conversation) vary according to frequency of work-related imagined interactions.

Future investigations of imagined interactions at work. The findings which emerged from the analysis of this data provide a roadmap for future investigations of imagined interactions in the workplace. Multiple possible future research projects are presented in this section.

In-depth exploration of imagined interactions in the workplace. As described in Finding 7, in this study the open-ended questions about imagined conversations with coworkers provided more insights into the phenomenon than the Likert scale questions, where the responses tended to average in the middle of the 7-point scale. Thus, future research should employ qualitative methodology to explore in depth the ways in which people describe their imagined interactions as a tool for managing themselves and managing others in today's relationally-oriented work environments. An example of a

strong methodological approach was provided by Archer (2003) who conducted exploratory, open-ended interviews about the theme of internal conversations. The interviews began with broad-questions, and participants were subsequently prompted to discuss their internal conversations related to ten types of self-talk. A similar type of methodology can be utilized for in-depth exploration of imagined conversations in the workplace, using the findings of this study as prompting questions in the interviews.

Another mechanism for in-depth exploration of imagined interactions in the workplace is the diary method. Prior research by Amabile and Kramer (2011) demonstrates the insights related to inner work life that can be gleaned through the methodology of work-related diaries completed in real time by project team members. Such diaries can include both open-ended and closed-ended questions to gather insights and facilitate comparison across entries. For example, in an imagined interactions research study, participants could be prompted to provide structured details about the proactivity, retroactivity, valence, topics and partners of their imagined conversations while also being given the opportunity to provide open-ended explanatory text. Amabile and Kramer used daily e-mail prompts to facilitate diary completion by their research participants, with a 75% response rate. Another technology for data collection could be a smart phone application which would alert users a couple of times per week during working hours and provide a mechanism for them to complete their diary entry via their smart phone.

Imagined e-mails. Research on imagined interactions about e-mails gains increasing importance as workplaces rely more and more heavily on e-mail for interpersonal communications. Prior research by Berkos (2010) suggests that individuals

have imagined interactions related to their online communications for the purposes of emotion management, communication improvement, rehearsal, situation management and professional conduct. The findings from this dissertation research study also support the assumption that the interior mental process of imagining conversations translates into the mental process of imagining e-mails. Further, as with imagined conversations, imagined e-mails can involve reliving a prior e-mail exchange, rehearsing options for an e-mail to be written, or imagining e-mail options that would never be sent.

Thus, the concept of imagined interactions is broad enough to include electronic conversations conducted via e-mails. However, the current definitions in the literature and how they are operationalized in the Survey of Imagined Interactions are vague on this point, probably because of the changing nature of conversations occurring via electronic media during the past decade. This suggests a need for considering a revised definition of imagined interactions that clarifies that the construct includes non-verbal aspects of communication, such as imagined e-mails.

Multiple options exist for future research projects to understand how imagined interactions play a role in e-mail oriented workplace conversations. One research study would be to repeat Berkos' (2010) study on imagined interactions in online communication with working adults (her study population was undergraduate students). Berkos asked respondents to answer four open-ended survey questions related to partners, topics, text editing, and roles of imagined interactions in online communication. Another option for research on imagined e-mails would be a more prospective methodology in which participants would report to the researcher actual e-mails that triggered imagined interactions along with their description of how they rehearsed or relived the e-mail. A

third research project could focus on how imagined interactions play out among work teams with little or no face-to-face or other verbal interactions, such as global project teams where the members live at geographic distances from one another. This research would attempt to understand how imagined e-mails differ in these text-oriented types of interactions, which exist without any visual imagery or cues to support the relational dynamics. Specific research questions may address whether people are more likely to be dominant, discrepant, and/or conflict-orient in their imagined e-mails with distant coworkers.

Managing relationships with the "bad boss." While all workplace relationships are important, an individual's relationship with his or her direct supervisor has been demonstrated to be the most influential in terms of overall job perception (Amabile & Kramer, 2011). As discussed in Finding 6, a theme emerged in this data analysis of some participants engaging in compensatory imagined interactions to express their displeasures towards their "bad boss" in ways that would not be said in real-life conversations. Additionally, the responses to the open-ended questions in this survey tended to show cautious and thoughtful phrasings about the quality and performance of peers and subordinates, but overtly negative and even insulting language was employed in imagined interactions about superiors. This finding aligns with Amabile and Kramer's (2011) workplace diaries in which employees were more likely to recall negative leader actions in more detail, and to write longer diary entries about them.

Further research is needed on the use of compensatory imagined interactions towards superiors. For example, research can be conducted to assess the real-life workplace dynamics of the superior-subordinate relationship that trigger negative and

compensatory imagined interactions about the boss. This research can test whether certain behaviors on the part of the boss are correlated with subordinate's imagined interactions, and whether encouraging greater voice and authentic dialogue in the workplace may reduce employee's use of imagined conversation to compensate for real-life conversations.

Finally, while the "bad boss" may appear to be the natural target for research and interventions to reduce the negative, compensatory imagined interactions, attribution theory (Martinko, 1995) suggests that individuals conducting these imagined interactions may be putting the responsibility on the boss to manage the relationship. Research on presence and mindfulness (Senge et al., 2005; Siegel, 1999, 2010) suggests that emotional self-regulation and resilience can be improved through practices that increase conscious awareness of thoughts and emotional reactions to external environmental stimuli. Future research can be conducted on how to improve emotional resilience and decrease compensatory imagined interactions in the face of threatening workplace situations, regardless of the boss's actual behavior.

Emotional aspects of imagined conversations in the workplace. Much more needs to be understood about the complex interior cognitive responses to emotionally difficult or threatening workplace encounters. The findings from this research suggest a dichotomy in the usage of imagined interactions based on emotional valence. Specifically, emotionally negative and cathartic imagined interactions occur retroactively in response to difficult or threatening work situations, whereas proactive imagined interactions are purposefully employed in the workplace as positive rehearsal and preparation for job performance

Using the methodological approaches discussed in the section on "*in-depth exploration of imagined interactions in the workplace*," future research can be conducted to more fully understand the interconnectedness between emotions and imagined interactions. Qualitative approaches which allow individuals to extensively discuss the emotional aspects of their imagined conversations will provide rich insights into the process. Questions can include how the emotional valence of real-life encounters inter-relates to the emotional valence of imagined interactions. Honeycutt's conflict linkage theory (2003-2004) suggests that the linking of prior and future real-life communicative encounters through imagined interactions can keep negative emotions alive and perpetuate conflicts and poor relationships. Research that applies the conflict-linkage theory to the workplace can provide insight into how difficult and threatening workplace situations can be diffused and/or escalated through imagined interactions.

Interventions and studies of their efficacy. The findings in Chapter 4 and the implications for practice discussed earlier in this Chapter provide guideposts to navigate the translation of this research on imagined interactions into interventions to improve the management of oneself and others. For example, trainings can be designed to assist working adults to be more purposeful in their visualizations of proactive imagined interactions in order to more successfully communicate and present information in the work environment. The participants' responses in this research project suggest multiple possible points of intervention: improved foresightedness, comfort with upcoming difficult conversations, maintaining their relationship with their "bad boss," managing emotional responses to workplace events, and preparation to deliver difficult or uncomfortable news.

Research projects can be designed specifically around measuring the effectiveness of interventions related to imagined interactions in the workplace. For example, can individuals improve their awareness and meta-cognitions about their work-related imagined conversations? Can imagined conversations be useful to increasing workplace resilience or reducing workplace conflict? Is it more effective to target imagined interactions related interventions to oneself or the management of others? Further, such research can be designed not only to measure the effectiveness of the interventions, but the resulting impact on job performance, job satisfaction, engagement, retention, and similar measures of positive work environments.

Concluding Remarks

In order to conduct work successfully in modern, team-oriented, and collaborative work environments, individuals must navigate relationships with superiors, subordinates and peers. Many of the essential functions of the manager exist at the interface with coworkers, such as developing employees, managing conflict, monitoring individual performance, organizing others, and presenting ideas (Quinn et al., 2003). Work is rarely a solitary endeavor, but a collaborative one involving successful communication to maintain workplace relationships with others to accomplish common goals.

Communication is the primary mechanism by which social relationships are formed, managed and maintained (Luhmann, 2006). Social interaction occurs in the relational sphere between people and includes both their external (interpersonal) and internal (intrapersonal) communications (Bradbury & Lichtenstein, 2000; Gergen, 2009). One aspect of intrapersonal communication which has received little research attention in

the organizational sciences is imagined interactions, the act of mentally imagining and indirectly experiencing oneself in conversation with a real-life others (Honeycutt, 2003).

Imagined interactions, like other interior cognitive, communicative, and emotional activities, are the less visible and quantifiable aspects of organizations. However, a growing body of literature is providing insights into the importance of these interior aspects of organizational life to accomplishing strategic goals (Rouleau & Balogun, 2010), preparing for difficult workplace conversations such as performance reviews (Kelley & Croghan, 2010), achieving progress on team-oriented projects (Amabile & Kramer, 2011) and organizational development and change (Grant & Marshak, 2011).

Because little is known about how working adults engage imagined interactions as part of their work lives, this exploratory research project sought to understand the terrain of this interior cognitive function. The findings provide significant insights into the phenomenon imagined interactions at work, especially in terms of how working adults engage imagined interactions for self-understanding, relationship maintenance, emotional catharsis, conversational rehearsal, job preparation, and navigating difficult relationships, especially with their boss. Taken as a whole, the results from this dissertation research project make a significant contribution to the literature on the interior cognitive and communicative processes that underpin interpersonal communications and behaviors in the workplace. They provide a baseline for understanding the range topics and partners of imagined interactions, as well as the emotional and relational dynamics that trigger imagined interactions in real-life work scenarios.

Further, this research project makes an important contribution to the organizational sciences by introducing the construct of imagined interactions into both the organizational literature and the common vernacular. Every day, in every workplace, employees are imagining conversations with their real-life others, for a variety of reasons and with both productive and unproductive outcomes. Continued scholarship on the phenomenon of imagined interactions in the workplace will lead to not only expanded understandings of this intrapersonal communication process, but increased avenues for using imagining interactions to improve the management of oneself and others in relationally oriented work environments.

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APPENDIX A
Online Questionnaire and Informed Consent Form

Brief Introduction to Imagined Interactions

Imagined interactions are mental conversations we have in our minds with other people from our lives, usually when they are not physically present. Sometimes we imagine conversations after they occurred in real life, when we relive or replay the conversation in our mind. Sometimes we imagine conversations before a real-life event, when we mentally rehearse or prepare for a future conversation or meeting. Sometimes we imagine conversations to "say" things in our mind that we might never actually say in real life.

These imagined interactions can be brief or long, vague or detailed. The dialogue may be one-sided where you do most of the talking, or more interactive where all people in the imagined conversation take an active part.

Imagined interactions can occur with a variety of people from our lives, such as friends, spouses, or coworkers. This study is about imagined interactions you have with people from your workplace, such as superiors, subordinates, and peers.

This study is seeking people in the United States who supervise at least one person at their current job and are willing to answer questions about mentally reliving and rehearsing conversations with people from work. With your help we can better understand the role of imagined interactions in managing workplace relationships.

This survey is anonymous and the website where the survey is hosted will not track your e-mail or IP address. Because the survey is best completed in one sitting, please only start the questionnaire when you feel you have 20-30 minutes of uninterrupted time to complete it. You can go "back" within the survey and change or modify a response. If you exit the survey without completing it, you may be able to return and complete it later by clicking on the invitation weblink from the same computer. You do not have to answer every question.

1. Would you like to participate in this study?

◯ Yes, I'd like to complete the survey now

◯ No thanks, exit this survey

Inclusion Criteria

We are interested in responses from people in a variety of workplace settings. Please complete the pre-screening questions below to see if you qualify for this study.

2. Inclusion Questions

	Yes	No
Do you currently reside in the United States?	◯	◯
Are you currently employed?	◯	◯
Are you 18 years of age or older?	◯	◯
Do you supervise at least one person who reports directly to you?	◯	◯
Do you have a direct manager or supervisor?	◯	◯
Do you have peers in your organization (other than your supervisor and your direct reports) with whom you collaborate?	◯	◯

*3. Did you answer YES to all of the above questions?

◯ Yes

◯ No

Informed Consent

***4. I agree to participate in the research study being conducted by Paula Thompson, under the direction of Dr. Susan Nero, which is being conducted in partial fulfillment of the requirements for a dissertation.**

◯ Yes

◯ No, exit survey

2. The overall purpose of this research is: to better understand how individuals use imagined conversations to make sense of and manage workplace relationships.
3. My participation will involve the following:
• Responding to approximately 65 questions about imagined interactions in the workplace. Most of these questions are answered on a scale of 1-7. Some questions are open-ended and will require writing answers.
4. My participation in the study will take 20-30 minutes. I can take as much time as I need to complete my responses. I understand that I do not have to answer every question. The study is conducted via the internet, at a time and location of my choosing.
5. I understand that the possible benefits to myself or society from this research are:
• contributing to a better understanding of the role of imagined interactions in workplace relationship management.
• the potential for an increased awareness of my own use of imagined interactions in the workplace.
6. I understand that there are certain risks and discomforts that might be associated with this research. These risks include:
• reliving unpleasant imagined interactions.
• an increase in discomfort or distress about a current workplace situation.
7. I understand that my participation is voluntary and that I may refuse to participate and/or withdraw my consent and discontinue participation in the project or activity at any time.
8. I understand that the investigator(s) will take all reasonable measures to protect the confidentiality of my records and my identity will not be revealed in any publication that may result from this project. The confidentiality of my responses will be maintained in accordance with applicable state and federal laws.
9. I understand that the investigator is willing to answer any inquiries I may have concerning the research herein described. I understand that I may contact the investigator, Paula Thompson, at [redacted] or the faculty supervisor, Susan Nero, Ph.D., at [redacted] if I have other questions or concerns about this research. If I have questions about my rights as a research participant, I understand that I can contact Yuying Tsong, Ph.D., Chairperson of the Graduate and Professional Schools IRB, Pepperdine University, at [redacted]
10. I understand that I have the right to sign a written informed consent document instead of consenting electronically. I may contact the investigator, Paula Thompson, at [redacted] to request a written informed consent.
11. I understand to my satisfaction the information regarding participation in the research project. I hereby consent to participate in the research described above.

Closed-ended Questions About Imagined Interactions in the Workplace

Instructions: When answering each of the questions below, consider imagined interactions you have involving all of the coworkers from your workplace. Coworkers includes everyone with whom you work – your superiors, subordinates and peers.

- A superior is direct manager, supervisor, or someone else above you in the organizational hierarchy who assigns work to you.
- A subordinate is someone who is your direct report, or someone else below you in the organizational hierarchy.
- A peer is a someone in your organization with whom you collaborate who is generally on par with you in the organizational hierarchy.

For each question, please indicate your level of agreement on a scale of 1 (very strong disagreement) to 7 (very strong agreement).

5. Dimensions of Imagined Interactions

	Very Strong Disagreement	Strong Disagreement	Disagreement	Neither Agreement Nor Disagreement	Agreement	Strong Agreement	Very Strong Agreement
After important work meetings, I frequently relive or replay them in my mind.	○	○	○	○	○	○	○
My work-related imagined interactions are very specific because I envision who says what during the conversation.	○	○	○	○	○	○	○
When I have a real conversation at work that I have previously imagined, the actual conversation is very different from what I imagined.	○	○	○	○	○	○	○
Before I meet with someone important at my job, I imagine a conversation with them.	○	○	○	○	○	○	○
The other people in my workplace dominate the conversations in my work-related imagined interactions.	○	○	○	○	○	○	○
Before important work meetings, I frequently imagine what I will say during the meeting.	○	○	○	○	○	○	○
More often than not, what I actually say to a coworker in a real workplace conversation is different from what I imagined I would say.	○	○	○	○	○	○	○
I do not enjoy most of my imagined interactions about my job.	○	○	○	○	○	○	○
It is rare that I imagine an encounter before an important work-related meeting or conversation.	○	○	○	○	○	○	○
In my real conversations at work, I am very different than in the conversations I imagine about work.	○	○	○	○	○	○	○
My imagined interactions often involve a variety of different coworkers.	○	○	○	○	○	○	○
I often have work-related imagined interactions throughout a day.	○	○	○	○	○	○	○
I dominate the conversation in my imagined interactions with coworkers.	○	○	○	○	○	○	○
Many of my imagined interactions are with the same coworker.	○	○	○	○	○	○	○
My work-related imagined interactions tend to be on a lot of different topics.	○	○	○	○	○	○	○
After I meet with someone important at work, I relive my conversation with him or her.	○	○	○	○	○	○	○
I have recurrent work-related imagined interactions with the same individual over the same topic.	○	○	○	○	○	○	○
I usually say in real life work settings what I previously imagined I would say.	○	○	○	○	○	○	○
I frequently imagine conversations with my coworkers.	○	○	○	○	○	○	○
I rarely imagine myself interacting with someone from my workplace.	○	○	○	○	○	○	○
In my real workplace conversations, other people are very different than in my imagined conversations.	○	○	○	○	○	○	○
I have work-related imagined interactions many times throughout the week.	○	○	○	○	○	○	○

When I mentally relive conversations that occurred at my job, they are usually quite unpleasant.	○	○	○	○	○	○	○
I often have imagined interactions before interacting with someone of importance from work.	○	○	○	○	○	○	○
My work-related imagined interactions are with different people from my job.	○	○	○	○	○	○	○
I enjoy most of my work-related imagined interactions.	○	○	○	○	○	○	○
I talk a lot to the other person in my work-related imagined interactions.	○	○	○	○	○	○	○
It is hard recalling the details of work-related imagined interactions.	○	○	○	○	○	○	○
I often think about prior conversations that I've had with coworkers.	○	○	○	○	○	○	○
When I have an imagined interaction involving a coworker, I often have only a vague idea of what the other person says.	○	○	○	○	○	○	○
When I have imagined interactions related to my job, the other person talks a lot.	○	○	○	○	○	○	○
My imagined interactions involving my coworkers tend to be pleasant.	○	○	○	○	○	○	○
I often have imagined interactions after speaking with someone important from work.	○	○	○	○	○	○	○
When I have imagined interactions about my job, they tend to be detailed and well developed.	○	○	○	○	○	○	○

Closed-ended Questions About Imagined Interactions in the Workplace

Instructions: When answering each of the questions below, consider imagined interactions you have involving all of the coworkers from your workplace. Coworkers includes everyone with whom you work – your superiors, subordinates and peers.

- A superior is direct manager, supervisor, or someone else above you in the organizational hierarchy who assigns work to you.
- A subordinate is someone who is your direct report, or someone else below you in the organizational hierarchy.
- A peer is a someone in your organization with whom you collaborate who is generally on par with you in the organizational hierarchy.

For each question, please indicate your level of agreement on a scale of 1 (very strong disagreement) to 7 (very strong agreement).

6. Functions of Imagined Interactions

	Very strong disagreement	Strong disagreement	Disagreement	Neither agreement nor disagreement	Agreement	Strong Agreement	Very strong agreement
Imagined interactions often help me to talk about feelings or concerns later with a coworker.	○	○	○	○	○	○	○
It is rare for me to imagine talking with someone from my job outside of his or her physical presence because I believe in the saying, "out of sight, out of mind."	○	○	○	○	○	○	○
Work-related imagined interactions help me understand myself better.	○	○	○	○	○	○	○
Imagined interactions can be used to mentally "say" things to a coworker that I would not say in real life.	○	○	○	○	○	○	○
Imagined interactions help me plan what I am going to say for an upcoming conversation in the workplace.	○	○	○	○	○	○	○
Imagining talking with coworkers helps me reduce uncertainty about their actions or behaviors.	○	○	○	○	○	○	○
I have imagined interactions in order to practice what I am actually going to say at my job.	○	○	○	○	○	○	○
Imagined interactions help me manage workplace conflict.	○	○	○	○	○	○	○
I use imagined interactions to think about coworkers with whom it's important to have a good working relationship.	○	○	○	○	○	○	○
Imagined interactions about my job help me in clarifying my thoughts and feelings.	○	○	○	○	○	○	○
I have imagined interactions before entering a work-related situation with someone whom I know will be evaluating me.	○	○	○	○	○	○	○
Imagined interactions are important in thinking about the relationships I have to maintain as a part of my job.	○	○	○	○	○	○	○
Work-related imagined interactions make me feel nervous and tense when thinking about what others say.	○	○	○	○	○	○	○
I rarely replay old arguments with coworkers in my mind.	○	○	○	○	○	○	○
Reliving conversations that occurred at my job actually increases my stress or anxiety.	○	○	○	○	○	○	○
My work-related imagined interactions usually involve conflicts or arguments.	○	○	○	○	○	○	○
My work-related imagined interactions help me to prioritize my working relationships with coworkers.	○	○	○	○	○	○	○
I use imagined interactions to compensate for the lack of real, face-to-face communication in the workplace.	○	○	○	○	○	○	○
Work-related imagined interactions help me relieve tension and stress.	○	○	○	○	○	○	○
Imagined interactions make me feel more confident and relaxed before I actually talk with a coworker.	○	○	○	○	○	○	○
Imagined interactions help me understand my coworkers better in relation to me.	○	○	○	○	○	○	○
I often cannot get negative work-related imagined interactions "out of mind" when I'm angry.	○	○	○	○	○	○	○
	○	○	○	○	○	○	○

It is sometimes hard to forget old disagreements with coworkers.	○	○	○	○	○	○	○
Mentally talking to coworkers substitutes for the absence of real communication with them.	○	○	○	○	○	○	○
Imagined interactions help me maintain my working relationships with coworkers.	○	○	○	○	○	○	○

Questions about Recent Work-related Imagined Interactions

Recall up to three topics you remember discussing during recent work-related imagined interactions. For each topic, indicate in whether the coworker(s) involved in the imagined interaction were superiors, subordinates or peers. Select all categories that apply.

7. List a topic you recall discussing in a recent work-related imagined interaction.

8. Which coworkers(s) were involved in this imagined interaction? Check all that apply.

- ☐ Superior
- ☐ Subordinate
- ☐ Peer

9. List a topic you recall discussing in a recent work-related imagined interaction.

10. Which coworkers(s) were involved in this imagined interaction? Check all that apply.

- ☐ Superior
- ☐ Subordinate
- ☐ Peer

11. List a topic you recall discussing in a recent work-related imagined interaction.

12. Which coworkers(s) were involved in this imagined interaction? Check all that apply.

- ☐ Superior
- ☐ Subordinate
- ☐ Peer

Questions about Recent Work Related Imagined Interactions

13. Please indicate the one coworker with whom you have most of your work-related imagined interactions:

- ◯ Superior
- ◯ Subordinate
- ◯ Peer
- ◯ Other (please specify)

14. How frequently do you relive or rehearse conversations with the one coworker with whom you have most of your work-related imagined interactions?

- ◯ More than once a day
- ◯ Once a day
- ◯ A couple of times a week
- ◯ Once a week
- ◯ Less often than once a week

15. Recall a recent work-related imagined interaction involving the one coworker with whom you have most of your imagined interactions. Write down some sample lines of dialogue said by each speaker during the imagined interaction. Write it like a play script, identifying who said what.

16. My feelings during this imagined interaction were:

- ◯ Mostly positive
- ◯ Neutral
- ◯ Mostly negative
- ◯ A mixture of positive and negative

17. Use the space below to write down anything else you would like the researchers to know about your work-related imagined interactions.

Demographic Information and Employment-related Questions

We are asking that you respond to a few questions to assist us in describing the participants who completed the survey. As with all questions in this survey, your responses are anonymous and cannot be linked back to your e-mail or IP address. You do not have to answer every question.

18. What is your current age?

19. What is your gender?

- ◯ Male
- ◯ Female

20. How many years of work experience do you have?

21. How many years of supervisory experience do you have?

22. How many direct reports do you currently have?

23. Which category best matches your current role within your organization?

- ◯ Executive (e.g., CEO, CFO, Executive Director)
- ◯ Vice President
- ◯ Director
- ◯ Manager
- ◯ Supervisor
- ◯ Other (please specify)

Thank you very much for participating in this research project! If you have any questions or feedback, feel free to e-mail the researcher at [redacted]

APPENDIX B

Pepperdine Institutional Review Board Approval Letter

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

December 20, 2011

Paula Thompson
[redacted]

Protocol #: E1111D06
Project Title: *The Role of Mentally Reliving and Rehearsing Conversations in Workplace Relationship Management*

Dear Ms. Thompson:

Thank you for submitting the revisions requested by Pepperdine University's Graduate and Professional Schools IRB (GPS IRB) for your study, *The Role of Mentally Reliving and Rehearsing Conversations in Workplace Relationship Management*. The IRB has reviewed your revisions and found them acceptable. You may proceed with your study. The IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46 - http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(2) states:

> (b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:
>
> **Category (2) of 45 CFR 46.101**, research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: a) Information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Jean Kang, CIP
Manager, GPS IRB & Dissertation Support
Pepperdine University
Graduate School of Education & Psychology
[redacted]

cc: Dr. Lee Kats, Associate Provost for Research & Assistant Dean of Research, Seaver College
Ms. Alexandra Roosa, Director Research and Sponsored Programs
Dr. Yuying Tsong, Interim Chair, Graduate and Professional Schools IRB
Ms. Jean Kang, Manager, Graduate and Professional Schools IRB
Dr. Susan Nero
Ms. Christie Dailo

APPENDIX C

Survey Participation Request

Dear _____:

I am writing to ask if you would consider being a participant in my research project. I am a doctoral candidate at Pepperdine University's Graduate School of Education and Psychology in Organization Change. My research project is about the conversations we have in our minds with other people from our workplace.

Do you ever:

- Replay or relive conversations in your mind, remembering what you and the other person said to each other?
- Practice or rehearse for upcoming conversations, meetings, or presentations, imagining what you and the other people might say?
- Have conversations in your mind to "say" something that you would never actually say to the person in real life?

I am seeking participants for this study who supervise at least one person at their current job, and are willing to answer questions about mentally reliving and rehearsing conversations with people from work.

This study will involve completing an electronic survey via the internet. It will take you approximately 20-30 minutes to complete the survey. This survey is anonymous and the

website where the survey is hosted will not track your e-mail or IP address. These steps were taken so there would be minimal risk to you in taking the survey. Additionally, the study is designed in such a way that the published results will not be linked to the data you provide. Your participation in this research study is voluntary.

If you would like to contribute to this study, you can access the survey at the following link: [redacted]

If you know of anyone who would be interested in participating in this study, please forward this e-mail invitation to them. The greater the level of participation, the more meaningful the findings will be. Or, you can have people contact me directly at: [redacted]

I would like to have the surveys completed by February 15, 2012 and am grateful to you for contributing by completing the survey or helping me find others to participate.

Thank you in advance!

Sincerely,

Paula Thompson

Doctoral Candidate

APPENDIX D

Topic Codes and Operational Definitions

Topic	Operational Definition
Appreciation	Positive appraisal or appreciation of coworker
Behavioral feedback	General and specific mentions of addressing behavioral issues, soft skills, and/or professionalism
Budget	Includes mentions of budget and financial issues
Career management	Relates to the respondent's own career issues, such as promotion, roles, goals, future, etc.
Company performance	Overall company performance, strategy, direction
Conflict or disagreement	Explicit use of the terms conflict or disagreement
Customer or client issue	Dealing with a customer, client, patient, or partner
Entitlement	Special treatment or being owed something
Job performance	General and specific mentions of addressing performance issues of self or other
Leaving job	Job resignation by self or other
Managing up	Providing advice or input to a superior
Meeting (general)	Mentions of meetings or 1:1 without additional content
Mistake	Explicit mention of a mistake being made
Organization change	Changes in the workplace or work process
Performance review	Formal performance review or annual performance evaluation of self or other
Personal conversation	Discussion of personal or non-work topic
Personnel actions	Includes hiring, firing, official reprimand and other personnel and legal issues in the workplace

Topic	Operational Definition
Planning	Strategic planning
Presentation	Explicit mention of conducting or preparing for a presentation
Priorities	Prioritization of work or projects
Project or process management	Task-oriented topics related to project or process, both general and specific examples
Quality of work	Quality of work
Reorganization	Reorganization or restructuring of work or office
Role delineation	Clarification of roles, responsibilities, and/or allocation of work
Salary	Salary or raise for self or other
Space issues	Office location and other space issues
Work ethic	Work ethic and work habits
Work hours	Includes work hours, work schedule, and absences
Work load	Managing work load

APPENDIX E

Descriptive Statistics: Eight Dimensions and Six Functions of Imagined Interactions

Variable	n	Minimum	Maximum	Mean	Standard Deviation
Frequency	88	1.75	7.00	4.5208	1.17636
Proactivity	88	2.50	7.00	5.3059	.92397
Retroactivity	88	1.75	7.00	4.8598	1.06790
Variety	88	2.60	7.00	4.4983	.77691
Discrepancy	88	1.80	6.20	3.6364	.85207
Valence	88	2.00	6.25	4.0937	.91390
Specificity	88	2.25	6.50	4.5331	.92930
Dominance	88	3.00	6.50	4.7509	.76350
Self-understanding	88	3.00	6.75	4.8845	.77501
Rehearsal	88	3.25	7.00	5.4063	.79909
Catharsis	88	2.75	6.75	4.3295	.89903
Conflict	88	2.20	6.80	4.7699	.89970
Compensation	88	2.00	6.00	4.0009	.87369
Relationship Maintenance	88	1.25	7.00	4.7225	.92311

APPENDIX F

Analysis of Variance: Eight Dimensions and Six Functions of Imagined Interaction by Primary Imagined Interaction Partner (Superior, Subordinate or Peer)

Variable	Variance	Sum of Squares	df	Mean Square	F	p value
Frequency	Between Groups	1.989	2	.994	.758	.472
	Within Groups	104.901	80	1.311		
	Total	106.890	82			
Proactivity	Between Groups	2.058	2	1.029	1.201	.306
	Within Groups	68.557	80	.857		
	Total	70.615	82			
Retroactivity	Between Groups	3.230	2	1.615	1.561	.216
	Within Groups	82.790	80	1.035		
	Total	86.020	82			
Variety	Between Groups	.426	2	.213	.378	.686
	Within Groups	45.056	80	.563		
	Total	45.482	82			
Discrepancy	Between Groups	.479	2	.239	.318	.729
	Within Groups	60.300	80	.754		
	Total	60.779	82			
Valence	Between Groups	.545	2	.272	.315	.730
	Within Groups	69.044	80	.863		
	Total	69.589	82			
Specificity	Between Groups	1.733	2	.866	1.064	.350
	Within Groups	65.121	80	.814		
	Total	66.854	82			
Dominance	Between Groups	1.338	2	.669	1.317	.274
	Within Groups	40.625	80	.508		
	Total	41.962	82			
Self-understanding	Between Groups	.315	2	.158	.273	.762
	Within Groups	46.117	80	.576		
	Total	46.432	82			
Rehearsal	Between Groups	1.859	2	.930	1.439	.243
	Within Groups	51.690	80	.646		
	Total	53.549	82			

Variable	Variance	Sum of Squares	df	Mean Square	F	p value
Catharsis	Between Groups	.840	2	.420	.523	.595
	Within Groups	64.234	80	.803		
	Total	65.074	82			
Conflict	Between Groups	.003	2	.001	.002	.998
	Within Groups	69.194	80	.865		
	Total	69.197	82			
Compensation	Between Groups	.032	2	.016	.020	.980
	Within Groups	63.189	80	.790		
	Total	63.221	82			
Relationship Maintenance	Between Groups	.560	2	.280	.386	.681
	Within Groups	58.057	80	.726		
	Total	58.617	82			