THE EFFECTS OF STEREOTYPE THREAT ON MIXED-GENDER
CONVERSATION

by

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ABSTRACT

KEVIN CHAUNCEY. The effects of stereotype threat on mixed-gender conversation.
(Under the direction of DR. ELIZABETH MILLER)

The present study examined some effects of Stereotype Threat priming on participants in a two-person prompted discussion. Four pairs of participants (one man, one woman) each discussed three workplace scenarios and were prompted to give suggestions for the workplace conflicts. Each scenario was preceded by one of three prompts. The first prompt did not mention that gender was relevant to the study, while the second two prompts mentioned that it was, and that the tasks were measurements of leadership ability and relationship maintenance ability respectively. These four sessions were recorded, transcribed, and analyzed to see whether a given participant or pair's verbal behavior changed between their non-specifically and gender-specifically primed discussions. Three of the features analyzed were the opening sequences of each discussion, participants' rate of hedging, and rate of conversational fillers. Analysis of the opening sequences for each discussion indicated a difference in a pair's verbal behaviors in the sessions that were preceded by a priming-prompt. Hedging rate across all four pairs showed a difference after the priming prompts. In three pairs, women's hedging rate increased when the task was framed as indicative of leadership ability and men's hedging rate increased when the task was framed as indicative of relationship maintenance ability. In the fourth pair, the effects were the opposite and to a similar degree. There was no noticeable change in conversational filler use.

ACKNOWLEDGEMENTS

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TRANSCRIPT ABBREVIATIONS

[ ]   Overlapping Speech

( )   Gap

(( ))   Transcribers note

__   Stress

: : :   Word stretch

.   Falling intonation

,   Slightly rising intonation

?   Sharply rising intonation

↑   Rise in pitch

↓   Drop in pitch

°   Quiet speech

→   Line of interest

CHAPTER 1: INTRODUCTION

In a time where different cultures are coming together at ever-increasing rates, it must seem increasingly convenient to rely on generalizations about various groups of people. The rights and livelihoods of one group or another are constantly changing, and it is easy to point out progress as you look back over the course of a century. However, it is also easy to identify centuries-old stereotypes and biased notions which still linger on. All groups have stereotypes and stigmas associated with them, though some may have more devastating consequences than others. For instance, it would not be uncommon to find someone familiar with the idea that black men are more athletic than white men. This is a scenario where a majority group faces a negative stereotype and a minority group could call it a positive stereotype. That said, the effects of such a stigma cannot be compared with the negative stigma that black men face, whether those stereotypes pertain to intelligence, violence, or morals. In general, men may face negative stereotypes like the notion that they are not as capable at maintaining relationships. The effects of such a stigma, however, do not create as much of a socio-economic barrier as pervasive notions that women are less able leaders. These notions are pervasive, and to any given reader they likely sound familiar. What if the very knowledge of these stereotypes could affect the individual without a single racist or sexist utterance being spoken? What if the presence of another individual is not even required for someone to feel the effects of these negative stereotypes? Studies over the last few decades have explored how the setting and situation itself can make a negative stigma relevant, and how the triggered salience of this stigma can affect an individual. The current study aims to explore how these stereotypes affect interaction between the individuals. Whether or not stereotypes

have any basis in reality – and in fact presuming that they have none at all – the current study relies on the fact that these stereotypes are pervasive and known, especially to those targeted by them. The core questions of this study are as follows: 1) do participants display a change in communication behavior after their stigmatized identity is made salient in and relevant to the interaction, and 2) does this change in behavior result in a negative outcome for the individual? The negative effects on an individual resulting from the triggering of a stereotype are known as the phenomenon called *stereotype threat*. The main questions of this study then simplify down to: does stereotype threat affect conversation?

CHAPTER 2: LITERATURE REVIEW

2.1. Understanding Stereotype Threat

In their *Annual Review of Psychology* article simply titled "Stereotype Threat", Spencer, Logel, and Davies (2016) put the phenomenon plainly enough: minorities and stigmatized groups in negatively stereotyped domains (e.g. women in politics, math, or engineering) will be motivated by the same factors and face the same pressures as any other group, but they will also face additional pressures that their peers (e.g. men in politics, math, or engineering) will not. The key point here is that these are domain specific pressures being faced, and if they can be faced, they can be removed. Steele (1997) writes that these are not internalized doubts about oneself or one's identity – these are not the pressures one continues to feel as they walk back into their home, surrounded by people of their in-group and out of the stigmatized context. He writes with hope that revelations about stereotype threat could allow the situational threat to be lifted: a far more "feasible" task than "altering [someone's] internal psychology" (p. 614). The threat of conforming to negative stereotypes about one's identity can be raised by the subtlest of cues in the environment. A demographics question at the beginning of a test, posters in a room, or even simply the presence of individuals of other non-stigmatized identities can weigh down on someone until they fail or back out of a situation or field before they even get the chance to prove themselves. As Steele included in the title of that 1997 paper, the threat is "in the air", in the setting and context of interaction, and easily felt even if it cannot quite be identified. A threat in the air around crucial institutional settings, like schools, creates life-long obstacles for some groups. That is where research on stereotype threat began.

2.1.1. Steele and Stereotype Threat

In the early 1990s, while linguists took a rare national spotlight debating what was then popularly known as "Ebonics" and its legitimacy as a language variety to be used in schools, Claude Steele presented another explanation for the racial gap in standardized testing. Instead of looking to language of standardized tests, Steele looked at the situation and context in which the tests were given. In the years before Steele's (1995) article called "Stereotype threat and the intellectual test performance of African Americans", his brother, Shelby Steele, had published *The Content of our Character* (1990). Claude Steele includes a disclaimer in his introduction summarizing Shelby Steele's point: that negative perceptions of African Americans are eventually internalized by African Americans themselves leading to poor life choices. He quickly and bluntly states that his theory does not focus on any sort of internalization, but instead looks out at the "immediate situational threat" (Steele, 1995, p. 798). He would have to continue reinforcing this distinct difference in a series of *New York Times Magazine* letters between him and Shelby Steele (Watters, Sep. 17, 1995; S. Steele, Oct. 15, 1995; C. Steele, Oct. 22, 1995), and in later publications throughout the years. According to Claude Steele, his theory is more "hopeful" (Steele, 1995, p. 810), noting that situational threat can be "feasibly corrected" – that it is something more concrete, direct, and confrontable (C. Steele, Oct. 15, 1995). Additionally, Steele's theory is not limited to African Americans' experiences, and has since been applied to explain performance differences (in test scores, physical activity, negotiation tactics, etc.) among a wide range of identities.

2.1.2. Who Identity Threat Affects

While Steele's early pioneering of stereotype threat research focused on minority African-Americans in school settings, over two decades of research have since proven its effects on a variety of groups in their own stigmatized contexts. Twenty years on, Spencer et al. (2016) published a review of research on stereotype threat and its applications. They relayed evidence of stereotype threat affecting Black, White, Asian, and Latino people, both women and men, and even findings for age as a susceptible identity trait (Steele uses a similar example in his 1997 article, describing a scenario where a grandfather fears any "faltering of memory will confirm or expose him to stereotypes about the aged," p. 617).

Individuals are perceived by others as performing a variety of identities and likewise claim multiple identities themselves. That said, individuals do not walk through life in perpetual awareness of their collective identities. While it can be difficult to consider how identity affects us in our day-to-day interactions, the context may make it a little easier to identify *when*.

Identity threat begins when an individual either consciously or unconsciously finds situational demands or cues to be potentially harmful to their identities. According to Steele (1997), individuals do not need to believe the stereotype to experience its effects. This is key: by no means does this theory rely on the legitimacy of the stereotype or require that any party believes in it. The simple fact that the stereotype exists is known by the stigmatized individual, and that the individual knows they *could* be judged by its standard is enough to provoke the idea of the stereotype with relevance in a particular

context. Major and O'Brien (2005), discussing the more widely defined notion of *identity threat* (which includes stereotype threat), summarize that for "ability stigmatized groups" threatening situations include "taking an ability diagnostic test…being outnumbered by members of nonstigmatized groups…being taught by an instructor who is a member of a dominant outgroup…being exposed to media images that reinforce negative stereotypes about one's group, or overhearing that an evaluator is sexist" (p. 399-400).

2.1.3. The Effects of Stereotype Threat

Steele (1997) acknowledges early in his works that stereotype threat only affects a "subportion" of a stereotyped group, as it is domain specific and thus relies on identification with that domain (p. 17). For example, even if stereotypes representing women as having poor mathematics ability are pervasive and well known, not all women will be equally threatened or affected in a mathematics-related domain. The effects of stereotype threat still require those women to identify with the domain – why would they care about potentially proving the stereotype otherwise? Women who have written themselves off as bad math students do not have the same pressure of performing well on that math test as the women who consider themselves good students in the domain. Paradoxically, it is the students who have the highest expectations for their performance in the domain who are most likely to suffer the worst effects of stereotype threat.

Steele (1997) provides a study of women's performance on a standardized math test as evidence of stereotype threat's effects. In a study done earlier that year with Spencer (published later, Spencer et al., 1999), men and women were given a "difficult math test" which was branded to them as either a test which "produces gender

differences," or branded as one which was "insensitive to gender differences" (covered in Steele, 1997, p. 620). The results were clear enough: men drastically outscored women in the test which claimed to reveal score differences across genders, but test scores were nearly equal when characterized as gender-irrelevant. Additionally, further tests revealed "post-treatment anxiety" to be a better predictor of the effect than "expectancies or efficacy" (620). The framing of the test triggered the additional pressures which lowered the scores even if participants were confident in their abilities going into it. This pattern was replicated in GRE verbal tests involving Black and White students, with Black students underperforming in the first frame and then both Black and White students' results balancing out within the supposedly race-irrelevant frame. In another test, the effects held even when participants were exposed to a subtler cue: simply marking race on a demographic questionnaire before the test.

It should be noted here that the way these cues are presented seems to elicit varied responses from the targets. Kray, Reb, Galinsky, and Thompson (2004) distinguish a difference between the effect of stereotype threat and what they called stereotype reactance. While considering the effects of stereotype threat on men and women's communication behavior at a negotiation table, Kray, Thompson, and Galinsky (2001) made the following observation: subtle cues to their participants (e.g. describing stereotypically masculine or feminine traits as primes) elicited "assimilation effects" in their study (i.e. participants behaved more like the stereotypes suggested they should). However, explicit cues (e.g. direct reference to gender differences in performance) produced the opposite effect, and women in their study tended to identify with more stereotypically masculine traits and "set higher aspirations" than if implicitly primed

(Kray et al., 2004, p. 401). What does this suggest with respect to Steele's research,

where explicit reference to stereotypes seemed to produce results just as strong as

implicit reference? It is possible that stereotype threat will have different effects on social

behavior and test performance. It is also probable that any given effect of stereotype

threat is group and context specific (i.e. comparing the effects of stereotype activation for

Black students in academia and women at a negotiation table is apples and oranges). To

further this point, one last finding from Kray et al. (2004) demonstrated that "blatantly

telling women that they lack the attributes necessary to prevail at the distributive

bargaining table produces stereotype threat in the absence of power and stereotype

reactance when sufficient power is possessed" (p. 409). When power was manipulated

among the participants (i.e. some were given a greater advantage in the experiments),

only those who were on the dominant side of the power-asymmetry counter-reacted

positively to the explicit negative stereotype prime. In addition to group-identification,

domain-identification, and the subtlety of the situational cue, relative power in an

interaction can be considered yet another factor mediating stereotype threat's effects.

One of the troubling effects of stigma being perceived as domain relevant is the

notion that individuals may then *disidentify* with the domains in which the stigma is

relevant (e.g. women distancing themselves from math-related careers; Black students

disconnecting school achievement from their identities). The disconnect acts as a defense

mechanism, reducing the effects of stereotype threat but also reducing the effect of

positive feedback (Steele, 1997, p. 623-624).

In their analysis of stigma and identity threat, Major and O'Brien (2005) suggest a

model in which situational cues play a role in "identity threat appraisals", which then lead

to both non-volitional and volitional responses. In their model, these responses include coping mechanisms as volitional (i.e. willing) responses, and increased anxiety, vigilance, and working memory load as non-volitional responses (i.e. automatic, involuntary). The outcomes these responses produce can then result in feedback which leads to a recycling of the process (p. 399).

2.1.4. Working Memory as a Mediator for Stereotype Threat

The present section is particularly concerned with the limited nature of an individual's working memory function. Though the effects of stereotype threat are clear enough, there have been a number of models used to explain the processes which mediate such effects. While some researchers have used anxiety research and related fields as a scaffolding for their stereotype threat models, others have considered working memory as a mediator of threat (not to suggest that these are necessarily mutually exclusive). First, it is worth looking at how working memory itself is considered to function.

In his 2010 article, "Working Memory," Baddeley recaps early notions of working memory, and proceeds to describe his more recent model of working memory as composed of four parts: a visuo-spatial sketch-pad, a phonological loop, an episodic buffer, and a central executive coordinating the set. This central executive, to Baddeley, refers to what is likely an "alliance of executive processes" which create a "system whereby working memory is controlled" (p. 139). In a sense, this executive refers to the ability to manage the various inputs (visual or audible) competing for attention in a system which is limited even in the best conditions. More than simply the ability to store

attentional details in short term memory, working memory is the ability to manage tasks of a given cognitive load.

In their work, Schmader, Johns, and Forbes (2008) use the term working memory to "represent a limited-capacity executive process that coordinates cognition and controls behavior to achieve performance goals in the process of exogenous or endogenous information that competes for attention" (p. 340). In other words, Schmader et al. (2008) see it as the limited ability to focus on goal-oriented tasks while distracted by additional internal thoughts or external situational cues. The authors use the term "working memory" interchangeably with "executive function". For the purposes of this paper, the term working memory will similarly suffice.

Schmader et al. (2008) cited earlier work (Schmader & Johns, 2003) as direct evidence that stereotype threat affects working memory. Given a series of math problems and words to hold for recall, participants in three separate experiments (targeting female participants and Latinx participants) recalled fewer words when the sessions were framed as testing competency in fields stereotypically out of their domain (indicative of math ability for women, tests of general intelligence for Latinx participants). Additionally, in the third experiment, researchers controlled for working memory and found the direct effect of stereotype threat on math performance was reduced to non-significance (i.e. no significant difference between threat and non-threat scenarios), suggesting that working memory fully mediates stereotype threat's effects -- in that context at least. In another study, Beilock, Rydell, and McConnell (2007) found that individuals under threat only underperform if the task is complicated enough to warrant significant use of working

memory (i.e. already pushing the brain's limits where any more cognitive load would hinder the ability to delegate between tasks).

2.2. Building Common Ground in Conversation

Very generally, a core function of communication is to get someone (or some*thing*, in an increasingly technological age) from a state of unknowing to one of knowing. Whether the interlocutors are complete strangers or the closest of companions at the start of a new conversation, there is at least some missing *common ground*, and communication involves relaying information to bridge this gap between someone who has it to someone who does not -- though this is not a one-way process. Here I will use definitions for common ground and the process of *grounding* from Clark and Schaefer (1989). Clark and Schaefer (1989) roughly equate common ground with the idea of shared presuppositions between the individuals: not only what we both assume, but what we have both assumed that we are both going to assume. The process of grounding, then, involves the communicator and the communicated-to doing *something* to indicate their common understanding, perhaps most importantly from the end of those being communicated to (even a simple, *yeah* on the part of the listener). Whether these things are done (or not done) is interpreted meaningfully by the participants. In the following sections, I will cover a few of the behaviors that are often used to establish common ground, or can indicate that there is difficulty in the comprehension process, that will be transcribed and analyzed during the study. The following sections will cover grounding responses, gaps and overlaps, repair, conversational fillers, and hedges.

2.2.1. Grounding Responses

Sometimes referred to as "back-channeling", participants produce sounds, words, and other behaviors while another is speaking that serve a variety of functions. These responses can act as continuers (Schegloff, 2000) or assessments (Goodwin, 1986), but in the end any sort of action is serving as some sort of meaning making device intending to express *something* to the speaker (by no means must this *something* be entirely supportive – yet it intends to be helpful for the interaction, such as by indicating that the listener is paying attention to the speaker). The term "grounding responses" seems to be used primarily in fields specifically looking at prosody (Beňuš et al., 2011), but I will use the term here as a single referent to include the various sorts of backchannel responses that seem to signal common ground between the participants (i.e. whether continuers, assessments, or otherwise). Beňuš et al. (2011) particularly look for what they call single-word grounding responses (SWGRs), which include words like "okay", "yeah", or "mhm". The present study will not necessarily limit analysis to single word responses (though the clear majority of such responses *are* SWGRs) but will look for grounding responses in general that "facilitate the addition of preceding information into the stack of concepts describing the common ground" (p. 3004).

Gaps and Overlaps

Turn-taking is one of *the* defining characteristics of conversation. A scenario involving an individual receiving a list of instructions from their boss, even if they replied with an affirmative, would hardly be considered a real conversation. Conversation is generally structured in such a way where "one speaker at a time" is the desired pattern,

and participants either seek ideal times to claim a turn or employ strategic behaviors to indicate that they plan to (Schegloff, 2000). Such ideal times are often at the end of completed *Turn-Constructional Units* (TCUs), units of speech which, as the term suggest, construct and project the end of a participant's turn. These units can take multiple grammatical or syntactic forms (e.g. questions, declarations, exclamations) and are actively interpreted by recipients as they are formed and produced. Points at which these TCUs could end, and which provide opportunity for speaker change are called *Transition Relevance Places* (TRPs).

While listeners are working through their strategies, speakers employ their own floor management tactics, sometimes in the form of intonation, breath, or filler words (e.g. uhm, like), which can function to signal that they wish to hold the floor or that they are ready to pass it on. The organized flow of conversation partially points to shared cultural norms – the relatively assured expectation of what is to come eases the planning process. That said, this organization is better considered a norm than an actual practice, and real dialogue is littered with "problem areas" (e.g. extended periods of overlap) even given these organizational strategies. Confronted with these problem areas, there are then strategies and systems developed to return to the ideal pattern (e.g. hurried completion of turn, stopping altogether, or maybe even raising one's voice).

Research on conversation often refers to the turn-taking process as fluid and smooth, even though turns are expected to have some of the aforementioned gaps and overlaps (Liddicoat, 2011; Sjerps & Meyer, 2015; Sacks et al., 1974). How these gaps and overlaps are interpreted is undoubtedly affected by the social norms of a community, yet the fact that they are interpreted at all seems to be generalizable to some aspect of

human cognition (Tanya Stivers et al., 2009; Roberts, Margutti, Takano, 2011). These inter-turn interactions should not be considered imperfections or accidents. According to Liddicoat (2011), these gaps and overlaps likely signal to individuals "that something additional is happening," and thus carry meaning and significance (p.1302; see also Roberts & Francis, 2013).

The fluidity of turn-taking, considering average gaps between turns of merely a couple hundred milliseconds, suggests a response planning process that occurs simultaneously with the act of listening and understanding (Levinson & Torreira, 2015). Multiple studies have determined that these linguistic processes (simultaneous listening, comprehension, planning, and production) share the same resources used for other motor-tasks (Boiteau, Malone, Peters, & Almor, 2014), and perhaps even occupy the majority of such attentional resources (Boiteau et al., 2014). Examining not only the behaviors participants use to organize their turns, but also the space (or lack thereof) between these turns reveals meaning making (and taking) being performed "online" throughout the course of the interactions.

Repair

Repair in conversation can be an indicator of problems cropping up in an interaction (e.g. extended overlap, failure to hear or failure to acknowledge that one had heard an utterance, a participant indicating that they did not understand a question, etc.). However, not all repair can be explained by the same diagnosis. Interlocutors choose their utterances in response to each other. Furthermore, even within a turn, an utterance can be affected by other verbal or non-verbal cues like overlapping speech, gaze, and

body language (Liddicoat, 2011). That said, is there a way we can quantify such disfluencies? Conversational analysts code transcriptions as thoroughly as the focus of the research demands, but gross tallies of repetitions, restarts, long gaps, overlaps, filler words (e.g. uh, uhm), or even word counts cannot be necessarily indicative of a relatively more troubled conversation in and of themselves. However, repair itself does serve as proof that there is a desired structure for language and that individuals not only monitor for deviations from the norm, but then also act to rectify those deviations. Coding for both self-initiated repair (speaker makes the error and signals it) and other-initiated repair (speaker makes the error and the listener signals it) allows us to similarly identify these problem areas and look for patterns across the participants' conversations. In addition to indicating out-right problems with talk, repair can highlight conscious attention to word choice and an increasingly careful portrayal of oneself (Kitzinger, p. 242).

Lexical Measures of Uncertainty

Undoubtedly, sometimes the best course of action when one is uncertain is not acting at all. That said, conversation is structured in such a way where participants are motivated to self-select (if not selected by the speaker) at the earliest possible Transition Relevance Place (TRP) (Sacks et al, 1974, p. 719). Speakers and listeners alike thus have a variety of verbal and non-verbal tools intended to help them manage transition places and maintain the floor (if needed) once they have it. For example, after self-selecting as a speaker at the earliest opportunity, a participant may begin their turn with a pre-start, or an appositional beginning (p. 719-720), like *well*. A participant can say *well* without having planned the structure for the rest of the turn unit. At this point, they could still

formulate a question (*well, where did you want to go to dinner, again?*), or make a claim (*well, I don't think that's going to work out.*), or even leave it at a word (*well, yeah.*). Once they have claimed the floor and eyes are on them, they can employ other tools like conversational fillers (*uhm, hmm, like, so*) to buy them the time they need to produce a full utterance.

These conversational fillers can play a positive role for both speakers and listeners, providing time to either prepare an utterance or comprehend the preceding terms. These apparent disfluencies may also highlight the importance of word choice or, as Clark and Fox Tree argue (2002), be an intentional display of uncertainty. Along these lines, cognitive load can be considered a predictor of these disfluencies (see Corley & Stewart, 2004, for their review of the literature on these fillers). Other markers of uncertainty may include hedges (*that might be kinda good for them*).

Hedging as Uncertainty or Strategy?

While hesitation phenomena, gaps and overlaps, and repair can generally be classified as disfluencies in interaction (though they can possibly be strategically manipulated themselves), grounding responses and hedging seem to perform a more overtly strategic role in conversation. The degree to which individuals consciously employ these tactics likely varies, and tendencies towards hedging or grounding frequencies are likely socially constructed and instilled from a young age. Having said that, the basis of this study is that the individuals in conversation will be prompted (rather overtly) to consider the communication behavior of themselves and others – with a particular emphasis on the *other*. It should not be a stretch, then, to consider that

linguistic behavior from that point forward (after attending to the prompt) is being strategically manipulated by the participant, or at the very least that participants will be more consciously aware of their own linguistic behaviors. In this case, a behavior such as hedging may not signal uncertainty within the individual as much as it signals an individual wishing to demonstrate the notion that they are uncertain (i.e. performing the act of uncertainty). As with any of these features, analysis must examine these tokens collectively and in context, and while the study will attempt to quantify the collected data, only a thorough qualitative analysis of the conversation transcripts and discussion with the participants beyond the prompted dialogue (about the dialogue) can attempt to explain some of the changes in behavior (e.g. rate of hedging deployment, or context in which hedging appears most frequently) beyond indicating change alone.

Of the linguistic features mentioned, this study will approach the transcribed conversations looking for "hesitation phenomena" (Corley & Stewart, 2004) like pauses and conversational fillers, grounding responses, overlaps at transition relevance points (TRPs), instances of repair, and hedging behaviors.

2.3. Does Identity Threaten Conversation?

Though studies applying stereotype threat to interpersonal communication are scarce, there are a few notable cases, and all are relevant to the current study. In a previous section, I discussed how Kray et al. (2004) demonstrated stereotype threat's effects on interpersonal behavior at the negotiation table. Subtle situational cues making negative stereotypes salient resulted in participants assimilating to the types of negotiation strategies which would be stereotypically expected of their gender. In this

case, explicit cues (e.g. male and female students differ in their performance) resulted in women pushing for more ground (in this case, rewards for oneself, *not* common ground in) the negotiations and displaying more "masculine" negotiation traits. Another insightful study was done by Goff, Steele, and Davies (2008), who found that the threat of White participants appearing racist caused them to physically distance themselves from their Black participant-partners. While it is another interesting interpersonal study, it still does not quite address the questions this study set out to explore.

The two most direct inquiries into stereotype threat's effects on verbal interpersonal communication came from McGlone and Pfiester (2015) and von Hippel, Wiryakusuma, Bowden, and Shochet (2011). Von Hippel et al. (2011) transcribed the verbal responses of women participants who were told to assume the role of a marketing manager and respond to workplace scenarios via a handheld recorder. Threat was initiated in the priming conditions by adding to the prompt that "the study was examining communication styles of women in a leadership context" (p. 1315). The study recorded frequency of tag questions, hesitations, and hedges, and judges further rated "directness" on a 3-point scale. The study determined that women when "explicitly reminded of a masculine stereotype of leadership and associated gender differences" responded more directly, and with fewer hedges, hesitations, and tag questions (p. 1316). Another experiment in the same study had male and female participants read a packet with supposed communication from four managers; two managers were given women's names, two were given men's names. Participants rated women managers communicating in a masculine style as less warm than the same transcript given a man's name. Additionally, participants indicated that they would be less willing to comply with the

request included in the transcript when it was supposedly given by a woman. Finally, participants rated the women managers as neither more nor less competent between the feminine or masculine style transcripts, suggesting women adopting a masculine communication style may suffer the penalty of perceived coldness and less willingness to comply without any increase in perceived competence – a lose-lose (p. 1320).

McGlone and Pfiester's (2015) article argued that individuals faced with a gender identity threatening task-prompt would show more speech disfluencies, tentative language, and give fewer recommendations (a part of the prompt) in their simulated conversation than those of the same gender under a non-threatening prompt. The topic of their conversation was the same: a workplace conflict between two fellow employees. The question: how would you advise the two? If the prompt indicated that the task was indicative of "relationship maintenance ability" and that the individual was being analyzed for differences in performance based on their gender, the authors hypothesized that men would face the threat of confirming to the negative stereotype that men are worse than women dealing with relationships. If the prompt indicated that the task was indicative of "leadership ability", and similarly highlighted the perceived relevance of their gender, the authors hypothesized that women would face the threat of confirming the negative stereotype that men are better leaders than women.

The study found that in the tasks framed as indicative of leadership ability, women averaged more disfluencies (per 100 words) and were more tentative compared to women given the neutral or relationship-maintenance frames. The study did not find that women gave significantly more or less recommendations in the leadership frame than the other two. Likewise, men in the tasks framed as indicative of relationship maintenance

ability produced more disfluencies (per 100 words) and were more tentative than men in the neutral or leadership ability scenarios. Again, the hypothesis that men would give fewer recommendations was not supported.

The results of these studies confirm that individuals do pick up on these situation social cues and stereotypes, something that has been known for decades, and add evidence that these cues do influence some aspects of an individual's verbal behavior as far as the researchers measured them (e.g. disfluencies, tentative language). However, like any lab-oriented experiment, there were factors which limited the generalizability of the studies and warrant further inquiry.

First, participants were alone in the both McGlone and Pfiester's (2015) and von Hippel et al.'s (2011) studies and spoke into a microphone to give their responses. While there was evidence of change in verbal behavior, the scenarios do not readily apply themselves to everyday situations. Second, though participants in McGlone and Pfiester's (2015) study were given time to plan their responses, participants recorded audio for only 90 seconds, something the researchers note may have limited their ability to measure for number of recommendations. Third, I have presented articles that show an individual's behavior is not only affected by their own internal processes but also by the behavior of their interlocutor – as two people acting for and reacting to each other. Von Hippel et al.'s (2011) study sought to explore the same idea: whether participants react differently to different communication styles from their interlocutors. Without the second interlocutor, we can see how stereotype threat affects verbal behavior but not necessarily conversation.

In the present study, I will use the same prompts as McGlone and Pfiester (2015) to cue relevant social stereotypes, but instead of a lone individual recording their response into a microphone, the participants in this study will respond to the prompts in conversation with another participant. In addition to looking for evidence that these same verbal disfluency / tentativeness patterns persist, I will be able to ask whether participants struggle to develop common ground over a longer span of dialogue (8 minutes dedicated to a prompt instead of 90 seconds). Including an interlocutor allows analysis of some of the most crucial aspects of conversation – in this instance: turn-taking and grounding. Additionally, having an interlocutor allows for a negotiable floor during the conversation. During a solo recording session, the floor belongs only to the individual and they must perform on it in some way. With someone else, the floor can be negotiated, opportunities to take the floor can be rejected, and we can see whether individuals do in fact distance themselves from a topic (e.g. do they less frequently self-select, etc.) or whether they assert themselves voluntarily. While it is still simulated and experimental, it is one step closer to a more day-to-day interaction.

Based on the literature reviewed so far, this study proposes that stereotype threat can affect everyday conversation in two separate but concurrent ways. First, stereotype threat triggers increased vigilance to situational cues and can result in distancing and feedback avoidance as volitional coping mechanisms. This may be identifiable if individuals are less likely to take a strong stance on a topic at the risk of confirming possible negative stereotypes about their identity (i.e. in this case, gender). The prompts request participants suggest solutions for the work-place problems in the stories, and a participant's behavior around these suggestions (e.g. hedging, willingness to self-select,

or interrupt) may display a pattern between the neutral prompts and those which intentionally target the participant. Second, increased conscious or unconscious attention to errors will increase cognitive load for stigmatized individuals, and as attention is shifted to the interactional environment, their ability to process incoming speech, prepare their own, and perform their own may be impaired to such a degree that the development of common ground will be affected.

CHAPTER 3: METHODOLOGY

The following methods were approved by the UNC Charlotte Institutional Review Board under study number 17-0450.

3.1. Participants

Eight participants (4 men, 4 women) were recruited via email (departmental listserv and contact with department student organizations). Individuals were given a link to a Google Form where they were prompted to fill three text boxes requesting their name, email, and gender. Individuals who left their contact information on the Google Form were contacted via email to request their available dates and times. Those with shared availability were then matched with a partner of another gender and emails were sent again to confirm their attendance. Rooms were reserved in Atkins Library at the available times.

3.2. Prompted Discussion Sessions

Upon arrival, participants were greeted by the principal investigator. Participants sat at the table, across from each other, and were given consent forms (see Appendix A). The consent forms were explained, and participants were asked if they had any other questions before they were collected. Participants were told that the recorder would be left on throughout the session, and they were instructed on how to restart the recording in case the red light went out (press record button). The participants were given the first packet of materials consisting of a front page with an instructions prompt, and a second page with the story of a workplace scenario. The first prompt read:

In today's study, you will simulate the communication strategies you would use to resolve a conflict between two people. We will make an audio recording of your performance that will be analyzed later on by a team of researchers here at the university. (Prompt 1)

Participants were then told to read the first prompt, and that they would then discuss the first of three stories. The investigator told the participants that they would leave the room while the two of them discussed it and return after eight minutes to give them the next prompt (and reiterating that there would be three in total). After leaving them with the instructions, the investigator left the room, returned after eight minutes, collected the old prompt, provided the new prompt, reiterated that the participants should read the new prompt, indicated that the new prompt was slightly different, and told them they would return after another eight minutes. This process was repeated for both the second and third prompts. All three prompts were borrowed and adapted from McGlone and Pfiester (2015). The second prompt read:

The purpose of this task is to investigate differences in people's leadership ability. Numerous scientific studies have demonstrated that leadership ability critically depends on communication behavior. This research has also found that *leadership ability can be predicted* from observing people as they simulate the communication behaviors they use when interacting with others.

In this task, you will simulate the communication strategies you would use to resolve a conflict between two people. Leaders often must resolve conflicts, so your performance in this simulation provides one way to measure your leadership ability. We will make an audio recording of your performance that will be analyzed later on by a team of researchers here at the university. They will compare your recording to those of other men and women participating in this study to examine gender differences in performance. (Prompt 2)

And the third prompt read:

The purpose of this task is to investigate differences in people's ability to maintain close personal relationships. Numerous scientific studies have demonstrated that the ability to maintain personal relationships critically depends on communication behavior. This research has also found that *relationship maintenance ability can be predicted* from observing people as they simulate the communication behaviors they use when interacting with others.

In this task, you will simulate the communication strategies you would use to resolve a conflict between two people. Partners in personal relationships often must resolve conflicts, so your performance in this simulation provides one way to measure your relationship maintenance ability. We will make an audio recording of your performance that will be analyzed later on by a team of researchers here at the university. They will compare your recording to those of

other men and women participating in this study to examine gender differences in performance. (Prompt 3)

The first prompt was intended to frame the discussion topic, a workplace conflict, as gender neutral. While the very act of speaking to someone of another gender may be enough to bring stereotypes to mind from the outset, any explicit mention of gender was removed from the original prompt. The second two prompts introduced and highlighted gender as a relevant aspect of the sessions and framed the discussion as either in the domain of leadership (a topic where men are stereotypically favored) or the domain of relationship maintenance (a topic where women are stereotypically favored), and then afterward declared that the discussions would reveal participants' abilities regarding either competency. All sessions received the neutral prompt for their first discussion in an attempt to collect the closest data to an un-primed control set of linguistic behaviors. After the first prompt and discussion, whether the pair got the leadership prime or the relationship maintenance prime was rotated between the sessions (leadership given second to the first pair, relationship maintenance given second to the second pair, leadership given second to the third pair, etc.). After that discussion, pairs were given the remaining third prompt. All pairs received each of the three prompts. The second two prompts were rotated in an attempt to control for an order-effect where behaviors displayed after any given prompt might be influenced due to the time participants had been speaking or the number of discussions they had. It was anticipated that the topics of these two prompts would be easily recognizable to the individuals as domains laden with gendered stereotypes.

Once all three prompt/story packets had been read, discussed, and collected, the investigator remained in the room upon reentry. At this point, participants were asked what they thought about the discussions and were invited to ask any questions they had about the study. After receiving the participants' initial thoughts, the investigator disclosed what they would and would not be looking for (e.g. would not be analyzing leadership qualities or relationship maintenance ability, would not be "comparing gender differences in performance" regarding leadership or relationship abilities, etc.). Throughout this Q&A with the participants, the recorder remained on and participants were again invited to share their thoughts regarding the discussion based on the new information they had received (e.g. discussing any knowledge of gender stereotypes relating to those domains, any conscious strategies for conversation with individuals of other genders or identities). Once any thoughts had been shared, participants were thanked for their time, provided with a $10 Target gift-card for their time, and then left.

3.3. Transcription and Analysis

As recordings were collected, the files were taken off the recording device and loaded into Adobe Audition. The files were split and saved in 5 copies each: the original full recording, the three individual segments of each discussion from the first utterance (after silence while reading) to the re-entry of the investigator, and the Q&A. Each discussion per session was then transcribed by the principal investigator (using conversation analysis transcription techniques adapted from Jefferson, listed in Sacks, 1974 among other sources) into its own Word document, saved, and printed. The Q&A portion of each session was not transcribed. Word counting, marking (for hedge tokens,

conversational fillers, and grounding responses) and other general analysis was done by hand on the printouts. Participants names were removed for the purposes of their anonymity, and they will be referred to by "Participant A" and "Participant B" throughout the document. For ease of analysis later on, all women are given the label "Participant A" while all men are given "Participant B".

CHAPTER 4: ANALYSIS

4.1. Opening Sequences

This analysis section will begin with a walkthrough of the opening lines for each session and prompt. The goal of such conversation analysis will largely be to describe what behaviors and tactics are being employed by the participants in a given selection. The analysis will begin with the opening segments of each discussion that were preceded by the neutral prompt (presented first to each pair), then move to examining the discussions that were preceded by the leadership prompt (presented second to half the pairs, third to the other half), and conclude with those preceded by the relationship-maintenance prompt. The analysis indicated that the opening turns and verbal behavior around suggestions (on the request of the prompts) displayed by participants differed in the neutrally-prompted discussions compared to the gender-primed discussions.

4.1.1. The Control Prompt

In the following section we can see the opening lines from the first discussion (the neutral prompt) of Session One.

(1) From Session 1, Neutral
```
1    B:        hm.
2              ( ) I'm done reading.
3    A:        ↑alright uh::m so:: what do you think.
4    B:        u::::h hhh ( ) okay, yeah, u::hh hh well ( ) uh ( ) – I – I work in fast food so::
5              nn I have occasional bickering episode [with] – with my coworkers so
6    A:                                                    [yeah]
7    B:        ( ) this seems ( ) kind of quaint in comparison,
8    A:        mhm.
9    B:        but u::m, ( ) I dunno just sort of looking ( )
10             well ( ) I guess they're forced to ( ) be in the same space,
11   A:        so there's no:: like I would su – first I would suggest just switch out with
12             someone else but I guess that can't happen [cause]
13   B:                                                        [ ye- ] I guess – presumably
```

14   [that's] – that's the case.
15   A: [mhm.]

In line 3, Participant A has explicitly selected B to take the next turn, leaving B with the obligation to answer the request for information. Participant B's timely response in line 4 suggests a desire to take the turn without significant delay – but significant fillers, word stretches, and restarts additionally suggest difficult processing of the situation, among other possible interpretations, and a struggle to prepare an adequate response. By line 5, Participant B has managed to conjure an anecdote relating to the topic at hand. Lines 6 and 8 provide examples of Participant A's readiness to use grounding responses as a tool to mediate or resolve possible problem-areas in the interaction (*yeah* signaling slightly stronger acceptance of, or agreement with, B's utterance than the *mhm* that follows). Continuers are typically not treated as problematic overlaps by speakers (Schegloff, 2000, p. 5), yet here in line 5 we see Participant B repeat the overlapped word *with* before continuing the turn unit. In line 10, Participant B finally makes the first turn that directly references the story which the two participants were prompted to discuss. Participant B does complete a TCU (*I guess they're forced to be in the same space*), and though B ends on a rising tone, Participant A self-selects to take the next turn without overlap (or requiring a significant gap). Though Participant B provided several TRPs throughout the first 10 lines, A waits until the initial request for information that was uttered back in line 2 is satisfactorily answered – assuming the implication of that question was "what do you think regarding the story?" In line 11, Participant A similarly employs word stretches (*no::*), fillers (*like*), and restarts (*so there's no –; and, I would su – first I would suggest…*), and like Participant B, initiated their turn without

overlap or a significant gap. This could indicate that the continuing intonation by Participant B at the end of line 10 was heard by A, but if it was an attempt to hold the floor, it was denied by A in their own attempt to produce their utterance. So, what is the point? Participant A requests an analysis of the situation from B, then B finally provides their first analysis (*they're forced to be in the same space,* line 10*)*, and upon this mark A takes their opportunity to comment on the situation themselves. Participant A noticeably restarts their turn to insert the word *first* in line 11, indicating that the suggestion which is to follow is importantly not the only one they have to offer. In line 12, Participant A references the same detail of the story that B had offered in the previous turn (*B: I guess they're forced to be… A: I guess that can't happen*). Though A continues, B orients to projected TCU in line 13 as *I guess that can't happen* and begins to initiate their turn with a grounding response of their own (*ye-*) only to realize A is continuing. Participant A, however, cedes the floor to B, who restarts their turn only to confirm that the situation each described is, in fact, something they agree upon. In line 15, Participant A follows B's grounding response with one of their own (*mhm*).

This opening sequence demonstrates the two participants attempting to ground their conversation with (at least) two levels of communication. First, both use grounding responses (*yeah, mhm,* and possibly even the whole phrase *I guess presumably that's the case*) to indicate their understanding (or acceptance) of the current speaker's utterance. Second, this opening section demonstrates the two participants using their opening sequence to find a starting point, in relation to the story, which they both agree upon and can work from. Participant A invites B to offer the first thought, and then upon receiving it chooses to offer a similar assumption about the same detail of the story. Like

Participant A did during B's previous turn, B takes the first opportunity to indicate that

they are in agreement with A with an extended grounding response in line 13 (*ye – I*

guess presumably that's the case), and Participant A drops their previous thought from

line 12 (*that can't happen cause -*) and does not return to it. The following transcript

demonstrates how another pair "did" the opening sequence for the same prompt and

story.

(2) From Session 2, Neutral
```
1    B:       okay s[o I gu]ess we jus::t uh:: recommend things, what they would do.
2    A:          [s::o.  ]
3             (  ) yeah [uh::m]
4    B:                 [okay. ]
5    A:       (  ) I was looking at the paper part >I mean< would it make sens::e,
6             for them:: to kind of designate an area of office that's like
7             this is where Mark puts his stuff?
8    B:       hm? I think so. I think part of the problem as well thou::gh is that, .hh uh::
9             because he has all the paper and she has the paperless, his stuff is
10            (  ) taking up most of the room because he just has – like in sheer numbers
11            he has wa::y more stuff than she does.
12   A:       ri::ght.
```

In the second session, Participant B starts first and offers not a thought about the

story, but one about the nature of the conversation. Unlike the opening in the first session,

Participant B does not explicitly select Participant A as next speaker through a direct

question. Without an obligation to take the next turn, there is a small gap before

Participant A self-selects and offers the word *yeah* in line 3. Here, A begins to continue

with a thought of their own (indicated by the conversational filler *uhm*), suggesting *yeah*

was intended to act as a pre-start marker of agreement more than an outright continuer.

After hearing *yeah* and overlapping A's *uhm*, Participant B follows with what is likely a

similar marker of agreement in line 4 (*okay*, i.e. okay, we are on the same page). Here it

is possible that B has misinterpreted the grounding response *yeah* as a continuer, prompting them to continue their turn, while A intended it to be a pre-start marker of agreement. In line 5, Participant A, after a pause, takes the next turn and offers the first topical statement regarding the story. Participant A structures their turn (and suggestion) in the form of a question: *would it make sense for them to...*? With Participant A having completed the turn unit and selected B as the next speaker, B has an obligation to answer A's question before anything else. In line 8, Participant B begins with a sharply rising *hm* before completing the adjacency pair with the answer *I think so*. Participant B continues to self-select in lines 8-11, offering their analysis of the issue as well. At this point, the pair has seemingly performed a tactic similar to the pair in session one with a move to establish an early point of agreement. However, unlike the first scenario, the second speaker here does not indicate such agreement by using their turn to discuss the same point. Here, Participant B answers A's question with *I think so* and continues with four lines of their own analysis. As the next ten lines demonstrate, this response does not necessarily close the opening sequence as fully as we saw occur in session one.

(3) From Session 2, Neutral

```
13    B:      it sounds like, because they have (  ) like two:: completely different like
14            set ups and routines and things like that? that unless they can (  ) find a way
15            to combine the two:: or find a way to settle on certain matters like (  )
16            either or they're not gonna have a very (  ) uh:: comfortable or satisfying,
17    A:      (  ) ye – I mean I do think it would definitely be reasonable for Diane to
18            designate spots that's like (  ) Mark don't put your crap here [hh  hh]
19    B:                                                                    [yeah.  ]
20            I agree with that, I just think it's also the fact that she's gonna be
21            surrounded (  ) the entire time
22:   A:      yeah.
```

After Participant A's grounding response in line 12 of segment 2 (*right.*),

Participant B continues in lines 13-16 (segment 3) with their analysis of the situation,

offering their own two opinions (*they have two different routines…find a way to combine

the two…or find a way to settle*), which becomes the third suggestion on the table after

Participant A's (*designate an area,* segment 2, line 6). In line 16, Participant B pauses in

the middle of a TCU (*not gonna have a very comfortable or satisfying, …*) presumably

searching for the appropriate word or inviting "collaborative utterance completion,"

either of which would be considered by Schegloff (2000) to be "conditional access to the

turn," i.e. an invitation for help in completing the utterance but conditional on the

expectation that the floor is returned to the current speaker (p. 5). Participant A self-

selects in line 17, and instead of aiding B with the completion of their utterance, begins a

grounding response (*ye –,* i.e. yeah I get what you're getting at) and then returns to their

initial question from lines 5-7 (*would it make sense for them to designate an area of the

office…)*. This time structuring the utterance as a statement instead of a question,

Participant A reiterates *I do think it would definitely be reasonable* in line 17. This

utterance repeats the topic A had brought up in line 5. This time in lines 19-20,

Participant B responds with a more concrete grounding response (*yeah. I agree with

that,*) and after choosing to continue, similarly returns to their previous (and largely

ignored) points – particularly the utterance in lines 10-11 of segment 2 (*in sheer numbers

he has way more stuff than she does*) which initially followed Participant A's question

from 5-7. In line 22, Participant A signals their agreement with B's utterance by uttering

yeah (again, having done the same by producing a different grounding response, *right,* in

line 12), and from here does not return to the suggestion that Diane and Mark better

designate their own areas in the office. This suggestion, having been better established as an either satisfactory or unsatisfactory solution to the workplace dilemma, can now be laid to rest among the collection of ideas being established as common ground.

The next segment (4) includes what essentially amounts to another interruption (in line 12), though as we will see it results from an agreement marker, and quickly transitions into a successful attempt at establishing agreement early.

(4) From Session 3, Neutral

```
1    A:    did you finish reading?
2    B:    ((clears throat)) yeah. I was just going back over it,
3    A:    yeah, what do you think?
4    B:    uh::m (  ) .hhh it's a pretty straightforward uh:: hh cla::sh, hh uhm,
5          (  ) I feel like it's kinda hard to make any of them like give up their,
6          (  ) like (  ) work practices?
7    A:    yeah,
8    B:    so it'd be more like, changing it slightly to accommodate the other person?
9    A:    m[hm,]
10   B:      [ so] maybe like with (  ) her (  ) lousy oldies station, she could just
11         wear [head]phones instead of
12   A:          [↑hm.]
13         (  ) I was thinking the same [thing,]
14   B:                                 [yeah.]
15   A:    yeah. .hh wearing headpho:::nes, or even noise blocker?
16         (  ) [headphones?] that play music.
17   B:        [ri::ght. right.]
18   A:    I know my father in law wears them when he's mowing and
19         (  ) he let me mow one time >and I put them on< and you literally could
20         not hear anythi::ng, except the music playing [like] it was crazy.
21   B:                                                   [mm.]
22         right.
23   A:    so that would be an easy fix for that,
```

Our third pair begins much like the first: the two participants indicate that they have finished reading the story, and in line 3 one of the participants asks the other *what do you think?* Like the responding participant from session one, here in lines 4-6,

Participant B responds in a timely manner, but the utterance itself is not delivered without a hitch (or several). Participant B does eventually produce a conclusion to their phrase in line 6 (*I feel like...work practices?)* that responds to A's question from line 3 and A indicates in line 7 that the choice made sense with the response *yeah*. Participant B continues to analyze the difficulties presented to them by the task itself (they must get the participants to *slightly accommodate the other person*, line 8), and A continues to prompt B to go on with another grounding response, *mhm*. In lines 10-11, Participant B reaches the first suggestion indicating how the story's characters should resolve their conflict (*she could just wear headphones*). Participant A produces the response *hm* in line with B's production of *headphones*. Participant A's use of the word sound/word *hm* at a higher pitch does not necessarily act as a continuer or any sort of agreement marker – perhaps instead simply serving as a grounding response showing piqued interest in the idea, paralleled by a peak in pitch. Participant B trails off at this point in line 11 (*wear headphones instead of...)*, interrupting their own TCU in light of the response by A (it would seem that the unit was initially projected to be *She could do X instead of doing Y* but was retroactively accepted as a shortened structure *She could do X* when it seemed Participant A had something to say about the initial suggestion of *X*). In the following turn, Participant A clarifies the *hm*, which could have been taken as a problematic interruption based on B's reaction (cutting off) and lets Participant B know that they were on the same page in line 13 (*I was thinking the same thing*). Participant B does not pick-up their previous point immediately, instead giving only a brief affirmative (*yeah*) before Participant A chooses to continue (likewise showing agreement by repeating the *yeah*) and suggests the same (if expanded) solution as B had recommended to the same issue in

lines 15-16 (*or even noiseblocker headphones that play music?*). As with the first pair

(seen in segment 1), these two participants move on only once they have both fully

agreed (and expanded) on an initial suggestion for the story's characters. It may be

noteworthy that Participant B makes no attempt to return to the unfinished thought in line

11 (*X instead of Y*), perhaps displaying relatively less investment in completing the

thought itself compared to the act of collectively establishing a decision on the

suggestion.

The fourth and final pair demonstrate the act of agreeing on something that is not

a good solution. Additionally, Participant B demonstrates significant hesitation before

getting to their point, and this does not seem to impede the grounding process. In fact, by

offering a poor solution, this may create an even easier opening for Participant A to join

in and establish a shared view.

(5) From Session 4, Neutral Prompt
```
1    A:      I'm a slower reader than you I'm (Participant A), [by the way]
2    B:                                                        [no : :  : : : ]
3            I – I'm (Participant B),
4    A:      nice to meet you.
5    B:      nice to meet you ma'am,
6    A:      okay so how do we help (  ) Diane and Mark.
7    B:      uh::m. a big part of me, just wants to. well.
8            you're – you're adults getting paid to do a job, uhm. do – do the job.
9    A:      right. [suck it up?] [>kind of deal<], hh
10   B:             [uh  :  : m,] [yeah.            ]
11           kind of, uh, however, you know that's not, obviously.
12           the – the best way to approach all situa(h)tions.
13   A:      right you'd have to know them very well.
14   B:      °yea:::h° hh
15   A:      [or be their] super superior.
16   B:      [uh : : : : m]
17           mhm. That's very true, uh::,
```

Here, we have the final of the four pairs discussing their first prompt. After brief introductions (the only of the four pairs to do so during the recording), the first participant to speak in reference to the prompt constructs their turn in the form of a question, this time more specifically than the questions from sessions one and three (*how do we help Diane and Mark*, line 6). In lines 7-8, Participant B produces several hitches and restarts (*you're – you're adults,* and *do – do the job*), while working towards the eventual suggestion, simply: *do the job*.

I'd propose the delay in getting to the point during lines 7-8 are unlike the delays demonstrated by the participants answering questions in sessions one and three. There, participants took at least a full line of disfluencies before even beginning to structure a full turn unit of some sort. Here in line 7, Participant B says early on that *a big part of me just wants to -,* indicating that they do have an intention of some sort, but they take a few different attempts at phrasing it. As responses which a speaker perceives may be undesirable to a recipient can require longer buildups (it's not as easy as simply giving the expected answer), an extended response like this could come across as acknowledging itself as undesirable. Even though Participant A affirms (in any sense of the word) the potentially unpopular opinion in line 9 (*right. suck it up kind of deal,*), Participant B still follows up by rejecting it as a feasible suggestion in lines 11-12 (*that's not, obviously, the best way to approach all situations*).

Beginning with *right* once again in line 13, Participant A projects agreement with the statement that they aren't in a position to make such a (hypothetical) demand and after another series of *yeah*'s and the extended grounding response *that's very true*, the two leave the suggestion behind. Here the two participants did not come up with an initial

solution to the workplace dilemma, but they move on fairly quickly and frequently

project agreement regarding each other's statements. Here, the two participants share

common ground by showing agreement the easiest solution and by together detailing how

it is an unsatisfactory one.

Preliminary analysis of the neutrally framed discussions indicates that participants

display a pattern of taking early opportunities to select turns for themselves, and that

when they do take the next turn, if a suggestion has been presented by the previous

speaker, participants indicate their agreement by reiterating that point and expanding on

it. The participants still use single word grounding responses including continuers, but

not to the extent where they encourage a current speaker to suggest more than one

solution at a time. If judgement on another speaker's solution was "open", participants in

the neutral prompts made clear efforts to address their partner's initial utterances.

4.1.2. The Leadership and Gender Prompt

Now that we have looked at some of the opening structures for the neutral

prompts, the following transcripts show the opening approaches that pairs took after the

prompt framed a discussion as part of a stereotypically gendered domain. Like the

previous discussion, the pairs were given a workplace scenario and the prompt told them

that they would simulate the communication strategies they would use to resolve the

conflict. Unlike the first prompt, this prompt included additional information suggesting

the purpose of the task was to investigate differences in people's leadership ability, and

that leadership ability could be predicted by observing people as they simulate these

communication behaviors.

The neutrally prompted discussions revealed a tendency for participants to seek early resolution on an initial suggestion. Participants would take early opportunities to employ not only single word grounding responses (*mhm*, *yeah*) but also expand on the suggestion given by the prior speaker. If the floor changed hands but an initial suggestion wasn't satisfactorily agreed upon, participants displayed a tendency to go back to their suggestion until it was more thoroughly acknowledged by their partner. One of the main questions for the following segments then is whether this pattern persists or if participants will approach common-ground building differently.

(6) From Session 1, Leadership Prompt

1	B:	kay. ( ) what do you think?
2	A:	↑uh:::m, I've actually had a problem with this before.
3	B:	mhm.
4	A:	I feel like ( ) you can get ( ) not as much done in thirty minutes.
5		for instance, this ( ) jo::b is related to:: clients ( ) demands.
6		clients calling and everything is ( ) depending on the client.
7		so I feel like making a rash decision something that isn't ( ) a::s determined?
8		for instance, during that thirty minutes that were cut off you could
9		have no clients call.
10	B:	mhm.
11	A:	o::r during that thirty minutes that you h – cut off you could have
12		a lot of clients call. so I feel like ( ) making a big decision on something
13		is inevitable isn't ( ) really ( ) right?
14		especially if it's in – a big inconvenience for your ( ) workers. .hh
15		but I do understand why he wants to have more time because of the holiday
16		months. I just feel like it would – it's not – you know – it would – it's better
17		to make ( ) another decision?
18	B:	( ) mhm.=
19	A:	=>cause you think about it< thirty minutes isn't that ( ) much time? you know?
20	B:	to eat.
21	A:	like you really can't get that much do::ne so cutting it off doesn't really
22		make a difference .hh ( ) uhm, ( ) I feel like ( ) you sho::uld
23		( ) give the clients, a set time, if that makes sense?
24	B:	[mhm.]
25	A:	[>for instance<] we are busy during these hours try calling [during] these hours
26	B:	[mhm.]

Unlike the previous transcript segments, this opening sequence did not offer a good place to crop for the purposes of this analysis. While opening sequences were more or less resolved by the end of the previous segments, the closing of the "opening" here is less defined. At line 1, the participants start off as we might have learned to expect. As was most common in the neutrally prompted discussions, one participant (this time Participant B) begins by requesting the other's thoughts on the new situation (line 1). After a stretched filler word (*uhm)*, Participant A suggests they have an anecdote from their own experiences that could help to provide an answer (*I've actually had a problem with this before*). Participant B prompts A to continue in line 3 (*mhm*), though from there A moves back to the workplace scenario provided to the pair. From lines 4-19, Participant A gives an analysis of unprecedented length in an opening thus far. Participant B offers continuers as grounding responses at lines 10 (*mhm*) and 18 (*mhm*), and then a response in line 20 (*to eat*) as a reply to A's "confirmation request" (Sacks et al., 1974, p. 723): *you know?* Lines 4, 5, 6, 7, and 8-9 each constitute a full TCU. Towards the end of line 7, Participant A produces a brief pause and the stretched word *a:::s* as they search for the word *determined*. In lines 8-9, Participant A self-selects to further explain what they were attempting to get across with that particular lexical choice. Participant B's *mhm* in line 10 thus acts not only as a continuer but an acknowledgement that they understood the point that A was trying to make. Between lines 11-17, Participant A completes 5 more TCUs. Participant B enters again in line 18 to utter *mhm* in a context slightly different from that in line 10, as A produces several hitches and undertakes a word search in lines 16-17. Back in line 10, Participant B's *mhm* did not follow the pause, word stretch, and raised intonation at the end of line 7, instead waiting

to give a response until Participant A repaired with an explanation. Participant B, in another slightly different context, repeats the *mhm* response in reply to A's request in line 23 (*if that makes sense?*), though even after selecting B to speak next, A quickly self-selects to attempt to clarify the question. Participant B's continuer (*mhm*) on line 26 is the first utterance that is neither requested nor in response to apparent difficulty. Unlike the previous neutrally preceded openings examined, neither party takes early opportunities to collectively agree on a first course of action. Participant A offers reasons why what the characters suggest is hypothetically a poor decision (*I feel like making a rash decision [is] something that isn't as determined?*, line 7), and suggests that some other course of action should be taken (*it would be better to make another decision?*, line 17). Participant B offers acknowledgements that they understand A's points but does not echo the strategies or expand on them as clearly as this pair did during the first opening sequence. Additionally, differing responses such as the *mhm* responses in lines 10 and 18 reveal moments (line 10) where Participant B passes on invitations to come to an agreement but doesn't self-select to initiate repair. Later (line 18), Participant B is quicker to acknowledge the difficulty which reappeared in lines 16-17.

The next section examines the opening sequence of the second session pair's discussion preceded by the leadership prompt.

(7) From Session 2, Leadership Prompt
1   B: oh, you ready?
2   A: oh yeah. sorry, .hh
3   B: sorry hh hh uh::m

The second pair begins this prompt with a quick exchange of apologies. Participant B has asked A if they were ready to start and A in turn answers that they are

and additionally apologizes for failing to provide sufficient indication that they were
finished reading. Participant B returns the apology with a brief laugh, either apologizing
for the same reason or, perhaps more likely, for missing a cue that Participant A was
ready to begin (seemingly indicated by the *oh,* in line 1).

(8) From Session 2, Leadership Prompt

```
4    A:    well ah – at least ↑this time the people agree with each other.
5    B:    ↑yeah that is nice.
6    A:    ((laughs))
7    B:    .hh uh::m (  ) this one's a really tough one because it's always hard
8          having to approach your boss about things like that,
9    A:    yeah especially when your boss is, known for ↑not being the nicest person.
10   B:    yeah. and since they both have different ideas if they don't – if they come up
11         with separate things they're not going to make any headway because (  ) the
12         boss is going to have to – they're not going to come out on a united fro::nt,
13         they're maybe going to disagree:: with each other in front of the [boss] maybe
14   A:                                                                      [well,]
15   B:    or they're gonna
16   A:    (  ) it wouldn't be that difficult for them to synthesize:: (  ) their, uhm (  ) ideas.
17         .hh because::, >you know< (  ) making your own schedule can also mean
18         deciding how long you go for lunch.
19   B:    yes, th – that's what I'm saying. .hh
```

Participant A offers a brief analysis of the story's situation in line 4 while
simultaneously referencing a prior situation that both participants shared (perhaps making
an early move to use previously-made common ground as a starting point for the new
discussion). Participant B agrees (thus acknowledging the reference to earlier context)
and matches A's rise in pitch and use of stress (*at least ↑this time*, line 4, and *↑yeah that
is nice*, line 5). Participant A laughs. Participant B self-selects after the exchange and
remarks about the difficulty of the situation. Participant A does the same, both agreeing
(*yeah*) and expanding (*especially when…*line 9). Participant B agrees to the expansion as
well and continues to problematize the situation. In lines 12-13, Participant B begins

listing issues that the fictional co-workers could face if they were to confront their boss.

In lines 13-14, Participant A attempts to interject. Participant A's following suggestion (*it wouldn't be that difficult for them to synthesize their ideas*) addresses Participant B's first point on line 13 (*they're maybe going to disagree*, a rephrasing of the prior point *they're not going to come out on a united front* for emphasis). Though Participant B has already projected that they are preparing to list ideas, Participant A is ready to self-select at the first TRP available, resulting in minor overlap as they insert with a pre-start in line 14 (*well,*) as B starts their final word in line 13 (*boss*). Though there is no extended overlap (A does not begin the rest of their thought after *well,*), Participant B stops in line 15 at *or they're gonna* and pauses, allowing Participant A a chance to self-select (again, though without overlapping B this time). As the next lines demonstrate, the two participants attempt to solidify this first suggestion on how to address the story's conflict before addressing (or even listing) any others.

(9) From Session 2, Leadership Prompt
```
20    B:      if they uh:: ( ) so they have to be able to
21            like you're saying, synthesize, they have to:: uh::m
22            ( ) I lost my train of thought .hh ( ) they can't uh:: come at it ( ) with their ow::n
23            uh:: they co – they come at it individually  they have to work together and uh:::
24            kinda coordinate what they're gonna do, who's gonna say what, how they're
25            going to approach them .hh uh:: maybe uh:: ( ) .hhh mmm.
26    A:      (4.2) I mean, they definitely – before they go::, like .hh they should (.) plan ou::t
27            what they're gonna say.
28    B:      yes.
29    A:      and how they're gonna say it.
30    B:      yeah.
```

Participant B, after a dual agreement / clarification (*yes, that's what I'm saying*) in line 19 (segment 8) echoes Participant A's point in line 21 (*like you're saying, synthesize*) and expands on it. Participant A starts a new turn in line 26, after a significant gap after B

fails to finish their utterance on line 25 and summarizes the collectively constructed

suggestion for the co-workers. Participant B displays agreement without producing any

further expansion in lines 28 and 30. From there, A begins to search for a next point. As

the opening discussion closes, it is again notable that Participant B showed no indication

of completing their thoughts from line 15 (*they're gonna -)*, instead focusing on

addressing the topic A latches onto. Participant B's hitched clarification in line 19 (*yes*

th- that's what I'm saying) and their vocalized struggle to recall their point in line 22 (*I*

lost my train of thought) also stand out as notable episodes in the opening sequence of

this discussion. In the next segment, the third pair approach their second discussion, this

time preceded by the prompt framing the discussion within the leadership domain.

(10) From Session 3, Leadership Prompt
```
1    A:       what do you think?
2    B:       .hh
3    A:       did you finish reading?
4    B:       yeah. this one's a lot more uh:: – it's a lot less cut and dry.
5    A:       ye[ah.]
6    B:          [act]ually.
7             (2.2) they gotta approach the bo::ss and talk about this.
8    A:       yeah I think, uhm (  ) in the first paragraph? he's saying tha::t (  ) .hh
9             the boss is trying to attempt to make the workplace more productive? .hh
10   B:       (.5) [mhm. ]
11   A:            [I don't] know that, (  ) making (  ) their lunches shorter would make
12            the workplace more productive.
13   B:       ye::ah you can't, (1.1) – you can't take away the – like the free ti::me
14            from workers. that [doesn't make] (.5) more productivity.
15   A:                          [ye : : :  : : ah,]
16            mhm.
17   B:       (1.5) it increases the time they're working, but that's not necessarily productive.
18   A:       right.
```

The third pair opens their discussion for this prompt in a more back-and-forth

manner than the previous two. Participant B initially fails to respond to Participant A's

question (*what do you think?*) prompting A to follow up with another. In the discussion preceded by the neutral prompt, A had initially asked whether B had finished reading, and returns to that question again here (A asks the same two questions in this discussion that they did in the first). Responding to both questions, B gives their brief analysis of the task in line 4, noting that there does not seem to be a clear solution (remember in the first discussion, B opened with *it's a pretty straightforward clash*). Even as Participant A begins to agree in line 5, B tacks on *actually* to their previous claim. Participant A makes no move to take the following turn, perhaps considering *actually* the beginning of a new utterance. Neither party speaks for a moment, and then B self-selects after a lapse (2.2 seconds in line 7) with a suggestion (*they gotta approach the boss and talk about this*). Participant A agrees in line 8 (*yeah*) and then moves to interpret the story's solution (offered by a character as part of the story), ending with a rising intonation (*I think…he's saying…the boss is trying to attempt to make the workplace more productive?*). At that point, there is a half second pause in line 10. Both participants self-select after the pause, B producing a grounding response *mhm* (likely functioning as both a continuer and marker of understanding, i.e. saying *that sounds right*), and A offering an analysis of the solution in lines 11-12. Participant B agrees with A's analysis in line 13, and then formulates a tentative expansion of A's analysis. Participant A overlaps with B in line 15, and then after a brief pause Participant B echoes the same point A had made (lack of productivity). After a quick grounding response by A in line 16, B selects again in line 17 only to repeat their collective point once more (*that's not necessarily productive*). Participant A confirms once more in line 18 (*right*) and then B proceeds to say the boss is bad, prompting a laugh from A who then suggests another solution. Overall, this opening

sequence demonstrates the same desire from the participants to hear a point echoed and

expanded on (by both participants) before moving on. Notably, Participant B does make a

suggestion in line 7 (*they gotta approach the boss and talk about this*), though this point

is not reciprocated by A (though they do indicate agreement through a grounding

response, *yeah*).

(11) From Session 4, Leadership Prompt
```
1     A:        this is bad, hhh ((laughs))
2     B:        uh::
3     A:        I've definitely worked places, >during like – during< tax season?
4     B:        mhm.
5     A:        where they ( ) cut your lunch down, cause it's just like ( ) in finance.
6     B:        ( ) well, uh:::::,  I wonder if it's a paid lunch?
7     A:        (1.2) probably.
8     B:        cause if they're getting pai::d  the::n, ( ) you're getting paid.
9     A:        mhm.
10    B:        uh:::m. (2.4) if you want to go for a non-paid lunch then su:::re.
11              you know, take as long that you wa(h)nt. [kinda:: thi::ng.]
12    A:                                                [  ((laughs))  ]
13    B:        uhm. .hhh but. mmm. I agree::, with. Sarah, that, if this happens every yea::r,
14    A:        yeah [>maybe there's a way to<]
15    B:             [you should be : :        ] setting yourself up for success earlier,
16              rather than .hh taking it out on your employees,
17              (2.0) and I don't, kno::w. that Chuck's idea would work.
18    A:        (1.8) ye::ah. at least – >so who are they,< <this just says> small business.
```

In the final pair's leadership-framed discussion, the participants open without the

typical courtesy questions displayed throughout most of the segments shown so far.

Participant A speaks first, bemused by the scenario provided (even though, unanimously,

groups considered the relationship maintenance scenario the worst situation by far).

Participant A makes the first move by beginning to produce an anecdote in line 3, after

Participant B fails to construct a turn (beyond the filler *uh*). In line 4, Participant B

acknowledges the utterance with rising intonation at the end of line 3 by producing the

grounding response *mhm*, and A finishes the sentence in line 5. In the following line,

Participant B speculates in the form of a statement (*I wonder if it's a paid lunch?*) though

the uncertainty (*I wonder*) and the rising tone suggest B will want some sort of

clarification (though whether A would interpret any obligation to answer is unclear – it is

not technically a direct question after all). After a bit of a gap (1.2 seconds to start line 7),

Participant A confirms B's theory, uttering *probably*, allowing B to finish their thought in

line 8. Participant A chooses a simple grounding response in line 9 (*mhm*), and B chooses

to continue on, though seemingly had nothing immediately available to contribute. After

an extended filler (*uhm*) and a 2.4 second pause, Participant B continues with their

previous point about the different perks of a non-paid versus a paid lunch in line 10.

Participant A laughs in line 12 after B laughs during the previous line, but A does not

choose to pick up the point regarding the paid lunch. Participant B self-selects once again

in line 13, bringing up a point offered by one of the story's protagonists, and here

Participant A jumps in at line 14. Participant A looks to complete the thought

collaboratively, as B has relatively clearly projected their turn to take the form of an *if –*

then statement (B: *if this happens every year,* in line 13, then A: *maybe there's a way*

to…). Upon B's continuation and the onset of the overlap in lines 14-15, Participant A

hastens their speech in an attempt to resolve the overlap and drops their turn, while

Participant B produces a word stretch (*be : :*), perhaps to maintain the floor, and once the

overlap is resolved, completes their sentence. Notably, Participant B goes beyond a

possible completion point for their turn (*you should be setting yourself up for success*

earlier) in line 15 by tagging on another segment (*rather than taking it out on your*

employees) in line 16, and then when neither party selects next turn at the 2.0 second

lapse, B chooses to bring up another one of the story's presented solutions in line 17.

Participant A begins to address the statement in line 18 (*yeah. at least -*) but drops the thought and restarts with a new line of questioning (*so who are they, this just says small business*). In this opening segment, the pair do not manage to come to an agreement over any particular suggestion, cycling through points without displaying the same echo – expand – agree pattern that so many of the segments have shown thus far. In fact, the one time A does think they know where B is going and attempts to finish the thought, B goes down a different path and neither addresses A's unfinished thought nor stops for it to resolve the overlap (having won the floor, in a sense).

Analysis of the dialogue in the post-leadership prompt discussions indicates a tendency to allow a current speaker to go on longer explanations or follow longer trains of thought. Segments 6-9 (the leadership framed discussions for sessions 1 and 2) displayed this fairly visibly. This is not the case in segment 10, taken from session 3, but this segment still features a possible suggestion by Participant B (*they gotta approach the boss and talk about this*) in line 7 which is not directly addressed, or repeated, by Participant A. The take-away from the neutrally framed discussions was that participants would attempt to address and conclude suggestions in order and fairly quickly (at least before moving on with another). If these weren't satisfactorily acknowledged, participants steered the discussion back towards their own suggestion. That did not happen here. Session 4 was not prone to long turns either, but featured several dropped suggestions at lines 10, 13, and 17. These ideas are acknowledged by the recipient but only minimally and none really conclude as an agreed-upon suggestion.

4.1.3. The Relationship Maintenance and Gender Prompt

The final set of openings cover the second discussions including the "primed"

prompts. These prompts were identical to the previous ones, covering the instructions

(same for all three) and noted that participants would be simulating the communication

skills they would use in a workplace scenario. Like the other primed prompt, this one said

the participants' relationship maintenance ability would be measurable "based on their

performance" and that the audio would be analyzed for differences in gender

performance. Unlike the last prompts which described the stories as tests of leadership

ability, the prompts for the following discussion described them as tests of relationship

maintenance ability. As the first pair demonstrate quite clearly in their opening lines, this

story was considered by far the most perplexingly immature workplace conflict.

(12) From Session 1, Relationship Maintenance Prompt

```
1    B:      .hh ( ) yi::kes. hhh uh::m:: ((sighs))
2    A:      ( ) such a simple ↑problem.
3    B:      .hh YEAH.
4    A:      ik – like ( ) what? ((sighs))
5    B:      no that's ( ) ((sighs))
6    A:      just calmly present both of your idea::s.
7            ( ) I don't even – like I don't understand,
8            for inst – well, when he started presenting, ( ) her rolling her eyes and tapping
9            the table [was  ] very ( ) unprofessional.
10   B:                 [mhm.]
11           mhm. [yes.]
12   A:            [.hhh] and then when she was presenting him muttering words was
13           very unprofessional and then them both arguing was very immature.
14   B:      yes.
15   A:      ( ) honestly, all they had to do wa::s sta[te hi : : s, and then  ] ( ) state hers,
16   B:                                                [hh not do that, yeah]
17   A:      and then hold hands and say thank you for ↑coming and then:: that's it.
18   B:      mhm. ( ) yeah it seems li – it doesn't ( ) imply that ( ) any – that ( ) any of the
19           things that they're act – they've actually produced for the pro::ject ( ) are
20           like substandard in any way?
21   A:      mhm.
```

The first pair signal early on that they agree on the overall nature of the issue: it is certainly ((sigh)) inducing (Participant B, lines 1 and 5, Participant A line 4) and a simple problem (Participant A, line 2). Participant A constructs the first turn that references the story in line 6. At line 10, Participant B begins responding to A's portrayal of the situation with continuers (*mhm, mhm*) and then a *yes* as a response more specifically indicating their agreement. Participant A continues after an inbreath in lines 12-13, prompting another *yes* from B in line 14. Participant A declares the simple solution to the issue in line 15 (*all they had to do was...*) and B attempts to finish the thought in the middle of A's turn (perhaps a little humorously) in line 16. Participant A pauses slightly (line 15) in reaction to the overlap before continuing with their sentence (*state hers*). In the following line 18, Participant B offers a quick agreeing response *mhm* before producing a pre-start that doubles as an agreement in *yeah* and possibly attempts to expand on A's point (*yeah it seems li -*), though it spins off into a different topic regarding the division of the characters' work (lines 18-21).

Though both participants make their agreement clear throughout this opening segment, they (particularly Participant B) do so primarily through the frequent use of grounding responses, as opposed to longer utterances where the recipient of the suggestion echoes and / or expands on a point made by their discussion partner to show their understanding and agreement. For that reason (perhaps among others), B's contribution of new content to the interaction is relatively limited until they bring up a new point with which they can move forward (line 18).

To summarize this particular pair's session (all three discussions), analysis indicated that in this pair's first discussion, Participant B made the first observation

(*forced to be in the same space,* segment 1, above, line 10), Participant A made the first

suggestion (*first I would suggest...*), then noted that it is not possible (*I guess that can't*

happen), to which B agreed, and then the two moved forward. In their leadership-framed

discussion (segment 6, above) Participant A moved first to establish their experience with

the subject (*I've actually had a problem with this before,* segment 6, line 2) and then

proceeded to both analyze and (eventually) offer a suggestion while Participant B did no

more than offer a few grounding responses. In their relationship maintenance framed

discussion (segment 12, above), the pair agreed early on regarding the general vibe of the

issue, Participant A offered a simple solution and a brief analysis, followed by a

reiterated solution. Participant B, again, mostly did the verbal equivalent of nodding (and

though there was no video, may have done that too) as they mostly *mhm'd* or *yes'd* their

way through the opening segment.

      The next segment contains the opening sequence for the second session's pair, their

discussion also preceded by the relationship maintenance prompt.

(13) From Session 2, Relationship Maintenance Prompt
1	A:	↑ready when you are.
2	B:	yep.
3	A:	okay, .hh
4	B:	( ) so::, hh I think it's part of the problems they're::: uh:: ( ) having such a
5		tight <u>schedule</u> on uh:: having to do such a (unclear) workload, but it sounds
6		like obviously they (didn't) really a chance to coordinate what they were
7		doing with each other? and having their own separate spheres and so:: .hh
8		( ) when the presentation begins uh:: he focused on what he was doing and
9		what he knew:: and things like that and ( ) auh – obviously she's getting
10		very very ( ) irritated an::d a little passive aggressive and things like that .hh
11		uh:: I think ( ) it wouldn't have necessarily <u>been</u> as much of a <u>problem</u> if she
12		hadn't uh:: said that about well, visuals are all well and go::od, but without yadda
13		yadda yadda .hhh because that <u>dire::ctly</u> undermines what he's saying.
14		( ) .hh uh:: ( ) if she ha::d ( ) I dunno ( ) I think she could have pro::bably::
15		( ) addressed it? in a way that ( ) didn't quite lead to as much conflict? like
16		maybe with less of a snide tone? or maybe taken an earlier opportunity to kind
17		of redirect the focus of the presentation. bu::t, ( ) uh it sounds like Walter didn't

18		even really consider <u>her</u> part of the project. uh:: just going straight in an::d
19		( ) [talking] all about his s[tuff.]
20	A:	[yeah,] [I do]n't think either of them really considered the
21		other,
22	B:	yeah.
23	A:	( ) uhm:: ( ) like ( ) but yeah, going back to you know <u>her</u> like ( ) she <u>does</u>
24		<u>have</u> like legitimate <u>concerns</u>
25	B:	yeah, [yeah.]

Here Participant A initiates the discussion, indicating that they're ready to go. Participant B replies *yep* in line 2, and A responds to their response with *okay* and draws a breath. After a brief pause, Participant B self-selects in line 4 and begins an uninterrupted (with no 'back-channeling' of any kind from A) stream of analysis for over 2 minutes. Several TRPs come and go, often marked by pauses or extended fillers between TCUs, but Participant A remains silent until line 20. Participant A attempts to interject at the pause following the extended *and* at lines 18-19, though ends up overlapping with B as B continues their turn in line 19. Participant B continues until the sentence is complete. However, just before the sentence is complete, Participant A self-selects to take a turn resulting in a brief overlap on *stuff* in line 20. Participant A comments that *neither really considered the other*, to which B agrees by responding *yeah*. Notably, Participant A explicitly directs the conversation *back* (line 23) to another point, namely one of the two protagonist's concerns. The long, listing analysis provided by Participant B prevents the early establishment of some sort of common agreement by the pair.

During the neutrally preceded discussion, Participant A offered a thought and Participant B acknowledged it but moved for a second, only for A to bring it back and resolve the first thought more fully. In the leadership prompted discussion (segment 8,

above), we saw that Participant B began to list a couple of approaches for addressing the story's situation, and A interjected to address the first one (segment 8, line 14). However, because the leadership and relationship maintenance prompts were given in a different order to each pair, that leadership prompt was actually discussed after this relationship maintenance one. It should be noted that there is a possibility Participant A was more willing to interrupt a list and address an early point after having experienced this (segment 13, relationship maintenance prompted, above) opening ramble in the pair's second discussion.

To recap the analysis of the second session pair: in their neutrally preceded discussion (segment 2, above), Participant B gave the initial analysis of the task, A gave the first suggestion, B suggested a new *part of the problem* (segment 2, line 8), A agreed, B continued with another suggestion, and upon B pausing, A agreed and directed the conversation back to their original thought. B agreed, and then directed the conversation back to their own last thought. A agreed to that as well, and then B made another suggestion. This pattern went on a few more times without interruptions or extended periods of overlap. In the leadership preceded discussion, Participant A offered the first general analysis (*at least this time they agree with each other,* segment 7, line 4), B indicated it was a tough situation, B started listing issues and A interrupted to offer a solution for one of the listed issues. B suggested that is what they were saying as well and expanded upon the idea. After a pause, A summarized the plan and B indicated agreement with *yes*'s and *yeah*'s. This pair's relationship maintenance preceded discussion (segment 13, above) included the longest continuous string of turns (by any one person). Participant A, across the transcripts, does use less grounding responses than

most of the other participants. It is still curious, given the amount of TRPs available in

such a long string of multiple thoughts, that A never indicated an attempt to speak until

line 20, and then chose to go back to an earlier forgotten point when they did speak.

(14) From Session 3, Relationship Maintenance Prompt
```
1     B:        °wow°
2     A:        ((laughs)) embarrassing right?
3     B:        [ri::ght.    ]
4     A:        [((laughs))]
5     B:        start arguing in front of the boss,=
6     A:        uh huh, not a good sign.
7               ( ) I think if I were, ( ) giving them advice, I would, make Jessica, wait was she?
8               which one was she.
9     B:        she was the:: like the fa:::[cts person       ]
10    A:                                     [the content one?]
11    B:        ye::ah.
12    A:        I would make Jessica talk about the visual, ( ) component of the presentation,
13              [that   ] Walter did? .hh and have Walter talk about the:: ( ) content.
14    B:        [mhm.]
15              I just feel like they didn't really, ( ) like ( ) work together.
16    A:        yeah.=
17    B:        =like I feel like they each made like one half of the whole instead of like
18    A:        (.7) [yeah.]
19    B:             [weav]ing the whole together,
20    A:        mhm.
21    B:        (.5) so it's a lot more fragile,
22    A:        yeah. (2.5) I think if they were each talking about what the other person did
23              though (.5) .h they::'d ( ) >one appreciate it a little bit more [I think.]<
24    B:                                                                         [right.  ] right.
25    A:        .hh and then:: ( ) they'd have to talk about it positively? Otherwise they're
26              just throwing their (.2) project, (.3) in the gro(h)und?
27    B:        right. exactly.
```

The participants share a laugh in lines 1-4, appearing to agree on the so called

embarrassing behavior of the characters written in the story. After having the floor in line

6, responding to Participant B's utterance in line 5, Participant A breaks the back-and-

forth exchange in line 7 and takes a second turn to offer a suggestion (*I think if I were

giving them advice…*). In line 8, Participant A asks B which set of issues the character

Jessica had (offering B conditional access to the turn), to which B responds (*she was the*

facts person), and A creates some overlap by attempting to clarify B's response (initiating repair) before B finishes the answer. Though they give different answers in lines 9 and 10 to the question Participant A poses in line 8 (*which one was she*), in line 11 Participant B agrees with A's answer (*the content one?* line 10), and Participant A restarts their suggestion for Jessica. In line 14, B responds *mhm* and then offers a new analysis of the situation (*I just feel like they didn't really work together*). Participant A agrees *yeah*, and then B expands on their own point (*I feel like they each made one half of the whole*) and A provides a continuer once more. After a brief gap, B reiterates, *so it's a lot more fragile*. In line 22, Participant A agrees, and after a significant pause (2.5 seconds) and then Participant A returns to their previous suggestion that the two characters perform each other's roles. Participant B quickly replies (*right. right.*) in line 24, overlapping slightly after A continues past the projected unit (*they'd: one, appreciate it a little bit more,*). Once Participant A returns to their previous point in line 22 (the suggestion that the participants should try each other's roles, a suggestion A has given multiple times now), Participant B produces only grounding responses (*right. right. right. exactly.*) in lines 24 and 27, this time showing agreement to the solution A has presented since line 14.

To recap this pair's session: in this pair's neutrally prompted discussion, B offered the first suggestion, which Participant A indicated they were already thinking of, A expanded on the subject with an anecdote, B agreed, and A closed the opening segment (*so that would be an easy fix for that,*). In the leadership framed discussion, Participant B made the first suggestion (*go to the boss*), Participant A acknowledged it (*yeah*) and moved to analyze the policy laid down by the boss (not quite echoing their suggestion,

but a related topic). Participant B agreed with the analysis, elaborating on their point, and

A confirmed (*right.*) before they moved on and A suggested another approach. In the

most recently covered, relationship maintenance framed discussion, Participant A offered

the first suggestion (that the co-workers should try each other's roles), Participant B

acknowledged it with a single-word response and moved to address their own angle,

Participant A produced continuers, and then when B seemed to give up the floor, A

brought the discussion back to their earlier suggestion. Participant B showed their

agreement with multiple grounding responses, and they moved on.

(15) From Session 4, Relationship Maintenance Prompt

```
1    B:      ((clears throat))
2    A:      °°okay.°° Walter and Jess.
3    B:      yeah. this one's a little more uh::: heated. [I would say::. ]
4    A:                                                    [having touble.]
5    B:      uh::m. ( ) man. uh::. again I uh:: - I fall back to:: uhm.
6    A:      yeah ((laughs))
7    B:      get it together? ((laughs))
8    A:      don't. fight at work. in a presentation in front of your boss, and then again in
9            the breakroom after?
10   B:      yeah.
11   A:      everybody calm down, I agree with that one,
12   B:      I would – I would definitely try to:: ( ) like ( ) stop arguing, period, like. this is.
13           not productive. uhm. I – there's a break, so you're getting to go back in there.
14   A:      ( ) right. gotta use that time to [get a     ( )    co]hesive strategy.
15   B:                                       [take a breath, kay]
16           yeah.
17   A:      of what you need to address.
18   B:      exactly.
```

In this interaction, Participant A speaks first, though this utterance is triggered

moments after B clears their throat. Participant B offers the first broad analysis of the

situation (*this one's a little more heated*), and at the end of Participant B's 3rd line

Participant A quickly adds their own analysis in line 4 (in overlap with B's tacked on *I*

would say). Participant B struggles their way through line 5, displaying a hesitancy (if not

difficulty) to offer the simplistic, hard line response: *get it together* in line 7 (or searching

for the best way to phrase it). Participant A displays agreement with B's solution through

producing a grounding response *yeah* (line 6), along with some additional laughter,

allowing B to complete their utterance in line 7 and return the exchange. Participant A

mirrors B's raised intonation (B: *get it together?* in line 7, and A: *the break room after?* In

line 9) and offers a similarly simple suggestion for resolving the story's conflict in lines

8-9. This time, Participant B responds with the *yeah*. Participant A begins the next turn

suggesting everybody should *calm down* in line 11. Participant B echoes a similar

statement in line 12, saying they should *stop arguing*. Participant B then (in line 13)

brings up the fact that they have a break, and A picks this topic up in the following turn,

referencing the break in line 14, and indicating that the individuals in the workplace

conflict should use that time *to get a cohesive strategy*. Just after A begins to say what

they should use the break for (*gotta use that time to ... ,* line 14), Participant B attempts to

finish the sentence (*take a breath,* line 15) and A waits for the overlap to end before

completing the majority of their phrase *cohesive strategy*. Participant B agrees, uttering

yeah in line 16, and Participant A tacks on one more phrase for clarification (*of what you

need to address*), and B closes the point with an *exactly* in line 18.

In this pair's neutrally framed discussion, Participant A opened with a question

(*how do we help Diane and Mark?,* segment 5, line 6) which presented a second speaker

the floor and explicitly requested (thus obligated them to give) a suggestion. Participant B

offered the first suggestion, Participant A agreed, Participant B proceeded to note that it

was a poor one regardless, Participant A agreed and expanded, and Participant B closed it

out (*very true*). In the leadership preceded discussion (segment 8), Participant A opened

with the initial analysis, and Participant B moved forward with the suggestions from there while A offered grounding responses along the way. Participant B produced a few suggestions, but none were expanded upon by Participant A and the pair never seemed to reach a conclusion in any sort of opening segment. In the opening of the relationship maintenance preceded discussion, Participant B opens with the analysis of the situation, Participant A follows with the first suggestion, B expands on it, and A closes it out with one further expansion before B confirms (*exactly.*). In this discussion, expansion was not lengthy by any means, but there were very explicit utterances used to indicate agreement, like *I agree with that one* (line 11), before participants moved on.

Analysis of the dialogue in the post-relationship maintenance discussions provided another transcript segment (segment 13) where a participant was allowed by their partner to continuously self-select (lines 4-19) without any interruption. This once again broke the "one suggestion at a time" pattern indicated in the neutrally prompted openings. Session 1 (segment 12) may not have contained a notably long passage by a single participant, but it also doesn't feature the same pattern of participants attempting to secure an early suggestion as a pair. The transcript segment primarily showed Participant B producing frequent single-word grounding responses as Participant A discussed the story. While single-word grounding responses were not uncommon in the neutrally prompted discussions, they did not appear to be the primary tool for coming to a collective agreement on a suggestion. Sessions 3 and 4 were likewise back-and-forth for the participants, though Session 4 (segment 15) more successfully came to a common conclusion by the end of their opening sequence. Session 3 (segment 14) featured Participant A making the same suggestion three times before Participant B directly

acknowledges it. Participant B offering suggestions without directly acknowledging Participant A's and Participant A continuing to go back to their unacknowledged point may suggest participants valued having "a say" after this prompt compared to the neutral prompt.

Now that we have examined the opening sequences and explored the ways which participants looked to solve the workplace conflicts with each other, it's worth looking for some general, more quantitative patterns in participants verbal behavior.

4.2. Lexical Measures

The two features this section explored were hedging and conversational fillers. The literature review suggested that conversational fillers may increase under threat if working memory was over-burdened. Other studies showed evidence that hedging would increase under threat, perhaps because a general motivation to avoid confirming the negative stereotype of poor ability in the targeted domain motivates individuals to create some distance between the domain and their claims (or firm suggestions, in this context). That said, the effects of stereotype threat were found to be mixed. The following section provides tables and analysis for hedge and conversational filler rates.

4.2.1. Hedge Rate

Hedge rate was calculated by marking for words or phrases intended to lessen the impact of a statement (*if we were to* <u>*sort of*</u> *look at what the average* <u>*sort of*</u> *way that most people were…*), increase the subjectivity of a statement (*I feel like,* or *I think that*, or *this is maybe just a me thing but*), or indicate a level of uncertainty towards the information a

speaker was about to use (*it seems like*, or *presumably*). Once the 6-8 minute dialog's

transcript had been fully marked, all marks were tallied and they were divided by the

individual's word count for that discussion (filler words like *uhm* or *like* were not

counted). The resulting percentage was used to indicate *hedges per 100 words*. An

outright count of hedges per discussion wasn't used as participants word counts within a

pair could differ by 50, 100, 200, or even 500 words in a given prompt. Time was also

not a possible factor, as discussions could vary by about a minute and a half (and in one

exceptional case, four minutes) as participants read and initiated conversation at different

points in the recording. As a brief reminder, all women in the study were called

Participant A and men were called Participant B. "Session" is the term used to refer to the

set of three interactions produced by a pair of participants, thus, Session 1 refers to the

three discussions completed by the first pair of Participant A and B.

	Neutral		Leadership		Relationship Maintenance	
	A	B	A	B	A	B
Session 1	4.0	5.8	5.0	5.4	2.7	6.8
Session 2	4.9	4.6	5.5	3.1	3.8	5.0
Session 3	3.1	5.4	6.8	3.9	2.7	4.1
Session 4	2.9	3.8	1.8	4.8	3.7	2.4

Figure 1 (Hedge rate; hedges per 100 words)

To begin with, hedge rates in the neutral prompt across the four sessions indicate

that behavior, from the outset, is already variable by individual. While five of the eight

participants hedged about five times every 100 words, one of the participants was on the

bottom side of 4 times every 100 words, while two were closer to 3 times. Going across

the sessions (left to right), relative to their neutrally prompted discussions, women in Sessions 1, 2, and 3 displayed a clear increase in hedging while discussing the leadership-prompted scenario. These same women displayed a clear decrease in hedging while discussing after the relationship-maintenance prime. In these same three sessions, each of the men displayed decreased hedging after the leadership prime, and two of the three displayed increased hedging after the relationship maintenance prime. Unlike the pattern displayed by the first three sessions, the woman in Session 4 displayed a decrease in hedging after the leadership prime and an increase after the relationship maintenance prime. Also different from his gender group, the man in Session 4 displayed increased hedging after the leadership prime and decreased hedging after the relationship-maintenance prime. Though both participants from Session 4 had relatively low hedging rates to begin with, their percentage change from the neutrally prompted (control) discussion was still clear enough (see Figure 2).

	Neutral		Leadership		Relationship Maintenance	
	A	B	A	B	A	B
Session 1	-	-	↑ + 25%	↓ - 7%	↓ - 32%	↑ + 17%
Session 2	-	-	↑ + 12%	↓ - 33%	↓ - 22%	↑ + 9%
Session 3	-	-	↑ + 119%	↓ - 28%	↓ - 13%	↓ - 24%
Session 4	-	-	↓ - 38%	↑ + 26%	↑ + 28%	↓ - 37%

Figure 2 (Hedge rate change; relative to *own* 'neutral' rate)

Though the change in hedging behavior during Session 4 was different (if not opposite) to the changes exhibited in Sessions 1-3, it still displays a sort of organized change – it is less important (if even possible) to predict how a participant's behavior will

change than it is to note that their behavior does, systematically, change. Having said

that, there is a clear pattern of targeted individuals (i.e. men after the relationship

maintenance frame, women after the leadership frame) demonstrating the expected

increase in hedging. Session 4 shows that the gendered prompts may initiate some kind of

different verbal behavior, but it is not necessarily stereotype threat at work.

Looking at the behavior change when framed by the prompts offers more

explanation than when the rates are sorted chronologically (by order of discussion as

shown by Figure 3, as the priming prompts were rotated between the second and third

discussions each session). One might expect participants to become more familiar with

each other as the session proceeds, and more familiar with format of the study on top of

that. Based on this expectation, they might predict lower rates of hedging in the second

discussion, and lower rates beyond those in the third – but this is not the case. Though

half the participants do hedge less in the second discussion, the remaining half hedge

more, especially Participant A in Session 3). Five participants do hedge less in the third

conversation, but there are still three who hedge more, and by a respectable difference.

	First Discussion [+]		Second Discussion		Third Discussion	
	A	B	A	B	A	B
Session 1	4.0	5.8	5.0	5.4	2.7	6.8
Session 2	4.9	4.6	3.8	5.0	5.5	3.1
Session 3	3.1	5.4	6.8	3.9	2.7	4.1
Session 4	2.9	3.8	3.7	2.4	1.8	4.8

[+] Always the neutral prompt.

Figure 3 (Hedge rate; chronologically in order of discussion, not topic)

The numbers indicate a pattern of change, and it would appear to be mediated by the primers. Figure 3 helps demonstrate that the pattern for hedging increase is organized by the domain which the prompts *suggest* the discussions are part of. (i.e. it isn't as much change over time which affects behavior between the men and women participants, but instead it is dictated more by the topic, in this context, where stereotype threat was intentionally primed). It is worth a few pages then to examine some instances of hedging, and particularly to examine a participant's approaches to these instances across the three discussions. Taking it one session at a time, the first instance comes from a segment we analyzed earlier, during the opening sequence of Session One.

(16) From Session 1, Neutral
```
1    B:         but u::m, ( ) I dunno just sort of looking ( )
2       →      well ( ) I guess they're forced to ( ) be in the same space,
3    A:         so there's no:: like I would su – first I would suggest just switch out with
4       →      someone else but I guess that can't happen [cause]
5    B:  →                                               [  ye- ] I guess – presumably
6                [that's] – that's the case.
7    A:         [mhm.]
```

Here Participant B brings up the fact that the story's protagonists are being forced to share the same space. Participant B already began hedging in line 1 (*I dunno just sort of*, forming an impressive mashup of hedge words/phrases), but one point of interest takes place between lines 2-5. In line 2, Participant B uses the phrase *I guess* to take some of the critical edge off their first claim, *they're forced to be in the same space*. Here, B is looking for a good point to make in line 1, and this pattern in line 2 may make them sound less critical when and if they fail to think of much beyond the surface. The interesting part comes in the following two turns, where Participant A uses the same phrase (*I guess that can't happen*) and then just a few words later B uses it once more (*I*

guess – presumably that's the case). Even more notably, Participant B seems to restart after that final usage (picking a slightly bigger yet still slightly unsure word), perhaps picking up on the fact that there has been a lot of guesswork going on within just a few lines. This dubious exchange may not yield many good suggestions for the characters in conflict, but it does demonstrate how the participants attend to each other's linguistic behavior. A careful selection of word choice in their hedging style points to the fact that this participant is attending to their partner's hedging, and at least during this point in the conversation that attention is conscious.

While there was an impact on hedging frequency for both of these participants in the second discussion, the impact was a bit more significant in the third (relationship maintenance prime). With that knowledge, let's examine a segment from the middle of that transcript.

(17) From Session 1, Relationship Maintenance Prompt
```
1    B:          (  ) .hh so I – ((sighs)) well there's definitely some sort of implied tension.
2                in. (  ) them making it.
3    A:          mhm.=
4    B:    →     =but (  ) – so I assume that – that (  ) you know (  ) something in his ch –
5                aesthetic choices, grates up against what (  ) she's – has (  ) tried to present,
6                (  ) in some way, that like m – might be noticeable to the supervisor.
7          →     (  ) but (  ) you know, like, I would think that you know – I – I feel like,
8                (  ) we've all done group projects where we know that there is a flaw somewhere
9                [in your] presentation,
10   A:          [mhm.  ]
```

In the lines leading to this segment, Participant A has just recently finished a suggestion of their own, with Participant B's contributions largely limited to frequent grounding responses (mostly a lot of *mhm*-ing). Here in line 1, Participant B attempts to analyze the source of the issue (*well there's definitely some sort of implied tension*). While there is some other hedging and plenty of pausing as B attempts to work through

this thought, lines 4 and 7 contain references to the two participants which may reveal some of the thought process for those particular hedging phrases. In line 4, Participant B tells A that they're making an assumption (hedging by putting the choice on their own subjective process, and by acknowledging their statement is based on a specific assumption). This is followed by a restart, a pause, and then another hedge, *you know*. Initially, it is not too surprising to see two hedges back to back in the same line, as even with this participant we saw a pattern of clustering in this context (*I dunno just sort of looking*). However, going a few more lines into their analysis, they cluster again with a now notable pattern of phrases. After the pause and a *but*, line 7 reveals the following hedges in order: *you know, I would think that, you know, I feel like*. This display of self- and then other-reference, back and forth, suggests an especially heightened orientation to the other person, or the dynamic between the two of them. Any attempt to make a claim based on one's own authority is softened by the inclusion of the other, you know? However, that is not to say its impact on the conversation as a whole is necessarily lessened. Making less of a claim to any idea (and to the floor) and inviting participation from an interlocutor may be an attempt to build some common ground, especially if one is struggling to build an idea on their own. Interestingly though, there is no acknowledgement from Participant A at any of the *you know* references.

One of the most significant changes in hedging behavior came from Participant A in Session Three. In the first discussion, Participant A recorded a relatively low rate of hedging (3.1 per 100 words). That discussion also featured lines like this:

(18) From Session 3, Neutral
1   A: so that would be an easy fix for tha::t, ( ) and then::
2   ( ) they also have the pacing issu::e,

3   which he doesn't have to do that in the office,

And lines like this:

(19) From Session 3, Neutral
1   A: .hh uhm ( ) I think that was everything. this was:: pretty easy.
2   B: ( ) yeah. nothing was like –
3   ( ) [it wasn't hard to think any of those] solutions out.
4   A: [that was – (.) yeah, (.) no, : :   ]
5   no those solutions are pretty easy.

While Participant A found the first discussion easy, the second discussion only moments later looked 119% more like this:

(20) From Session 3, Leadership Prompt
1   B: [no : : :]
2   A: [I think] that he needs to offer some kind of incenti:::ve?
3   (2.8) >I don't know< if they reach this productivity::? they'll get this bonu:s:,
4   or something like that, I don't feel like cutting out the lunch is a solution though.
5   B: (1.4) definitely not.

In the prior discussion, finding solutions was *easy*. In fact, the majority of their first discussion consisted of thinking of a solution, considering it a good idea, and agreeing upon it. Here, finding a solution is still the first step, but the assuredness is gone. After offering a solution in line 2, Participant A, perhaps waiting for a response from B, undercuts their idea before they even say it (>*I don't know*<, i.e. this probably isn't a good idea). Instead of saying, "if they reach this productivity they get a bonus" and "cutting out lunch isn't the solution", Participant A trades their previous declarations for self-described feelings and opinions.

4.2.2. Filler Rate

The previous tables demonstrated that the hedging rate increased for the majority of participants targeted by the gender-threatening prime and decreased after primes which targeted their partner. Hedges and filler words can both be considered displays of

uncertainty (though acknowledging that this display does not necessarily need to reflect their internal processes and could be a tactic or an act). If the prompts had a direct effect on a participant's hedging behavior, would they have necessarily additionally affected participants' frequency of conversational fillers? The literature review cited research which showed stereotype threat's effects on working memory, and other research which suggested that working memory could play a crucial role in speech production. Thus, one of the main questions was "will speech production be affected by stereotype threat", and the following table suggests stereotype threat does not affect the rate of conversational fillers in this context.

	Neutral		Leadership		Relationship Maintenance	
	A	B	A	B	A	B
Session 1	3.8	8.1	2.4	6.5	2.4	6.0
Session 2	3.0	4.0	2.8	3.5	3.4	3.3
Session 3	2.3	4.3	1.7	3.6	2.0	4.7
Session 4	1.0	5.7	0.4	4.4	1.2	4.9

Figure 4 (Filler Rate; conversational fillers per 100 words)

	Neutral		Leadership		Relationship Maintenance	
	A	B	A	B	A	B
Session 1	-	-	↓ - 37%	↓ - 20%	↓ - 37%	↓ - 26%
Session 2	-	-	↓ - 7%	↓ - 12%	↑ + 13%	↓ - 17%
Session 3	-	-	↓ - 26%	↓ - 16%	↓ - 13%	↑ + 9%
Session 4	-	-	↓ - 60%	↓ - 23%	↑ + 20%	↓ - 14%

Figure 5 (Filler rate change; relative to *own* 'neutral' rate.)

Figures 4 and 5 display no obvious pattern of filler rate change being mediated by the stereotype threat primes. While there is difference in filler rate, no pattern aligns itself to the prompts (i.e. leadership preceded discussions aren't producing a higher filler rate for women across the sessions). All participants uttered fewer filler words after the leadership prompt, and the few cases of increased filler-rate in the relationship maintenance prompt were slight, and mostly among the women (who were not the targets of that prime). The only pattern that seems reasonably interpretable from these charts is that there as an overall decrease in filler rate after the first discussion – perhaps indicating that participants use a lower rate of fillers as they become more comfortable with either their partner or the format of the discussions.

CHAPTER 5: DISCUSSION

5.1. Discussion

After selecting opening-segments from the neutral and gender-prompted discussions, the analysis explored the structure of early ground-building and looked for differences between discussions preceded by a neutral prompt and discussions preceded by a gender-priming prompt. During the neutral prompt openings, participants used fewer single-word grounding responses, selecting themselves for the next turn at earlier opportunities. The opening segments came to a clearer agreement and close when participants self-selected and used their turn to expand on the point raised by the previous speaker. When participants self-selected and offered their own analyses of the situations described in the scenarios, with differing suggestions, the previous speaker frequently returned the topic of conversation to their earlier suggestion before moving forward with new points. Openings preceded by gender-primed prompts tended to be characterized by more frequent single-word grounding responses, and participants would allow speakers to continuously self-select for longer periods of time. For this reason, opening sequences in the primed discussions tended to be more difficult to define endings for. One participant would often talk for longer periods and cycle through multiple analyses and suggestions while the other listened and encouraged them to proceed.

A closer analysis of participants' lexical choices included their rate of hedging and rate of conversational fillers. Participants' rate of hedging appeared to be mediated by the discussion's prompt for both men and women participants. In three of the four sessions, women's rate of hedging increased after the leadership prompt and decreased after the relationship-maintenance prompt. Likewise, men's rate of hedging increased after the

relationship maintenance prompt and decreased after the leadership prompt. It is thus fair

to say that the participants' communication behavior, in this regard, was affected by

stereotype threat. This study does not have the capability of interpreting whether hedging

increased involuntarily due to uncertainty or voluntarily as a communication tactic, but it

does identify that this style changed nonetheless. Von Hippel et al. (2011) found such

changes in style to affect both men and women's interpretations and willingness to

comply with their superiors' requests. Such findings are why this study is less concerned

for the reasons behind an individual's change in communication behavior, and instead

more concerned with asking whether participants' interactional style changes.

The literature review did offer the concept of an over-burdened working memory as

a possible mediator for stereotype threat's effects on conversation. If this were the case, I

predicted speech production would suffer and this could be quantified by a change in

conversational filler rate. No such increase was observed in any pattern. Neither men nor

women, targeted or not, showed a pattern of increased conversational filler rate. Instead,

the filler rate largely declined from the first discussion to the second and third regardless

of the prompt provided.

5.2. Limitations

There were several limitations with this study, some of which are more avoidable

than others going forward.

This study aimed to test the effects of stereotype threat on both men and women in

conversation, and particularly men and women in conversation *with each other*, unlike

studies which have largely kept individuals isolated and speaking into a microphone.

While this design moves the interaction towards a more natural style, the investigator loses control of several variables. First, the very presence of a partner of another gender may be enough to trigger stereotype threat without the need for a prompt. While this may be beneficial for boosting the effects of stereotype threat in the intentionally primed discussions, it could make gathering a "neutral" control sample of behavior impossible. Second, the presence of a real individual as a partner (as opposed to a participant imagining they're speaking to someone or being given a written character whose description can be controlled) means that any other visible traits of that partner can trigger all sorts of other identity related effects. For example, this study wished to examine the effects of identity threat triggered when gender was made relevant to a conversation – but what if participants' race, age, dialect, or any other feature of their identities were attended to by a participant and affected interaction? These factors can't be controlled for in the current design.

One questionable design element was the choice to prime participants twice. After having a supposedly "neutrally" prompted conversation, participants were given a prompt which either framed the discussion in a masculine domain or a feminine domain. The goal was to make one's gender salient and make one of the two participants in that discussion the target of stereotype threat. However, once that has been done, there is not much evidence to suggest that participants would not *still* be primed going into the third discussion, even if the third discussion is now supposedly in a domain where they would stereotypically succeed. Previous studies did not typically try putting the same participant through all three scenarios (control, positive domain, negative domain). That said,

hedging rates in this study could provide slight evidence that the effects of stereotype threat can be reversed even in the span of a few minutes.

Regarding the transcription of the audio recordings, a clear limitation was the possible bias of the investigator. The same investigator set up the study's design, recruited the participants, met the participants, transcribed the audio recordings without anonymizing them (because it would have been pointless after having met the participants and collecting the recordings), and then also interpreted subjective variables like hedges. Many conversation analysis methods have at least two individuals transcribe the same audio and then settle discrepancies between them. No such method was possible for this graduate thesis. For this reason, it is possible that another reader could come up with slightly different data from the same recordings. The validity of this study mainly rests on the presumption that as long as there is consistency in the investigator's interpretations, errors will be evenly distributed throughout. However, this is not necessarily the case.

CHAPTER 6: CONCLUSION

In debriefing interviews during the study, all of the participants were asked whether or not they were familiar with the stereotypes which the study chose to present. Nobody said they were unfamiliar with notions that women were less competent leaders or that they were more capable than men at maintaining relationships. To varying degrees, some said they actively consider stereotypes about their gender as they interact with individuals of another. Though it was clear that participants have varying strategies for this particular type of interaction (a prompted conversation oriented around problem solving), all participants seemed to display a reaction to the prompts which highlighted gender roles. To the extent in which the reaction could be characterized as stereotype *threat*, three of the four sessions seemed the most affected. In the future, a larger scale study can aim to replicate and expand on these results. In particular, it would be interesting to see if similar effects on conversation translate across other various identities (race, religion, dialect, etc.), or whether the type of change varies.

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APPENDIX A: STUDY MATERIALS

Session: _____

Task One **(8 minutes)**

In today's study, you will simulate the communication strategies you would use to resolve a conflict between two people. We will make an audio recording of your performance that will be analyzed later on by a team of researchers here at the university.

Participant: _____   Date:_____

Diane and Mark are coworkers at a small business firm in Austin. They have the same title and rank at the firm, but work with different clients. The firm's offices are currently being renovated, so its employees have temporarily been moved to another space in the building until the renovation is completed in a few months. The temporary space is smaller than the old space, and consequently many employees who had offices of their own must share with someone else for the time being. Diane and Mark were among the employees asked to double up temporarily, and were happy to do so based on the friendship they have developed working together for the past 4 years.

Sharing the office worked fine for the first couple of weeks. They enjoyed chatting with one another over coffee breaks and occasionally arranged to have lunch together. But recently differences in their work styles have begun taking a toll on relations between the office mates. Mark prefers making client calls in the morning and using the afternoons to handle his email correspondence and write reports. In contrast, Diane likes to do her "quiet work" in the morning and then make client calls in the afternoon. As a result of their different schedules, they are constantly distracting one another. Diane is also a big believer in the "paperless office," preferring to work with electronic documents as much as possible in order to generate minimal paper clutter. Mark on the other hand would rather read office documents on paper, because staring at a computer screen for very long gives him a headache. Much of their workspace is devoted to storing all the memoranda, reports, and various other papers he prints out.

The tension has been steadily building up between them, so it was only a matter of time before things came to a head. Yesterday afternoon, Mark got up from his desk and began pacing the office, as he often does when he's thinking over an idea. His pacing was driving Diane crazy, so she hung up from her client call and told him so. "Can't you sit still for five minutes" she asked in an exasperated tone, "or do you have some sort of medical problem? I can't concentrate with all the commotion in here!" Mark retorted angrily, saying "Look, sometimes I move around to get the creative juices flowing. But what right do you have to complain? You play that lousy oldies station all the time, which drives me nuts." The two continued to exchange criticisms until they were both so upset they couldn't talk or even look at one other anymore.

Imagine that you are also an employee at the firm with the same rank as Mark and Diane, and know them both equally well. After their argument, each one independently comes down to your office to complain about other, and you are able to piece together the nature of their dispute from their different accounts. There is no possibility of either one trading offices with someone else, so you take it on yourself to advise them about how to resolve the conflict stemming from their different work schedules and the ways they use and organize the office. You go down to their office and find the two of them fuming.

What recommendations would you make to Mark and Diane? Please offer as many specific recommendations for resolving their differences as you can think of. Assume during your simulation that both people are in the room and listening to you simultaneously.

Task Two **(8 minutes)**

The purpose of this task is to investigate differences in people's leadership ability. Numerous scientific studies have demonstrated that leadership ability critically depends on communication behavior. This research has also found that *leadership ability can be predicted* from observing people as they simulate the communication behaviors they use when interacting with others.

In this task, you will simulate the communication strategies you would use to resolve a conflict between two people. Leaders often must resolve conflicts, so your performance in this simulation provides one way to measure your leadership ability. We will make an audio recording of your performance that will be analyzed later on by a team of leadership researchers here at the university. They will compare your recording to those of other men and women participating in this study to examine gender differences in performance.

Name: _____   Date: _____

Sarah and Chuck are coworkers at a small business firm in Atlanta. They have the same title and rank but work with different clients. During the winter holiday months, the clients' demands increase greatly, causing the employees to work overtime. In an attempt to make the workplace more productive and the workday longer, their boss implemented a rule, cutting their lunch break in half from an hour to thirty minutes.

Sarah and Chuck have worked together at the firm for a number of years. While not close friends, they enjoy chatting over coffee breaks. After their boss announced the new rule, they talked in the break room about how it would affect them. Sarah, who takes part of her lunch to run errands, disagrees with the new rule because she does not have time to both eat and finish the things she otherwise does not have time for. She suggests that since this problem occurs annually, the boss should implement strategies throughout the year to prevent burdening the employees during the holiday months. Chuck disagrees with Sarah because he already takes a shorter lunch break in order to leave the office early. However, the boss said that employees were not permitted to leave before five p.m., the official end of the workday, so Chuck cannot leave early as he previously did. He suggests that the boss allows the employees to make their own schedule, so long as they are getting their work done.

While they have suggestions that they would like to make, Sarah and Chuck are unsure of how to approach the boss because the boss has a history of being hard on employees who disagree or do not follow instructions. Sarah and Chuck worry that by speaking up, they will make the situation worse. Imagine that you are also an employee at the firm with the same rank as Sarah and Chuck, and that you know them both well. Toward the end of their conversation, you enter the break room and overhear parts of their interaction. They come to you and share their displeasure over the new rule. They ask for your advice on how to approach the boss with their complaints.

What recommendations would you make to Sarah and Chuck? Please offer as many specific recommendations for resolving their conflict with the boss as you can think of. Assume during your simulation that both people are in the same room and listening to you simultaneously.

Task Three **(8 minutes)**

The purpose of this task is to investigate differences in people's ability to maintain close personal relationships. Numerous scientific studies have demonstrated that the ability to maintain personal relationships critically depends on communication behavior. This research has also found that *relationship-maintenance ability can be predicted* from observing people as they simulate the communication behaviors they use when interacting with others.

In this task, you will simulate the communication strategies you would use to resolve a conflict between two people. Partners in personal relationships often must resolve conflicts, so your performance in this simulation provides one way to measure your relationship maintenance ability. We will make an audio recording of your performance that will be analyzed later on by a team of relationship researchers here at the university. They will compare your recording to those of other men and women participating in this study to examine gender differences in performance.

Name: _____   Date: _____

Jessica and Walter are coworkers at a marketing company in Charlotte. They have known each other for several years, but have only worked with one another in larger teams. They were recently assigned a project together due to Jessica's expertise in the content area and Walter's design experience. The company recently had to let some people go, so Jessica and Walter have had to pick up the extra slack by taking on this assignment under short notice. They are on a tight schedule with this project and are working under unusually stressful circumstances. They are familiar with one another from previous projects, but have always had the efforts of other people adding to their own, and are not used to working with only one other person. Jessica is concerned with the facts and effectiveness of their marketing campaign, while Walter is focused on the visual components and aesthetic presentation of information. They are able to finish the project in time to present it to their supervisor and coworkers, but did not have enough time to practice their presentation.

Walter begins the presentation by discussing the effectiveness of his visual design, and spends a significant amount of time mentioning the intentional aesthetic choices he made. During his part of the presentation, Jessica looks increasingly flustered – playing with her jewelry, tapping on the table, and occasionally sighing or rolling her eyes. She is concerned that he is not presenting the information cohesively and touching on important details. When it is time for her to present, she says, "Well visuals are all well and good, but without meaningful content, a marketing campaign means nothing." Feeling like she did not appreciate the work that he completed on top of other assignments and under heavy deadlines, Walter mutters comments during her presentation about her having the easy part of the work. His comments get gradually louder until Walter and Jessica begin to argue with one another over who did more work on the project and whose contribution mattered more.

The boss quickly interrupts them and mentions that they will all take a 15-minute break before coming back to discuss the project. Walter and Jessica both leave the room and continue their argument in the break room. Imagine that you are one of their coworkers who viewed this presentation. You are going to use this 15-minute break to talk to Walter and Jessica.

What recommendations would you make to Walter and Jessica? Please offer as many specific recommendations for resolving their differences as you can think of. Assume during your simulation that both people are in the room and listening to you simultaneously.