

**Planning for Communication through
Rehearsal Imagined Interactions**

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Dedication

I dedicate this dissertation to my entire family back home. There is an ocean between us, but you are a part of me every day. I am who I am because I grew up among you.

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Abstract

Imagined interactions are mental representations of conversations with significant others. One function they may serve is as a rehearsal for an anticipated encounter. The process by which this rehearsal occurs is investigated using Dillard's (1990) Goals-Plans-Action model and Berger's (1997) Planning Theory of Communication. A causal model is proposed for the relationships between domain knowledge, use of retroactive imagined interactions, specificity, and discrepancy of the proactive imagined interaction. This model is tested using survey data ($N = 210$), and additional data were collected assessing characteristics of the anticipated conversations. Results and additional analyses suggest that rehearsal occurs in many different contexts, that domain knowledge moderates the relationship between retroactivity and specificity, that specificity and valence of imagined interactions influence discrepancy, and that valence and discrepancy influence the achievement of social goals. These findings are discussed in reference to the planning and imagined interactions literatures.

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Chapter 1

Background and Literature Review

People have conversations with others for a plethora of reasons. These reasons may include, but are not limited to, persuading others to do something, giving or receiving social support, getting information needed to do work, or initiating and maintaining personal relationships. What connects all these examples is that the actors enter conversations with the objective of achieving some social goal. Berger (1997) explains that social goals “involve the induction of some desired state in other people” (p. 19). Communicating in an attempt to achieve these goals is referred to as strategic communication (Berger, 1997). Communication scholars with an interest in the processes through which strategic communication occurs have investigated such issues as how strategic messages are created, what factors influence message effectiveness toward goal achievement, and what factors explain differences in individuals’ abilities to produce effective messages (Berger, 2005).

The field of interpersonal communication contains a prominent set of theories that Caughlin (2010) referred to as *multiple goals theories*. These theories consider communication purposeful: people communicate to achieve multiple goals that can conflict with each other. Dillard’s (1990) Goals-Plans-Actions model and Berger’s (1997) Planning Theory of Communication fall under this umbrella. The former theory suggests that strategic communication is the end result of a three-step process: (1) the actor becomes aware of a desire to achieve certain goals; (2) this awareness motivates and initiates a planning process that results in the formulation of a plan; (3) and this plan

serves as input for the actual communicative action (Dillard, 1990). The latter theory zooms in on the planning step and describes the cognitive structures and processes by which people generate plans in more detail (Berger, 1997).

Research on multiple goal theories has proven valuable in explaining strategic message production. Berger (2008) indicated that his theory spurred studies investigating how dimensions of plans (for example, plan complexity) relate to performance during actual communication. However, the specific processes through which people generate and formulate plans are still not fully understood and deserve further study (Berger, 2008).

The current work aims to serve as one step toward addressing this gap in the literature. Specifically, the main objective of this inquiry is to investigate the role of imagined interactions during the planning phase of a communication event. Imagined interactions refer to a cognitive activity where people make mental representations of conversations with others (Honeycutt, 2003a). One of the functions imagined interactions can serve is as a rehearsal for anticipated encounters, for example when the actor imagines what to say to persuade another person (Allen & Honeycutt, 1997). This use of imagined interactions for rehearsal appears closely related to Berger's (1997) idea of planning, and this chapter discusses this overlap in more detail.

This inquiry is structured as follows. The rest of this chapter provides a review of the imagined interactions and planning literatures, and links these two literatures. This discussion leads to the formulation of a research question and three hypotheses and the proposal of a causal model. Chapter 2 describes the study that was conducted to collect

data used to investigate conversations that subjects planned for and to test the hypotheses and the model. Chapter 3 provides the results of this study. Chapter 4 presents a discussion of its implications and limitations, the additional analyses that were conducted, and suggestions for future research.

Review of the Imagined Interactions Literature

When people use cognition to represent conversations with others in their minds, they employ an intrapersonal communication process that is referred to as an imagined interaction. Imagined interactions are mental representations of past, anticipated, or non-existent conversations with others (Honeycutt, 2003a). People report using imagined interactions on numerous topics (Edwards, Honeycutt, & Zagacki, 1988) and in a variety of contexts (Honeycutt & Ford, 2001), but they tend to primarily involve intimate partners and personal topics (Edwards, Honeycutt, & Zagacki, 1988) and to be proactive rather than retroactive (Honeycutt, Zagacki, & Edwards, 1990).

History and Definition. The imagined interaction construct as used today was first mentioned in the 1980s. Rosenblatt and Meyer (1986) initially derived the conceptualization of imagined interactions from Mead's (1934) concept of internal dialogue and symbolic interaction theories. Focusing on therapist-client relationships, Rosenblatt and Meyer (1986) suggested that identifying and understanding a client's pattern of imagined interactions could be an essential element of therapy because mental representations of conversations, whether full or fragmentary, are crucial in developing and maintaining individuals' concepts of self, others, situations, and reality. People use such internally constructed conversations not only to process past conversations or to

prepare for future conversations, but also for more complex tasks such as identifying and clarifying opposing needs and wants. They do so by comparing what one wants to do in a conversation with what one “should” do, or by imagining the advice another person who is not present (e.g. a parent) would give. Furthermore, Rosenblatt and Meyer (1986) presented evidence that suggested feelings of shame are linked to imagined interactions, since imagined interactions with members of the family of origin may result in overreliance on those family members, and that imagined interactions with a therapist may continue to influence the client after therapy is terminated. Rosenblatt and Meyer (1986) used this evidence to argue that a therapist may use this insight to work with clients to foster effective thoughts and change disruptive imagined interactions.

In the years that followed, others extended Rosenblatt and Meyer’s (1986) initial conceptualization of imagined interactions and proposed that these cognitive processes are worth of study beyond therapy populations, and provided more specific definitions. Edwards, Honeycutt, and Zagacki (1988) defined imagined interactions in communication as a “process of cognition whereby actors imagine themselves in interaction with others” (p. 24) and proposed “that imagined interactions are attempts to simulate real-life conversations with significant others” (p. 25); these attempts may precede or follow an actual interaction. Over time, Honeycutt (2003a) has refined the definition of imagined interactions to be “a process of social cognition whereby actors imagine and therefore indirectly experience themselves in anticipated and/or past communicative encounters with others” (Honeycutt, 2003a, p. 2). While the definition is

not limited to one-on-one conversations, most imagined interactions research looks at dyadic interactions, and this work limited its scope accordingly.

This research follows Honeycutt's (2003a) proposition that imagined interactions are mental representations of past or future conversations; imagined interactions refer to instances when people think about conversations that they may have, or have had, with others (i.e., these conversations may or may not actually occur). People who have an imagined interaction think about what they will say and how they will say it (or what was said and how), and also consider their interaction partner's responses. This process involves imagining the content as well as the form of the messages from both parties involved in the interaction. Imagined interactions can be used as a way for a speaker to mentally prepare for an upcoming communication event, to interpret and process a past conversation, or to replace an actual conversation when that is not possible or if the other person is unavailable.

Imagined interactions can be classified and distinguished from each other through a number of variables. There is general agreement on eight attributes that may be measured and six functions that imagined interactions may serve (Honeycutt, 2003a, 2010a). Table 1 provides the definitions for these attributes and functions. The attributes include *frequency*, *retroactivity*, *proactivity*, *variety*, *discrepancy*, *self-dominance*, *valence*, and *specificity*. The functions include *relational maintenance*, *conflict management or conflict linkage*, *self-understanding*, *catharsis*, and *compensating* for a lack of real communication when it is not possible to actually communicate.

Table 1.

Definitions for Attributes and Functions of Imagined Interactions.

Term	Definition
Attributes	
<i>Frequency</i>	How often imagined interactions occur
<i>Retroactivity</i>	The degree to which the actor thinks back to a past interaction after it has taken place
<i>Proactivity</i>	The degree to which the actor thinks about an anticipated future interaction
<i>Variety</i>	The diversity of topics and interaction partners
<i>Discrepancy</i>	The level of incongruity between the imagined and actual interaction
<i>Self-dominance</i>	The level of prominence of the self versus prominence of the imagined interaction partners
<i>Valence</i>	Pleasantness of the imagined interaction
<i>Specificity</i>	The level of detail present in the imagined interaction
Functions	
Relational maintenance	Keeping relationships alive
Conflict management or conflict linkage	Dealing with conflict episodes through imagined interactions
Self-understanding	Improving knowledge of own beliefs and attitudes
Catharsis	Emotional release of anxiety and stress
Compensation	Coping with situations where it is not possible to actually communicate with another person.
Rehearsal	Preparing for upcoming conversations

Note. Source: Honeycutt (2003a)

The sixth function, most pertinent for the current discussion, is *rehearsal*, which refers to preparing for upcoming conversations. It is important to realize that proactive imagined interactions are not solely used for rehearsal. While an actor may preview a conversation in an attempt to communicate effectively during the real conversation (i.e., use a proactive imagined interaction for rehearsal), an upcoming conversation may also be imagined in search of another function. For example, when an upcoming conversation causes anxiety, the actor may distort expectations and imagine the conversation going well and thereby relieve the stress that he/she is currently experiencing. In this case, a proactive imagined interaction is used to achieve catharsis.

While these eight attributes and six functions are generally presented and measured in the imagined interactions literature, a few other variables that have been used to describe imagined interactions warrant mentioning here. The first of these, imagery, refers to the form that imagined interactions take in the actor's mind (Edwards, Honeycutt, & Zagacki, 1989). Some people report imagined interactions that are mostly verbal; they focus on the content of the conversation. For others, imagined interactions are mostly visual, focusing on nonverbal messages, or they may reflect a mix of verbal and non-verbal elements.

Another distinction that Honeycutt (2003a) made differentiates between online and offline imagined interactions. Online imagined interactions occur with the conversation partner present during a conversation, for example when a speaker considers what response he/she may expect to his/her intended message right before sending it.

Offline imagined interactions take place when the actor is alone, before or after the conversation.

Predictors of Imagined Interactions Use. The initial stages of imagined interactions research established that imagined interactions are often employed by many actors, but also that the use of imagined interactions might be dysfunctional. Early studies on imagined interactions suggested that for lonely individuals, imagined interactions tend to be dysfunctional (Edwards, Honeycutt, & Zagacki, 1988) as loneliness is associated with imagined interactions that are more discrepant, less specific, and less varied (Honeycutt, Edwards, & Zagacki, 1989-1990). Additionally, Rosenblatt and Meyer (1986) suggested that therapists should be aware that clients might maintain and strengthen feelings of shame and overreliance on family members through dysfunctional patterns of imagined interaction use.

These insights spurred further research on the associations between imagined interaction use and other variables, and on imagined interaction use beyond therapy populations. Research suggests that actors' imagined interactions influence their actual communication in various settings of interest to communication scholars, including compliance gaining (e.g. Berkos, 2012-2013), conflict (e.g. Hample, Richards, & Na, 2012), close relationships (Honeycutt & Bryan, 2011), and public speaking (e.g. Honeycutt, Choi, & DeBerry, 2009). Furthermore, studies have found evidence of individual differences in imagined interaction use. Table 2 summarizes findings from studies that measured subjects' general tendencies in imagined interaction regardless of situation or context.

Table 2.

Research Findings Relating Personal Variables to General Use of Imagined Interactions.

Source	Variable	II Attribute/ Function	Association
Honeycutt, Edwards, & Zagacki (1989-1990)	Internal Locus of Control	Retroactivity	+
Edwards, Honeycutt & Zagacki (1989)	Sex: Female	Frequency	+
		Valence	+
		Self-dominance	+
		Visual imagery	+
Allen (1990)	Machiavellianism	Proactivity	+
		Valence	-
Honeycutt, Zagacki, & Edwards (1992-1993)	Communication Competence	Discrepancy	+
Honeycutt, Choi, & DeBerry (2009)	Communication Apprehension	Discrepancy	+
Honeycutt (1998-1999)	Anxious/ambivalent Attachment	Discrepancy	+
		Specificity	-
		Rehearsal	-
McCann & Honeycutt (2006)	Culture: American (compared to Thai & Japanese)	Frequency	+
		Self-dominance	+
	Culture: Japanese (compared to American and Thai)	Variety	+
		Boldness	+

(continued)

Table 2

*Research Findings Relating Personal Variables to General Use of Imagined Interactions
(continued)*

Source	Variable	II Attribute/ Function	Association
Honeycutt, Pence, & Gearhart (2012-2013)	Neuroticism	Frequency	+
		Catharsis	+
		Relational Maintenance	+
	Openness	Frequency	+
	Conscientiousness	Discrepancy	-
		Catharsis	-
		Relational Maintenance	-
Honeycutt, Pence, & Gearhart (2013)	Extraversion	Discrepancy	-
	Covert Narcissism	Frequency	+
		Self-dominance	+
		Specificity	+
		Discrepancy	+

Note. + indicates a positive association between the variable listed and the imagined interactions attribute/function; - indicates a negative association.

Table 2 shows that general patterns of imagined interaction attributes have been associated with demographic variables. Women have more frequent, pleasant and self-dominant imagined interactions than men and their imagined interactions are more visual than they are for men (Edwards, Honeycutt, & Zagacki, 1989). McCann and Honeycutt (2006) found an influence of culture: American students reported having more frequent and more self-dominant imagined interactions compared to Thai and Japanese students (who come from more collectivist cultures), while Japanese students reported more variety in conversation partners and more boldness than did Americans and Thais. Other differences in the ways people experience their imagined interactions have been linked to personality traits. Having an internal locus of control (believing that one controls his/her own destiny; Lefcourt, 1982) is associated with more variety, while an external locus of control (believing that destiny is the result of factors beyond personal control; Lefcourt, 1982) is associated with more retroactivity (Honeycutt, Edwards, & Zagacki, 1989-1990). People high in Machiavellianism tend to have more proactive and less pleasant imagined interactions (Allen, 1990). Imagined interactions tend to be more discrepant for those who have lower communication competence (Honeycutt, Zagacki, & Edwards, 1992-1993) and for those with higher levels of communication apprehension (Honeycutt, Choi, & DeBerry, 2009). People with an anxious/ambivalent attachment style tend to have more discrepant and less specific imagined interactions compared to those with a secure attachment style (Honeycutt, 1998-1999). Finally, a more recent study by Honeycutt, Pence, and Gearhart (2012-2013) examined the Big Five personality traits (neuroticism – a tendency toward negative affect; extraversion – a tendency toward

positive emotions; openness – a tendency toward being curious, original, and flexible; agreeableness – a tendency toward being good-natured and trusting, and conscientiousness – a tendency toward being careful and well-organized; O'Brien & DeLongis, 1996) and found that frequency of imagined interactions was associated with neuroticism and openness, and non-discrepant imagined interactions were associated with conscientiousness and extraversion.

Imagined Interactions Use by Function. One might interpret the studies cited in the previous section as collectively suggesting that individual tendencies toward imagined interaction use are indeed related to certain personality, state, and demographic variables. However, that interpretation must be made with extreme caution, as there is a potentially serious concern with measuring a subject's general tendency toward imagined interaction use: doing so implies the assumption that the attributes of a person's imagined interactions should be similar across all six functions. In other words, it would be assumed that someone who tends to frequently use retroactive imagined interactions to process conflict episodes (the conflict-linkage function) should also frequently use retroactive imagined interaction toward catharsis, rehearsal, or any other function.

Bodie, Honeycutt, and Vickery (2013) suggested that while this assumption has guided previous imagined interactions research, it had never explicitly been tested. Through two studies, they analyzed the nature of the attributes and functions. One study compared the attributes in each function. The findings suggested that the strength of the attributes of a person's imagined interaction use changes across functions. Pertinent to the current work was that imagined interactions that were used for rehearsal were more

proactive, less retroactive, and more discrepant than imagined interactions used for any of the other functions. Additionally, imagined interactions used for rehearsal were higher in self-dominance and lower in specificity than imagined interactions used toward the compensation and relational maintenance functions (Bodie, Honeycutt, & Vickery, 2013).

Bodie, Honeycutt, and Vickery (2013) also conducted a canonical correlation between the attributes and functions that yielded three dimensions containing various sets of functions and attributes:

- The first dimension suggested a link between using imagined interactions for the rehearsal, self-understanding, conflict management, relational maintenance and catharsis functions and lower levels of proactivity, retroactivity, specificity, frequency, and variety.
- The second dimension suggested an association between the compensation function and lower levels of self-dominance, discrepancy, frequency, and valence, but higher levels of variety.
- The third dimension linked lower use of the relational maintenance and conflict management and higher use of the catharsis function with higher levels of frequency and lower levels of self-dominance.

Bodie, Honeycutt, and Vickery (2013) interpreted their findings as suggesting “a multivariate association at the most fundamental level – that is, the functions can be described by the various attributes” (p. 18). This implies that the pattern of a person’s

imagined interaction attributes will likely look different as the function(s) that he/she aims to achieve with the imagined interaction changes.

In all, this suggests that the most promising way of furthering research on individual tendencies and imagined interactions is to forego attempts to measure general imagined interaction use across all functions and instead focus on function-specific investigations. Eventually, this should help identify by function what attributes play a role and how variation in those attributes relates to other variables.

The Conflict Linkage Function. Of the six imagined interactions functions, conflict linkage currently has the most complete base of research and theorizing in the form of Honeycutt's (2003-2004) Conflict Linkage Theory. This theory provides a set of axioms and theorems (see Appendix A) that explain and predict how imagined interactions help people interpret, manage, and cope with conflict episodes. With these propositions, Honeycutt (2003-2004) suggested that people maintain their interpersonal relationships through imagined interactions. Conflict is a major theme in interpersonal relationships, and people process conflict episodes in their head with their imagined interactions. By imagining past and anticipated arguments, people keep their recurring conflicts alive between the actual conflict episodes. In other words, the imagined interactions serve to link conflict episodes together, even when the partner is not present. Over time this process can cause rumination when negative imagined interactions build on each other, or positive outcomes when people imagine positive interactions.

Allen and Berkos' (2005-2006) study supports Conflict Linkage Theory, as subjects reported routinely experiencing both retroactive and proactive imagined

interactions about conflict episodes with various interaction partners. Additionally, the work of Hample and colleagues on serial arguing (Hample & Allen, 2012; Hample & Cionea, 2012; Hample & Krueger, 2011; Hample, Richards, & Na, 2012) indicated that the way people cognitively experience conflict episodes has more to do with the imagined interactions they had between conflict episodes than with what actually occurred during those episodes.

The Rehearsal Function. While Conflict Linkage Theory (Honeycutt, 2003-2004) provides prediction and explanation for the conflict linkage function, literature on the other imagined interactions functions lacks such theories. The relational maintenance function has been covered with extensive literature reviews, such as Honeycutt and Bryan's (2011) book chapter on relational maintenance through imagined interactions. For the other functions, however, there appears to be less work that structurally combines theorizing with study findings. This state of affairs may be a natural consequence of a relatively small and young research area or because researchers have chosen to investigate certain functions over others, or it might be that the need to theorize around specific functions was not felt until Bodie, Honeycutt, and Vickery (2013) published their study. Regardless of the reason, however, it is particularly noteworthy that the rehearsal function has not received as much attention as conflict linkage or relational maintenance.

Rehearsal is a very common reason for people to use imagined interactions. In fact, Honeycutt, Vickery, and Hatcher (2013) found rehearsal to be the most commonly reported function when they asked subjects to keep a diary of all their imagined interactions for 79 days.

Recent studies on rehearsal through imagined interactions (Berkos, 2012-2013; Choi, Honeycutt, & Bodie, 2013; Van Kelegom & Levine, 2013) indicate current scholarly interest in better understanding this function, and the rehearsal function appears to be a very promising and useful area to advance. Therefore, the current inquiry focuses specifically on rehearsal through imagined interactions and aim to further knowledge about how that rehearsal occurs and how it leads to message production.

Dillard's (1990) Goals-Plans-Action model and Berger's (1997) Planning Theory of Communication provide the theoretical foundation for this investigation as they explain how messages are produced. While their propositions do not directly refer to imagined interactions, Berger (1997) did consider the extant imagined interactions literature in formulating his theory. Berger (1997) acknowledged that proactive imagined interactions likely influence what happens during conversations, but he considered the evidence available at the time insufficient to make definitive claims about imagined interaction use during planning: "[a]lthough it is clear that individuals imagine interactions with others, and these imagined interactions can produce discernable effects, we have relatively little idea how these anticipatory inferences influence communicative action and how long they survive once the interaction has begun and new information is acquired" (p. 122-123). This quote suggests that rehearsal imagined interactions do influence the actual conversation, but how that happens was unknown at the time Berger (1997) phrased his theory. While Berger (1997) excluded rehearsal imagined interactions from his theory, this function of imagined interactions does appear to be part of the message production process, as the discussion in the following sections will show.

Review of the Literature on Message Production

Caughlin (2010) suggested that multiple goals theories fit together as they all make three basic assumptions. First, they assume that people communicate for a reason; in other words, communication is strategic or purposeful. Second, they assume that at any given time people simultaneously try to achieve multiple different goals. Third, these multiple goals can conflict with each other: attempting to achieve one goal may make it impossible to achieve another goal at the same time.

These assumptions suggest that the process of message production starts when an actor intends to achieve one or more social goals. Dillard's (1990) Goals-Plans-Action model is perhaps the best-known and most influential work in this area. Averbeck and Hample (2008) refer to it as "a generally accepted understanding of the message production process since its inception" (p. 396). It explains how actors turn social goals into communicative behavior.

Goals, Plans, and Communicative Behavior. The Goals-Plans-Action model (Dillard, 1990) was initially formulated as an outline for a theory that explains how interpersonal compliance-gaining attempts occur. Dillard (1990) proposed that compliance-gaining attempts are instances of purposeful behavior. His model suggests people generate purposeful behavior through a process with three main steps:

- first, the actor becomes aware of social goals (goal step);
- second, this awareness leads to the formulation of a plan (plan step);
- third, that plan is translated into behavior (action step).

In the action step, the actor communicates a compliance-gaining attempt. The other person may comply, in which case the attempt is considered successful. If, on the other hand, the desired compliance is not immediately gained, the actor adapts his/her communicative behavior. This adaptation may consist of selecting an alternative plan or the actor may reassess and re-weigh the goals entirely and thereby start the entire process anew. Figure 1 visualizes this process as Dillard (1990) originally proposed it.

Figure 1 shows that the message production process starts when an actor becomes cognitively aware of an influence goal. Goals are “future states of affairs which an individual is committed to achieving or maintaining” (Dillard, 1990, p. 43). Goals may be primary or secondary. Primary goals are the influence goals that explain why the actor wants to communicate in a specific situation. Secondary goals deal with concerns regarding how the actor wants to communicate his/her message. These secondary goals set constraints for the actor’s communication and typically remain activated across conversations, as they deal with concerns such as politeness and social appropriateness. Often, primary goals trigger a desire to approach while secondary goals act to inhibit this desire.

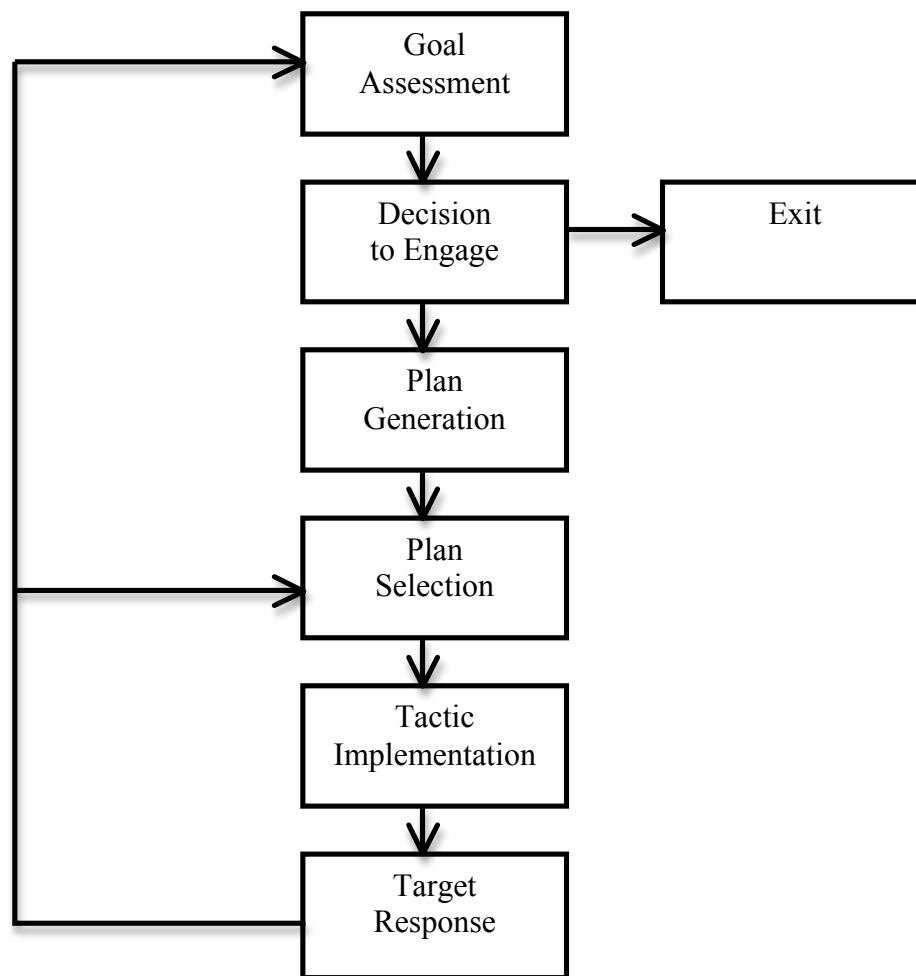


Figure 1. Goal-driven model of interpersonal influence.

The process starts when the actor becomes aware of one or more social goals that he/she wants to achieve. If the actor determines his/her desire to reach these goals is high enough to engage, the actor generates one or multiple plans. After selecting the plan that is most likely to lead to goal achievement, the actor communicates with the other party, implementing the selected tactic. Depending on the target's response, the actor may need to select a different plan or reassess his/her goals entirely. Adapted from "A Goal-Driven Model of Interpersonal Influence," by J. P. Dillard, 1990, in: J. P. Dillard (Ed.), *Seeking compliance: The production of interpersonal influence messages* (pp. 41-56). Scottsdale, AZ: Gorsuch Scarisbrick, p. 51, and from "A Test of the Initial Processes of the Goal-Planning-Action Model of Interpersonal Influence," by C. R. Hullett, 2004, *Communication Studies*, 55, 286-299.

Goals can vary on the level of abstraction at which they exist in the actor's mind. For example, 'being happy' is a very abstract goal, while 'working fewer hours' and 'negotiating with my boss so I have Fridays off' are progressively more concrete goals. Goals can also become more or less important over time.

Aware of his/her goals, the actor considers whether *both* the importance of the goal *and* the discrepancy between the current and desired states of affair are large enough make an effort to achieve those goals. This consideration is referred to as the decision to engage (Dillard, 1990). Plan generation is initiated only after the decision to engage has been made (Hullett, 2004).

Having made the decision to engage, the actor formulates one or multiple plans that serve as paths to achieving the goals. Berger (2008) offered the following definition of plans: "hierarchical knowledge structures that represent goal-directed action sequences" (p. 91). So, plans are a cognitive representation of the actions that need to take place to achieve the goal. This definition suggests there may be overlap between plans and imagined interactions. Plans are said to represent action sequences. When a plan involves communicating with another person the actions in the sequence should refer to communicative behavior, which may include speaking, listening, and the use of non-verbal communication. Proactive imagined interactions also refer to mental representations of these types of communicative behavior. Consequently, it appears that, within the message production process, imagined interactions occur during the planning stage.

Similar to goals, plans can differ on the level of abstraction at which a plan is formulated. Berger (1988) indicated that “[p]lans vary in their level of abstraction. Highly abstract plans can spawn more detailed plans. Plans can contain alternative paths for goal attainment from which the social actor can choose” (p. 96). For example, ‘I will talk to my boss tomorrow’ is a more abstract plan than ‘first I will talk socially and assess his mood and then I will ask about getting Fridays off’. Even more concrete plans are those that include consideration of specific sentences to say.

In addition to hierarchy, plans can vary on two other dimensions. The first is complexity, which refers to the level of detail and the number of contingencies contained in the plan (Berger, 1997). Plans become more complex when actors seek more information about the conversation partner and situation before and during planning (Berger & DiBattista, 1992). Second, plans can vary on completeness, which refers to the degree to which the plan is fully fleshed out (Dillard, 1990). These dimensions appear closely related to the specificity function of imagined interactions, which refers to the level of detail present in the imagined interaction (Honeycutt, 2003a). Plans that are more complex and more complete contain more details about an anticipated conversation. This suggests that these dimensions are akin to the specificity dimension of imagined interactions.

Goals and plans occur cognitively but they are executed physically in the form of what Dillard (1990) referred to as action: instances of purposeful behavior. Plans do not necessarily translate one-on-one to communicative action. Variation between plans and actions may occur when the relative weight of each goal starts to change; this may even

occur during plan execution so that a previously unimportant goal becomes dominant while the conversation takes place. Variation may also be the result of features of the social situation that impede execution of the planned actions, or in situations where limited cognitive resources make it impossible to execute the actions as planned.

To summarize, the Goals-Plans-Action model suggests the steps by which message production occurs. Its main contribution has been the emphasis on goals directing communicative behavior. While the theory has been criticized for its conceptualization of the goal construct (Dillard & Schrader, 1998; Palomares, Li, & Grasso, 2013; Shepherd, 1998), the model remains at the forefront of message production research. A limitation to the model is that it does not indicate how each of its steps occurs. The model tells us that there are cognitive processes labeled as plan generation and plan selection that follow the decision to engage, but further detail is needed to understand these processes and the role of imagined interactions therein. The next section reviews Berger's Planning Theory of Communication, which considers these processes in more depth.

Planning Theory of Communication. Berger's (1997) Planning Theory of Communication was formulated to describe the cognitive structures and processes by which humans plan for strategic communication. This scope overlaps with the plan generation and plan selection steps of Dillard's (1990) model. Berger (1997) indicated that rehearsal imagined interactions are likely part of these processes as well. Through 11 propositions and 8 accompanying corollaries (see Appendix B), the theory explains that strategic communication is guided by the social goals that actors aim to achieve. To get

from those goals to communicative action, a planning process takes place. The term planning thus refers to a multi-staged process through which plans are generated as the end product (Berger, 1997).

Berger (1997) explained that the theory assumes that the actor has completed goal assessment and made a decision to engage. So, the starting point of this theory is when an actor sets out to generate a course of action toward achieving the desired social goals. The actor first searches long-term memory to determine if an appropriate already-formulated or canned plan is available. Hample, Gordy, Sellie, Wright, and Zanolla (2008) refer to a message repertoire that provides content that the actor can directly use or adapt if needed. These repertoires are larger for people with high motivation and ability and they influence elements of the message that the actor communicates (Waldron, 1990).

If an appropriate plan is accessible, the actor will take the route of least effort and proceed with that plan. The effort mentioned here is cognitive: Beaty and Heisel (2007) found cortical activity during planning to be significantly lower when subjects could use existing verbal plans without modification as compared to situations where they had failed before and consequently realized existing plans were ineffective and they had to generate a new plan. Actors may also take a route of least effort and limit their creative planning activity when situational or cognitive resource constraints inhibit extensive planning activity.

If no appropriate plan is directly available, the actor will use a combination of current information inputs and potentially relevant plans from long-term memory to

formulate a new plan in his/her working memory. Sources of knowledge that may contribute to this process of plan formulation include past or hypothetical episodes, role models, and instructions (Berger & Jordan, 1992). These sources of knowledge promote efficiency for the actor, as they lower the amount of mental effort required for planning. It should be noted that accessing and reviewing past episodes implies the use of retroactive imagined interactions. It appears that rehearsal involves both retroactive imagined interactions (when past episodes are recalled and used as an information source toward plan formulation) and proactive imagined interactions (when the actor thinks ahead to the anticipated conversation).

It was mentioned earlier that plans may be considered in terms of plan complexity. Plans are considered more complex as the level of detail (the concreteness of the actions) and the number of contingencies included in the plan increase. Plan complexity will be higher when the desire to reach the social goal increases, when the actor has higher levels of domain knowledge, and when the actor's desire to achieve meta-goals of efficiency and social appropriateness decreases (Berger, 1997).

Differences in plan characteristics appear to influence actual communication. Waldron and Applegate (1994) found higher levels of plan complexity, completeness, and sophistication associated with the use of more integrative conflict tactics (jointly creating solutions or accepting the partner's position). Furthermore, concrete plans that include contingencies are typically judged more effective than abstract plans characterized by vagueness (Waldron, 1997). Interestingly, Miller and Samp (2007) found no differences in plan complexity between subjects planning for intra-cultural or

inter-cultural situations despite the apparent differences in domain knowledge. It may be that a stranger is treated as a stranger regardless of cultural similarities and differences.

The outcomes of plan characteristics can be far-reaching. Wilson (2000) suggested that physically abusive parents may differ from non-abusive parents on variables including plan complexity, plan confidence, and their ability to modify plans. Some support for this assertion came from Strickland and Samp (2013), who found a curvilinear relationship between plan complexity and corporal punishment. Compared to parents with either high or low levels of plan complexity, parents with moderate levels were less likely to believe that corporal punishment is effective and less likely to oppress their children's power and independence.

Once the actor translates the plan into communicative behavior, the initial planning process is complete. However, the actor may revisit the planning stage during the conversation if he/she fails to reach the goal. Such failure may occur due to events external to the interaction itself (for example, when an interaction is thwarted because a third person enters the room) or due to events internal to the interaction, as is the case when the interaction partner resists the actor's persuasive attempt. When faced with failure, the actor returns to the planning process and adapts the plan that was initially employed (Berger, 1997).

Since plans are hierarchically organized (Berger, 1988), the adaptation occurs at a level of abstraction appropriate to the specific cause of the failure. Initially, internal events likely results in plan adaptations at a low level of hierarchy, but if the interaction partner continuously blocks goal achievement a more abstract adaptation likely occurs;

this is referred to as the hierarchy principle (Berger, Knowlton, & Abrahams, 1996). For example, an initial refusal may lead the actor to try the same strategy again but with a louder or clearer voice. Repeated refusals may lead the actor to select an entirely different compliance-gaining strategy. An illustrative study by Aune, Levine, Park, Asada, and Banas (2005) found that subjects used more repetition when giving directions to a person from a different culture than to a person from the same culture. The authors suggested that illustrated low level adaptations, such as repetition, are a relatively low-effort change to the plan.

Berger (1997) suggested a few other variables that influence at what hierarchical level adaptations occur. Higher-level adaptations occur earlier for actors with higher levels of goal desire. Additionally, repetitive thwarting of plans likely lead to the generation and selection of plans that are progressively less socially appropriate, especially when the goal is considered important, a mechanism that Afifi and Lee (2000) found to occur when sexual resistance messages did not achieve the desired effect. This also aligns with the rebuff phenomenon (Hample & Dallinger, 1998): when facing an unelaborated refusal without justification, compliance seekers tend to respond more rudely and aggressively than their initial message. Barnett, Ropers-Huilman, and Aaron (2008) found further support for the suggestion that student activists were more likely to use negative strategies when the school administration created obstacles for the activists. Furthermore, failure to achieve a goal likely produces negative affect. If this occurs repeatedly, the adapted plans likely become progressively less complex (Berger, 1997).

A final element to the Planning Theory of Communication is action fluidity, which refers to the smoothness (both verbal and nonverbal) with which a plan is enacted. Indicators of low action fluidity include stuttering, verbalized interruptions such as saying ‘ehm,’ and the use of self- or object-adaptors (touching the self, for example stroking one’s hair, or touching an object such as one’s keys). When goals are thwarted, action fluency is mainly affected for those actors whose initial plans contained no or many alternative actions, and less for those actors who had planned a small number of alternative actions. This curvilinear relationship between plan complexity and action fluidity is amplified when alternative actions are less directly available from memory (Berger, 1997).

Simply increasing time spent on planning is not sufficient to achieve effective communication. Bates and Samp (2011) conducted an experiment and found no differences in conflict resolution between couples who were instructed to individually plan before discussing either a conflict or a problem-solving task and couples who did not plan for their discussion. The takeaway is that the potentially beneficial effects of planning may depend on characteristics of the plan or exactly what occurs during the planning process.

A decade after proposing his theory, Berger (2008) stated that the theory is a formulation which informs investigations on the relationships between the dimensions of plans and actual communicative performance, such as the studies cited in the previous paragraphs. Interestingly, in the same review, Berger (2008) also indicated that the actual processes by which people formulate these plans have not been researched as often as the

effects of plan characteristics. That is surprising because uncovering those processes can help explain why a person produces effective or ineffective plans. In other words, attention was focused on plans and their outcomes, but not their predictors. Consequently, it remains unclear exactly what occurs between the decision to act and the formulation of the plan that the actor follows as he/she communicates.

That state of affairs brings us back to the conclusion of the review of the imagined interactions literature. Similar to planning, use of the imagined interactions rehearsal function has been studied, but how exactly that rehearsal occurs has not been fully determined. The objective of the current inquiry is improving the understanding of imagined interactions as they are used for rehearsal. The objective can be phrased as the following research question:

RQ1: How do people use imagined interactions to rehearse for anticipated encounters?

The next section combines the literatures on planning for communication and rehearsal imagined interactions to help unfold how these processes take place.

Imagined Interactions during the Planning Process

When rehearsal through imagined interactions occurs during initial planning (i.e., before the conversation), those imagined interactions are considered offline as the other party is not present. The Planning Theory of Communication makes predictions (see Appendix B) about this phase in propositions 1-5. These propositions suggest that imagined interactions could be an element of planning processes. Propositions 6-11 describe what happens during the conversation, and any imagined interactions that occur

at that time are considered online, as the conversation partner is present. The current investigation focuses specifically on offline imagined interactions that take place before an anticipated encounter and are used toward rehearsal.

There is consistent evidence that people regularly use offline imagined interactions to rehearse conversations, and that doing so benefits the actor as rehearsal is associated with more effective communication. Honeycutt, Vickery, and Hatcher's (2013) study found many subjects indicating they use imagined interactions to rehearse, either as the sole function or in combination with at least one other function. Some specific contexts where research established the use of rehearsal imagined interactions include revealing a secret (Richards & Sillars, 2014), preparations to study abroad (Petress, 1995), and consumer complaining (Bolkan & Goodboy, 2011).

Various studies support the assertion that rehearsing through imagined interactions is beneficial for actual communication. The imagined interactions rehearsal function is associated with reduced use of object adaptors during persuasive efforts (Allen & Honeycutt, 1997), with improved verbal fluency during speeches (Choi, 2007), with intrapersonal communication satisfaction for Thais (but not for Americans or Japanese; McCann & Honeycutt, 2008), with more use of prosocial strategies when making requests (Berkos 2012-2013), and with an improved ability to develop online interactions into actual relationships (Bryan, 2008). Collectively, these findings suggest that rehearsing through imagined interactions can improve communication effectiveness, but they do not necessarily explain under which conditions that is the case. The next section discusses the role of the discrepancy attribute in rehearsal imagined interactions.

Discrepancy. The discrepancy attribute, which refers to the degree to which the actual conversation differs from what was imagined, appears to be key toward understanding rehearsal imagined interactions. Bodie, Honeycutt, and Vickery (2013) found that, compared to the other functions, rehearsal imagined interactions were lowest in discrepancy. Furthermore, the literature suggests that rehearsal through imagined interactions benefits those people who achieve low discrepancy between what they rehearsed and the actual conversation as it is associated with more positive emotions (Zagacki, Edwards, & Honeycutt, 1992), with higher relational quality (Honeycutt, 2008-2009), more use of other-involvement strategies and affinity (Honeycutt & Patterson, 1997), less anxiety during the actual conversation (Zagacki, Edwards, & Honeycutt, 1992), more use of prosocial strategies (Berkos 2012-2013), and fewer object adaptors during speaking (Allen & Honeycutt, 1997).

Work on imagined interactions before and after conflict episodes suggests there are negative outcomes associated with having discrepant imagined interactions. The eighth theorem of Honeycutt's (2003-2004) conflict-linkage theory (see Appendix A) suggests that rumination about conflict distorts reality. Consequently, those who ruminate are more likely to experience conflict episodes discrepant from the imagined interactions that occurred in anticipation of those conflict episodes. This may occur because conflict imagined interactions tend to be verbal and unpleasant, and imagined interactions that are mainly verbal tend to be more discrepant than visual and mixed imagined interactions (Zagacki, Edwards, & Honeycutt, 1992). When rumination happens, the imagined interactions may build upon each other. Hample, Richards, and Na (2012) found that the

imagined interactions gain a consistent character on their own, where previous imagined interactions are more predictive of current ones than any actual conflict episode that occurred in between the imagined episodes. Hample, Richards, and Na (2012) suggested this means that imagined interactions have more influence on actual communication than vice versa. Additionally, Wallenfels and Hample (2010) found associations between discrepant imagined interactions and feelings of persecution, stress reactions, and negative relational effects. Considering this evidence, it appears that positive or negative effects of rehearsal imagined interactions relate to the level of discrepancy that the actor achieves.

This warrants a consideration of predictors of discrepancy. Higher levels of discrepancy tend to occur more for people with an anxious attachment style as compared to those with a secure attachment style (Honeycutt, 1998-1999; Honeycutt & Kelly, 1996), for people low in communication competence (Honeycutt, Zagacki, & Edwards, 1992-1993), high in loneliness (Honeycutt, Edwards, & Zagacki, 1989-1990), low in extraversion (Honeycutt, 2003b), and high in communication apprehension (Honeycutt, Choi, & DeBerry, 2009). Honeycutt, Pence, and Gearhart (2013) found low discrepancy associated with conscientiousness and extraversion, and inversely associated with narcissism. Culture, however, does not appear to influence discrepancy (McCann & Honeycutt, 2006). For marital orientation (a construct that classifies married couples according to their ideology, interdependence, communication and conflict; Fitzpatrick, 1977), Honeycutt and Wiemann (1999) found that those with a traditional orientation had

more discrepancy than independents and separates, but Gendrin and Werner (1996-1997) did not find such a difference between these groups.

The overall picture that emerges suggests insecure, introverted and apprehensive communicators have more discrepant imagined interactions than those who are more comfortable with communication. Related to this discrepancy, these insecure people find conversations anxiety-inducing, which seems to create a cycle of further discomfort with communicating. Consequently, these people may avoid communication, which limits their exposure to conversations and increases loneliness. As a result of this avoidance, they have a smaller set of previous experiences to rely on when rehearsing for upcoming conversations (Honeycutt, 2003-2004).

Hypotheses

The previous section suggests that rehearsal imagined interactions are better understood when differences in the discrepancy levels that actors experience can be explained. The following sections identify three direct and indirect predictors of discrepancy (specificity, domain knowledge, and retroactivity) and present hypotheses based upon this literature.

Research on the Planning Theory of Communication investigated the outcomes of plan complexity (Berger, 2008). Plan complexity refers to the level of detail (the concreteness of the actions) in the plan and the number of contingencies included in the plan (Berger, 1997).

In general, the takeaway from studies investigating plan complexity is an association between higher levels of plan complexity on the one hand and more plan and

communication effectiveness on the other hand (Berger, 2002, 2005). The road to more effective communication is not to simply spend more time and effort on planning activity. Rather, the degree to which complexity is achieved in these efforts appears to be the key to effective communication (Burgoon, Berger, & Waldron, 2000). Waldron and Applegate (1994) found the degree to which a plan completely specifies all its elements is associated with differences in communicative behavior. For example, clients in a job-training program who generated detailed plans were more likely to gain employment than clients whose plans lacked detail (Waldron & Lavitt, 2000). Furthermore, more effortful message creation processes are associated with more positively evaluated communication attempts (Guntzviller & MacGeorge, 2013).

Looking at the plan complexity construct from the perspective of the imagined interactions literature indicates that plan complexity appears closely related to the specificity attribute of imagined interactions. Specificity also refers to the level of specification and detail that an actor achieves with his/her cognitive activity (Honeycutt, 2003a). As was the case for discrepancy, the specificity of imagined interactions appears associated with a person's demeanor towards communicating with others. The apprehensive and insecure communicator tends to have less complex plans, and thus less specific imagined interactions, than those more comfortable with communication. This is evidenced by studies that found more complex plans by adolescents who were lower in depression and anxiety (Dickson & MacLeod, 2004) and by adults higher in subjective well-being (MacLeod & Conway, 2005). Considered in combination with evidence that extraverted people experienced lower discrepancy in their imagined interactions

(Honeycutt, Pence, & Gearhart, 2012-2013), it appears that people who have specific imagined interactions about an anticipated encounter are also those whose imagined interactions are least discrepant.

One suggested explanation for the relationship between specificity and discrepancy is that higher plan complexity allows the actor to more effectively adapt to the actual conversation (Honeycutt & Choi, 2008). For most people, specific consideration of the upcoming encounter should allow the actor to better predict how the conversation will go. At least one exception must be considered. Honeycutt, Pence & Gearhart (2013) suggested that one problematic outcome of narcissism is that narcissistic people have specific but discrepant imagined interactions. While they carefully consider their own messages, narcissists are likely less concerned with predicting how the other person will communicate and therefore less accurate (i.e. more discrepant) regarding the actual conversation. Non-narcissistic people, on the other hand, consider the other party during planning and be more accurate as their plan becomes more specific.

The overall body of evidence discussed here leads to the following proposition about the relationship between specificity and discrepancy:

H1: Specificity of the proactive rehearsal imagined interaction has a negative influence on its discrepancy.

Predictors of Specificity. The next question to answer in understanding the process of rehearsing through imagined interactions is what influences the level of specificity that an actor achieves. Berger, Karol, and Jordan (1989) suggested that planning ability is probably not a context-independent trait-like quality, in the sense that

some people would be expert planners in all situations. Instead, although people develop the social-cognitive sophistication required for more complex plans over time as they grow up (Marshall & Levy, 1998), plan complexity at a given time appears to depend on the specific goals sought in the anticipated interaction (Berger & Bell, 1988).

Propositions 2-5 of the Planning Theory of Communication suggest that plan complexity increases when the social goal is more desired and when the actor can rely on a more extensive base of strategic and specific domain knowledge (Berger, 1997). The available evidence supports the assertion of proposition 3, which states that plans are more detailed when the actor has more domain knowledge related to the situation at hand. Higher levels of domain knowledge allow for the development of more complex cognitive rule schemas based on deeper psychological knowledge about the type of conversation (Meyer, 2000; Wilson, 1995).

Additionally, domain knowledge can be related to specific knowledge about the conversation partner that results from previous conversations with that person (Mongeau, Serewicz, & Therrien, 2004). A better understanding of the partner's needs and goals should allow plans that the actor checks for effectiveness and appropriateness (Lahey & Canary, 2002). Domain knowledge thus refers to the degree to which the actor has previously been exposed to the type of conversation at hand and the conversation partner or people similar to the conversation partner. The plan that is generated for strategic communication is the product of cognitive processes and activation of processes from memory (Keck & Samp, 2007). Such processes are likely more sophisticated and complex as domain knowledge increases.

Furthermore, Proposition 1 of the Planning Theory of Communication suggests that people first activate long-term memory to check if a canned plan is readily available. With more domain knowledge, the actor is more likely to have a canned plan ready (proposition 1). These canned plans may be considered cognitive scripts for communicating, and imagined interactions aid in the cognitive development of such scripts (Honeycutt & Bryan, 2011; Honeycutt, Vickery, & Hatcher, 2013). Afifi and Steuber (2009) suggested such scripts are used when people plan to reveal a secret. Actors may apply their most basic script for secret revelation first, and over time these scripts become habituated and are used until the script fails and a more complex plan must be generated. Over time, such processes lead to building a repository containing more complex scripts; similar processes likely occur in contexts other than secret revelation. Gotcher and Honeycutt's (1989) investigation of forensic tournament participants suggested higher levels of past success in such tournaments to be associated with lower discrepancy between their rehearsal imagined interactions and the tournament. However, since Gotcher and Honeycutt (1989) did not measure the specificity of those imagined interactions, the possibility that this relationship between domain knowledge and discrepancy is mediated by specificity, as suggested in the current work, remained unexplored.

The above discussion suggests that the level of specificity a person is able to achieve in his/her proactive rehearsal imagined interaction depends on the actor's domain knowledge about the type of conversation at hand:

H2: Higher levels of domain knowledge lead to higher specificity in the proactive rehearsal imagined interactions.

In addition to the effects of domain knowledge, plan complexity also increases when more effort is put into planning (Berger & DiBattista, 1992). The anticipation of conversations leads to cognitive activity (Cloven & Roloff, 1995). Higher levels of cognitive elaboration may be triggered during planning when certain goals are activated (Samp & Solomon, 2005); more brain activity also occurs when an actor has to adapt his/her plan versus being in a situation where canned plans could be enacted (Beatty & Heisel, 2007). Higher levels of cognitive elaboration during planning tend to lead to generating more complex and more specific plans (Shi, 2013). This interpretation fits Waldron and Applegate's (1994) findings that interpersonal cognitive complexity (the number of constructs and the intricacy by which actors organize those constructs as they perceive the behavior of others) has positive associations with planning specificity, complexity, and sophistication. People whose cognitive processes are more complex likely generate more specific plans in anticipation of an important conversation.

The Planning Theory of Communication suggests that the cognitive processes triggered by anticipating a conversation include the review of past conversations; that review serves as a source for plan generation (Berger, 1997). Those past conversations may be reviewed fully and with lots of detail or that process may occur fragmentarily (Berger & Jordan, 1992). This implies the use of retroactive imagined interactions, where previous conversations that might be similar to the anticipated encounter are reviewed and interpreted. Barnett, Ropers-Huilman, and Aaron (2008) refer to this as

postconversational planning, where feedback acquired during the conversation is reviewed to adapt existing strategies or generate novel strategies as part of formulating a new plan for the next conversation.

The link between imagined interaction activity and plan complexity is further evidenced by Choi's (2007) study that suggested imagined interactions training and induced mental rehearsal lead to the formulation of a higher number of plans, and by Gotcher and Honeycutt (1989), who found negative associations between imagined interactions frequency and discrepancy. In other words, more imagined interaction use can result in more specific plans and in less discrepancy from the actual conversation.

Taken together, these findings suggest that retroactive imagined interactions are an element of the cognitive processes that occur during planning, and that plan specificity is higher when more cognitive elaboration occurs. Higher levels of retroactive imagined interaction use should thus allow the actor to generate a more detailed plan for the anticipated conversation:

H3: Higher levels of retroactive imagined interaction use during planning lead to higher specificity in the proactive rehearsal imagined interactions.

Two predictors of specificity of the proactive imagined interactions are thus proposed: domain knowledge and retroactivity. These two predictors may be associated with each other, but it is important to note that, in itself, having domain knowledge does not trigger retroactive imagined interaction activity. Imagined interaction use may be treated as a trait-like construct when considering a person's general tendency toward this cognitive activity (Honeycutt, 2003a). Those who are prone to review past conversations

may do so even when they don't have much specific domain knowledge available (instead, they may consider conversations that don't directly seem related). Therefore, no causal effect between these two predictor variables is proposed here. However, some association between the two is certainly possible, since the degree of domain knowledge provides many or few past encounters to consider, precluding those without domain knowledge from accessing and reviewing past conversations.

Figure 2 shows the causal model¹ that puts the hypotheses together. This model suggests that, when faced with an anticipated conversation that requires planning, an actor assesses past conversations and uses his/her domain knowledge with the type of conversation at hand to determine if a plan is readily available or a new plan must be generated. Having a higher amount of domain knowledge available from past experiences and higher levels of retroactive imagined interaction activity both allow the actor to generate more specific proactive imagined interactions. As specificity rises, the level of discrepancy between what was imagined and the actual conversation decreases.

¹ Note that in spite of the name 'causal modeling,' one cannot prove causality with cross-sectional data, regardless of the sophistication of the modeling technique used. Data collected for the current study were cross-sectional in nature. The technique of path analysis used in the current study does allow researchers to test whether theories are consistent with the available data.

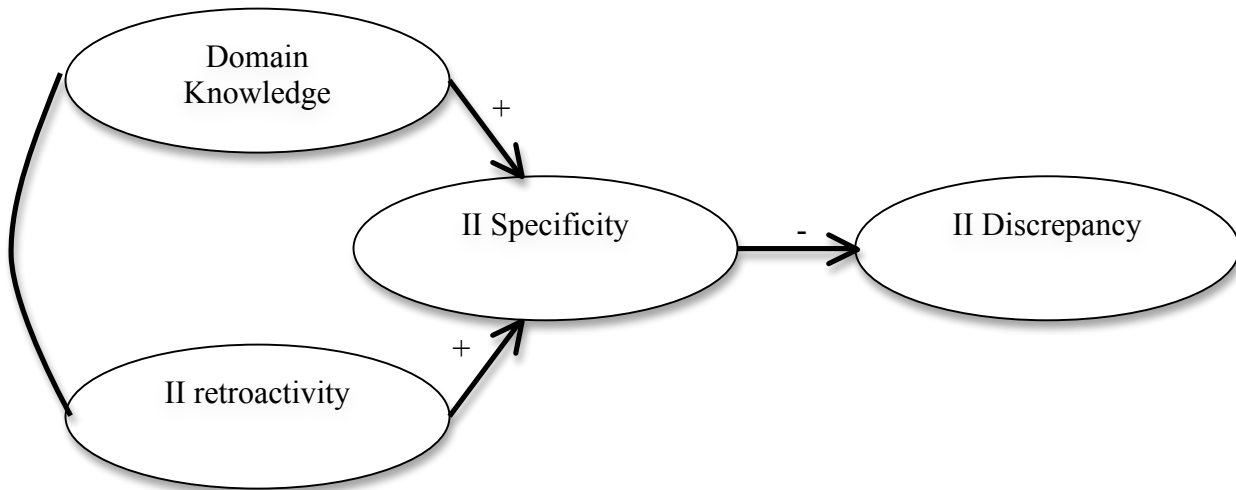


Figure 2. Proposed Causal Model.

The model suggests that, during planning, the level of specificity by which the actor imagines an anticipated conversation is influenced by the actor's level of domain knowledge and the degree to which the actor considers past conversations that were similar (retroactivity). Higher levels of domain knowledge and higher levels of retroactivity should lead to higher levels of specificity as they provide the actor with more things to consider when anticipating the upcoming conversation. In turn, higher levels of specificity should lead to lower levels of discrepancy, as actors who imagine the upcoming conversation in more detail are better able to predict how the conversation will actually unfold.

The next chapters present a survey that was conducted to collect data about people's planning efforts in anticipation of an important conversation. These data are used to test the hypotheses and evaluate the proposed causal model through a path analysis. Path analysis is a technique that allows researchers to evaluate path models, which are structural models that illustrate a set of connected hypotheses indicating an order of effects (Kline, 2011). Path analysis is a special instance of structural equation modeling that is appropriate when the variables measured do not have latent variables (i.e., variables are observed through a single-indicator measurement and the variables are not conceptualized as having multiple dimensions that are separately measured; Kline, 2011). Evaluating these path models through path analysis is useful toward testing propositions that were theoretically deduced (versus exploratory analyses), as path analysis yields insight in the comparative strength of effects that different constructs have on other constructs, and it allows evaluation of direct and indirect effects (Lleras, 2005). In the case of the model proposed here, the comparative strength of domain knowledge and retroactivity on specificity, and their indirect effect on discrepancy are tested.

An important consideration in path analysis is the sample size. Kline (2011) indicated that path analysis is a technique that falls under the structural equation modeling umbrella and discussed the issue of sample size. He suggested that the statistical estimates done in structural equation modeling make certain minimum requirements for the sample size to avoid inaccurate results. Kline (2011) made two recommendations. The first suggested that the ideal minimum sample size is relative to the number of parameters in the model to be tested. Specifically, the ratio of sample size

to the number of parameters is ideally at least 20:1, but should certainly not go below 10:1 when a complex model makes unreasonable demands to sample size. The model proposed in this chapter contains 3 paths between constructs, 1 covariance among the exogenous variables (domain knowledge and retroactivity), and 2 error terms. In sum, there are 6 parameters to be estimated, which would require a minimum of 120 cases. However, Kline's (2011) second recommendation suggested an absolute minimum of 200 cases. To avoid any issues caused by inaccurate results, a minimum sample size of 200 subjects was sought for the survey at hand. The final section of this literature review discusses how imagined interactions are measured.

Measuring Imagined Interactions

Imagined interactions are conceptualized as an intrapersonal communication process where the actor thinks about a conversation with another person and uses cognition to imagine the verbal and nonverbal behaviors of the self as well as those of the conversation partner (Honeycutt, 2003a). Honeycutt, Zagacki, and Edwards (1989) addressed the challenging issue of measuring a cognitive process. They suggested that capturing subjects' imagined interactions requires self-report measures, and that data on the occurrence and content of people's imagined interactions may come from surveys, journal accounts, and/or interviews.

Honeycutt's (2003a, 2010a) Survey of Imagined Interactions (SII) is the main instrument to measure imagined interactions. In 1988, Edwards, Honeycutt, and Zagacki presented the earliest version of the SII. The 2003 and 2010 versions of the SII consisted of both closed-ended and open-ended items. It measured the eight attributes and six

functions of the respondent's imagined interactions through items that require responses on a Likert-type scale. The 2003 and 2010 versions of the SII also contained a closed-ended item that measures imagery and two open-ended items asking respondents to list topics and conversation partners in their imagined interactions. The open-ended items follow a prompt asking the respondents to remember their most recent imagined interaction and respond to five open-ended items to identify who the conversation partner was, when the conversation took place, the location where the conversation took place, topics discussed, and some sample sentences from the imagined interaction.

This description and the phrasing of items in the 2003 version of the SII (Honeycutt, 2003a) indicate that imagined interaction use can be conceptualized and measured in at least two ways. A researcher can measure how the respondent generally uses imagined interactions, or ask the respondent to recall and report on a specific imagined interaction. The 2010 version of the SII effectively contains the same items as the 2003 version, but all items are now consistently worded in a way that assesses general use of imagined interactions. It must be noted that both versions are presented with the instruction that items on the SII may be reworded to relate to a specific imagined interaction or to general use of imagined interactions, depending on the researcher's needs and interests.

Informed by Sudman, Bradburn, and Schwarz' (1996) argument that the wording of questions is the most important determinant of how respondents interpret what is being asked (i.e., what information they are asked to provide), Van Kelegom, Kotowski, and Levine (2011) reviewed the existing imagined interactions literature. They assessed how

studies that employed the SII phrased the items to determine if the items asked subjects to report on their general or specific use of imagined interactions. Many of the studies that used some version of the SII indicated that items had been adapted for the study's specific context. Furthermore, the review revealed more levels beyond general and specific (trait or state) use of imagined interactions. Two additional levels appeared to exist: partner-specific and context-specific tendencies. The four levels that have been measured can be thought of as follows:

- *General tendency*: items ask subjects to report on their general use of imagined interactions, without instructing them to think of a specific partner or context. An example would be '*My imagined interactions are usually enjoyable.*'
- *Specific*: items ask subjects to think about a single specific imagined interaction or a specific actual encounter, and then to report on their imagined interactions relating to this specific case. An example would be '*I found this particular imagined interaction enjoyable.*'
- *Partner-specific tendency*: subjects are asked to think about imagined interactions with a specific partner and to report on their typical use of imagined interactions with this partner. An example would be '*My imagined interactions with my spouse are usually enjoyable.*'
- *Context-specific tendency*: subjects are asked to think about imagined interactions in a specific situation and to report on their typical use of imagined interactions in this context. An example would be '*My imagined interactions about conflict episodes are usually enjoyable.*'

Van Kelegom, Kotowski, and Levine (2011) found that each of these four levels of abstraction (general, specific, partner-specific, and context-specific) had been measured multiple times across the imagined interactions literature. About one third of studies actually phrased items in such a way that multiple levels of abstraction were measured within the same study. Van Kelegom and Wright (2012-2013) provided some evidence for the conceptual distinction between these levels. Their study measured subjects' imagined interactions following a specific conversation with a romantic partner that had caused relational uncertainty, and subjects' partner-specific tendency toward imagined interactions use with that same romantic partner. Subjects' imagined interactions use at the specific and partner-specific levels were moderately associated, providing support for a conceptual distinction between these levels (Van Kelegom & Wright, 2012-2013).

Chapter 2

Method

Data were collected through an online survey that was hosted on a Qualtrics Survey account made available to the researcher through his university. Subjects included undergraduate students and people who responded to invitations sent online. The survey asked respondents to report on a past conversation. Subjects' domain knowledge and use of imagined interactions were measured through scale items while additional items provided further data about the context of these conversations.

Subjects

Subjects ($N = 210$) were recruited in three ways. The first group of subjects consisted of undergraduate students at a large public university in the Southeastern United States. These students were enrolled in communication studies courses and received course credit for their participation in this study. The course instructors assigned each student in their class a unique identification code and the list of codes entered was forwarded to the instructors upon completion of data collection.

The second group of subjects was recruited through a snowball sampling procedure. People in the researcher's social network were sent an online message containing an invitation to access and complete the survey (see Appendix C). Additionally, the invitation asked them to forward the recruitment message and the link to the survey to anyone else over 18 whom they thought might be interested in participating and willing to complete the survey.

The third group of subjects was recruited by placing the online invitation on CRTNET (*The Communication, Research, and Theory Network*). CRTNET is an email listserv run by the National Communication Association. On business days, subscribers receive an email. The researcher contacted the administrator to request the invitation, which contained a link to the survey and a request to forward the link to others, to be included in this daily email.

All groups of subjects completed the survey online on a computer of their choice. Before any analyses were performed, the data set was cleaned. Only data from subjects who completed all items of the survey were included, and cases that contained an obviously invalid response were also removed (for example, one subject responded the same to all scale items *and* reported an age of 100 *and* identified race as ‘other - all of the above’).

In total, the survey had been accessed 370 times. In 124 cases, no data whatsoever were entered. These instances likely include people who decided not to go ahead with the survey after reading the informed consent statement, but also software programs that accessed the survey due to the link being available online through the archive website of the CRTNET listserv. Of the remaining 246 responses, 24 did not contain responses to all items on the survey and were considered incomplete, and an additional two responses were considered invalid.

That left a dataset of 220 subjects. These data were analyzed for outliers. Figures 3-6 provide graphical representations of the four variables in the causal model (details on

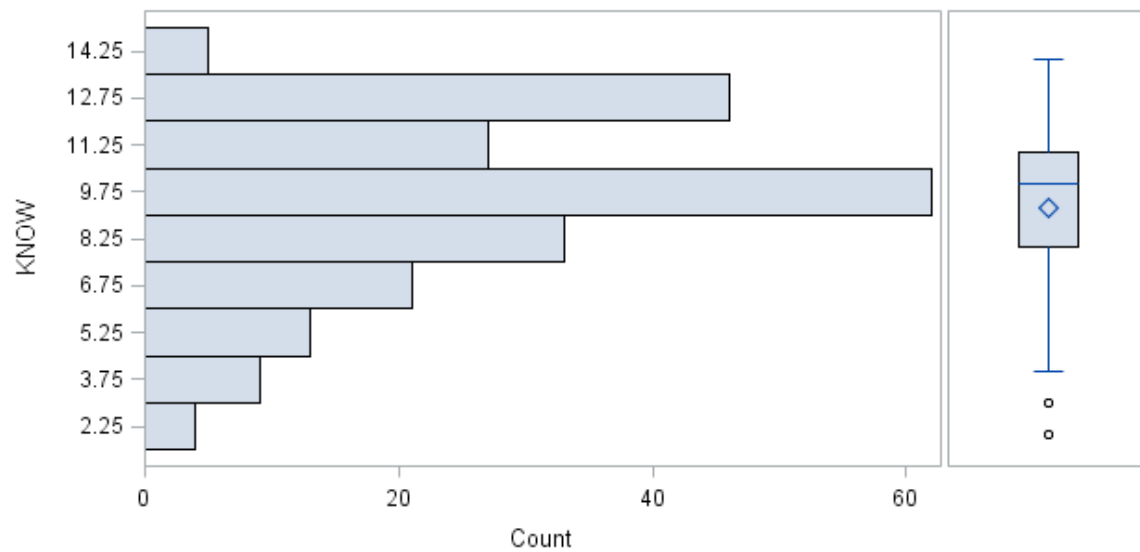


Figure 3. Distribution and Box-and-whisker Plot for Domain Knowledge.

The figure shows the distribution of responses to the domain knowledge measure. The box-and-whisker plot indicates which responses fall between the 25th and 75th percentile (those within the box) and which responses are less than 1.5 times the interquartile range away from the 25th and 75th percentile (those within the ‘whiskers’ – the lines connected to the outside of the box). The dots outside the whiskers represent univariate outliers – extreme responses that were removed from the dataset following Tukey’s (1977) suggestion.

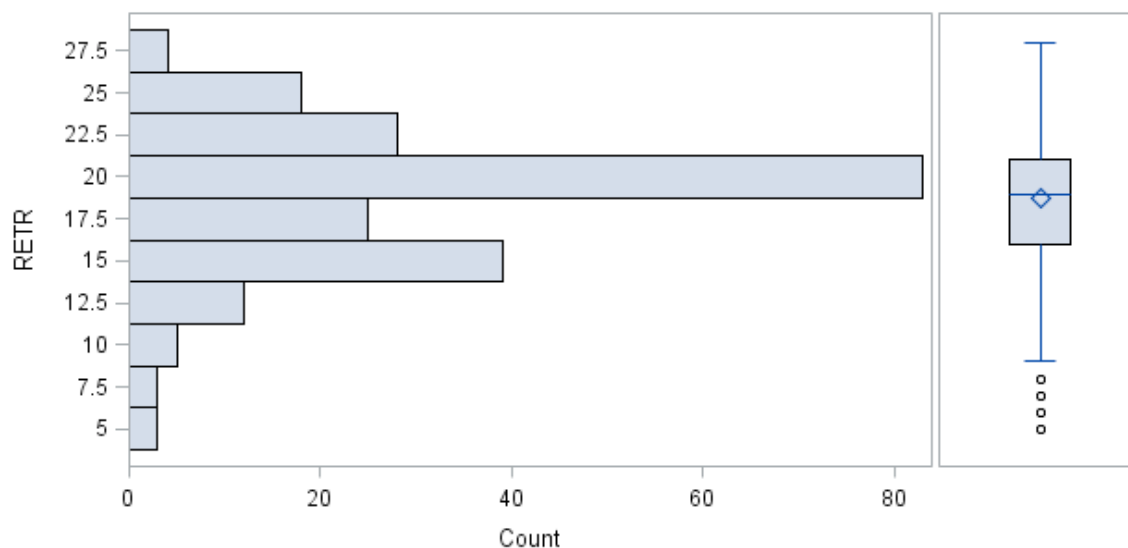


Figure 4. Distribution and Box-and-whisker Plot for Retroactivity.

The figure shows the distribution of responses to the retroactivity measure. The box-and-whisker plot indicates which responses fall between the 25th and 75th percentile (those within the box) and which responses are less than 1.5 times the interquartile range away from the 25th and 75th percentile (those within the ‘whiskers’ – the lines connected to the outside of the box). The dots outside the whiskers represent univariate outliers – extreme responses that were removed from the dataset following Tukey’s (1977) suggestion.

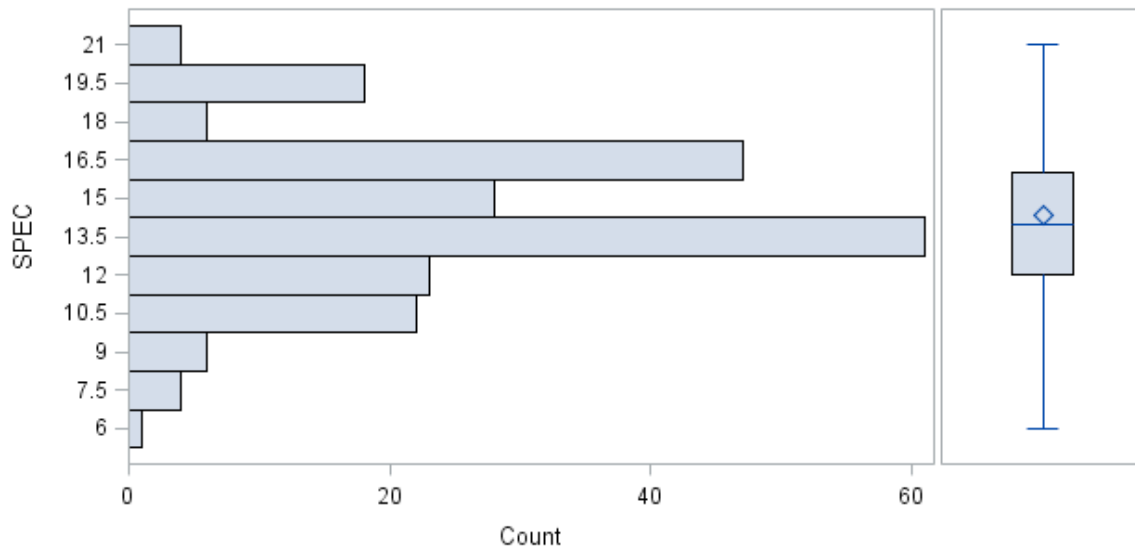


Figure 5. Distribution and Box-and-whisker Plot for Specificity.

The figure shows the distribution of responses to the specificity measure. The box-and-whisker plot indicates which responses fall between the 25th and 75th percentile (those within the box) and which responses are less than 1.5 times the interquartile range away from the 25th and 75th percentile (those within the 'whiskers' – the lines connected to the outside of the box). All responses fell within these whiskers, suggesting there were no extreme observations that should be considered outliers.

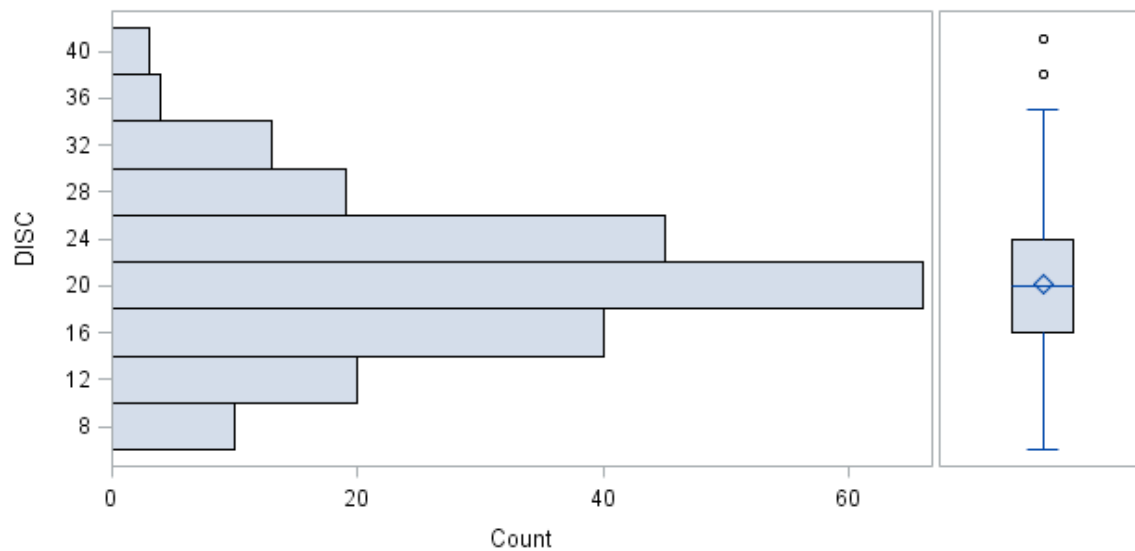


Figure 6. Distribution and Box-and-whisker Plot for Discrepancy.

The figure shows the distribution of responses to the retroactivity measure. The box-and-whisker plot indicates which responses fall between the 25th and 75th percentile (those within the box) and which responses are less than 1.5 times the interquartile range away from the 25th and 75th percentile (those within the ‘whiskers’ – the lines connected to the outside of the box). The dots outside the whiskers represent univariate outliers – extreme responses that were removed from the dataset following Tukey’s (1977) suggestion.

the measures used for these variables can be found later in this chapter). The box-and-whiskers plots indicated some outliers from the normal univariate distributions.

Observations outside the upper or lower fences, which indicates they were more than 1.5 times the interquartile range away from the 75th percentile (upper fence) or the 25th percentile (lower fence) were considered outliers. These outlier observations were removed as recommended by Tukey (1977). Additionally, calculations of Cook's D, Student Residuals, and Covariance Ratios for the observations allowed assessment of multivariate normality. One observation had a problematic Student Residual value (above 4.0 was used as the cutoff point; Kutner, Nachtsheim, Neter, & Li, 2004). Collectively, these analyses identified 10 outliers that were removed from the dataset. The final dataset that was used contained 210 observations.

The 210 subjects ranged in age from 18 to 72 years old ($M = 31.43$, $SD = 12.02$, with one subject not disclosing age by answering '0' to that item). One hundred and twenty-nine subjects were female, and 81 were male. The majority of subjects identified as White ($N = 165$), with others identifying as Asian/Pacific Islander ($N = 13$), Black/African American ($N = 8$), Hispanic, ($N = 8$), Bi-racial/mixed/multi-ethnic ($N = 2$) Middle Eastern ($N = 2$), Native American/American Indian ($N = 2$), European ($N = 1$), and West Indian ($N = 1$). Eight subjects indicated they did not want to identify their race.

Procedures

Subjects accessed the survey online. Upon reading and agreeing to the informed consent information (see Appendix D), subjects were instructed to think about the most

recent time they had a conversation they considered important and that they knew about beforehand.

The first section of items asked subjects to describe the conversation. Specifically, this section included open-ended items that asked subjects to describe the context of the conversation, when it occurred, who the conversation partner was, why they considered it important to communicate effectively in this conversation, what goals they had for the conversation, whether they achieved those goals and why, and how they determined if they achieved these goals. This section also included three closed-ended items through which subjects indicated the type, length, and closeness of their relationship with the conversation partner.

Together, the items in this section were included to best trigger subjects' memories about the conversation they reported on and the context in which the conversation took place. In addition, the open-ended items regarding the context of the conversation, the importance of the conversation, and subjects' goals were used to analyze subjects' primary goals for the conversation. For this analysis, the researcher read the responses to the three items and created codes (with a description) reflecting different types of primary goals. After all responses were coded, the researcher went back and evaluated all subjects' responses a second time to ensure correctly coding all responses. Responses to the goal achievement item were used to assign subjects to groups reflecting different levels of goal achievement. These groupings were used in the additional analyses of the study to investigate predictors of goal achievement.

In the second section of the survey, subjects completed measures that assessed their use of imagined interactions as they were planning for this conversation. Specifically, these measures assessed the degree to which the subject reflected on past encounters (retroactivity), the level of detail in their proactive imagined interactions (specificity), and the degree to which the actual conversation was dissimilar to what was imagined (discrepancy). Furthermore, subjects indicated their level of familiarity with this type of conversation (domain knowledge). This section also contained measures for the other attributes of subjects' imagined interactions (frequency, proactivity, valence, variety, and self-dominance) to allow for analyses beyond testing the proposed model.

The data collected from this second section of the survey were used to calculate correlations between the variables. These correlations were used to test the hypotheses and served as input for the path analysis. These data were also used in the additional analyses of the study.

The third and final section of the survey contained three demographic items, including an open-ended item that asked the subjects to report their age in years and closed-ended items asking their sex and race. Appendix E provides a complete overview of all items and instructions.

Measures

Items taken from Honeycutt's (2003a, 2010a) Survey of Imagined Interactions (SII) were used to assess use of IIs in response to the conversation. The SII consists of subscales that measure the attributes and functions of respondents' use of IIs; it uses 7-point Likert-type response scales. For this study, items measuring imagined interactions

attributes were adapted to reflect episodic use of IIs during rehearsal activity in anticipation of a specific conversation. Honeycutt (2003a) previously reported reliabilities for these attributes that he considered adequate and indicative of sufficient internal consistency: retroactivity ($\alpha = .80$); specificity ($\alpha = .73$); discrepancy ($\alpha = .84$); frequency ($\alpha = .76$); proactivity ($\alpha = .73$); valence ($\alpha = .85$); variety ($\alpha = .67$); and self-dominance ($\alpha = .77$). For the current study, Cronbach's alphas were as follows:

Retroactivity: $\alpha = .72$ (4 items).

Specificity: $\alpha = .56$ (using 3 items; the item '*When I had imagined interactions about the upcoming conversation, I often had only a vague idea of what the other person would say*' was removed to improve reliability but removing further items would not increase reliability further).

Discrepancy: $\alpha = .83$ (6 items).

Frequency: $\alpha = .76$ (4 items).

Proactivity: $\alpha = .70$ (4 items).

Valence: $\alpha = .78$ (4 items).

Variety: $\alpha = .74$ (using 3 items; the item '*I had recurrent imagined interactions with the other person over the same topic*' was removed to improve reliability).

Self-dominance: $\alpha = .56$ (using 3 items; the item '*I talked a lot in my imagined interactions about the conversation*' was removed to improve reliability but removing further items would not increase reliability further).

The domain knowledge measure contained four items, but only two items were used with $\alpha = .65$ (the items '*The anticipated conversation represented a novel situation*

for me’ and *‘I was very familiar with the person I would speak to or people similar to him/her’* were removed to raise reliability).

The Cronbach’s alpha values for some of the scales were problematic as they were below .70, which is typically considered less than adequate reliability (Tavakol & Dennick, 2011). However, some researchers suggest that .60 is the lower limit of acceptability when a scale has a small number of items (e.g. Hair, Black, Babin, & Anderson, 2010). This suggests the measure for domain knowledge could be used in the subsequent analysis of the results.

More problematic was the values found for the specificity scale (self-dominance was not used in any of the analyses in this work so its reliability will not be considered further). The decision was made to perform the hypothesis tests and path analysis rather than forego all analyses due to a lack of confidence in the measurement of the specificity construct. There were several reasons for doing so. First, the procedures of path analysis allow researchers to correct for imperfect reliability through a correction for attenuation (Kline, 2011). Doing so somewhat limits the effects of the poor reliability on the interpretation of the findings. Second, specificity was measured using only four items, and one of those was removed to improve reliability. The calculation of Cronbach’s alpha includes the number of items and it can underestimate reliability for scales with a small number of items (Tavakol & Dennick, 2011). Given this explanation, the observed reliability was considered poor but not unacceptably low. Third, a transparent report of the findings and honest acknowledgement of this issue allows the reader to make an

informed decision about the findings, and not conducting the analysis would preclude sharing the results of the path analysis with the scientific community.

Table 3 presents the reliabilities for all scale measures, as well as the means and standard deviations that were obtained for all measures. The next chapter contains the study findings.

Table 3.

Cronbach's Alphas, Means, and Standard Deviations of Measured Variables.

Cronbach's Alpha is an indicator of the internal consistency of a scale measure. Cronbach's Alpha values for specificity and self-dominance stand out as they are below .60, suggesting these scales suffer from poor reliability.

	α	M	SD
Domain Knowledge	.65	9.49	2.44
Retroactivity	.72	19.10	3.68
Specificity	.56	14.33	2.91
Discrepancy	.83	19.88	6.02
Frequency	.76	19.49	4.11
Proactivity	.70	19.17	4.45
Valence	.78	16.19	4.68
Variety	.74	10.03	3.69
Self-Dominance	.56	13.50	3.03

Chapter 3

Results

The analysis of the data consisted of two main parts. The first part contains an analysis of responses to the items in the first section of the survey. This analysis provides an understanding about the conversations that triggered rehearsal. The second part of this chapter contains the hypothesis testing and the evaluation of the proposed causal model's fit with the data from the second part of the survey.

Analysis of the reported conversations

While the first section of the survey mainly served to optimally trigger subjects' memories about the conversation for which they had rehearsed, their responses to those items provide insight into the conversations that trigger rehearsal through imagined interactions. Subjects were explicitly instructed to think back to a conversation they had anticipated before it occurred. The instructions also stated that subjects should pick a conversation in which they considered it important to communicate effectively. The first noteworthy observation was that practically all subjects could remember such a conversation. During the initial cleaning of the dataset only one instance was found where a subject indicated being unable to remember such a conversation and quitting the survey.

The instructions asked subjects to think back to a time that they anticipated a conversation with another person and considered it important to communicate effectively. In other words, subjects reported on a conversation where they sought a social goal. Responses to the open-ended items that asked subjects to report the context of the

conversation, their goals, and why they considered it important to communicate effectively were analyzed together to determine what the subjects' primary goals for the conversation were. Starting with the first subject, the researcher read the subject's responses to these three open-ended items. After reading these responses the researcher created a code (with a description) for the subject's primary goal. For subsequent subjects, the responses were evaluated to determine if the primary goal fit a previously generated code. If necessary, the description of the code was refined to accurately reflect all responses that were assigned to that code. When the primary goal did not fit a previously generated code, a new code and description were added to the coding scheme. After all responses were coded, the researcher went back and, considering the final set of codes generated, evaluated all subjects' responses a second time to ensure all primary goals were coded correctly. The final coding scheme contained twelve main goals with each subject classified as seeking one primary goal (see Table 4).

The results of the coding revealed that four types of strategic communication were most commonly initiated. These included conversations to maintain romantic or personal relationships, conversations needed for the proper execution of work or academic tasks, attempts to persuade another person, and gaining employment during job interviews. Each of those goals was reported by at least 15 percent of all subjects. Less often reported, but still common, were attempts to present the self in a positive light and conversations through which the actors wanted to explain their own actions or thoughts. Among the situations reported by less than five percent of all subjects were conversations

Table 4.

Coding categories for subjects' goals in the reported conversations. This table lists the coding categories that were created for the primary goals that subjects had for the conversations they anticipated. Twelve categories were generated by collectively assessing responses to the open-ended items asking subjects to report on the context of the conversation, their goals, and why they considered it important to communicate effectively. The number of subjects classified in each category indicates that relational maintenance, work tasks, persuasion, and job interviews were the most commonly reported goals.

Category	Description	N	%
Bring or get information	Actor shares news or other knowledge that impacts another person or vice versa	4	1.9
Explain myself	Actor seeks to justify own behavior or feelings	18	8.6
Get advice	Actor seeks recommendations from the other person regarding future actions of the actor	6	2.9
Give advice	Actor makes recommendations to the other person regarding the other's future actions	3	1.4
Job interview	Actor seeks to gain employment or promotion while talking to the hiring party	33	15.7
Legal	Actor discusses a court case or legal proceedings	1	0.5
Medical	Actor seeks to gain understanding about a health issue or to plan treatment	9	4.3
Persuade	Actor seeks to change the other person's attitudes and/or behavior	35	16.7
Quit job	Actor intends to discuss the termination of his/her current position	4	1.9

(Continued)

Table 4.

Coding categories for subjects' goals in the reported conversations (continued)

Category	Description	N	%
Relational maintenance	Actor seeks to negotiate relational boundaries or discuss the future of a personal or romantic relationship	39	18.6
Self-presentation	Actor seeks to present the self in a positive light or impress the other person	20	9.5
Work task	Actor communicates to execute responsibilities directly related to job or academics, or seeks information needed to complete these responsibilities	38	18.1

where actors discussed a medical issue, received advice, quit their jobs, shared relevant information with another person, gave advice, and discussed legal issues.

When asked if they believed they achieved their goals for the conversation, the vast majority of subjects indicated they had. One hundred sixty-four (78.1%) subjects believed they had fully achieved their goal, and 19 (9.0%) indicated they had partially achieved their goals. Another 19 (9.0%) said they had not, while 8 (3.8%) indicated they were unsure.

Table 5 shows responses to the closed-ended item that asked subjects to report to whom they anticipated talking. Managers, romantic partners, and people associated with subjects' academics (such as professors or advisors) were each reported by at least 10 percent of subjects. Friends, family members, and a wide range of others were also reported as conversation partners.

Tables 6 and 7 show the responses to the closed-ended items that assessed the length and strength of subjects' relationships with these conversation partners. It is noteworthy that subjects mainly planned for conversations with people whom they either didn't know before the conversation (21.0%) or with people whom they had known for more than three years (32.9%), while the relational closeness that subjects reported with the conversation partner had a more equal distribution.

Table 5.

Reported Conversation Partners.

Responses to the closed-ended item asking respondents to select which phrase best described their relationship with the person they anticipated talking to. Managers, romantic partners, and people associated with academics were the most commonly reported conversation partners.

Relationship	N	%
A family member who I feel close to	15	7.1
A family member but not one I feel particularly close to	2	1.0
A friend	18	8.6
An acquaintance	10	4.8
A romantic partner/spouse	31	14.8
A manager at work	55	26.2
Someone at work but not my manager	11	5.2
A professor/instructor/academic advisor or someone else associated with my academics	25	11.9
A medical professional	9	4.3
Other	34	16.2

Table 6.

Reported Relational Length.

Responses to the closed-ended item asking respondents to select which phrase best described how long they had known the person they anticipated talking to. The most selected response options were those that reflected either a person subjects did not know before the conversation or a person they had known for at least three years.

Response option	N	%
I did not know this person before the conversation	44	21.0
Shorter than one month	17	8.1
One to three months	17	8.1
Three to six months	6	2.9
Six months to one year	21	10.0
One to three years	36	17.1
Longer than three years	69	32.9

Table 7.

Reported Relational Closeness.

Responses to the closed-ended item asking respondents to select which phrase best described how close they felt the relationship with the person they anticipated talking to was. The response options selected indicated relational closeness was distributed among the subjects, with no response clearly standing out as selected more often than others.

Response option	N	%
No relationship - I did not know the person before the conversation	47	22.4
Not close at all	48	22.9
Somewhat close	45	21.4
Close	24	11.4
Very close	46	21.9

Hypothesis Tests and Path Analysis

The proposed causal model was tested through a path analysis. Table 3 contains the means, standard deviations, and reliabilities of the variables in the causal model (domain knowledge, retroactivity, specificity, and discrepancy) as well as those for the other imagined interactions attributes collected (frequency, proactivity, valence, variety, and self-dominance).

Table 8 contains the correlation matrix for the measured variables. These correlations form the input for the hypothesis testing. Hypothesis 1 predicted a negative association between specificity and discrepancy. This hypothesis was supported: ($r(208) = -.24, p < .001, 95\% CI [-.366, -.112], r^2 = .06$). Hypothesis 2 predicted a positive association between domain knowledge and specificity. This hypothesis was supported as well: ($r(208) = .14, p < .05, 95\% CI [.003, .268], r^2 = .02$). Finally, hypothesis 3 predicted a positive association between retroactivity and specificity, and this hypothesis also received support: ($r(208) = .34, p < .001, 95\% CI [.219, .458], r^2 = .12$).

These correlations were also used to test the fit of the proposed model through a path analysis. Since cases were removed from the dataset, reliabilities for the measures included in the model were re-calculated to allow correcting for attenuation. Table 9 contains these reliabilities and the observed and corrected correlations for the variables in the model.

Table 8.

Correlation Matrix.

Matrix shows the correlations observed among domain knowledge and eight imagined interactions attributes and indicates statistical significance levels of these correlations. Correlations that informed the hypothesis tests included the correlation between specificity and discrepancy ($-.24, p < .001$), the correlation between domain knowledge and specificity ($.14, p < .05$), and the correlation between retroactivity and specificity ($.34, p < .001$)

	1	2	3	4	5	6	7	8	9
1	1.00								
2	.60***	1.00							
3	.14*	.34***	1.00						
4	-.19**	.02	-.24***	1.00					
5	.10	.46***	.42***	.13	1.00				
6	.06	.42***	.45***	.15*	.77***	1.00			
7	.20**	.06	.06	-.19**	-.19**	-.03	1.00		
8	.15*	.18**	-.02	.23**	.01	.09	.27***	1.00	
9	.01	.07	.23***	-.10	.05	.13	.04	-.04	1.00

* $p < .05$, ** $p < .01$, *** $p < .001$

1 = Domain Knowledge

2 = Retroactivity

3 = Specificity

4 = Discrepancy

5 = Frequency

6 = Proactivity

7 = Valence

8 = Variety

9 = Self-dominance

Table 9.

Observed and Corrected Correlation Matrices for Model Variables.

To account for imperfect reliability of the measures (as indicated by their scores for Cronbach's alpha), a corrected correlation matrix was calculated. This corrected correlation matrix can be used to perform local and global tests of fit during path analysis.

<i>Observed</i>					
	Dom. Know.	Retroactivity	Specificity	Discrepancy	α
Dom. Know.					.65
Retroactivity	.60				.73
Specificity	.14	.34			.56
Discrepancy	-.19	.02	-.24		.83
<i>Corrected</i>					
	Dom. Know.	Retroactivity	Specificity	Discrepancy	
Dom. Know.					
Retroactivity	.87				
Specificity	.23	.53			
Discrepancy	-.26	.03	-.35		

To test the model, estimations for the path coefficients and error terms were calculated. The researcher hand-calculated these estimates and confirmed them using the CALIS procedure in SAS. That yielded the following estimates: $P_{DS} = -.24$; $P_{SK} = -.11$; and $P_{SR} = .41$. Figure 7 shows the path model with the estimations for these path coefficients as well as the error terms. It is immediately visible that the model is inconsistent with the predicted model; the path between experience and specificity has a negative sign, while a positive path was predicted. This indicates that local and global tests of fit are actually redundant. Even if this model would fit the data statistically, the study's results suggest the model is incorrect as it goes against the predicted associations.

In summary, while the individual hypotheses were supported, the overall model had to be rejected as it did not fit the data. The following chapter interprets these results.

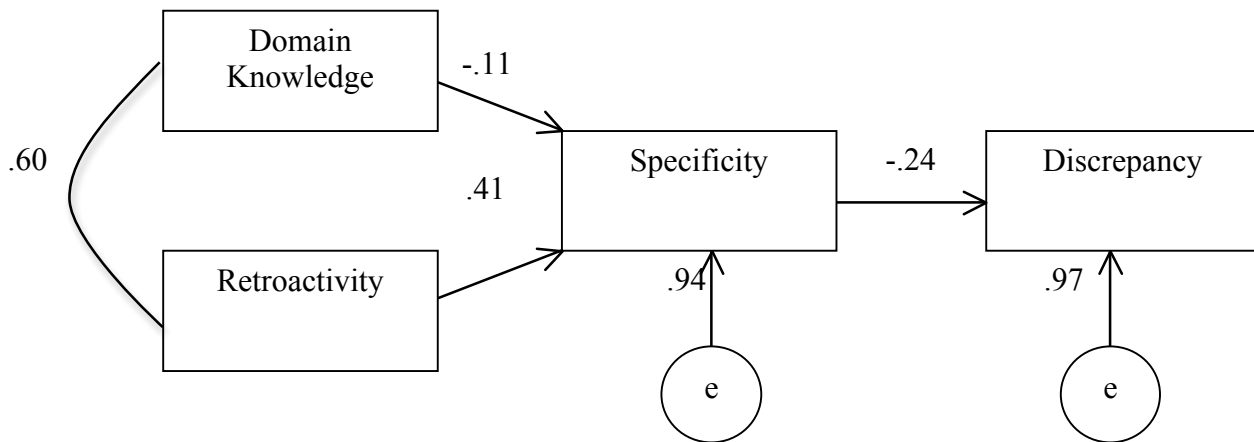


Figure 7. Path Model with Estimated Path Coefficients.

Estimates for the paths between the measured variables are indicated above the arrows.

Two paths were as predicted by the hypotheses. The estimate for the path coefficient between retroactivity and specificity suggests a positive direct effect. The estimate for the path coefficient between specificity and discrepancy suggests a negative direct effect. On the other hand, the path between domain knowledge and specificity had a negative sign, counter to predictions. As the observed correlation between these two variables was positive, that correlation was not considered strong enough to warrant a direct effect.

Chapter 4

Discussion

This study analyzed how domain knowledge and imagined interactions operate during planning for instances of strategic communication and assessed the context of those conversations. This chapter discusses those findings and links them to Berger's (1997) Planning Theory of Communication as well as to the imagined interactions literature.

What immediately stood out from the responses to the survey was that planning is a common occurrence. Nearly all subjects indicated that they could remember a time when they had anticipated a conversation that they considered important, and they indicated performing at least some cognitive activity before the conversation to improve their chances of achieving the goal or goals they had. These occurrences spanned a wide range of settings and goals and they included conversations with a variety of conversation partners. This observation reinforces the importance of studying the processes through which people plan for such conversations. Improved understanding of these processes provides insights that will be of interest to researchers studying a range of contexts where people engage in strategic communication, including communication in close relationships, conversations that occur in organizational and health settings, persuasion, and other areas of study.

While the range of social goals subjects sought to achieve indicates that planning activity is not limited to certain areas in life, some goal types were sought more often than others. The most reported goals included initiating or maintaining personal

relationships, successfully completing professional or academic tasks, persuading another person, and getting hired during employment interviews. Similar to the variety in goals sought, there was a wide variety in conversation partners, indicating again that planning for strategic communication occurs in many facets of life. The conversation partners most reported on may be grouped together as representing two main types: those with whom the subjects have a close and personal relationship and those with whom they have (or seek) a professional relationship. The specific types of people mentioned most were managers, romantic partners, and people associated with academics such as professors or advisors. This may not come as a revelation, as these are likely the people with whom subjects have most conversations during a regular day. Potentially more surprising was that many subjects reported these conversation partners were either people they had known for a long time or people they barely knew or did not know at all.

Altogether, it has become clear that that planning for conversations occurs regularly and that planning activity is not limited to certain settings or specific social goals. These findings further establish the relevance of understanding how planning occurs. The discussion now shifts to the findings regarding the hypotheses and the test of the model that was proposed in the literature review.

The prediction of hypothesis 1, a negative association between specificity and discrepancy, was supported, suggesting that people who imagined the anticipated conversation in more detail were better able to predict how the conversation would actually unfold. Since specificity was linked to the plan complexity construct, more specific imagined interactions include both high levels of detail and consideration of

contingencies for the anticipated encounter. This finding is in line with previous imagined interactions research, which suggested that those who achieve higher levels of specificity when they imagine the upcoming conversation are better able to predict what will occur and also more likely to successfully adapt their messages as the conversation unfolds (Honeycutt & Choi, 2008). This allows them to be more effective communicators as they exhibit more speech fluency, in contrast to those who avoid imagining the anticipated encounter and thereby experience reduced levels of specificity, and those who are otherwise unable to generate a detailed plan.

The second hypothesis, which predicted a positive association between domain knowledge and specificity, was also supported. It should be noted that the statistical significance of this finding was not as strong as that for the first hypothesis. This result provides support for the third proposition of Berger's (1997) Planning Theory of Communication, which stated that higher levels of strategic domain knowledge produce more complex plans within that domain. Subjects who indicated that the type of conversation was familiar to them because they had experienced similar conversations before tended to generate more specific imagined interactions when they imagined the upcoming encounter.

Hypothesis 3 suggested a positive association between retroactivity and specificity. This hypothesis was supported with relatively strong statistical significance. This suggests that those who spent more time considering past similar conversations achieved more specific imagined interactions about the anticipated conversation. This finding is in line with the corollary to the first proposition of Berger's (1997) Planning

Theory of Communication, which posited that people activate long-term memory storage to formulate plans for upcoming conversations, and Berger and Jordan's (1992) suggestion that past conversations are reviewed during planning. It appears that spending more effort reviewing past conversations helped subjects generate more specific imagined interactions or, in the words of the planning literature, more complex plans.

All three hypotheses posited in the literature review were supported, which provided some confidence toward the validity of the proposed causal model. However, the analysis of the path model suggested otherwise. The path between retroactivity and specificity and the path between specificity and discrepancy were as expected. These findings provide further support for the first and third hypotheses.

On the other hand, the path between domain knowledge and specificity suggested these two constructs did not have a strong enough association to warrant a direct main effect. The path coefficient that was estimated suggested that there might not be a main effect of domain knowledge on specificity, which was counter to the prediction of hypothesis 2. Furthermore, interpretation of the path coefficients suggests that the underlying cause for the positive correlation that was found between domain knowledge and specificity is the cognitive activity that occurs when past conversations are reviewed (i.e., the use of retroactive imagined interactions), supporting Shi (2013) who suggested that more cognitive elaboration leads to more specific plans. Higher levels of domain knowledge allow the actor access to a wider repository of past conversations. When past conversations are considered during the formulation of a plan, a wide repository allows the actor to formulate a plan with higher levels of specificity. Since a negative and

significant correlation between domain knowledge and discrepancy was found, it appears that actors with much domain knowledge are able to predict relatively well how the conversation will unfold, even when that domain knowledge does not directly translate into more specific imagined interactions about the anticipated conversation.

Speculating that increases in domain knowledge cause higher levels of retroactive imagined interactions is likely an invalid interpretation. In fact, the way people use imagined interactions has a trait-like element to it. Honeycutt, Edwards, and Zagacki (1989-1990) found that people with an internal locus of control tend to use more retroactive imagined interactions than those with an external locus of control, and Allen (1990) found a positive association between Machiavellianism and the use of proactive imagined interactions. This suggests that the degree to which people would consider past conversations (i.e., their level of retroactivity) and anticipate future conversations (i.e., their level of proactivity) is more dependent on their disposition than their experience with the type of conversation at hand. Responses from the current study's subjects also suggest that may be the case. For example, one subject responded as follows when asked to describe the conversation he had anticipated: *"Well it seems this question is a bit hard for me to answer because I feel as if I anticipate every conversation before I have it."*

A safer interpretation is that the level of domain knowledge can impact how retroactivity influences specificity by providing a smaller or larger repository of past conversations to draw from, yet logically domain knowledge cannot be expected to directly cause retroactivity levels. Instead, it appears that those who spend much energy considering past conversations can benefit from having more domain knowledge when

they engage in their retroactive activity. In turn, they achieve higher levels of specificity than similarly disposed individuals who lack that domain knowledge. Following this interpretation, the positive correlation observed between domain knowledge and specificity is then explained as the result of using retroactive imagined interactions. Meanwhile, the evidence suggesting the absence of a direct effect may be explained as the result of higher levels of domain knowledge limiting the actor's need to generate specific imagined interactions because he/she can rely on existing domain knowledge to communicate effectively without extensive planning efforts. This explanation suggests that the relationship between retroactivity and specificity may be moderated by domain knowledge, which is tested later in this chapter.

Limitations

As with all social scientific research, the limitations of the current study must be acknowledged. A serious concern with the current study is the poor internal consistency found for the specificity measure as evidenced by its Cronbach's alpha. Honeycutt (2003a) had previously reported satisfying reliability for this measure when he presented the Survey of Imagined Interactions. In that version, the items were phrased to reflect the respondent's general tendency towards imagined interaction use. For the current study, items were rephrased to reflect episodic imagined interactions around the anticipated conversation. That rewording may have impacted the decrease in reliability, but the observed reliability was surprising after a pretest of the items produced a Cronbach's alpha value of .85 for this measure. A close look at the items is warranted to assess the source of the issue.

The specificity measure contained four items, and it should assess the level of detail by which the anticipated conversation was imagined. One item was removed to increase Cronbach's alpha. That item was '*When I had imagined interactions about the upcoming conversation, I often had only a vague idea of what the other person would say.*' The three remaining items were (1) '*The imagined interactions I had about the upcoming conversation tended to be detailed and well developed;*' (2) '*It is hard recalling the details of my imagined interactions about the upcoming conversation;*' and (3) '*My imagined interactions about the upcoming conversation were very specific because I envisioned where the conversation took place.*' The phrasing of these items may underlie two issues that could explain the poor reliability of the specificity measure. First, it appears that there may actually be three dimensions underlying the specificity construct:

- the overall level of detail by which the actor imagines the conversation, which appears to be assessed by the first and second items that were kept;
- the level of detail by which the other person's communication is imagined, which appears to be assessed by the removed item;
- the level of detail by which the environment where the conversation takes place is imagined, which appears to be assessed by the third item kept.

A second problematic issue might have been the phrasing of the second item that was kept ('*it is hard recalling the details...*'). This item may work as expected when people's general use of imagined interactions is assessed, as it is likely that those who tend to imagine interactions in much detail can generally better remember what they

imagined than those who do not commonly imagine conversations in much detail, but there are a number of reasons why a specific imagined interaction is hard to recall. Subjects may have found it hard to recall the details because they actually did not imagine the anticipated conversation in much detail, but it may also have been hard to recall their imagined interactions because much time has passed since the conversation was imagined or because a subject has bad memory in general. In the latter two cases, not recalling the details of the imagined interaction was not a reflection of a lack of specificity.

The poor reliability of the specificity measure may have been caused by the items actually reflecting a multidimensional construct or because items that work well to assess general use of imagined interactions could not effectively be translated to capturing imagined interactions use before a specific conversation. As mentioned in the method section, the decision was made to progress with the hypothesis tests and path analysis while acknowledging the reliability issue. At the same time, the issue with the specificity construct's reliability should not be ignored entirely. A potential effect of low scale reliability is that the analyses may underestimate the strength of the relationships between the variable measured with that scale and other variables (Schmitt, 1996). This may partly explain the relatively small effect sizes observed in the hypothesis tests, where none of the observed relationships explained more than 12 percent of the findings. Since all hypotheses contained specificity, this issue might have affected each hypothesis test.

A few additional limitations to the study must be addressed. First, the survey relied on subjects' recollection of their cognitive efforts in anticipation of a past

conversation. Over time, their memory of what occurred may be distorted. One item asked subjects to respond when the conversation took place. The majority of subjects (125 of 210) reported that the conversation had taken place one month or less before they completed the survey, and 70 of these 125 indicated the conversation took place one week or less ago. Sixty-nine subjects reported on a conversation that occurred between one and six months ago, and only 16 of the 210 subjects indicated that the conversation took place six months or longer ago.

To address this issue of distorted memory, the instructions asked subjects to think about the most recent time they anticipated a conversation in which they wanted to communicate effectively. Furthermore, the items contained in the first part of the survey were designed to get subjects thinking about the conversation before they responded to the scale items, which should have aided their recollection of the conversation and the time period leading up to it. While these instructions likely aided subjects in their recollection, follow-up studies will benefit from a design that allows subjects to report on their planning activity as it occurs and measures the discrepancy between what the imagined and the actual conversation immediately after that conversation takes place.

Furthermore, the methods by which subjects were recruited prevented a truly random sample from the general population. Sixty-three of the 210 subjects were considered student subjects as they entered a code to receive course credit, and the other 147 subjects came from the snowball sampling procedure that started from the researcher's social network and from the invitation on the CRTNET listserv.

The demographic characteristics of the sample show that whites and females were overrepresented in the sample. There are a few considerations in response to the concerns about the sample's demographics. The study investigated the use of imagined interactions, which are a cognitive process, and there is no evidence found in the imagined interactions literature that age plays a role in differences in imagined interaction use. Sex differences in the general use of imagined interactions identified by Edwards, Honeycutt, and Zagacki (1989) included differences in frequency, valence, self-dominance, and imagery, but not in the attributes that were part of the hypotheses of the current study. Similarly, McCann and Honeycutt (2006) identified differences between cultures in the frequency, self-dominance, and variety attributes. Again, these findings did not include retroactivity, specificity, or discrepancy.

To assess whether the overrepresentation of women might have skewed the results, t-tests were conducted to compare men and women on the variables used in this study. A t-test indicated that men ($m = 17.38$) had more pleasant imagined interactions (i.e., higher valence) than women ($m = 15.43$): $t(193.16) = 3.13, p < .01$, which was interesting because past research suggested women tend to have higher imagined interaction valence (Edwards, Honeycutt, & Zagacki, 1989). For the other variables discussed, no significant difference between men and women was found:

- For domain knowledge: $t(208) = -.10, p > .01$.
- For retroactivity: $t(198.23) = .53, p > .01$.
- For specificity: $t(208) = .24, p > .01$.
- For discrepancy: $t(208) = 1.55, p > .01$.

Additionally, ANOVAs revealed no significant differences between the races on the variables that were investigated, so it does not appear that the overrepresentation of whites skewed the results. However, the non-white groups were relatively small, which reduced the chance of finding an effect. On the other hand, the distribution and range of subjects' ages was more representative than the typical college student sample often used in social scientific research.

Related to the above concern about the sample's characteristics is another limitation. Due to the procedures of the snowball sampling, the researcher could not determine the response rate for the survey or the characteristics of those who were invited but chose not to participate. Since the invitation encouraged all those contacted to forward the invitation to others, it is unknown how many people were actually invited to complete the survey. Furthermore, those who did respond to the invitation were not personally identified, preventing an analysis of the characteristics of those who did versus those who did not access and/or complete the survey.

A potential limitation of the study's design was that the instructions assumed subjects would be able to remember an important conversation they anticipated. This assumption was mostly correct; however, there was one subject who indicated not being able to remember such an instance. While this subject exited the survey after indicating so (which resulted in an unfinished survey which was not included in the sample), some subjects may have completed the survey while thinking about a conversation they barely remembered.

Despite these limitations, the findings of the study discussed so far are of interest to communication scholars in general and those interested in planning and imagined interactions in particular. However, the lack of model fit and the concerns about the reliability of the specificity measure suggest that a second look at the study's data may yield additional insights about the use of imagined interactions during planning.

Additional Analyses

The discussion up to this point has suggested some alternative explanations regarding the functioning of imagined interactions during planning. Those explanations are explored in more detail below.

Alternative Model 1: Domain Knowledge as a Moderator. The first suggestion explored seeks to explain the negative sign found in the estimation of the path coefficient between domain knowledge and specificity. Earlier, it was suggested that the relationship among domain knowledge, retroactivity, and specificity might be a moderated one, where domain knowledge moderates the relationship between retroactivity and specificity. More concretely, it was proposed that higher levels of domain knowledge would strengthen the positive association found between retroactivity and specificity. For actors who possess a larger repository of past experiences in the type of conversation that is anticipated, their level of retroactive imagined interaction use should have a stronger association to the specificity with which the upcoming conversation is imagined than for actors with smaller repositories of past experiences. When the actor does not have much domain knowledge available, he/she may still extensively use retroactive imagined interactions to

help formulate a plan for the anticipated encounter, but doing so should not have as much effect on specificity. Figure 8 visualizes the proposed moderated relationship.

This model was tested through a linear regression with domain knowledge, retroactivity, and an interaction term between domain knowledge and retroactivity as the independent variables and specificity as the dependent variable. Before this regression was executed, the domain knowledge and retroactivity measures were centered to counteract multicollinearity issues that might arise as a result of the relatively strong correlation between domain knowledge and retroactivity (Jaccard, Wan, & Turrisi, 1990).

The results of the regression indicated that the independent variables explain 20.5 percent of the variance in specificity ($R^2 = .205$, $F(3, 206) = 18.967$, $p < .001$). Furthermore, the beta weights for retroactivity ($\beta = .44$, $p < .001$) and for the interaction term ($\beta = .31$, $p < .001$) were statistically significant, while the beta weight for domain knowledge was not ($\beta = -.09$, $p > .05$). This suggests that the effect of retroactivity on specificity was indeed moderated by domain knowledge, while domain knowledge did not have a main effect on specificity.

To visualize this moderated relationship, subjects were assigned to one of three groups by their score on the domain knowledge measure. The split was done such that the groups were as close to equal in size as possible. This led to assigning 72 subjects to the ‘low domain knowledge’ group, 61 subjects to the ‘moderate domain knowledge’ group, and 77 subjects to the ‘high domain knowledge’ group.

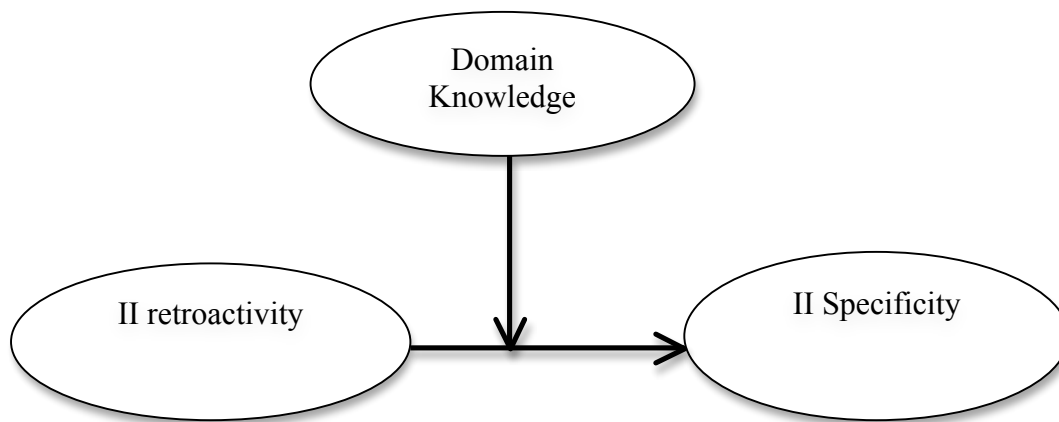


Figure 8. Moderated model.

The relationship proposed for the additional analyses suggests that the strength of the association between retroactivity and specificity differs as the level of domain knowledge changes. Specifically, it was expected that the association would be stronger with higher levels of domain knowledge.

As predicted, the association between retroactivity and specificity is stronger when domain knowledge increases, as indicated by the different slopes for the three groups. The evidence suggests that retroactive imagined interactions are mainly effective toward increasing specificity for those who have high levels of domain knowledge. Actors who lack such domain knowledge are not able to increase the specificity of their imagined interactions about the anticipated conversation much by engaging in more retroactive imagined interactions, and they thereby miss out on the benefits of more specific planning efforts. Figure 9 visualizes that effect.

Alternative Model 2: The Role of Valence. Having established a better understanding of the relationship between domain knowledge and retroactivity in predicting specificity, it is now relevant to critically consider the back end of the proposed causal model. That is, the discussion now shifts to answering the question about what predicts the discrepancy between the imagined interaction and the actual conversation. So far, the discussion solely paid attention to the role of specificity. The evidence appeared to suggest that specificity is an important element toward answering that question. Both the correlation that was found and the estimate for the path coefficient lent support for a negative association between specificity and discrepancy. However, concerns about the poor reliability of the specificity measure make an exploration of additional explanations worthwhile.

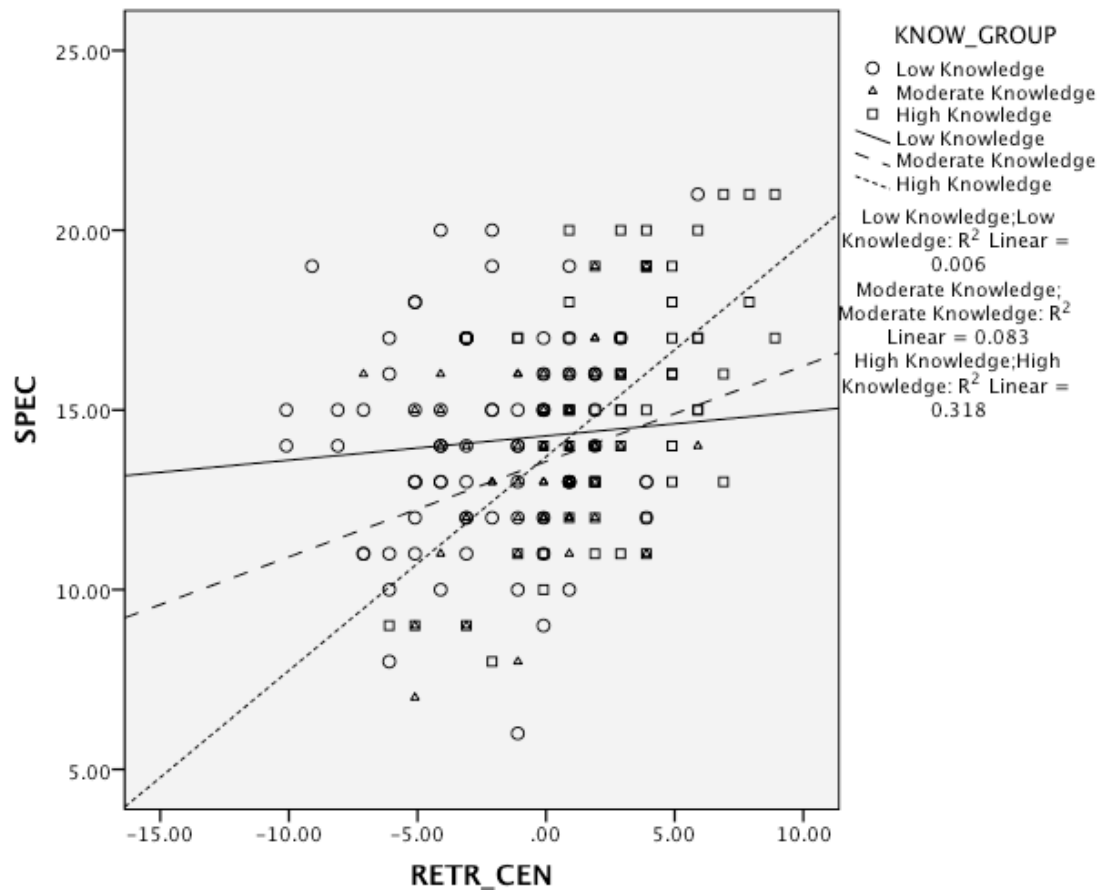


Figure 9. Scatterplot for Retroactivity (centered) and Specificity, by Experience. The graph plots centered scores for retroactivity (x-axis) and specificity (y-axis). Subjects were split into groups with low, moderate, and high domain knowledge. The slopes of the lines illustrate the moderation effect domain knowledge has on the association between retroactivity and specificity. The association between retroactivity and specificity is strongest for the high domain knowledge group, and weakest for the low domain knowledge group.

Allen and Honeycutt (1997) suggested that explanations of cognitive planning processes should consider affect as part of the process. Discrepancy of imagined interactions appears associated with constructs indicative of a lack of comfort with communicating. Imagined interaction discrepancy has been associated with loneliness (Honeycutt, Zagacki, & Edwards, 1990), four types of communication apprehension (group, meeting, interpersonal, and public speaking; Honeycutt, Choi, and DeBerry, 2009), an anxious/ambivalent attachment style (Honeycutt, 1998-1999), and low extraversion. (Honeycutt, 2003b; Honeycutt, Pence, & Gearhart, 2012-2013).

These findings are typically explained through a process where an individual's demeanor restricts or extends that person's exposure to communication. The mechanism then operates as follows: those who are uncomfortable with communication avoid putting themselves into situations where they need to talk to others. Over time, their avoidance limits the range of experience with different types of conversations they build up, compared to those who are comfortable communicating. When a situation comes up where a conversation must be had, they lack the repository of past experiences that allows them to accurately predict how the conversation will go, resulting in a comparatively larger discrepancy between what they predicted and how the actual conversation unfolds.

Related to the tendency towards discrepancy, these people likely experience anxiety when they imagine upcoming conversations. Anticipating a conversation they have to engage in is an unpleasant activity for them as they expect the anticipated situation will make them uncomfortable. While planning may alleviate this anxiety, it can

also increase when the imagined interactions repeatedly turn out discrepant from the actual conversation; over time this can result in the experience of learned helplessness due to an inability to successfully integrate information from past conversation into a plan for the upcoming conversation (Allen & Honeycutt, 1997). This anxiety and unpleasantness is captured in the valence attribute of imagined interactions. Imagined interactions can elicit positive or negative emotions that reflect how their valence is experienced, and these imagined interactions and emotions can build on and strengthen each other (Honeycutt, 2003a). This explains how satisfaction with imagined interactions can be predicted by the valence of those imagined interactions (Honeycutt, Edwards, and Zagacki, 1989-1990).

There is some evidence that this occurs in specific contexts as well. In marital communication, valence of imagined interactions with the spouse was found to predict marital happiness for both husbands and wives (Honeycutt, 1999). Additional studies found similar associations for imagined interactions valence with relational quality (Honeycutt, 2008-2009) and with relational satisfaction (Honeycutt & Wiemann, 1999) for samples that included married, engaged, and dating couples. In family communication, college students reported imagined interactions with their family about money issues to be more pleasant when their parents tended to work together to address money concerns than when the parents tended to argue about money, and when students themselves worried less about having money (Allen, Edwards, Hayhoe, & Leach, 2007). The negative experiences of worrying and seeing parents argue were thus reflected in the pleasantness of imagined interactions in this context. Another positive association was

observed between roommate affinity and imagined interaction valence for females (Honeycutt & Patterson, 1997).

Together, this suggests that imagined interactions by which people rehearse for upcoming conversations have lower valence when actual communication is experienced negatively. Considering the evidence presented in the literature review that discrepant imagined interactions are associated with negative communication experiences suggests that those who don't enjoy their imagined interactions are less accurate in predicting how the conversation will occur. A contributor to this process may be that recall of actual conversations occurs more when a conversation, and thus the retroactive imagined interactions about that conversation, is experienced as unpleasant than when it is experienced as pleasant (Honeycutt, Zagacki, and Edwards, 1992-1993).

To summarize, it was suggested that people who view communication as unpleasant, whether they do so in general or only within a specific context, likely experience their imagined interactions as unpleasant as well. Consequently, they may lack domain knowledge about communication encounters in those domains because they experience more difficulty integrating information from their past experiences into an effective plan, because they try to avoid exposure to similar conversations, and because dwelling on negativity in their retroactive imagined interactions prevents them from effectively using those past experiences in planning for future conversations.

It then becomes interesting to investigate the comparative strengths of the effects of domain knowledge, retroactivity and valence on discrepancy. A multiple regression analysis tested if domain knowledge and the imagined interactions attributes of

retroactivity and valence significantly predicted discrepancy. Results indicated these three predictors explained 7.3 percent of the variance in discrepancy (adjusted $R^2 = .073$, $F(3, 206) = 6.50$, $p < .001$). Furthermore, the beta weights for domain knowledge ($\beta = -.28$, $p < .01$), retroactivity ($\beta = .20$, $p < .05$), and valence ($\beta = -.14$, $p < .05$) were all statistically significant.

Given the earlier findings suggesting that retroactivity and domain knowledge work together in predicting specificity, an additional regression was conducted to test if valence and specificity significantly predicted discrepancy. Results indicated that these two predictors explained 8.1 percent of the variance in discrepancy (adjusted $R^2 = .081$, $F(2, 207) = 10.27$, $p < .001$). Furthermore, the beta weights for specificity ($\beta = -.23$, $p < .01$) and valence ($\beta = -.18$, $p < .01$) were both statistically significant.

Comparing the variances in discrepancy explained in the two regression analyses suggests that the effect of retroactivity and domain knowledge on discrepancy indeed operates through specificity. The two sets of independent variables explain almost the same percentage of variance. Additionally, the results suggest that the valence of subjects' imagined interactions also operates as a predictor of discrepancy, albeit a small one, as evidenced by the relatively small effect sizes. Despite the small effect size, this is still an interesting finding as the current investigation is one of the first ones to examine how imagined interactions attributes operate during rehearsal. These results provide one building block that could be used in the future toward generating a theory of rehearsal and they can inform further research efforts on rehearsal through imagined interactions.

Predictors of Goal Achievement. The introduction of this manuscript cited Berger (1997), who suggested that planning occurs when people anticipate engaging in strategic communication. People set some social goal or goals for the anticipated conversations. Up to this point, the analysis focused on the role imagined interactions play during the planning process before the conversation occurs. But to come full circle, the link to those social goals must be established. To be more precise, this section aims to answer the question of what elements of the planning process predicted subjects' goal achievement.

As discussed in the results section, the coding of the open-ended success item indicated that the vast majority of subjects reported they had successfully achieved the goals that they had set for the conversation. Subjects were placed in one of four groups: those who reported they had achieved their goals ($N = 164$), those who reported they had partially achieved their goals ($N = 19$), those who indicated they had not achieved their goals ($N = 19$), and those who stated they were unsure or indicated it was unknown at the time of filling out the survey if they achieved their goals ($N = 8$).

The outcome variable in the model tested in this study was discrepancy. It was reasoned that that more effective plans are those that help the actor accurately predict how the actual conversation unfolds. If there is merit to this claim, then the subjects who reported success should have had less discrepant imagined interactions than those who did not achieve their goals or only did so partially.

A one-way between subjects ANOVA compared the discrepancy levels reported by the four subject groups. Results indicated these groups significantly differed in the

discrepancy of their imagined interactions: $F(3, 206) = 4.76, p < .01, \eta^2 = .07$.

Subsequent *t*-tests were used to determine which groups differed. Results indicated that those who had not achieved their goals ($m = 24.63$) had more discrepant imagined interactions than those who had achieved their goals ($m = 19.35$): $t(181) = 3.82, p < .001$. Furthermore, those who had not achieved their goals also had more discrepant imagined interactions than those who only partially achieved their goals ($m = 19.26$): $t(36) = 2.61, p < .05$. No further statistically significant differences were found between the groups.

Discrepancy, however, was only one of the imagined interactions attributes measured in this study. Similar analyses were conducted for the other attributes. The first was valence. The suggestion was made that unpleasant imagined interactions are mainly experienced by those uncomfortable with and less competent in communication. This explanation would be supported further if it can be established that those who did not enjoy their imagined interactions were less likely to see success in the actual conversation.

A one-way between subjects ANOVA compared the valence of the imagined interactions reported by the four subject groups. Results indicated these groups significantly differed in the valence of their imagined interactions: $F(3, 206) = 9.71, p < .001, \eta^2 = .12$. Subsequent *t*-tests were used to determine which groups differed; the results indicated that those who had achieved their goals ($m = 16.99$) had more positive valence towards their imagined interactions than those who had not achieved their goals ($m = 11.84$): $t(181) = 4.98, p < .001$. Furthermore, those who had achieved their goals also had more positively valenced imagined interactions than those who only partially

achieved their goals ($m = 13.95$): $t(181) = 2.83, p < .01$. No further statistically significant differences were found between the groups.

No further significant effects were found for constructs in the planning process on the likelihood of success. Specificity did not have a significant effect on success: $F(3, 206) = 1.09, p > .05$. No significant effect on success was found for retroactivity either: $F(3, 206) = 1.47, p > .05$. Finally, domain knowledge was not found to have a significant effect on success: $F(3, 206) = 1.41, p > .05$.

To summarize, only the discrepancy and valence of subjects' imagined interactions predicted whether subjects achieved their goals. Successful goal achievement was associated with low discrepancy (accurately predicting how the conversation would unfold) and positive valence (having imagined interactions that are pleasant). Valence actually had a larger effect than discrepancy on goal achievement, which reinforces Allen and Honeycutt's (1997) suggestion that investigations of rehearsal through imagined interactions should consider the role of affect.

General Discussion

The results of the primary and additional analyses provide valuable insights about the ways imagined interactions operate when people plan for an anticipated conversation in which they seek to achieve a social goal. The rest of this chapter puts those findings together, discusses how the results of this study inform the planning and the imagined interactions literatures, and points out directions for future research.

The results suggest that planning for conversations is common when people seek to achieve a social goal. Planning occurred in a variety of settings and toward the

achievement of a variety of social goals. When they anticipate a conversation considered important, people review past similar episodes as they attempt to predict how the anticipated conversation will unfold. Domain knowledge about the setting gained from previous experiences moderates the relationship between the degree to which actors engage in these retroactive imagined interactions and the specificity by which they imagine the anticipated conversation. More retroactivity tends to generate higher specificity, but this is especially the case for those with a lot of domain knowledge. As actors imagine the upcoming conversation with higher levels of specificity, the discrepancy between what is anticipated and the actual conversation decreases. The degree to which this imagined activity is considered pleasant also impacts discrepancy: people whose imagined interactions are more pleasant tend to experience less discrepancy in the actual conversation. Finally, the levels of discrepancy and valence appear to impact goal achievement: the degree to which goals are achieved is higher when people are better able to predict how the conversation will unfold and when they consider their imagined interactions more pleasant.

These findings have implications for advancing the planning literature. The insights gained can contribute to a deeper understanding of the processes through which planning occurs and they contribute to addressing the call for further investigations into these processes made by Berger (2008).

On the one hand, some of the findings support the extant literature in this area. Meyer (2000) discussed unanswered questions about the message production process. One of those questions concerned how speakers acquire the knowledge they used during

planning. Results of this study regarding the role of retroactive imagined interactions support Berger and Jordan's (1992) assertion that specific, vivid instances of past conversations are a primary source for the development of plans. Furthermore, it appears that the pleasantness of the imagined interactions induced during planning have an impact on the effectiveness of those plans, as imagined interactions are less discrepant and more likely to result in goal achievement for those who experience positive affect. Dickson and MacLeod's (2004) study found negative outcomes of depression on planning processes, which may occur as a result of negative affect when thinking about past and anticipated encounters.

On the other hand, some of the results challenge extant theory. The second proposition of Berger's (1997) Planning Theory of Communication asserts that increases in domain knowledge tend to increase the complexity of plans in that domain. Findings of this study indicated that this effect is not as direct as was suggested. Instead, domain knowledge appears to act as a moderator on the relationship between retroactive imagined interactions and the specificity of imagined interactions about the upcoming conversation, such that the effect of consideration of past conversations leading to more specificity is stronger as domain knowledge increases.

The results are also informative to researchers whose main interest lies with imagined interactions. While rehearsal may be the most commonly used function of imagined interactions (Honeycutt, Vickery, and Hatcher, 2013), the conflict linkage and relational maintenance functions have received more comprehensive scholarly attention in the form of both research activity and theorizing. Findings regarding the relationships

among the imagined interaction attributes of retroactivity, specificity, valence, and discrepancy can serve as a building block toward the proposition of a theory of rehearsal through imagined interactions. It appears that higher levels of retroactivity, specificity, and valence work together to reduce discrepancy.

Results of this study also provide some practical recommendations for people looking to become more effective planners. It appears that building domain knowledge through direct exposure to communication is helpful, as it strengthens the effect of retroactivity on specificity and thereby increases the likelihood that the actor can accurately predict what will happen. However, that may not be advice people who dislike communicating, such as those high in communication apprehension, like to hear. They may prefer to avoid communicating, and it remains unknown if domain knowledge can only be acquired in real conversations, or if activities such as mock conversations are also effective domain knowledge builders. The role of valence as a predictor of discrepancy also suggests that learning to think more positively about communication could be an effective avenue toward more effective planning, advice also posed by Honeycutt (2003a).

So far, these implications considered the use of imagined interactions in planning at the general level, but the study's results emphasize that planning occurs in various contexts. Dillard and Solomon (2000) warn that most message production theories don't elaborate on the conceptualization of context and consequently keep its role unspecified, even when those theories do acknowledge that message production is inherently contextualized. They suggested that conversation contexts should be conceptualized in

terms of the actors' perceptions and the goals that actors have for the conversation. The following paragraphs consider the four most reported social goals (relational maintenance, the execution of work and academic tasks, persuasion, and job interviews) as specific contexts and link the study's implications to the existing literature for each context.

The most reported type of goal dealt with the initiation, development, and maintenance of close personal relationships, or what Wilson, Kunkel, Robson, Olufowote and Soliz (2009) called relationship (re)definition goals. These are situations where the actor seeks to influence the future of a personal relationship. That means actors use their imagined interactions not only to achieve the rehearsal function, but also the relational maintenance function. Many imagined interactions serve more than one function. In this case, thinking about what one wants to communicate to the other person implies thinking about the relationship, which can function to make the actor aware of details in the relationship, thereby maintaining the relationship (Honeycutt & Bryan, 2011).

In these cases, rehearsal may also include thinking about how one wants the relationship to develop as the actor decides what he/she wants to say. While deciding what to say, the actor may actually be determining what he/she wants from the relationship. This implies the use of imagined interactions toward the self-understanding function. Interestingly, Honeycutt, Vickery, and Hatcher's (2013) diary study suggested that when imagined interactions served two functions the combination of rehearsal and relational maintenance was the most common combination. When they served three functions, the most reported combination was rehearsal, self-understanding, and

relational maintenance. Furthermore, some subjects reported that the topic of these conversations would be discussion of a past conflict, which also links the use of rehearsal imagined interactions with close partners to the conflict linkage function.

When this is an existing close relationship, the actor likely knows the other person well, which suggests a relatively high level of domain knowledge: the actor has a large repository of past conversations with the other person upon which to reflect. That should make it easier to achieve specificity by engaging in more retroactive imagined interactions, which should result in decreased discrepancy.

However, the role of valence as a predictor of discrepancy and goal achievement suggests that it is also important to understand what initiated the desire to influence the future of the relationship. The negative association found between valence and discrepancy appears to support Honeycutt's (2003-2004) Conflict-Linkage Theory and Bevan, Finan, and Kaminsky's (2008) Serial Argument Process Model. If a past or continuing conflict or a serial argument will be discussed, the risk of conflict linkage is present when the actor fails to avoid the pitfall of ruminating with negative affect. Negative affect can cause a lack of perceived resolvability (Bevan, Finan, & Kaminsky, 2008) and increase discrepancy (Honeycutt, 2003-2004) even when past conversations are thoroughly imagined. Negative valence can also occur as a result of relational uncertainty (Van Kelegom & Wright, 2013), which may spur the desire to negotiate the direction of the relationship.

The current study found negative valence associated with reduced likelihood of goal achievement, which suggests that negative affect can decrease the chance that the

actor gets what he/she wants out of the subsequent conflict episode. This may contribute to reductions in perceived resolvability, as the actor is unable to imagine how the conflict is to be resolved. When positive affect is present during planning, the specificity level the actor achieves will likely be a major predictor of discrepancy.

When the conversation occurs in the context of initiating a personal relationship, the actor seeks to set up a first meeting (in case of a romantic interest, a date) or to effectively communicate during an early meeting. Lacking much information about the partner, a person's goals for the first date and for intimacy influence the choice of how to communicate interest (Mongeau, Jacobsen, & Donnerstein, 2007; Sanderson, Keiter, Miles, & Yopyk, 2007). More specific and less discrepant imagined interactions may be expected when experience with initiating dates and relationships increases, but the valence of those imagined interactions likely depends on traits such as attachment style as well as the way these people interpret their past experiences. When those interpretations include negative affect, the imagined interactions may serve for catharsis in addition to rehearsal.

While this first set of goals concerned relational communication, the second most common context focused on task communication, where actors seek to effectively perform tasks required by their profession or academics. Understanding how planning occurred in these settings can inform investigations of antecedents of competent communication in professional and academic settings.

The specific goals that subjects reported varied widely, likely a result of differences between subjects in professions and in academic experiences. Research on the

communication needed to effectively complete work activities and academic tasks reflects this variety; many different contexts have inspired separate studies. Most of those have sought to understand why some people achieve success while others do not. Often, such work has focused on a specific profession and investigated the relationships between goal achievement and generalized or context-specific traits such as communication competence (e.g. call center sales agents; Downing, 2011).

An important consideration in applying the findings of the current study to such settings is that the goals for conversations that are relevant to various professions can differ. An extensive consideration of various professions and academic situations is beyond the scope of this project, but the improved understanding of the planning processes gained from the current study can inform context-specific research efforts. Important in this is the actor's ability to detect the goals of the conversation partner (Berger, 2000), especially when a job requires conversations with many different people who may seek dissimilar goals.

Studies on the use of imagined interactions in organizational settings that addressed performance evaluations and job interviews found that work experience reduces discrepancy (Croghan & Croghan, 2010). In academic settings, students' imagined interactions when teachers misbehaved tended to be used to compensate for actually confronting the teacher (Berkos, Allen, Kearney, & Plax, 2001). This short list of past findings implies ample opportunity to expand knowledge about imagined interactions in various professional and academic contexts. The effect of domain knowledge gained from past experiences on reducing discrepancy (Croghan & Croghan,

2010) can be explained in more detail from the findings of the current study. People with more domain experience benefit from a larger repository of past conversations to consider, and they are better able to generate specific estimations of the upcoming conversation, which allows them to more accurately predict what will happen.

The third most commonly reported goal was persuasion. Persuasive goals were actually present more often than the coding suggests, as persuasive attempts that were part of somebody's profession (such as a sales conversation) were coded in the 'work task' category discussed previously. In other words, some form of persuasion might actually have been the most sought goal in this study, albeit sometimes secondary to effectively completing job tasks. This goal has been at the core of previous planning research such as Dillard's (1990) Goals-Plans-Action model, which was initially designed to explain message production during persuasive attempts. As such, it should not come as a surprise that persuasive goals were commonly reported in this study.

Attempts to influence another person to engage in a desired behavior have been extensively researched as evidenced by a wide literature base on persuasion through communication; Dillard and Shen's (2013) handbook provides an extensive review. The actor's ability to overcome obstacles appears to be an important determinant of persuasive success as it has been linked with the actor correctly anticipating resistance that the other person may have during the conversation, so that overcoming those obstacles can be planned for (King, 2000). Ifert and Roloff (1998) suggested that such obstacles reflect different reasons for resisting, including unwillingness to comply, inability to comply, and personal characteristics of the requestor. Anticipating resistance

can influence the form a plan takes as it increases the number of compliance strategies included in the plan (King, 2000), but not necessarily the level of detail by which the plans are created (Filipek & Lawrence, 2005).

Correctly anticipating the target's resistance implies achieving low discrepancy between the imagined and the actual conversation by predicting the reason(s) the target may have for not complying. Increasing the specificity of the imagined interactions about the persuasion attempt should help the requestor. However, since reasons to resist may be different between targets, spending more effort on retroactive imagined interactions about similar requests may not be directly helpful unless those retroactive imagined interactions consider past conversations with the target. On the other hand, cognitive development in children improves their ability to identify obstacles to achieving persuasion (Marshall & Levy, 1998), which suggests that people learn over time to better predict resistance in their proactive imagined interactions. Increases in domain knowledge should also improve requestors' abilities to generate specific and non-discrepant imagined interactions as it provides exposure to potential refusals, which can depend on the phrasing of the request (Paulson & Roloff, 1997). These refusals can then retroactively be imagined in preparation of future persuasive attempts.

While the three contexts discussed above could still be considered somewhat generic, the fourth most commonly reported goal was much more concrete: successful completion of a job interview. In this context, the main goal is to receive a job offer. This setting may be addressed in organizational communication research, but a better understanding of effective planning for employment interviews may be most relevant to

job applicants and the people who help them prepare for interviews, such as teachers or coaches.

There has been some research on the role imagined interactions play during the preparation for interviews. Croghan and Croghan (2010) indicated that people with communication apprehension tend to avoid preparing for the interview, which fits the idea that individual dispositions impact the planning process. Furthermore, people with higher domain knowledge gained from past work experience have more frequent and more varied imagined interactions, while people seeking salaried positions have less discrepant and more proactive imagined interactions than people seeking hourly positions in the service industry (Croghan & Croghan, 2010), which is in line with the current study's finding that domain knowledge impacts the planning process.

Unfortunately, that does not indicate what applicants who lack relevant experience with interviewing or with the type of job they apply to should do. Some have suggested alternative preparation methods such as mock interviews (Browning & Cunningham, 2012; Hansen, Oliphant, Oliphant, & Hansen, 2009) or watching job interviews in television shows (Bloch, 2011) can help college students prepare for their future interviews, but the evidence toward the effectiveness of these approaches is anecdotal. Considering the current study, these approaches may work because they provide the students with past conversations that may be retroactively imagined when they plan for an actual interview, and/or they help the student think more positively about the prospect of job interviews.

Opportunities for Future Research

While the study yielded some insights into the functioning of planning processes, there are still many questions that remain unanswered, and the study raised some more questions. This section provides some suggestions to guide further research in this area.

Two suggestions stem from limitations with the study. First, the poor reliability of the specificity measure suggests that future studies should carefully consider how to assess the specificity of subjects' imagined interactions. Studies using Honeycutt's (2003a, 2010a) Survey of Imagined Interactions have typically reported satisfactory to good reliability for specificity, so a thorough consideration when rephrasing the items in future studies is warranted.

Future studies will benefit from a more structured analysis of the specificity construct when used to assess imagined interactions at the specific level. A scale that contains multiple items for the different dimensions that may underlie specificity (detail by which the actor imagines his/her own communication, the other person's communication, and the location) could be designed and evaluated using factor analysis. Measuring specificity with a scale that contains more items and considers different dimensions may improve reliability. In turn, improved reliability should reduce the underestimation of the relationships (Schmitt, 1996), yielding an improved understanding of the role specificity plays during rehearsal. Furthermore, careful attention to the phrasing of the instructions may also help to overcome this reliability issue in future research.

In more general terms, future studies will benefit from thorough consideration of items of the Survey of Imagined Interactions (Honeycutt, 2003a, 2010a) when they need to be rephrased to reflect specific instances of imagined interactions rather than subjects' general tendencies. It may be necessary to generate and test additional items for each attribute. Those additional items should reflect the specific context that the researcher is investigating. Doing so means that each attribute is measured through a larger number of items that would allow for factor analysis of the items and provides researchers with more flexibility in removing items that do not load well, or contribute to poor Cronbach's alpha scores, while maintaining a sufficiently large number of items. In general, using scales with more items should result in stronger reliability (Tavakol & Dennick, 2011), which in turn means less underestimation of relationships and more confidence in the findings.

The second limitation that future studies could address is rooted in the fact that there were far more subjects who indicated they achieved their goals than subjects who indicated partial or no goal achievement. The ANOVAs and *t*-tests that compared these groups in their imagined interactions attributes would have had more statistical power with more subjects in the groups that achieved partial or no success. Furthermore, the relationships observed between experience and the imagined interactions attributes might look different when actors don't achieve their goals. It will be informative to investigate if that is the case by designing a study that asks subjects about instances where they did not achieve their goals. Results of such a study could be compared to the findings of the current study to determine if imagined interactions and domain knowledge operate in a

similar manner. Another option is to assess planning activity as it occurs and determining if goals were achieved at a later time (i.e., after the actual conversation took place).

Other directions for future study are inspired by the findings of the study and seek to link these findings to the precursors and outcomes of the planning process. Future investigations should assess what actually occurs during the conversation that is planned for, and relate elements of that conversation to the planning processes.

The current study's design asked subjects to report on their conversations through some open- and closed-ended items, but those items did not capture some important elements of communication that the literature suggests are impacted by planning. Examples of such elements are verbal and non-verbal fluidity and plan adaptation during the conversation. Choi (2007) suggested that people who don't rehearse because they aim to be spontaneous in the conversation pay the price of reduced verbal fluency. The propositions of Berger's (1997) Planning Theory of Communication suggest that alterations to the plan are impacted by elements of the initially formulated plan.

Study designs that include observational measures, and/or procedures where subjects watch their conversation and indicate what they thought as the conversation progressed will allow such investigations. Additionally, there is some evidence that planning is associated with activity in specific regions of the brain (Beaty and Heisel, 2007), which suggests that further use of physiological measures can inform future investigations of planning. For example, a study using physiological measures could answer the question if there are physiological differences between plan generation and proactive imagined interactions, to establish the degree to which these activities overlap.

Honeycutt, Mapp, Nasser, and Banner (2009) proposed (but did not present results of) a study to test the hypothesis that imagined interactions are associated with physiological correlates. Honeycutt (2010b) presented data on heart rate and blood pressure during imagined interactions that suggested physiological arousal occurs when people use imagined interactions towards conflict management and catharsis following an actual conversation about a displeasing topic. Similar research could be designed to investigate the rehearsal function.

Another potential study is a quasi-experiment where subjects who are high and low in domain knowledge are recruited to further investigate the moderator effect that domain knowledge appears to have on the relationship between retroactivity and specificity. An example might be a comparison of planning for job interviews between college students or recent graduates (low domain knowledge) and professionals who are mid-career or later (high domain knowledge). A quasi-experimental design will likely be necessary as domain experience is not a construct that can experimentally be induced.

Furthermore, the role of training in building up domain knowledge could be assessed from a viewpoint inspired by the current study. It was suggested in the previous section that mock job interviews might be effective because they build domain knowledge. If that is the case, people with similar levels of retroactivity but various amounts of training through mock communication should differ in the level of specificity by which they imagine an anticipated communication in the domain for which they were trained. This could have applications in a wide variety of settings, such as job interviews,

sales training, and many other areas where people are exposed to role-playing to improve their communication.

Finally, predictors of individual differences in the planning process should still be investigated further. Waldron and Applegate (1994) discussed the need for models that link individual differences in social cognition and conversational plans to message behavior, and progress in this area is still underway. Primary candidates are those traits that influence how people think about communication and their decision to avoid or engage in communication, such as communication apprehension and attachment style. Additionally, the relationship between planning processes and communication competence should be investigated to determine why competent communicators tend to achieve low discrepancy (Honeycutt, Zagacki, & Edwards, 1992-1993). One possible explanation is that their planning processes may differ from those of less competent communicators. If such differences are observed, they could be used to design training activities geared toward teaching people to rehearse more effectively. Such training may teach people to more accurately predict how conversations will unfold so they are more likely to achieve their goals.

Concluding Remarks

The investigation presented in this dissertation analyzed how planning occurs through rehearsal imagined interactions. In line with previous research, it was confirmed that planning for strategic communication is a very common experience, and planning for conversations occurs in a variety of communication contexts and with a range of conversation partners. As expected, people who imagined the upcoming conversation in

more detail were less likely to experience that the conversation was discrepant from what was imagined. Results of the study also confirmed that people who were able to accurately predict the conversation, and those who found their imagined interactions enjoyable were more likely to achieve their social goals during the actual conversation.

On the other hand, the results of the study challenged the proposition in Berger's (1997) Planning Theory of Communication that more domain knowledge about the type of anticipated conversation leads to a more specific plan. In fact, the evidence suggests that domain knowledge actually operates as a moderator rather than directly predicting specificity. Consideration of past conversations mainly helped those with high domain knowledge generate a more specific plan for the upcoming conversation.

Wrapping up this work, the researcher hopes that insights gained from this study will form one of many building blocks that inform further research and theory on these topics so communication scholars will be better able to understand and predict planning and rehearsal. This may occur by studies on imagined interactions informing refinements to planning theories that explain how people generate goal-directed messages. It may also occur through the formulation of a theory of rehearsal imagined interactions that is informed by research and theories from the planning literature. Research progress is not predictable, so it may happen through a different, as of yet unforeseen, direction.

Regardless of the route that will be taken though, a better understanding of the planning process and its relationships to achieving effective communication will be of interest. And not only communication scholars will be interested; anybody who wants to communicate something important with their romantic partner, people preparing to

interview for the position they always wanted, those looking to persuade another person to do something for them, and anybody else who wants to achieve a goal by communication with another person can benefit from understanding how to plan more effectively for those conversations.

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Appendices

Appendix A: Axioms and Theorems of Honeycutt's (2003-2004)

Conflict Linkage Theory

Axiom 1: Interpersonal relationships exist through intrapersonal communication as imagined interactions involving the relational partner outside of actual interaction.

Axiom 2: An interpersonal relationship is maintained and developed through thinking and dwelling on a relational partner.

Axiom 3: A major theme of interpersonal relationships is conflict management (e.g., cooperation-competition). Managing conflict begins at the intrapersonal level of communication in terms of IIs.

Theorem 1: Recurring conflict is maintained through retro and proactive IIs.

Theorem 2: The current mood of individuals is associated with whether or not their IIs are positive or negative. The better a person's mood, the more positive their IIs will be as well as the inverse.

Theorem 3: When an individual attempts to purposely create positive IIs (e.g., as therapy for a poor marriage), negative intrusive IIs will frequently occur, in many cases with effects that undermine the therapy or positive intent.

Theorem 4: Suppressed rage is a result of the lack of opportunity or inability to articulate arguments with the target of conflict.

Theorem 5: Thinking about conflict may be facilitated through exposure to contextual cues including music, substance abuse, and media (TV shows and movies).

Theorem 6: Recurring conflict is reflected in physiological arousal in which anxiety is triggered and persons “fight” or take “flight” in terms of the sympathetic nervous system.

Theorem 7: In order to enhance constructive conflict, individuals need to imagine positive interactions and outcomes.

Theorem 8: Conflict-linkage has the potential of distorting reality because conflict is kept alive in a person's mind and facilitates anticipating a conversation that most likely will be discrepant from reality since the actual interaction will not occur as planned.

Theorem 9: People use IIs as a mechanism for escape from societal norms. For example, a person may be expected to talk a certain way with their boss in real life, but in their IIs, the persons can be considerably more bold or liberated.

Appendix B: Propositions and Corollaries of Berger's (1997) Planning Theory of Communication

Proposition 1: When persons derive plans to reach goals, their first priority is to access long-term memory to determine whether an already-formulated or canned plan is available for use.

Corollary 1: when individuals fail to find canned plans in long-term memory, they will resort to formulating plans in working memory utilizing potentially relevant plans from a long-term store, from current information inputs, or both.

Proposition 2: As the desire to reach a social goal increases, the complexity with which plans are formulated also tends to increase.

Proposition 3: Increases in strategic domain knowledge tend to produce increases in the complexity of plans within that domain.

Corollary 1: Maximally complex action plans will be generated when high levels of both strategic domain knowledge and specific domain knowledge obtain. Low levels of strategic domain knowledge or high levels of strategic domain knowledge with low levels of specific domain knowledge produce plans with lower levels of complexity.

Proposition 4: Strength of desire and levels of strategic and specific domain knowledge interact to produce differences in plan complexity. High levels of desire and high levels of knowledge produce more complex plans. Low and high desire levels coupled with low knowledge levels should produce less complex plans.

Proposition 5: Increased concerns for the meta-goals of efficiency and social appropriateness tend to reduce the complexity of plans to reach social goals.

Proposition 6: When people experience thwarting internal to the interaction, their first response is likely to involve low-level plan hierarchy alterations. Continued thwarting will tend to produce more abstract alterations to plan hierarchies.

Corollary 1: Elevated levels of goal desire will propel planners to make more abstract alterations to plan hierarchies when their plans to reach social goals fail.

Corollary 2: Planners with high levels of goal desire, who experience repeated thwarting of goal-directed actions, will manifest higher level alterations to their plans earlier in the goal failure-plan alteration sequence than will planners with lower levels of goal desire who experience repeated goal failure.

Proposition 7: Attainment of a superordinate goal will produce positive affect. Interruption of a plan will result in the induction of negative affect.

Corollary 1: The intensity of affect experienced after goal attainment or interruption is positively related to the importance of the goal.

Corollary 2: Given the unavailability of contingency plans, the closer to the goal the interruption occurs, the more intense the negative affect will be. The presence of contingency plans will tend to dampen the intensity of negative affect experienced.

Corollary 3: The greater the investment of time and energy in the pursuit of a goal, the more intense the negative affect experienced will be when interruption occurs. Again, the presence of contingency plans will tend to dampen the intensity of negative affect.

Proposition 8: Repeated thwarting of plans will lead to the instantiation and enactment of progressively less socially appropriate plans.

Corollary 1: The importance of the goal determines the extent to which one will continue to deploy successively less socially appropriate plans in response to thwarting. The more important to goal, the more one will be willing to employ less socially appropriate plans.

Proposition 9: With repeated thwarting over time, resulting in the induction of higher levels of negative affect, plans will become progressively less complex.

Proposition 10: Under conditions of goal failure, individuals whose plans contain no alternative actions and those whose plans contain numerous action alternatives at the point of thwarting will manifest lower levels of action fluidity than those whose plans contain a small number of contingent plans.

Proposition 11: Increased access to planned actions will generally increase action fluidity levels in such a way that the curvilinear relationship between the number of alternatives and action fluidity will be maintained but displaced upward relative to the same function obtained under conditions of reduced action access.

Appendix C: Recruitment Message

Hello,

I am contacting you to tell you about a study I am conducting for my dissertation. I am studying how people plan for conversations, and I would like to ask you to consider helping me by completing a survey online.

You can participate if you are at least 18 years old. The survey should not take you more than 15-30 minutes. All responses to the survey will be kept confidential and at no time will your identity be revealed in the analysis or reporting of the results. It is important to know that your participation is completely voluntary and you may choose to exit the survey at any time.

You can access the survey through this link: <http://goo.gl/kzGBmN>

I need as many participants as possible so feel free to share and forward this message to anybody else who may be interested and is at least 18 years old.

If you would like to learn more about the study you can always contact me at mvankele@utk.edu or my advisor Dr. Kenneth J. Levine at klevine1@utk.edu.

Thank you for your time!

Sincerely,

Martijn J. Van Kelegom

University of Tennessee, Knoxville
School of Communication Studies

Appendix D: Informed Consent Statement as Presented to Subjects

**The University of Tennessee, Knoxville
College of Communication and Information
School of Communication Studies
Informed Consent Statement**

**Project title: Rehearsal for Communication through Imagined Interactions
Investigators: Martijn J. Van Kelegom and Dr. Kenneth J. Levine**

Thank you for your participation in this research study. People who are 18 years and older are invited to participate in this research study. The study, which is conducted by a research team from the University of Tennessee's School of Communication Studies, aims to collect information about how people prepare when they anticipate an important conversation.

Please read the following information carefully before continuing to the survey.

PROCEDURES: You will be asked to answer a series of questions about yourself and your preparation for a recent conversation. Please read each question completely and provide the answer that best describes you by clicking the bubble. Please do not select BACK on your browser. You must complete the entire survey during one session. This survey should take you no more than 30 minutes.

RISKS: The risks of participating in this study are no greater than those encountered in everyday life. The questionnaires are commonly used in communication research without harm. If some of the questions in this study are found to be upsetting or cause discomfort, you may skip the question(s) and go on to the next question or you can terminate your participation in the study entirely without penalty.

BENEFITS: The findings of the study will be used to further knowledge and encourage future research on the way that people prepare for important conversations. If you wish to learn more about this topic or the results of the study, you may contact the researchers.

CONFIDENTIALITY: The information in the study records will be kept confidential. Data will be stored securely and will be made available only to persons conducting the study unless participants specifically give permission in writing to do otherwise. Your identity will never be connected with your responses to the survey, and responses will only be presented in aggregate or summary form. No reference will be made in oral or written reports which could link participants to the study. Your responses will not be released to any individual outside of the research team.

COMPENSATION: Student participants will receive course research credit for their

participation in this study as indicated by your course instructor. Participants who withdraw from the study prior to its completion will not receive credit. You will not be paid for participating in this study.

PARTICIPATION: Your participation in this project is voluntary. There is no penalty if you choose not to participate or withdraw from the study. If you withdraw from the study before data collection is completed your data will be returned to you or destroyed.

CONTACT INFORMATION: Any questions about this study may be directed toward Martijn Van Kelegom at telephone number (865) 974-8200 or email, mvankele@utk.edu or Dr. Kenneth Levine at telephone number (865) 974-1136 or email, klevine1@utk.edu. If you have questions about your rights as a study participant, contact the Office of Research Compliance Officer at (865) 974-3466, research@utk.edu.

By clicking yes, you indicate that you are at least 18 years old and consent to participating in this study.

☐ Yes

☐ No

Appendix E: Survey and Instructions

Thank you for taking the time to help with this research study. Please read the instructions carefully.

This study investigates how people prepare when they anticipate an important conversation. Today we would like to learn about your experiences. Please think back to the most recent time that you knew a conversation with another person was coming up and you really wanted to communicate effectively during that conversation. Such a situation may come up in many contexts; it could be in academic settings (e.g. before talking to a professor or advisor), in work settings (e.g. before talking to your boss or before a job interview), in romantic settings (e.g. before a date) or other situations.

You may think of any recent conversation, but it is important to choose one where:

- you had a conversation with one other person (so not a public speaking situation).
- you knew about the conversation before it was to occur.
- *and* you considered it important that you would communicate effectively.

Once you thought of a conversation that fits these three criteria, please answer the following questions:

1. Describe the context of this anticipated conversation in as much detail as possible.
2. How long ago did the conversation take place?
3. Who was the person you anticipated talking to?
4. How would you best categorize your relationship with this person?
 - A family member who I feel close to
 - A family member but not one I feel particularly close to
 - A friend
 - An acquaintance
 - A romantic partner/spouse
 - A manager at work
 - Someone at work but not my manager
 - A professor/instructor/academic advisor or someone else associated with my academics
 - A medical professional
 - Other (please specify)

5. How long have you known this person?
 - I did not know this person before the conversation
 - Shorter than one month
 - One to three months
 - Three to six months
 - Six months to one year
 - One to three years
 - Longer than three years
6. How close was your interpersonal relationship with this person before the anticipated conversation?
 - No relationship – I did not know the person before the conversation
 - Not close at all
 - Somewhat close
 - Close
 - Very close
7. Why was it important for you to communicate effectively in the anticipated conversation?
8. What goals did you have for the anticipated conversation?
9. Did you achieve those goals? Why or why not?
10. How did you determine if you did or did not achieve your goals?

The next section asks about the way that you planned for the anticipated conversation. Some people use imagined interactions during planning.

Imagined interactions are “mental” interactions we have with others who are not physically present. People may have imagined conversations that occur in self-controlled daydreams or while the mind wanders. They may occur before or after a real interaction has taken place. Imagined interactions may be brief or long. They may be ambiguous or detailed. They may address a number of topics or examine one topic exclusively. The interactions may be one-sided in which the person imagining the discussion does most of the talking, or they may be more interactive in which both persons take an active part in the conversation.

*Following are a few items asking you about your experiences with imagined interactions **before** the actual conversation occurred. Please read each item carefully and try to answer it as honestly as possible.*

Retroactivity

- 11. I often had imagined interactions about previous conversations I had in this context.
- 12. I frequently imagined past meetings that shared similarities with the anticipated conversation.
- 13. I relived past conversations I had had with the other person or similar people.
- 14. I often thought about similar prior conversations that I have participated in.

Specificity

- 15. The imagined interactions I had about the upcoming conversation tended to be detailed and well developed.
- 16. It is hard recalling the details of my imagined interactions about the upcoming conversation.*
- 17. My imagined interactions about the upcoming conversation were very specific because I envisioned where the conversation would take place.
- 18. When I had imagined interactions about the upcoming conversation, I often had only a vague idea of what the other person would say.*

Discrepancy

- 19. In the real conversation, I was very different than in my imagined ones.
- 20. I said in real life what I thought I would say.*
- 21. The actual conversation was very different from what I imagined.
- 22. In the real conversation, the other person was very different than in my imagined ones.
- 23. My imagined interactions were quite similar to the real conversation that followed them.*
- 24. What I actually said to the other person in the real conversation was different from what I imagined I would say.

Domain Knowledge

- 25. I had often experienced situations similar to the anticipated conversation.
- 26. The anticipated conversation represented a novel situation for me.*
- 27. In the past, I have frequently been in conversations where I sought goals similar to the goals I had for this conversation.
- 28. I was very familiar with the person I would speak to or people similar to him/her.

Valence

- 29. I enjoyed most of my imagined interactions about the anticipated conversation.
- 30. My imagined interactions about the anticipated conversation were usually quite unpleasant.*
- 31. My imagined interactions about the anticipated conversation were usually enjoyable.
- 32. My imagined interactions about this anticipated conversation involved happy or fun activities.

Frequency

- 33. I had imagined interactions many times throughout the week before the anticipated conversation.
- 34. I frequently had imagined interactions about the anticipated conversation.
- 35. I rarely imagined myself interacting with the other person.*
- 36. I often had imagined interactions about the anticipated conversation throughout the day.

Proactivity

- 37. I often had imagined interactions before I interacted with the other person.
- 38. Before the conversation, I frequently imagined it.
- 39. Before I met the other person, I imagined a conversation with him/her.
- 40. I rarely imagined the conversation before it occurred.*

Variety

- 41. I had recurrent imagined interactions with the other person over the same topic.*
- 42. My imagined interactions about the anticipated conversation tended to be on a lot of different topics.
- 43. The imagined interaction I had before this conversation involved a variety of people.
- 44. The imagined interaction I had about earlier conversations with the other person involved a lot of different topics.

Self-dominance

- 45. I talked a lot in my imagined interactions about the conversation.
- 46. The other person dominated the conversation in my imagined interactions.*
- 47. I dominated the conversation in my imagined interactions about the anticipated conversation.
- 48. When I had imagined interactions about the conversation, the other person talked a lot.*

Please tell us about yourself.

49. What is your sex?

Male

Female

50. What is your age?

I am _____ years old

51. Which of the below best describes your race?

White

Black/African American

Hispanic

Middle Eastern

Asian/Pacific Islander

Native American/American Indian

Bi-racial/mixed/multi-ethnic

Other (Please specify) _____

I do not wish to answer this question.

Note: items 11-48 were presented in an order that maximized the space between two items measuring the same construct. The response options for items 11-48 included:

(1) Very Strong Disagreement

(2) Strong Disagreement

(3) Disagreement

(4) Neither Agreement nor Disagreement

(5) Agreement

(6) Strong Agreement

(7) Very Strong Agreement

* = Reverse coded item

Vita

Martijn Jos Van Kelegom was born in Utrecht, the Netherlands, on August 7, 1979. He holds a Master's degree in Business Information Systems from the University of Amsterdam (1997) and a Master's degree in Communication and Information from the University of Tennessee, Knoxville (2004). His research interests are social cognition, interpersonal communication, imagined interactions, and planning.