Patterns of Receptivity to the Influence Tactic of Pseudo-Reasoning

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I am submitting herewith a dissertation written by Dennis Neal McCarty entitled "Patterns of Receptivity to the Influence Tactic of Pseudo-Reasoning." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Communication and Information.

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Abstract

The "bullshit" construct used within social influence involves presenting ambiguous message content as an ersatz substitute for missing reasoning. This pseudo-reasoning combines with clearer source or affect cues that drive the target toward a desired conclusion. Bullshit receptivity (BSR) has presented a popular focus of research, especially considering the use of pseudo-reasoning within viral disinformation (Van Bavel et al, 2020). Most BSR research has involved non-experimental correlational tests with trait-like, individual cognitive variables, their explanation of BSR's cause remaining limited and inconsistent (Pennycook et al, 2015). However, influence tactics employing bullshit commonly derive their effects from fulfilling targets' motivated needs and addressing their accessible knowledge structures (Brown et al, 2019; Carpenter, 2017; Kruglanski & Thompson, 1999). Attitude and knowledge structures partially emerge from and depend upon individuals' connections to the groups with which they identify (Smith & Hogg, 2008; Terry & Hogg, 1996), and self-uncertain individuals exhibit attraction to group-based messages that reduce their uncertainty (Hogg, 2007). This project tested the hypothesis that self-uncertainty and message cues identifying sources as sharing social identities with subjects positively predict the acceptance of pseudo-reasoning and compliant responses to compliance gaining messages accompanied by pseudo-reasoning.

Keywords: bullshit receptivity, social identity, compliance gaining

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Chapter One: Introduction

Under uncertainty, individuals make judgments about their experiences in the same way that scientists test hypotheses: They encounter new data and weigh it against premises that exist within their personal, observational, and collective spheres of understanding – in theoretical terms, behaving as "lay epistemics" (Kruglanski & Webster, 1994; Kruglanski et al, 2010). Some individuals, more than others, exhibit tendencies to find patterns in random stimuli, more liberally assigning fit between what is observed and what is known, such as in the case of an individual discovering animal shapes within a scattering of stars (Walker, 2019). In communication, individuals share their patterns of understanding via strategic interaction, through which they find and negotiate meaning (Higgins, 1992). Meaning is co-oriented between people within communication episodes that coordinate message goals, message structure, and message interpretations situated within social expectations and constraints (Knapp, 2011).

When influence is the goal, individuals use communication to coordinate their wants and needs with the goals and actions of others – in the case of compliance gaining, for example, influencing agents use communication to alter a message target's behavior in the direction of doing something they otherwise would not do (Miller et al, 1987). In some situations, communication may occur between an influencing agent and an influence target in which the agent, unable or unwilling to make claims or compliance gaining messages supported by reasoning, may instead turn to communication patterns that look like reasoning, but lack the traditionally known features of high-quality reasoning, such as specificity, concreteness, relevance, and/or logical connections with evidence (Dynel, 2011; Grice, 1989).

Considering this message function and requisite structural choice, some researchers have addressed the use of non-reasoning, or placebic information (Langer et al, 1978), which uses

mundane, often redundant statements to act as a placeholder for reasoning when a message target is not motivated to attend carefully to a compliance gaining message. Alternatively, message agents may tailor their communication of pseudo-reasoning (see Kuhn, 1991) to contain intentionally low-clarity elements – such as ambiguity, abstraction, or statements out of context – which offer communication that looks like meaningful information, but actually derives its effect from capitalizing on a target's assigning meaning based on familiar premises, i.e. their attitudes, norms, and intuition. Agents employing pseudo-reasoning strategically pick message elements and resist clarification just enough for a target to fill in the blanks, as they are motivated to apprehend meaning and focus on information relevant to a conclusion (Kruglanski & Thompson, 1999).

Harry Frankfurt (2005) described this ubiquitous pattern of communication behavior as "bullshit," and named it as a way in which individuals maintain exchanges with one another by casually saying words just to say words, being motivated by little concern for expressing truth. In tests of attributions of message believability and quality, some individuals appear more susceptible than others to influence tactics employing the pseudo-reasoning of "bullshit," showing "bullshit receptivity" (BSR; Pennycook et al, 2015). While Frankfurt (2005) explained it more in terms of low-stakes, low-effort, lightly deceptive talk, bullshit has garnered popular interest concerning the social issues of viral disinformation and epistemic fragmentation (Harrington, 2020; Van Bavel, 2020), as bad faith actors employ difficult-to-clarify backing for the presentation of spurious claims (Bengoetxea, 2017). Bullshit as a construct, however, remains inconsistently conceptualized and operationalized across studies.

The traditionally accepted view of effective influence messages posits that good persuasion relies on the presentation of clear evidence logically connected to a claim (Grice, 1989). Instead, bullshit may represent, much like placebic information (Langer et al, 1978), a tactical form of evidence replacement. Unlike placebic information, however, its effect may not be limited to low-effort compliance gaining, as tests of BSR show subjects attributing profoundness and likeability to its ambiguous claims (Čavojová et al, 2020; Pennycook et al, 2015). Individuals' processing of messages occurs as a result of the interaction of their cognitive ability, their motivation to evaluate, and the ease of understanding built into the message content (Carpenter, 2010; Kruglanski et al, 2006). While the majority of bullshit research has addressed targets' deficits in cognitive ability, only simple correlational analyses have shown associations with higher-order motivating factors, such as religious adherence (Pennycook et al, 2015), and without very much specific experimental attention to the need fulfillment often theorized to drive influence (Brown et al, 2019; Cialdini & Goldstein, 2004).

In most influence research, social scientists induce perceptions of high quality persuasion by controlling the presence or non-presence of evidential statements, but bullshit represents a difference in evidence clarity. Regarding message structure, bullshit strategy commonly presents the effects of combining ambiguous verbiage with unambiguous source and paralinguistic cues (such as known scientific terms cast with more advanced and lesser-known terms within fabricated complex theoretical statements; Evans et al, 2020). Studies examining bullshit as a message type by adjusting the simple cues and ambiguity-increasing devices within message structure may reveal differing influence effects, further explicating the mechanisms behind social influence (Carpenter & Dryden Henningsen, 2011). Simple differences in message element's

clarity may steer message targets toward evaluation based on the cues that represent the clearest path to a syllogistic conclusion (Erb et al, 2007; Kruglanski & Thompson, 1999).

In particular, an examination of bullshit draws theoretical interest because it may articulate the potential of intentionally ambiguous claims to capitalize on the frequently abstract premises that drive syllogistic reasoning (Gigerenzer, 1991). These premises exist as prior knowledge structures, attitudes, and beliefs supplied, at least in part, by individuals' group identification (Eaton et al, 2008). For individuals identifying with a salient group (Wyer, 2010), an influence agent communicating identifiable in-group cues may moderate the effect bullshit message construction has on BSR and message acceptance in message evaluation. This effect may especially emerge for self-uncertain individuals (Hogg, 2007), who ostensibly derive greater meaning from the ambiguities of bullshit because of their needs, such as group belongingness and uncertainty reduction, that the messages purport to fulfill (Brown et al, 2019; Kruglanski et al, 2006; Kruglanski & Thompson, 1999).

This set of studies addressed the overall hypothesis that influence messages employing bullshit pseudo-reasoning significantly and positively affect message acceptance and compliance when highly self-uncertain individuals perceive the message source as sharing their social identity. Similar to Pennycook et al's (2015) original BSR explication, the processing of bullshit messages may involve an interruption in message evaluation, as described according to the Spinozan model of information processing (Carpenter, 2010, 2017; Gilbert, 1991; Gilbert et al, 1993). Unlike most prior tests of BSR as an individual difference variable, however, this research sought to test receptivity to bullshit as an artifact of message processing resulting from the aforementioned uncertainty and social identity variables' interference in message evaluation.

First, this project sought to clarify and operationalize a replicable bullshit message strategy and illuminate some of bullshit's effects as a social influence variable, particularly as a low-quality (in terms of message clarity) substitute for reasoning. Second, this project puts forth investigations of the social causes underlying message believability and requisite compliance, particularly in terms of individuals' processing of messages based on the attitudinal structures made familiar (and therefore accessible) to them via their group self-categorizations. This second purpose utilizes and expands an understanding of communication behavior predicted by Uncertainty-Identity Theory (UIT; Hogg, 2007), which builds upon the family of theories informed by Social Identity Theory (Tajfel & Turner, 1986).

Literature Review

The Bullshit Concept

Regarding the bullshit concept's definition, researchers have differed over the qualifying criteria for bullshit communication patterns, and different scholars use the term discrepantly. Frankfurt (2005) focused his rhetorical analysis on the phenomenon of idle talk among interactants enlisting situational relativistic approaches to making meaning, whereas Cohen (2002) and those following focused on the intentional ambiguity or equivocality of message structures, mainly used as social influence strategies. Meibauer (2016) lent further articulation to Frankfurt (2005), outlining a sender-side definition of bullshit according to four pragmatic criteria: the assertion of truth in a claim, the lack of concern for the truth or falsehood of said claim, the motivation to hide or deflect attention from said lack of concern, and the presentation of unwarranted certainty for the truth of the claim. Three out of the four Meibauer (2016) criteria address antecedent psychological conditions. To examine bullshit's explication as a

communication strategy, it is prudent in research to investigate psychological and social antecedents and conditions, message structures, message interpretation, and communication outcomes within an influence process.

The Functions of Bullshit. Communicators of bullshit seek to alter their audience's apprehension of reality, either concerning impressions about them or evaluations of their claims. Especially when they lack the willingness or ability to provide reasoning under expectations for doing so, they turn to pseudo-reasoning (Cohen, 2002; Dynel, 2011; Meibauer, 2016, Petrocelli et al, 2019). Similar phenomena have emerged as subjects of communication research under the conceptualizations of equivocation (Bavelas et al, 1990) and strategic ambiguity (Eisenberg, 1984). However, while scholars mainly characterize equivocation as an interpersonal conflict avoidance tactic and strategic ambiguity a meta-strategy for inviting cooperative dialogue in groups, bullshit has mainly represented the focus of study for researchers examining the credulity of influence targets, especially regarding the kind of persuasive tactics involved in the dissemination of disinformation and doubt (Bengoetxea, 2017; Pennycook & Rand, 2018; Van Bavel et al, 2020).

Individuals, such as politicians and religious idealogues, who must publicly appear to have easy solutions even when possessing none, may craft bullshit influence messages meant to attract followers or reinforce lines of group solidarity around themselves (Hogg, 2018; Meibauer, 2016; Petrocelli, 2018; Spicer, 2020). Bullshit thrives in information environments in which prestige or authority lack objective (or clear consensual) definition, such as the arts (Turpin et al, 2020). Bullshitters tend to use bullshit when they can reasonably predict that their audience will accept it and generally ignore its particulars (Petrocelli, 2018). Non-targets, or individuals for

whom the message lacks familiarity, value relevance, or social goal fulfillment may more likely find bullshit messages disturbingly unclarifiable and therefore worthy of rejection. This reflects prior findings concerning the role of information accessibility in persuasive message processing (Kruglanski & Thompson, 1999; Russell & Reimer, 2020).

In most bullshit literature, scholars name the sender's mind state as the primary defining attribute of bullshit, and scholars have identified bullshit as a message type evincing that low-truth-concern mind state. Within a communication episode, however, which involves a transactional and continuous process of meaning sharing through the intentional use of symbolic messages between people, the standards of clarity, accuracy, and plausibility undergo mutual negotiation between interactants (Miller & Steinberg, 1975). Situated within an act of attempted influence, message agents concern themselves with altering the judgment formations of their targets, which in turn inform those targets' persuasibility and/or compliance (Kruglanski & Thompson, 1999).

In social influence, bullshit maneuvers the target into accepting, for example, an impression of the agent as capable of fulfilling the target's needs (Petrocelli, 2018), without due verification or clarification of what a sender claims within message content (Cohen, 2002). The agent holds the motivation to create an impression but lacks the motivation or resources to cast unambiguous claims (Petrocelli et al, 2019); meanwhile, the message target bears the burden of assigning the missing verification and clarity. Motivation for this may come from personality, normed pressure, or deficits in needs such as belongingness (Cialdini & Goldstein, 2004). Within bullshit research, scholars have rarely named the influence goal bullshitters pursue nor tested it

explicitly, though some experiments have tested specific goals, such as targets' re-sharing of information (Čavojová et al, 2018) and appraising abstract art as valuable (Turpin et al, 2020).

The Form of Bullshit. Bullshit pseudo-reasoning avoids clarity, instead depending on the receiver to assume it (Cohen, 2002), and this avoidance of clarity, fulfilling Meibauer's (2016) criterion of obfuscating both intent and low concern for truth, can be carried out via a variety of linguistic devices, such as the communication of non-falsifiable statements, equivocal word choice (presenting the possibility of multiple meanings), use of esoteric or sesquipedalian language, use of exaggeration, or appeals to anonymous bandwagon authority (Jurkovič et al, 2018; Pennycook & Rand, 2018; Spicer, 2020; Turpin et al, 2019). Thompson (2016) pointed out that bullshit in advertising tends to involve mechanical elements such as passive voice (obfuscating a clause's subject), vague terms or front-loaded qualifiers (e.g. "value" or "this simple solution"), and conditional statements that make ad hoc rescue easier.

So far, scholars have yet to develop a consistent list of sufficiency criteria for the content that signifies a message as bullshit, though Cohen (2002) and Dynel (2011) described the core qualification: No immediate clarification occurs from message content or context, favoring a general impression of plausibility over accuracy. Pennycook et al's (2015) tests of bullshit receptivity described the construct in terms of communication lacking substantive meaning while expecting that meaning to be intuitively assumed by those receptive to the message. Pennycook et al's (2015) initial test of their BSR scale used, within the so-called "pseudo-profound" domain, excerpts of bullshit taken from an online widget and tweets from spiritual idealogue Deepak Chopra. An example from the widget reads like so: "The goal of ultra-sentient particles is to plant the seeds of balance rather than delusion. Inspiration requires exploration." Partially, this

passage qualifies as bullshit because, through the choice of ambiguous and pretentious language, it makes general assertions without necessarily pointing to falsifiable or readily apprehensible information.

Regarding variations in its operationalization, Jurkovič et al (2018) and Čavojová et al (2020) applied Pennycook et al's (2015) operationalization to bullshit outside the transcendental domain, seeking to test examples of its general usage, and altered definitional statements to contain inaccurate claims supported by figurative flourishes, such as metaphor. Evans et al (2020) created a test of "scientific bullshit" by cobbling together esoteric words from the physics discipline and organizing them into false theoretical descriptions. Turpin et al (2019), in a test of abstract art appraisals, created bullshit titles for art pieces by using principles underlying "International Art English," a pattern of message construction in art criticism that features collocations such as paired like terms (e.g. "external reality") and converting adjectives and verbs into nouns (e.g. "potentiality" out of "potential"). Gligoric et al (2020), in an operationalization of political bullshit slogans and political program descriptions, used references to ill-defined abstract terms, such as "America" in a collective personality sense.

Conceptual Clarity. The bullshit described by the last decade of literature suggest a superordinate communication strategy that subsumes and elaborates upon phenomena already known to the communication discipline: those of strategic ambiguity and equivocation. Equivocation, similar to Frankfurt's (2005) definition of bullshit as "short of lies," involves the communication of intentionally unclear information, particularly information that could be interpreted numerous ways, for the purposes of deceptively avoiding the difficulty associated with either truth-telling or unequivocal lying (Bavelas et al, 1990; Bello et al, 2016; Buller &

Burgoon, 1996; McCornack et al, 2014). In most equivocation research, its expression

accompanies defensive or avoidant behavior in response to conflict, seen as a politeness strategy

more often than a concerted influence strategy, though its usage appears to occur most often, at

least based on self-reported responses to scenarios, in informal situations among friends (Bello,

2000). In this sense, parallel to bullshit's use of pseudo-reasoning as an influence strategy,

equivocation involves the careful introduction of variably explicit pseudo-information in favor of

an individual maintaining a desired impression or level of disclosure.

Eric Eisenberg's line of research on organizational communication relying on strategic

ambiguity (Eisenberg, 1984) similarly involves the programmatic usage of carefully adjusted

clarity in collaborative settings to blur intergroup or inter-perspective lines: An ambiguous or

equivocal claim has the benefit of looking like a puzzle piece to which many different pieces (or

points of view) may affix. Spicer (2020), in his meta-analytic review of organizational bullshit,

similarly found that leaders (formal or otherwise) commonly used bullshit to inculcate a feeling

of community, especially in groups that indulged its usage, but that if overused, similarly to

equivocation in the interpersonal context (Edwards & Bello, 2001), it could result in diminished

trust and/or negative attributions of a bullshitter's competence (Christensen et al, 2019).

Eventually, message targets will seek clearer information.

For the sake of parsimony, it may be useful to the social sciences to conceptualize

bullshit as a superordinate construct of influence behavior, comprising the communication of

pseudo-reasoning message structures for the purpose of achieving influence goals. This would

subsume equivocation and some strategic ambiguity patterns, as much as those patterns feature

pseudo-reasoning-based influence attempts on, for example, attitudes regarding relational

stability or perceived cohesion of work groups. Some recent research has divided bullshit into evasive and persuasive functions (Littrell et al, 2021), but these represent only two directions. Researchers especially interested in antisocial realms of social influence may focus on compliance gaining bullshit uttered for the sake of gaining asymmetrical benefit for the bullshitter. However, such an undertaking will require further explication for the bullshit construct and its interpretation in terms of its situatedness within communication episodes and relationships.

For one of its purposes, this research proposed the development of testable bullshit messages fitting characteristics established in the literature before examining them within influence processes with cognitive and behavioral goals. For the sake of parsimony, therefore, this research project adhered to the following conceptual definition based mainly on the Cohen (2002) line of consideration and Meibauer's (2016) criticism alongside tests of bullshit strategies as tactics of influence (e.g. Gligoric et al, 2020; Gligoric & Vilotijević, 2020; Turpin et al, 2019): Bullshit represents a superordinate communication strategy that replaces missing or unwanted reasoning with pseudo-reasoning. The communication of pseudo-reasoning commonly involves the enlisting of evidential claims that, in service to an influence goal, combine distinctive cues for desired impression formation with verbal message structures that prevent clarification. In the case of compliance gaining, this influence tactic would concern itself with engendering likeability of the agent and worthiness of the compliance gaining message.

Bullshit violates Grice's (1989) second maxim of quality, regarding the presentation of evidence for a claim; it carefully blurs facts or cues in the direction of its influence goal without attention to concrete or thorough evidence (Dynel, 2011). Bullshit represents the use of

replacement pseudo-reasoning, like Kuhn's (1991) "pseudo-evidence," which involves the lack of a warrant tying anecdotal evidence to a generalizable claim. Though this suggests classically understood low-quality argumentation from Grice's (1989) or Toulmin's (2003) post-hoc judgment, it may fulfill a priori determinations of quality judged by the activation of message receivers' attitude structures.

Bullshit Receptivity

Persuasive messages show particular effectiveness when they address salient elements of an individual's semantic network surrounding a subject of communication (Russell & Reimer, 2020). In simpler terms, individuals may more likely accept persuasive messages containing evidence that seems familiar to their experience. Regarding the kind of bullshit that Pennycook et al (2015) and Evans et al (2020) operationalized, intentionally unclear or complex terms stood couched in collocations familiar to their respective domains (New Age philosophy and science). Furthermore, the answer to the question of why certain individuals in certain situations seem more receptive to bullshit may lie in examining the goal motivations receivers have that bullshit purports to satisfy (Kruglanski & Thompson, 1999). Bullshit literature has generally lacked such examination, especially within controlled experimentation (Brown et al, 2019; Gligoric & Vilotijević, 2020).

Pennycook et al (2015) set a precedent for other research in the psychological discipline for BSR as an individual difference variable, approaching high-BSR individuals as cognitive misers lacking the wherewithal to attend diligently to low-quality claims. Casting BSR as merely an error in judgment, however, may represent a faulty description of its functionality in the context of human cognition's evolution and the ways individuals communicate to organize their

communities (Christensen et al, 2019; Spicer, 2020) or simply share reality (Higgins, 1992). In the variable's short history, researchers have found significant negative associations between BSR and both cognitive reflective ability and analytical ability (Čavojová et al, 2018; Čavojová et al, 2020; Pennycook et al, 2015). Some findings across studies found relationships between BSR and certain socialized preferences or approaches to epistemology, such as religiosity, faith in intuition, and paranormal belief (Bainbridge et al, 2018; Čavojová, 2020; Pennycook et al, 2015; Walker et al, 2019). These findings suggest BSR's antecedents lying within attachment to groups or communication environments that normatively indulge more relativistic epistemic judgments in line with Spicer (2020) and Christensen et al (2019). In some analyses, personality factors suggesting proclivities for lenient judgments or creative theorizing represented one direction for potential causes for BSR while associations with needs for fear reduction related to developmental trauma (e.g. conspiracy ideation) represented another (Čavojová et al, 2020; Pennycook et al, 2015).

Regardless of pragmatic definition, receivers commonly interpret the communication strategy of equivocation, or insincere sidestepping of information, as deception (Edwards & Bello, 2001). However, explicit truths as well as lies represent cognitive difficulty and potential social uncertainty, therefore incremental adjustments and variations in equivocality are common to conversation (McCornack et al, 2014). Treated similarly as an individual difference variable, scholars across studies have found low variance in the ability to detect deception (Bond & DePaulo, 2006), and when deception is detected, the process is less akin to the activation of observational abilities and more associated with effective exchanges of communication content

in context (Levine, 2014). BSR may be more prudently analyzed as an artifact of message evaluation influenced by message structure, function, and environment.

Pennycook et al (2015), in their focus on an individual proclivity to assume meaning in the meaningless, theorized that BSR resulted from an haphazardly arrested message evaluation process, but limited their analysis to the individual cognition aspects of that process. To date, most bullshit research has involved the development of context-centered bullshit receptivity scales instead of addressing bullshit's place as a purposeful influence tactic or as a means of coordinating meaning between interactants. The rules of communication associated with the contexts under study have received little attention (Walker et al, 2019). To evaluate bullshit as reasonable or impressive without rejecting its claims may represent an advantage to survival (Brown et al, 2019), inasmuch as maintaining an "open mind" to others' messages fosters social inclusion. Bullshit messages may also concern issues relevant to the groups with which individuals identify, and individuals further ensure social survival by conforming to their groups' norms and displaying adherence to familiar group attitudes and beliefs (Hogg, 2007; Hohman & Hogg, 2015). Communication about collective norms represents the vehicle by which individuals achieve social cohesion (Hogg & Giles, 2012), and the strategic use of ambiguous messages, or messages that agents have tailored to fit the perspectives of many different targets, often facilitates that cohesion (Higgins, 1992).

Message Processing and Bullshit Acceptance

Functionally, influencing agents employ bullshit to divert message receivers from close cognitive judgments of message content in favor of impression management cues, therefore the effectiveness of bullshit as an influence tactic depends on either deflecting attention or

capitalizing on the prior attitudes of influence targets. Deflecting attention generally has a positive effect on low-effort message evaluation and acceptance (Dolinski et al, 2002; Gilbert, 1993). Conversely, when targets slow down their interpretation and comprehension of a message and focus their attention, they may detect bullshit more consistently (Brown et al, 2019). Especially inexperienced analytical thinkers, or individuals labeled "lay epistemics," may lack the ability to detect bullshit, but their activated goal motivations have a significant effect (Kruglanski & Thompson, 1999). Message judgments may shift in the presence of even minimally different cues, such as passive voice (Carpenter & Dryden Henningsen, 2011). Furthermore, with tactically ambiguous or "obscurantist" (Cohen, 2002) message content, influence targets, especially under uncertainty, may latch onto the message evidences (e.g. source cues) that they more easily understand (Kruglanski et al, 2006), especially if those evidences suggest relevance to a conclusive premise provided by their group identification. Bullshit arguments, especially displaying in-group-relevant cues, present "weak" evidences sometimes using difficult-to-decipher words but asserting easy-to-understand certainty (or whatever other attribution represents the bullshitter's goal) and present themselves as already evaluated. The combination of ambiguous verbal arguments with unambiguous source or paralinguistic cues generally results in targets' biasing of their judgments in the direction of unambiguous cues, but only when those messages contain cues or statements that show congruence with targets' latitude of acceptance or similarity to their prior attitudes (Erb et al, 2007). A bullshitter presenting an attitude or information that challenges a receiver's attitude or knowledge runs the risk of eliciting a combative response, within which the receiver may more

likely express higher expectations for clarity and transparency (i.e. the opposite of bullshit) from the message agent (Bohner et al, 2002; Buller & Burgoon, 1996).

The judgment of a message as believable or a behavior as reasonable based on the source's perceived membership in the receiver's in-group represents a phenomenon familiar to social influence theorists (Maitner et al, 2010; Tajfel & Turner, 1986; Turner et al, 1987; Wyer, 2010). Furthermore, the closer the relational ties of message source and receiver, the more biased toward assigning believability a receiver may become (Buller & Burgoon, 1996; Buller et al, 1994), and the more resistant the receiver may feel toward the potentially dangerous uncertainty reduction that knowing unambiguous information may cause (Afifi & Matsunaga, 2008). However, before the intervention of social and relational factors, individuals may attribute the believability or reasonableness of messages by default as a necessary condition for information comprehension. Pennycook et al (2015) cited this argument from Gilbert (1991) as a potential cause for the misapprehension of bullshit as meaningful. Daniel Gilbert based his position on the writings of 17th-Century philosopher Baruch Spinoza in contrast to the generally accepted assumptions about information processing popularized by 17th-Century philosopher Rene Descartes. Descartes', or the "Cartesian," position presupposes that individuals make choices about what they believe after a time of comprehension, suggesting that messages, on input, maintain a sort of qualitative liminality until later judgment. The Spinozan position, however, offers an alternative to the presupposition of immediate rational choice on belief, arguing that belief or agreement occurs first before closer evaluation later. This perspective shows at least rudimentary convergence with contemporary positions on the automaticity of behavior in the moment and post-hoc judgments of structured belief (Haidt & Joseph, 2004; Zajonc, 1980).

Gilbert (1991) argued for Spinoza's approach using the metaphor of a library. In the Cartesian library, new books entering the collection would remain untagged until further reading and evaluated as containing either fiction or nonfiction, subsequently tagged as such. Under the Spinozan system, all new books get tagged as nonfiction, and then judgment about the veracity of their contents informs re-tagging upon later reading. The initial tagging of all books as nonfiction represented the initiation of a message interpretation and evaluation process similar to an assembly line, and the introduction of interfering information or emotional distraction could result in knowledge structures stamped as acceptable prematurely (Gilbert, 1991, 1993). Gilbert (1991) also proposed a mean between Cartesian and Spinozan conceptualizations, in which the acceptance function occurs still earlier (and takes less of a cognitive load) than rejection, but may not necessarily occur simultaneously with comprehension: a "Cartozan" process.

Carpenter (2010), noting that the Spinozan argument yielded support but lacked an actual model structure, turned to Hastie and Park's (1986) description of "on-line" processing, which involves the transfer of environmental stimulus information into working memory before processing through a cognitive judgment operator. In other words, individuals process the information as soon as they encounter it. When on-line processing becomes more likely, such as during exposure to stronger arguments (containing more evidences) and more complex arguments (resulting in slower, more deliberate, processing), targets' need to evaluate activates and the strength of arguments becomes more detectable (Carpenter, 2010; 2018). Otherwise, when message targets feel distracted or experience cognitive load appraised as unassailable in the moment, memory-based processing activates, delaying evaluations and leaving message properties unevaluated in long-term memory (Hastie & Park, 1986). Bullshit purveyors normally

present their claims under time constraint or low expectations of concerted attention (Meibauer, 2016; Petrocelli, 2018).

Pure memory-based processing rarely occurs (Hastie & Park, 1986), and bullshit may derive its effect from whether or not targets process the message disfluently, as in Brown et al's (2019) experiment yielding greater detection, or in a spontaneous on-line fashion, in which it enters working memory. Still, an arresting of evaluation may occur because of the rapid (and emotionally driven) activation of prior attitude structures concerning the object of communication. Interrupted memory-based processing may not necessarily lead targets to an acceptance default, as some tests of the Spinozan model have shown that subject knowledge or domain familiarity may lead targets to rapid judgment operations, possibly contradicting past support for Spinozan processing and calling for a more flexible model definition (Nadarevic & Erdfelder, 2019; Richter et al, 2009). Street & Richardson (2015) found that individuals tested for message processing, when given a choice, more often expressed indecision rather than commitment to a hard binary of message acceptance or nonacceptance, suggesting that acceptance does not necessarily represent a given part of initial message comprehension. This may suggest credibility for Gilbert's (1991) "Cartozan" proposal.

In the case of compliance gaining messages, as with most influence messages (Forgas, 2019), the suggestion of any positive emotional valence in a request usually predicts compliance. Some scholars have described individuals' day-to-day communication, in general, as mostly mindless (Dolinski, 2002; Langer, 1978), determined by learned or instinctive action programs triggered by environmental or emotional cues. Langer et al (1978) and similar studies (Dolinski, 2002; Liang et al, 2013) have supported the hypothesis that individuals presented with low-effort

requests show greater likelihood of compliance in the mere presence of placebic information, or communication that sounds similar to reasoning while containing nothing but obvious non-reasoning. The resulting rates of compliance do not differ significantly from the results of messages containing substantive or non-obvious information, though increased effort requested from the target results in a reduced effect, as does the triggering of information recall about norms of request acceptability or pro/antisociality (Boster et al, 2001; Kotowski, 2020; Langer et al, 1978). The persistent addition of reasoning to request messages after an initial request utterance, or the general strengthening of reasoning-based arguments, also tends to increase compliance rates beyond the "mindless" baseline (Boster et al, 2009). If the pseudo-reasoning of bullshit-laden requests follows the pattern described by Pennycook et al's (2015) operationalization, its mere triggering of heuristics of familiarity or registering of reasoning should make its effect similar to placebic information requests, resulting in rates of compliance comparable to direct-request-plus-reason tactics.

BSR and Social Groups

BSR and Group Identification. When animals lack the competitive ability to survive within their ecosystems, such as exposure to predators or traits that seem unfit in the perceptions of prospective mates, they develop adaptations, such as camouflage or rituals of performance, in order to secure an edge on natural selection (Mokkonen & Lindstedt, 2016). Human animals, on the individual and group level, show similar behavioral adaptations, some of which take the form of patterns of influence, such as bullshit strategies. Effective bullshitters are effective communicators, using their intelligence to achieve their competitive goals within their ecosystems (Turpin et al, 2021). Individuals who show lenient judgment toward bullshit may be

regarded as credulous from some perspectives, but influence processes represent coordinated exchanges affected by relational context (Echterhoff et al, 2009; Miller & Steinberg, 1975), and humans have evolved patterns of relationship-seeking and cooperation by merit of those behaviors' resulting survival advantage (West et al, 2007). The assumption of honesty appears to be humans' benign interpretation default in a similar vein (Levine, 2014). Hence, BSR, or the tendency to assign meaning to bullshit's pseudo-reasoning, does not necessarily represent dangerous credulity, and lack of cognitive reflective ability does not necessarily represent its central cause (Littrell et al, 2022).

Though cognitive ability has proven a somewhat consistent negative predictor of BSR (Pennycook et al, 2015; Pennycook & Rand, 2018; Petrocelli et al, 2018) as well as the habituated communication of bullshit (Littrell et al, 2020), the characterizing of BSR as a form of individual bias or error proclivity presents a problem, as it suggests a more prescriptive approach assuming the existence of objectively "correct" judgment. Gigerenzer (1991) argued that, concerning especially the tests of heuristics and biases carried out by Kahneman and Tversky's (1973) research program, errors of individual probabilistic judgment tend to arise from test subjects' access to information, the kind of reasoning intuited as having associations with particular domains of problem solving, and interactions with subjects' social environments.

Spicer (2020) argued for the practice of bullshitting as fulfilling the social or organizational functions of establishing and maintaining network membership and defining the attitudinal boundaries of speech communities. Reciprocally, individuals receptive to bullshit may veer toward that receptivity as a response to in-group membership cues and trust in in-group knowledge structures (Eaton et al, 2008; Wyer, 2010). Scholars must interrogate the structure of

environments perceived by message targets, especially through the lens of community

knowledge, in order to understand influence effects (Russell & Reimer, 2020). The perceived

stability or unwanted change in an environment may lead individuals to make problem solving

decisions that appear advantageous to survival, whether outside parties qualify those decisions as

"error" or not (Gigerenzer, 1991). For example, "winning" with one's in-group may, in certain

circumstances, represent more of an adaptive advantage than accurate evaluation.

The judgment of information, forming of attitudes and beliefs, and requisite translation of

attitudes into behavior has consistently shown emergence from the activation of internalized

social norms (Cialdini & Goldstein, 2004; Schultz et al, 2008). Targets of influence messages

generally behave in sync with the perceived normed behaviors of other individuals in their

environment, especially as influence messages focus on those normed behaviors and

communicate social approval for behavior (Goldstein et al, 2007; Kallgren et al, 2000; Schultz et

al, 2007). Influence messages inferred to originate with a target's in-group generally show

effectiveness in predicting target behavior (Ajzen, 1985; Smith & Hogg, 2007), especially when

message content communicates values or attitudes central to a target's definition of group

membership (Wyer, 2010). An individual who identifies closely with their in-group conforms to

the prototypical norms of that group, and this conformity also involves the internalization and

reinforcement of shared attitudes (Smith & Hogg, 2007; van Knippenberg et al, 1994). Also,

individuals who perceive that others in their identity group simultaneously share attention with

them to an issue under consideration may incline toward judgments with extremity on group

lines; this describes one reason why mass communicators, within their persuasive messages,

often address audiences as abstract unified groups (Hogg, 2018; Shteynberg et al, 2016), relying

on ambiguous statements of unity in lieu of missing evidence of that unity. Groups perceived by members as more unified tend to yield higher levels of group identification, especially for self-uncertain individuals (Hogg et al, 2007).

Brown et al (2019), in a rare test of situational factors' effects on BSR, found that individuals whose sense of belongingness was threatened became more open to bullshit messages. On the other hand, individuals became more inclined toward bullshit detection when their individual self esteem was threatened. The difference maker may lie in the attitudinal and behavioral knowledge structures accessed by individuals within those situations. Under belongingness threat, an individual may strive to access social information, learned from relational experience, in order to solve the problem by facilitating social connection (Terry & Hogg, 1996). Under self-esteem threat, and made wary of message content by mood (Forgas, 2019), an individual may rely on personal identity knowledge to evaluate and resolve the problem. Without an induced need to connect, an individual may feel more motivated to carefully attend to and reject the bullshit.

At Pennycook et al's (2015) baseline using pseudo-profound items, high BSR individuals may not merely lack the faculties for breaking messages down, but may also not hold motivations toward skepticism because they seek quick closure or satisfaction with the content of the message. Beyond "laziness" as Pennycook & Rand (2018) might suggest, this satisfaction seeking may come from a need to reduce uncertainty that results in a viewing of the message agent as potentially like-minded. High BSR individuals may more likely perceive similarity in others, especially as BSR has shown association with agreeableness (Čavojová et al, 2020), an individual measure of personality that describes trusting, conformist, compliant behaviors (Brook

& Mount, 1991; Sukenik et al, 2018). Agreeableness predicts leniency in rating others' performance (Bernardin et al, 2000), and in the case of BSR, it may predict a general tendency to assign bullshit the benefit of the doubt. The ambiguity built into bullshit messages may facilitate this response, and the selective use of group-identity-appropriate words or claims that rest within the social group's latitude of acceptance may stimulate a target's need to express receptivity, overclaim for the sake of social connection and cooperation, and reduce any uncertainty stimulated by surrounding ambiguous situations, threatening information, or an insecure perception of self.

      BSR and Uncertainty Concerning Social Groups. The perception of uncertainty represents a key variable in understanding individuals' motivations to seek or manage information, not only within approaches to or judgments concerning initial interactions with strangers (Berger & Calabrese, 1975), but also in facing environmental complexity and instability or new and dissonant information (Afifi & Matsunaga, 2008; Brashers, 2001; Festinger, 1957). According to Uncertainty-Identity Theory (UIT; Hogg, 2000, 2007, 2014), individuals also respond to uncertainty and seek its reduction by seeking commonality with others and turning to the knowledge and validation provided by their in-group ties (Hogg, 2007). Message agents familiar with targets' group categorizations take advantage of those targets' need for belonging by crafting messages that suggest a.) that a threat to certainty exists and b.) that targets must accept their authority or comply with their requests to resolve it (Hogg, 2018). Bullshit in particular may present high strategic value because of its ability to provide low-cost "evidence" for evaluating a message agent (even an outsider) as in-group sympathetic and

authoritative (Hogg, 2018; Hogg & Giles, 2012; Spicer, 2020). A need for uncertainty reduction may motivate individuals to evaluate that agent's messages as meaningful, impressive, or true.

Proposed threats to certainty come from without or within. Individuals experience the unwelcome emotions elicited by uncertainty when they face threats to feelings of safety or stability, even the stability of their held values or beliefs (Festinger, 1957), and out-group threat may especially activate defensive behaviors in favor of an individual's in-group (Tajfel & Turner, 1986; Wichman, 2012). An individual, tied to a group, learns to manage uncertainty, not only reduce it (Brashers, 2001), based on their personal and group motivations, and communication within groups informs and equips these motivations (Belavadi & Hogg, 2019).

Concerning communication and social influence, researchers have observed that a group's prototype, or "official personality" toward which self-uncertain members may aspire (Hohman et al, 2017), achieves definition and reinforcement through norming communication that draws the lines of group inclusion and exclusion, ostensibly fulfilling group-level goals of homeostasis and survival (Hogg, 2018; Hogg & Giles, 2012; Hogg & Reid, 2006). A group member adopts the goal motivations of the group prototype, and threats to certainty, or the ability to effectively predict and control achievement of those goals (such as that which would stem from out-group threat), stimulate a need to shore up lines of group, and by association self, defense.

In addition to the uncertainty generated from perceived external threat classically understood as a variable in intergroup communication (Hogg and Giles, 2012), UIT makes clear predictions about individuals' self-uncertainty as a predictive factor, which can result from perceived non-belonging or a requisite enhanced need for belonging (Hogg, 2015). Self-

uncertainty describes individuals who perceive their self-concepts as less stable than desired or their group role or attitudinal orientations as tenuous or highly dependent on the influence of their material or social environment (Hohman et al, 2017). Self-uncertain individuals may prefer high-entitativity groups because the conformity and closed belief systems enforced via communication in those groups offer stability and security (Hogg, 2015; Hogg & Gaffney, 2014).

Concerning group-prototype-challenging information, individuals who show a yearning for quick answers (Kruglanski & Webster, 1994), or who have identified themselves as belonging to entitative groups (Yang et al, 2020), show greater resistance to counter-attitudinal message acceptance and avoidance of uncertainty-inducing information. The motivations associated with membership in entitative groups affect the exchange and interpretation of meaning within both intra-group and intergroup communication. The social identity family of theories, including UIT and identity fusion theory (Swann et al, 2012), owe their roots to experimentation exploring intergroup confrontations, and much research has addressed questions concerning individuals' attraction to extremist groups or willingness to engage in collective action, sometimes involving extreme self-sacrifice (Besta et al, 2018).

Social identity cues represent an important factor in influence targets' judgment of source credibility. Individuals showing receptivity to bullshit are not as driven by unmotivated impulsiveness as they are by their prior attitudes and the sources in whom they trust their attitude reinforcement (Littrell et al, 2022). Social group exemplars offer the restoration of attitude certainty when an individual feels their faith has lapsed (Clarkson et al, 2017), and in uncertain spaces, individuals seek out like minds. In communication environments allowing little

synchronous information exchange, socially identifiable aspects of an individual's self-presentations, such as a culturally distinctive name or the display of a religious emblem, represent the foci of their interaction partner's attention (Reicher et al, 1995). Online communication spaces, for example, exemplify such deindividuated environments, in which interlocutors are restricted in their disclosures by the symbols and mechanisms offered by a mediating device, such as the emoji options on a social networking website. Communication in such spaces often restricts individuals to uncomplex displays of social identity aspects, and individual identity information, barring willfully meaningful disclosures, tends to involve more gradual transmission. In online spaces, individuals generally report positive evaluations and favor the communication of interactants who present, clearly, that they share a common social identity (Carr et al, 2013).

The sharing of any clear social identity at all may engender positive evaluations of a message agent, as individuals deciding under uncertainty or in impersonal interactions will gravitate toward message elements that encourage ease of processing (Read, 2020). When interactants feel depersonalized within their communication environment, encountering an ingroup member, especially a prototypical one, results in greater adherence to group norms; contrastwise, conformity is reduced under conditions of personalization (Lee, 2004; Smith & Hogg, 2008). Conformity to the standards of one's group, however, does not necessarily mean mindless behavior as much as attention to the collective aspect of identity (see Brewer & Gardner, 1996; Reicher et al, 1995), and an individual's processing and behavioral expression regarding group normativity may change as their experiences and situational goals shift their perspective (Hogg & Smith, 2007).

Trust in an ingroup source is established in an individual's history of self-expansion and social goal achievement within their group; likewise, lines of prejudice and habituated social distancing are drawn by the histories associated with particular outgroups, and social identities can be defined in terms of negative stereotype and antagonistic expression (Gallois, 2018, Wichman, 2012). Social identity theory classically posits that even seemingly arbitrary group labeling can become important to group member's identities, and individuals rely on group comparisons to develop their understanding of a network's boundaries and distinctiveness (Tajfel & Turner, 1986). Outgroup sources may engender highly negative responses from individuals acting under conditions of depersonalization, especially as they identify highly with their group, share its goals, and hold attitudes that an outgroup is inferior (Bee & Dalakas, 2015; Ehala et al, 2016). Individuals achieve self-conceptual clarity through their experiences with other group members and constitutive processes of belonging and validation within their groups (Besta et al, 2018). Highly self-uncertain individuals, expressing that uncertainty as a personality trait, constantly seek that validation (Hohman & Hogg, 2015). However, individuals may find their uncertainty reduced via group identification or, in some cases, increased, especially in circumstances in which their membership and/or prototypicality are threatened by challenging or inconsistent information (Choi & Hogg, 2020; Hogg & Majahan, 2018).

This project tests the hypothesis that self-uncertainty and group identity salience activates goal motivations within respondents that motivate them to adhere meaning to bullshit based on familiar attitude scripts. In a recent test published in an academic poster, BSR showed significant association with both epistemic (concerning knowledge) and aleatoric (concerning outcome likelihood) uncertainty (Neybert et al, 2021). Like the self-uncertainty central to UIT, the

variable of need for cognitive closure (Kruglanski et al, 1993) may yield similar effects and convergent theoretical predictions. Need for cognitive closure (NFCC) represents a mostly stable trait describing individuals who feel an immediate need for answers and uncertainty reduction, desiring predictability and reduced ambiguity in their environments and the behavior of people around them. Uncertainty salience causes individuals to show higher NFCC, and both variables appear to directly predict cognition and behaviors that overemphasize group loyalty and stark social comparison, such as negative attributions about out-groups (Brizi et al, 2016). Concerning bullshit, a seeming paradox lies here: Self-uncertain and/or high-NFCC message targets may prefer reduced ambiguity, and bullshit utilizes intentionally ambiguous constructions, but in its adherence to superficial claims of authority and prototypicality, effective bullshit may select just the right message elements for ambiguity and specificity both to offer the uncertainty reduction that uncertain individuals crave. Bullshit used as a low-cost placeholder for real evidence offers the kind of ambiguity that makes judgment quick and, essentially, intuitive, especially if targets have access to automatized attitude or knowledge scripts (Carpenter, 2017). Bullshit may exhibit ambiguous and superficial meaning, but making the decision process simpler allows high-NFCC (and likely highly self-uncertain) people to quickly reach clarity and closure (Czernatowicz-Kukuscza et al, 2014).

Summary

This project proposes that receptivity to bullshit pseudo-reasoning has causes that lie within on-line message processing and rapid conclusions drawn in favor of accessible message elements (Hastie & Park, 1986; Kruglanski and Thompson, 1999), such as those tied to the experiences individuals have concerning their group categorizations and feelings of self-

uncertainty. Most individuals, as inexperienced epistemologists (Kruglanski & Thompson, 1999; Kruglanski & Webster, 1994), may accept bullshit presented as evidence or rationale for compliance when they feel that those claims fulfill their needs for uncertainty reduction and requisite belonging to their in-group, especially as their history of communication and meaning making within their in-groups inform their apprehension of reality (Terry & Hogg, 1996). Under conditions of emotion-arousing uncertainty, individuals may gravitate toward message elements, such as source cues of social identity, that present unequivocal evidence toward resolving that uncertainty. Targets may evaluate the adjoining ambiguous pseudo-reasoning with leniency or attribute unwarranted meaning to it as targets haphazardly speed up or arrest processing. This effect should show particular strength when bullshit messages accompany further messaging that aligns with a target's self-categorization (Hogg, 2007).

When addressing the attribution of meaning to stimuli, scholars should remember that, according to classical understanding in the communication discipline, meaning exists not in words or symbolic things, but in people, and proceeds not only from snapshot communication episodes, but from individuals' history of experiences (Berlo, 1960). The majority of BSR research has involved the cross-sectional, non-experimental development of scales similar to that of Pennycook et al (2015) and/or correlational analyses with individual difference variables. Therefore, this bullshit dissertation calls for more research addressing bullshit production and receptivity by way of the experimental analysis of communication episodes that involve and control not only message structure, but source, channel, and environmental elements.

This project features two studies: First, a survey-based test of pseudo-inspirational bullshit manipulations and group identification in a de-individuated context, and second, a field

experiment testing subject compliance with pseudo-reasoning-accompanied request messages, controlling for group categorization and interacting with self-uncertainty. In both studies, a source seeking attributions of social attractiveness and trustworthiness attempts to garner message acceptance through the communication of bullshit. As substitutes for specific information in both studies, the bullshit statements bear the function of attempting to inspire and mobilize the message target – in other words, acting as "inspirational" bullshit. Before the experimentation, however, a study partially replicating Pennycook et al (2015) established the role of self-uncertainty in the interpretation of inspirational bullshit and created induction material for the experimental designs.

Chapter Two: Preliminary Replication Study

Prior to the online experiment, an online survey study tested 16 potential pseudo-reasoning inductions in the method devised by Pennycook et al (2015), in which respondents rated bullshit messages mixed with mundane messages for contrast (4 devised for this study). For respondents, the study advertising bore the title, "Inspirational Messages and Identity." The LET (Kruglanski et al, 2010) predicts that individuals will make judgments about new information in large part based on the availability of epistemically authoritative resources (i.e. backing) for those judgments. Self-uncertainty represents a condition for individuals in which they have little confidence in their self-knowledge, and much of their judgments are reliant upon the knowledge and attitude structures provided by others, particularly the influential members of their social groups (Hogg, 2007; Hohman et al, 2017; Swann & Bosson, 2010). Therefore, the preliminary replication study addressed the following hypothesis.

H1: Self-uncertainty positively predicts receptivity to (a) pseudo-profound and (b) inspirational bullshit.

Participants

An initial sample of 250 respondents was recruited via Amazon's Mechanical Turk (mTurk) subject pool. Each individual who completed the survey after having given informed consent was paid $1. During data cleaning, 16 respondents were removed for suspect response behaviors, such as artificial intelligence checks. The ultimate sample for analysis retained 223 subjects.

Of the respondents, 61% identified as male, 38.1% identified as female, and 1% identified as nonbinary or third gender. Regarding ethnicity, the sample identified as 79.8%

White, 9.9% Black or African-American, 7.6% Asian, 0.9% American Indian or Alaska Native, and 1.9% as "other." Participants' ages ranged from 23-73, with 36.6 marking the mean age.

For the sake of developing inductions for further study, a small-sample pilot test yielded results on which "inspirational bullshit" message was suitable for use as a pseudo-reasoning bullshit induction, and this result was employed for experimentation immediately. To aid in qualifying the pilot's result, a parallel sample of 50 mTurk respondents was added to the preliminary study and given an alternative "inspirational bullshit" questionnaire in which they rated the ambiguity of the statements. Of these 50 respondents, 1 was removed for incomplete responses, leaving 49 for the parallel analysis.

Procedure and Measures

Participants provided consent and were directed to report on scale measures via the Qualtrics online survey platform, on which responses were kept anonymous. Barring demographic items, all measures were adapted to fit a 7-point Likert-type structure for questionnaires.

Measurements

Pseudo-Profound Bullshit (PPBSR). This study employed the 10 highest-mean-scoring items from Pennycook et al's (2015) original studies measuring, ostensibly as an individual difference variable, the tendency of individuals to derive meaning from supposedly meaningless messages. Each item is followed by a Likert scale measuring the degree to which respondents found the statement "profound." The scale included items such as "Consciousness is the growth of coherence, and of us," and "Nature is a self-regulating ecosystem of awareness."

Inspirational Bullshit (IBSR). Similar to Jurkovič et al's (2018; Čavojová et al, 2020) instrument development for a general BSR scale and Gligoric et al's (2020) development of a political BSR scale, the author infused a particular message structure – in this case a "call to action" message – with various buzzwords and abstractions taken from and inspired by "inspirational" quotes in books of historical quotations (e.g. collocations with numerous potential interpretations, such as "Giving someone a hand up creates a blossoming of karmic glory"). Keeping within the pragmatic realm of putting on airs of authority or certainty, all bullshit messages represented declarative statements about supposed truths, just as in Pennycook et al (2015). Specific items, such as "A charitable heart plants the seeds of progress," which the pilot study results deemed the most appropriate induction message, can be found in Appendix A.

Self-Uncertainty. Self-uncertainty refers to an individual's lack of self-conceptual clarity, especially regarding their own self-definition, feeling of stability as an individual, and/or standing within a social group (Hogg, 2007). This study adapts 12 items from previous measurements of the construct within group identification research (Hohman et al, 2017), including items such as "I think I know other people better than I know myself" and "If I were asked to describe my personality, my description might be different from one day to the other."

Auxiliary Measures

Three further constructs, apart from those involved in the hypothesis, were added to the survey for the sake of potential secondary analysis. Agreeableness represents one of the Big 5 Inventory of personality variables (Barrick & Mount, 1991), defining a trait-like tendency to cooperate, acquiesce, perceive similarity, and show leniency in interactions. This measurement employed the HEXACO-60 (Ashton & Lee, 2009) 10-item scale of the Big Five personality

traits, which analyzes the agreeableness construct along construct "facets" of forgiveness, gentleness, flexibility, and patience, including items such as "I tend to be lenient in judging other people" and "Most people tend to get angry more quickly than I do."

NFCC refers to an individual's need for stability, reduction of ambiguity, and feeling of control and accuracy in judgment, especially in suddenly uncertain situations (Kruglanski et al, 1993). A 15-item form of the NFCC scale was adapted from (Roets & Van Hiel, 2011) with the scale treated as a unidimensional measure, as had been done in previous research (Roets & Van Hiel, 2007). Respondents marked their level of agreement on items such as "I don't like to go into a situation without knowing what I expect from it" and "I don't like to be with people who are capable of unexpected actions."

Finally, 15 items from Brotherton et al's (2013) conspiracy belief scale assessed individuals' generalized acceptance of popular conspiracy theories regarding far-reaching national and social catastrophes. Items featured Likert-type measurements of agreement with statements such as "The government uses some people as patsies to hide its involvement in criminal activity."

Results

Measurement Models

Before hypothesis testing, the measurement model for each of the five measures was subjected to confirmatory factor analysis (CFA). The CFA method calculated factor loadings with a centroid estimation procedure using communalities on the diagonal. Factor loadings and model specifications were used to generate a predicted inter-item correlation matrix, which was then subtracted from the observed inter-item correlation matrix, producing a residual matrix for

the assessment of model fit. To the extent that the residuals in the matrix were within sampling error of zero, it was concluded the model exhibited fit with the data. This process uncovered misfit on some items, which were removed from the analysis.

The CFA for inspirational bullshit receptivity (IBSR) yielded eight items (factor loadings $M = 0.73$, $s = 0.08$) in a unidimensional model showing consistency with the data, with $RMSEA = .02$, $GFI = .98$, $\chi 2$ (20) = 21.12, ns. For pseudo-profound bullshit receptivity (PPBSR), the CFA yielded six items (factor loadings $M = 0.76$, $s = 0.07$) in a unidimensional model showing consistency with the data, with $RMSEA = .05$, $GFI = .98$, $\chi 2$ (9) = 13.88, ns. The CFA for self-uncertainty (SU) yielded five items (factor loadings $M = 0.89$, $s = 0.02$) in a unidimensional model showing consistency with the data, with $RMSEA < .001$, $GFI = .99$, $\chi 2$ (5) = 2.42, n.s. The full model testing parallelism between all three constructs showed consistency with the data, with $RMSEA = .04$, $GFI = .91$, $\chi 2$ (149) = 219.21, $p < .001$.

In consideration of the discriminant and concurrent validity of the PPBSR and IBSR measures, both measures were subject to separate CFAs analyzing a two-construct model and a single-construct model. The two-construct model showed reasonable fit, with $RMSEA = .04$, $GFI = .93$, $\chi 2$ (134) = 175.51, $p = .01$. The single-construct model showed poorer fit, with $RMSEA = .09$, $GFI = .79$, $\chi 2$ (135) = 381.42, $p < .001$. The superior fit of the two-construct model suggests PPBSR and IBSR measure separate constructs.

However, PPBSR and IBSR are highly correlated, as is evident in Table 1, featuring the study's correlation matrix between measured variables ($R = .75$). This ample correlation fits the pattern of concurrence claimed by other scale-development tests of BSR along different domains (Evans et al, 2020).

Table 2 shows the means and standard deviations on levels of inspirationality (n = 234) and ambiguity (n = 49) measured for the preliminary study. Two items (Nos. 5 and 12) failed to show sufficient levels of inspirationality in comparison to the "mundane" items and were removed. A t-test compared the composite of the 14 remaining items to the four intentionally less inspirational "mundane" items, finding that the difference was significant, t(233) = 9.00, p < .001. Similarly, the parallel sample of 49 respondents reported significantly greater levels of ambiguity for the first 16 items in comparison to the "mundane" four, with t(48) = 3.98, p < .001.

Tables 3-5 show scale item data post-CFA.

Hypothesis Testing

H1 predicted a positive effect of self-uncertainty on (a) inspirational bullshit receptivity and (b) pseudo-profound bullshit receptivity. A test of linear regression found that self-uncertainty's effect on PPBSR (R = .47) was slightly more robust and significant, with $t(232)$ = 8.12, b = .36, p < .001. Self-uncertainty's effect on IBSR (R = .38) was slightly less robust, but significant, with $t(232)$ = 6.20, b = .23, p < .001. H1 was fully supported.

Discussion

Individuals experiencing little certainty regarding their perceptions of self may feel a persistent compulsion to adopt or perform allegiance to the attitudes of others, particularly those who belong to their in-group, and/or those who display greater comparative attitudinal certainty (Hogg & Giles, 2012). In the framework of LET, this phenomenon reflects individuals' need to make sense of their experiences via relationships with (and trust in) sources of epistemic authority (Kruglanski et al, 2010; Kruglanski & Webster, 1994). From the perspective of UIT, the promise of reduced uncertainty via turning to normed epistemic authority may represent one

of many group phenomena that potentially lead self-uncertain individuals to seek answers from their prototypical group leadership or knowledge structures (Hogg, 2007).

Therefore, the first hypothesis for this dissertation suggested that individuals would show greater pseudo-profound and inspirational BSR when their self-uncertainty motivated them to seek urgent answers from familiar knowledge sources. In on-line processing, subjects may make positive judgments about ambiguous pseudo-reasoning without the reflective time necessary for more critical evaluations. The results of the survey and testing supported the hypothesis, though a stronger relationship appeared between self-uncertainty and pseudo-profound BSR over inspirational BSR.

Source cues are particularly important for the judgment processes of self-uncertain individuals (Swann & Bosson, 2010). Within this study, both pseudo-profound bullshit and inspirational bullshit are lacking in such cues beyond what may be inferred from the words chosen and the research purposes of the survey (i.e. an academic source). Inspirational message content may differ from the pseudo-profound regarding respondents' familiarity with inspirational collocations over the lofty metaphysics involved in Pennycook et al's (2015) items. Self-uncertain subjects who lack confidence in their own interpretation abilities may have felt more intimidated by the degree of "obscurantism" (Cohen, 2002) apparent in statements such as "consciousness is the growth of coherence."

Based on the inspirational bullshit ambiguity analysis and T-tests, it was determined that the designed inspirational bullshit items represented appropriate indicators for judging inspirationality, and their significant ambiguity represented, conceptually, evidence that they would function as appropriate inductions for an experiment controlling the ambiguous pseudo-

reasoning quality of influence messages. Between inspirationality and ambiguity, the message "A charitable heart plants the seeds of progress" scored the highest, therefore the later experimental inductions employed it in their design.

Limitations

Mainly, and informing the purpose of the experimental studies, the preliminary replication study was limited by its use of BSR scales, which represent series of statements assessed by subjects via underdefined single-item evaluations. Furthermore, an induction check showed that the chosen scale items represented inspirational and ambiguous qualities significantly different from "mundane items," but only four of those items were used, and they potentially offered insufficient, ill-defined contrast. In Pennycook et al's (2015) scale development, several of their contrast items also received high scores on profundity. This calls into question whether individuals responding to the scales were effectively judging message qualities or acquiescing to the authoritative requests of the researchers. Evans et al (2020) addressed this problem in developing their scientific BSR instrument, but it remains to be seen if, as in the science domain, knowledge of science or faith in science represent constructs conflated with scientific BSR. If BSR scales measure an authentic construct describing interpretation processes, they need to undergo further processes of validation (Levine, 2005).

As this study was conducted with a sample from Amazon's Mechanical Turk (mTurk), some potential sample error should be considered. While mTurk ostensibly offers researchers a more diverse base of respondents than most college student samples in the Uunited States, mTurk workers are also more likely to have over-exposed themselves to socio-psychological experimental paradigms, potentially rendering themselves less-immersed or negativized subjects

(Rand et al, 2014). Furthermore, as online labor is more easily outsourced to artificial intelligence, the danger of artificial intelligence entering researchers' samples continues to increase.

This study was also administered under the socio-historical effects of the COVID-19 pandemic, which should be considered as a potential moderator in any meta-analysis of social research. In mTurk's case, more individuals have been attracted to the platform's minor income supplementation as the pandemic has thrown economies into flux (Lourenco & Tasimi, 2020). In future studies using the platform, it may be prudent to measure respondents' socio-economic status or related variables.

Future Research

If individuals are predisposed toward pseudo-profound and inspirational BSR because they feel little clarity of self, and their low clarity of self causes them to lack confidence in their own judgment skills, then they may more likely seek clarity from an external epistemic authority. On one hand, this may tie LET and its related constructs, such as need for cognitive closure, to BSR and potentially other markers of susceptibility to bad faith persuasion or deception. On another hand, self-uncertainty's relationship to social identity and the performance of adherence to social group prototypes may suggest source and receiver identity factors may be relevant to predicting BSR.

The purpose of this preliminary replication study was not to create a new BSR scale for treatment of the construct as an individual difference variable. Instead, this study sought to create inductions for use in experimentation with "bullshit" conceptualized as a type of pseudo-reasoning used to accompany claims or requests. Pennycook and colleagues' (2015) scale

represented a study of message acceptance using single-item assessments of individual statements, which represents a drastically underdefined way to gauge message evaluation and/or interpretation. Furthermore, the use and interpretation of different devices in message craft is best understood when communication can be coordinated within purposeful interactions (Burleson, 2010, Liao et al, 2021). Meaning is not found solely in words, but in people (Berlo, 1960). Therefore, the items created for the inspirational BSR scale were submitted to pilot testing with small samples who evaluated them on both their "inspirationality," or ability to motivate individuals to act prosocially, and "ambiguity," or potential for being interpreted in numerous ways. The statement rated as highest combining both criteria – "A charitable heart plants the seeds of progress" – was slated for use in the planning of experimental tests of pseudo-reasoning bullshit.

Chapter Three: Online Experiment

The first experiment involved an online survey with inductions varying source in-group cues and message reasoning type while eliciting responses to mobilizing inspirational messages. Respondents evaluated a message source's social attractiveness and trustworthiness, the message's believability, and their acceptance of the message. Subjects also reported on self-uncertainty and other measures relevant to potential secondary analysis. The study was designed according to a 3 x 3 factorial on levels of the message source displaying group-identifiable-vs-control cues and mobilizing messages accompanying either specific reasoning or ambiguous pseudo-reasoning. The online experiment addressed the hypotheses below.

Individuals motivated by group identification and self-uncertainty to perform solidarity by positively evaluating messages from a seemingly group-affiliated source (Hogg, 2007; 2018) may latch onto message elements (e.g. source information) showing evidence of that group affiliation, especially within a communication environment containing scarce personally identifying information (Carr et al, 2013). For religious categorization, the religious context of message judgment alone may drive message acceptance, as per Gueguen et al's (2015) interpretation of individuals' receptivity to Christian iconography in their study, which associated Christian affiliation with messaging about prosocial action. For this study, individuals perceiving religious identity information in the message agent were expected to access knowledge related to their own (non)religious beliefs and histories in order to evaluate persuasive messages. The ambiguity of pseudo-reasoning in the messages was hypothesized to facilitate this. However, to account for potential error related to the complexity of judgments of

religious categorizations and the contexts they imply, a level was added to the inductions presenting social identity cues related to affinity with a particular sport.

H2: (a) Source cues identifying the source as sharing the target's social categorization positively predict message acceptance in comparison to the control. A positive relationship with (b) the social identifiability, i.e. social attractiveness and trustworthiness, of the source, in sequence with (c) evaluation of message believability, mediates the aforementioned source cue effect.

Considering bullshit pseudo-reasoning as a substitute for specific information, if ambiguous messages, sounding like reasoning, behave similarly to placebic information (Langer et al, 1978), then pseudo-reasoning messages should not differ in effect from specific reasoning.

H3: Pseudo-reasoning messages do not differ significantly from reasoning in their positive prediction of message acceptance in comparison to a control.

The combination of distinctive source cues with ambiguous pseudo-reasoning message content should also bias targets in favor of those distinctive cue evidences, resulting in greater positive attributions of source and message and leading to greater message acceptance (Erb et al, 2007).

H4: (a) Distinctive social identity source cues and pseudo-reasoning messages interact to produce effects on message acceptance greater than those in groups lacking either induction. A positive relationship with (b) the social attractiveness and trustworthiness of the source, in sequence with (c) evaluation of message believability, mediates the aforementioned interaction effect.

Self-uncertainty leads to individuals persistently performing allegiance to the group affiliations that offer relief for that uncertainty (Hogg, 2007). Exposed to a combination of ambiguous information and ingroup source cues, highly self-uncertain individuals may rapidly evaluate such ambiguous pseudo-reasoning messages. This study will analyze the effect of self-uncertainty on message acceptance for those inductions.

> H5: (a) Self-uncertainty positively predicts acceptance of messages combining social identity source cues and pseudo-reasoning inspirational statements. (b) Self-uncertainty positively moderates the relationship between social attractiveness/trustworthiness of the source and message believability that mediate the aforementioned relationship.

Figure 1 shows the proposed model of relationship between variables.

Participants

Communication students from a large university in the Southern United States were recruited and incentivized via academic credit to participate in the survey-based experiment, and 382 respondents were initially enrolled in the study. Data cleaning removed incomplete and suspect responses (e.g. with low survey completion times), and 32 responses were removed, resulting in 350 retained for the analysis. Advertising for the study displayed the title "An Evaluation of Calls to Action from Peers."

In order to add a layer to perceived distinctiveness from other respondents, instructions and opening material informed participants from the outset that students from other universities would also participate. The study admitted only respondents over the age of 18, and all participants provided informed consent before beginning the survey.
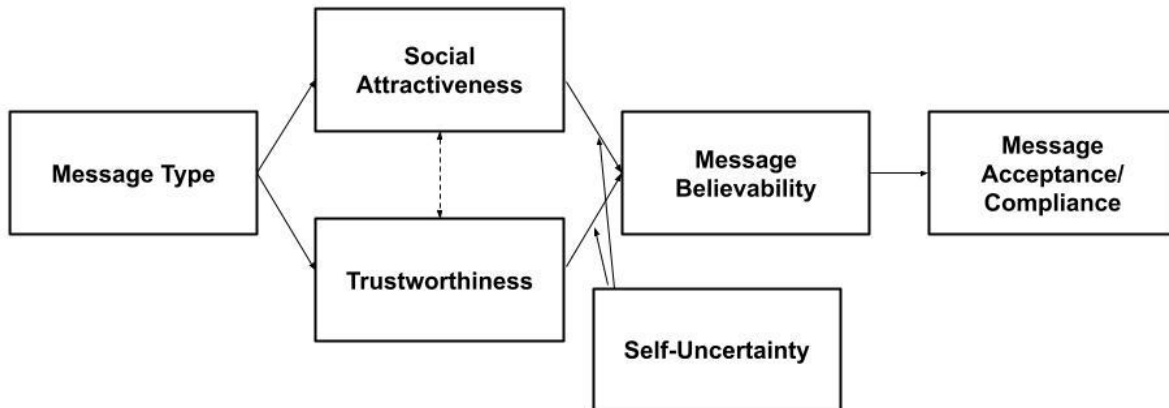
Figure 1. *Processing Sequence of Messages Varying on Reasoning and Social Identity Cue.*

Participants' ages ranged from 18-30, with 19 the median age. White individuals constituted 90% of the sample, with a further 3.1% identifying as Black or African American, 0.3% identifying as American Indian or Alaska Native, 3.7% identifying as Asian, and 2.9% identifying as "Other." Females constituted 62.6% of the sample, with 36.3% identifying as male and 1.2% identifying as nonbinary or otherwise. Regarding social categorizations relevant to the experimental conditions, in terms of religion, 73.1% of respondents identified as Christian and 20.9% identified as non-religious; 41.1% identified themselves as football fans over other sports.

Procedure

The online survey featured an experimental test manipulating source cues and message ambiguity. After completing standard demographic items, respondents answered a question asking them to name the (non)religious categorization to which they belonged followed by a Likert-type item measuring the extent to which they affiliate with that particular (non)religious categorization (i.e. "How close do you feel you are with people who share your religious beliefs? Not very close – Very close"). In addition to the religious categorization questions, respondents answered similar items involving their categorization and identification with a particular school and sports affinity.

Following initial categorization questions, for the purpose of experimental immersion, the instructions informed participants that other individuals from other universities had completed some of the questions they would encounter, and they would see some of their answers. After a prompt, respondents wrote in what they would consider a "catch phrase" that they liked, or an "inspiring statement." Then, after another prompt, respondents wrote a "call to action" for their peers, described as follows: "Now, we would like you to write a message to your peers (two

sentences) about something you think everyone should do, like a 'call to action.' What is something you think your peers would benefit from doing?" Respondents also chose a graphic avatar to accompany the messages they wrote before choosing whether they would allow other study respondents to potentially see their choices. Graphic avatars featured options with common religious iconography, including the Christian cross. Appendix B contains all graphic elements and induction details.

After subjects completed their own messages, the survey platform randomly assigned participants into experimental condition groups, organized in a 3 x 3 factorial design. Depending on the condition group, respondents encountered a graphic, catch phrase/inspiring statement, and "call to action" labeled as "chosen and written by another respondent earlier in the study," each adhering to a particular group induction or control. All induction groups featured the same baseline "call to action" statement: "I think everyone should help the homeless more often." No reasoning for the assertion was presented. In the control group, the information presented a generic avatar (an image of the planet Earth) and catch phrase ("You do you!").

For the religious identity cue induction, the page displayed a Christian cross avatar and a religious catchphrase ("Jesus is the answer!"). For the sports identity cue induction, the page displayed an image of a football and a related catchphrase ("Football is life"). For the message reasoning inductions, specific reasoning involved adding the following sentence to the baseline: "Giving to shelters means rehab and resources to help them rejoin and give back to society." Pseudo-reasoning involved use of the induction choice from the preliminary study: "giving to shelters shows a charitable heart, which plants the seeds of progress."

After exposure to these inductions, respondents in all groups proceeded along the same procedural route. Following their reading of "other participants'" work (examples in Appendix B), respondents answered whether they wanted to revise the information they chose and wrote for the avatar, catch phrase, and "call-to-action" questions. Afterward, they completed questionnaires on the social identifiability/attractiveness of the individual whose information they viewed, as well as a scale measuring their perception of that person's trustworthiness. Then, respondents judged the believability of the statements the individual made before completing a measure of message acceptance.

Finally, respondents completed a measurement of self-uncertainty. Then, for the purposes of potential secondary analysis, they completed questionnaires on agreeableness, need for cognitive closure, group identification, identity fusion, and conspiracist belief.

Measures

Inductions and Measurements

"Inspirational" Pseudo-Reasoning Induction. A small sample pilot evaluated items from the inspirational BSR scale in the preliminary study according to their inspirational nature and ambiguity. "A charitable heart plants the seeds of progress" yielded the most positive results aligning both criteria. Appendix A contains specific items for all instruments involved in this dissertation.

Social attractiveness and trustworthiness. A 13-item 7-point Likert scale developed by McCroskey et al (2006) with one addition measured respondents' considerations of message agents' social attractiveness, analyzing the likeability of the request message's source, its items representing potential usefulness as an indicator of the potential relationship struck within a

bullshit message exchange. McCroskey & Teven's (1999) scale measuring the trustworthiness dimension of credibility was also used to measure positively valenced source judgments.

Message Believability. Message believability's measurement employed six semantic differential scale items from McCroskey & Teven (1999), including a choice between "Agree" and "Disagree" concerning the message.

Message Acceptance. Message acceptance's measurement used a combination of nine items from Zhao et al's (2011) measure of argument strength and LaFrance & Boster's (2001) argument quality scale, tailored to fit the types of messages used in the experiment.

Self-Uncertainty. Self-uncertainty refers to an individual's lack of self-conceptual clarity, especially regarding their own self-definition, feeling of stability as an individual, and/or standing within a social group (Hogg, 2007). This study adapts 12 items from previous measurements of the construct within UIT research (Hohman et al, 2017; Hohman & Hogg, 2015).

Auxiliary Measures

Parallel to the preliminary study, the online experiment also elicited responses for the need for cognitive closure and agreeableness scales, in addition to the following two instruments, for the purpose of potential secondary analysis.

Group Identification. Group identification measures the extent to which an individual seeks to adhere to the goals, traits, or attitudes of their group's prototypes, or the "official personality" of the group as defined through norming communication (Hogg & Giles, 2012; Tajfel & Turner, 1986). This measure, adapted from (Hogg & Hains, 1998), employs 10 items.

Identity Fusion. Identity fusion represents the extent to which an individual has internalized their affiliation with a group and made that affiliation a stable part of their self-concept (Swann et al, 2012). Identity fusion represents a separate construct from group identification, which concerns individual adherence to group prototypical norms and relational ties, but as a construct developed through similar experiences of self-expansion with group members, it represents a reliable correlate with group identification.

Results

Measurement Models

Before hypothesis testing, each of the five relevant continuous variables' measurement models was subjected to confirmatory factor analysis (CFA) using SPSS AMOS. The CFA calculated factor loadings with a centroid estimation procedure using communalities on the diagonal. Factor loadings and model specifications contributed to the generation of a predicted inter-item correlation matrix, which was then subtracted from the observed inter-item correlation matrix, producing a residual matrix for the assessment of model fit. To the extent that the item residuals were within sampling error of zero, the model showed fit with the data. Items showing especial misfit were removed from the analysis.

The CFA for social attractiveness yielded five items (factor loadings M = 0.69, s = 0.15) in a unidimensional model showing moderate consistency with the data, with RMSEA = .07, GFI = .99, $\chi 2$ (2) = 5.12, ns. For trustworthiness, the CFA yielded four items (factor loadings M = 0.76, s = 0.06) in a unidimensional model showing consistency with the data, with RMSEA = .04, GFI = .99, $\chi 2$ (2) = 3.31, ns. The CFA for believability yielded four items (factor loadings M = 0.91, s = 0.03) in a unidimensional model showing consistency with the data, with

RMSEA = .05, GFI = .99, χ 2 (2) = 4.07, ns. The CFA for message acceptance yielded five items

(factor loadings M = 0.77, s = 0.09) in a unidimensional model showing consistency with the

data, with RMSEA = .02, GFI = .99, χ 2 (5) = 5.87, ns. The CFA for self-uncertainty yielded 10

items (factor loadings M = 0.59, s = 0.20) in a unidimensional model showing consistency with

the data, with RMSEA = .03, GFI = .97, χ 2 (35) = 45.73, ns. The CFA for the total complex

model including all five constructs, showed reasonable fit, yielding indices of RMSEA = .04,

GFI = .91, χ 2 (314) = 461.44, p < .001. Table 6 presents the variable correlation matrix. Tables

7-11 present the scale item data.

Hypothesis Testing

H2 hypothesized that social identity cues accompanying messages would positively

predict message acceptance in comparison to the control, in particular for respondents self-

categorizing with the presented social identity group. H3 hypothesized that both specific

reasoning messages and ambiguous pseudo-reasoning messages would predict positive effects on

message acceptance that differ non-significantly from each other. To test these hypotheses the

data was first tested via a two-way ANOVA without considering respondents' religious or sports-

related identities. Table 12 presents the cell means.

The ANOVA resulted in a non-significant effect shown between the categorical variables

and message acceptance, with the model presenting $F(8,341) = 1.45$, $p = .18$. No significant

difference between condition groups was found, and H2 and H3 could not be supported. Lacking

a significant direct effect, no mediation from source judgment or message believability could be

inferred, thus eliminating the utility of path analysis for the proposed model. The test showed no

significant interaction effect between the categorical variables, further eliminating support for H4.

To further unpack the effects, despite non-significance, categorical message type and identity group variables were dummy coded for simple effects with the control groups as referent, and correlation coefficients were calculated by way of linear regression for all continuous variables in the model. Table 13 presents the effects, showing significance in line with the hypotheses presented only for the main effect of reasoning type on trustworthiness – for reasoning, $R = .20$, $b = .45$, $F(1, 235) = 10.05$, p = .002; for ambiguous pseudo-reasoning, $R = .18$, $b = .38$, $F(1,230) = 7.40$, $p = .01$ – and significance opposite the hypothesized direction for the main effect of identity cue on social attractiveness and trustworthiness – for sports, near-identical effects on both variables: social attractiveness, $R = -.18$, , $b = -.30$, $F(1, 230) = 7.95$, $p = .01$; trustworthiness, $R = -.18$, $b = -.37$, $F(1,230) = 7.45$, $p = .01$ – and believability for religious identity, $R = -.18$, , $b = -.43$, $F(1,233) = 7.40$, $p = .01$. Message reasoning type effects on believability, though non-significant, showed respondents considering both specific reasoning and ambiguous pseudo-reasoning as eliciting a negative judgment.

Considering the significant regression effects on trustworthiness, a two-way ANOVA tested categorical between-group differences on trustworthiness. The test showed significant differences, presenting $F(8,341) = 3.37$, $p = .001$. No interaction effect was detected between message reasoning and identity cues, but message reasoning presented significant main effect differences ($p = .002$), as did identity cue ($p = .01$). For message reasoning, specific reasoning differed significantly from the control ($p = .003$), as did ambiguous pseudo-reasoning ($p = .02$), but they did not differ significantly from each other. For identity cues, the sports identity differed

significantly (and negatively) from the control group ($p = .02$) and the religious identity ($p = .03$). Table 14 presents the cell means for trustworthiness. Figure 2 presents the differences in effect on trustworthiness for the categorical variables.

H4 hypothesized that self-uncertainty would positively moderate the acceptance of messages combining ingroup source cues and ambiguous inspirational pseudo-reasoning. Self-uncertainty was added as a predictor to the categorical variables in a three-way ANCOVA, detecting a significant interaction effect with identity cue inductions, with $F(2,341) = 4.41$, $p = .01$. Using regression to unpack specific interactions, tests of multiple linear regression with dummy coded message type yielded a significant interaction effect of self-uncertainty and religious (Christian) identity cues on message acceptance, with $b = -.43$, $t(233) = -3.17$, p = .002. At one standard deviation below the mean of self-uncertainty, the effect of religious identity cues on message acceptance was significant, though negative ($b = -.61$, $p = .004$). At mean self-uncertainty, the effect diminished and lost significance ($b = -.23$, $p = .12$). At one standard deviation above the mean for self-uncertainty, the effect became positive, though non-significant ($b = .32$, $p = .11$). While this presented self-uncertainty as moderating the effect of religious identity cues, a combined effect with message reasoning in the predicted direction was not found, therefore H4 could not be supported.

Considering that message reasoning types showed significant effects on trustworthiness and identity cues showed significant effects on social attractiveness in prior analyses, self-uncertainty was entered into ANCOVA and tests of multiple linear regression with dummy coded message types on those outcome variables. The three-way ANCOVA revealed a significant interaction between self-uncertainty and identity cues, with $F(2,332) = 6.62$, $p = .002$.
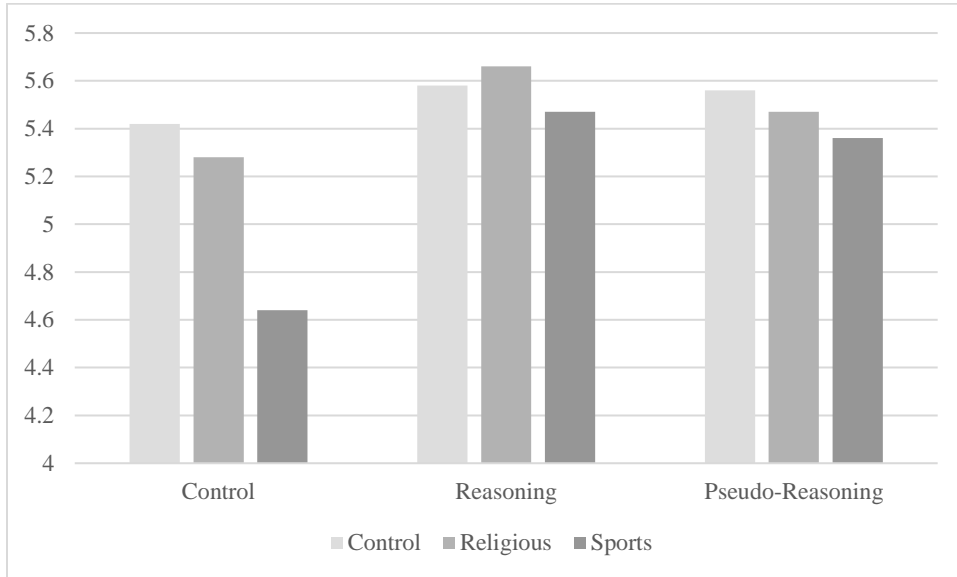
Figure 2. *Online Experiment Trustworthiness by Reasoning Type and Social Identity*

Concerning social attractiveness, a significant interaction effect of self-uncertainty and religious (Christian) identity cues was found, $b = -.37$, $t(233) = -3.33$, $p = .001$. At one standard deviation below the mean of self-uncertainty, the effect of religious identity cues on social attractiveness was significant, though negative ($b = -.66$, $p < .001$). At mean self-uncertainty, the effect diminished and remained significant ($b = -.26$, $p = .03$). At one standard deviation above the mean for self-uncertainty, the effect became positive, though non-significant ($b = .14$, $p = .40$). No other interactions with self-uncertainty yielded significant effects on social attractiveness or the other outcome variables.

The prior tests were repeated twice, first limiting the sample to the selection of individuals who reported identification with the Christian social identity presented in the inductions (n = 256), and then the individuals who categorized themselves as football fans (n = 144). A significant main effect of message reasoning was found for the trustworthiness outcome variable, however.

Controlling for religious categorization, the ANOVA testing categorical variable effects on message acceptance detected no significant differences, with $F(8,247) = 1.20$, $p = .30$. On trustworthiness, the ANOVA detected significant differences, with $F(8,247) = 3.37$, $p = .001$. No interaction effect was detected between message reasoning and identity cue inductions. Both specific reasoning (p = .01) and pseudo-reasoning (p = .05) differed significantly from the control, but not from each other. Regarding identity cues, the sports identity differed significantly from the religious identity (p = .003), but not from the control. Table 15 shows the cell means.

Testing the effects of self-uncertainty, a three-way ANCOVA with message acceptance as the dependent variable showed no significant between-group differences, with $F(17,238) = 1.07$, $p = .38$. In the Christian sample, self-uncertainty yielded no other significant effects on the relationship between the inductions and message acceptance.

Controlling for the football fan categorization, the ANOVA testing categorical variable effects on message acceptance detected no significant differences, with $F(8,135) = 1.59$, $p = .14$. Table 16 shows the cell means. However, the model failed Levene's test of homogeneity of variance ($p = .02$). Therefore, each main effect was tested again via one-way ANOVA with a Welch-Satterthwaite adjustment. Only message reasoning presented a significant main effect on message acceptance, with $F(2,141) = 3.18$, $p = .05$. In this case, only specific reasoning showed significant difference from the control ($p = .05$), but no significant difference from the pseudo-reasoning condition. The main effect of identity cues was non-significant.

On trustworthiness while controlling for the football fan categorization, the ANOVA detected significant differences, with $F(8,135) = 2.62$, $p = .01$. No interaction effect was detected between message reasoning and identity cue inductions. Pseudo-reasoning alone ($M = 5.66$, $p = .05$) differed significantly from the control($M = 5.20$). Regarding identity cues, the sports identity ($M = 5.14$) differed significantly from the religious identity ($M = 5.69$, $p = .04$), but not from the control ($M = 5.64$).

Controlling for football fans, testing the effects of self-uncertainty, a three-way ANCOVA with message acceptance as the dependent variable showed significant between-group differences, with $F(17,126) = 1.86$, $p = .03$. The test detected a significant interaction effect between self-uncertainty and the identity cue effects, with $F(2,126) = 6.14$, $p = .003$. Using

regression to unpack specific interactions, tests of multiple linear regression with dummy coded message type yielded a significant interaction effect of self-uncertainty and sports (football fan) identity cues on message acceptance ($b = -.45$, $p = .01$). At one standard deviation below the mean of self-uncertainty, the effect of sports identity cues on message acceptance was significant, though negative ($b = -.68$, $p = .02$). At mean self-uncertainty, the effect diminished and lost significance ($b = -.20$, $p = .33$). At one standard deviation above the mean for self-uncertainty, the effect became positive, though non-significant ($b = .28$, $p = .30$). While this presented self-uncertainty as moderating the effect of sports identity cues, a combined effect with message reasoning in the predicted direction was not found, therefore H4 could not be supported.

Discussion

This study proposed that individuals confronted with a claim supported by ambiguous pseudo-reasoning would respond with little difference from those responding to the same claim with more specific reasoning. Furthermore, it was hypothesized that social identity cues matching respondents' self-categorizations would yield higher scores on source and message evaluations. It was expected that reasoning types and identity cues would interact to predict source and message evaluations. Some patterns emerged in line with the hypotheses, but in light of ANOVA results, none of the hypotheses could be fully supported. Social identity cues and self-uncertainty also yielded some unexpected directions of effect.

Concerning the variable of trustworthiness, both message reasoning conditions differed significantly from the control and non-significantly from each other, in line with the pattern suggested by H2. This pattern held when also controlling for religious or sports-related identity categorizations. Social identity cues, however, did not yield expected effects. Controlling for

Christian respondents, no significant differences were uncovered. Controlling for self-categorized football fans, a significant difference was found for the football identity cue, but in a negative direction in comparison to the control and religious categorizations. The self-uncertainty of subjects, however, predicted a lower likelihood of negative evaluations of supposed in-group peers. Still, self-uncertainty showed a general negative association with source and message judgments.

The linearly independent effects of specific reasoning and ambiguous pseudo-reasoning are consistent with both mindlessness research and the unimodel (Langer et al, 1978; Kruglanski & Thompson, 1999; Kruglanski et al, 2010). Similar to placebic information, ambiguous pseudo-reasoning appears to register in the evaluations of individuals who are making decisions about communication under some level of uncertainty or obstacles to processing. Regarding an understanding of message processing from the unimodel perspective, it also fits that reasons of unequal quality but congruent function (i.e. explaining why helping the homeless is good) would yield near-equivalent responses from individuals feeling little involvement in the topic. However, for the online experiment, message reasoning only significantly affected trustworthiness, suggesting that the effects in this case were made distinctive in interpretation only on lines of respondents' making judgments about the source. The presentation of evidence, regardless of quality, affected stronger impressions of honesty but did not appear to alter the variance in other aspects of evaluation.

Inconsistent with patterns from unimodel research such as Erb et al (2007), the presence of social identity cues did not engender consistent effects presenting them as clear information to which subjects could gravitate. The cues did not lend the kind of unequivocal informational

support necessary for respondents to reach the expected conclusion (i.e. higher message acceptance). This can be explained in part by some limitations to the experimental design, addressed below. Apart from sampling, design, and measurement error, however, it is relevant to consider that not all social identities, and the identification individuals feel with them, are equivalent in nature, nor are the effects of greater social environments surrounding particular social groups.

To explain this consideration, it is prudent to similarly consider the fifth hypothesis. H5 hypothesized that self-uncertainty would present a positive moderating effect of message type on source and message evaluations. The results showed not what was hypothesized per se, but instead an effect on how harshly negative evaluations were assigned for particular identity groups. For messages accompanied by football fan identity cues, respondents were largely negative in their evaluations, though the inclusion of reasoning of any kind improved their judgments. Concerning independently linear effects, self-uncertainty interacted with the football fan identity cue to predict football fan subjects' perceptions of social attractiveness and message acceptance; as self-uncertainty was higher, judgments became generally less negative. A similar phenomenon was observed for Christian subjects evaluating messages with accompanying Christian elements.

Self-uncertainty may have differing effects on behavior according to three potential factors not considered in this experiment: (a) the relevance of the message to group membership, (b) the effect group membership has on self-uncertainty within an individual's personal history, and (c) the entitativity of the group (Choi & Hogg, 2020; Hohman et al, 2017). For the sake of resisting survey fatigue and maintaining the subtlety of the inductions, group salience for

respondents was not assertively primed – respondents were asked for their categorizations and

then questioned regarding their emotional closeness with their group. Furthermore, the baseline

claims in the inductions represented a topic ostensibly separate from religious or sports group

considerations. Social identity normally needs to be primed as salient for individuals to activate

the related motivating pressures on behavior (Haslam et al, 1999), though, theoretically, the

effects of social identity are omnipresent and especially noticeable when individuals must make

decisions under uncertainty (Schultz et al, 2008) or within de-individuated environments, such as

online spaces (Carr et al, 2013).

Limitations

Several limitations may present explanations for the online experiment results, in which

some hypothesized mean differences appeared, but without statistical significance. The dividing

of the sample into a 9-group design and further controlling for self-categorization likely resulted

in uneven groups with sample sizes that failed to achieve sufficient power to accurately judge the

effects and avoid Type II error (Morrison et al, 2010).

Though pair-wise dummy-coded comparisons showed a significant effect of bullshit

pseudo-reasoning on trustworthiness, subjects may have been responding primarily to message

length and complexity (Kruglanski & Thompson, 1999), the increasing of which tends to present

a similar effect under mindlessness conditions. Similarly, subjects may have altered their

evaluations based on the presence of metaphor in the induction, which tends to elicit perceptions

of higher competence in a communicator (see Shen & Bigsby, 2013, for a review).

One major potential limitation of the online experiment was its attempt at deception in

eliciting responses from subjects. In the survey design, subjects were prompted to create their

own "call-to-action" messages before then evaluating messages from other fabricated

respondents. Online survey participants are already more likely to deliberate more in their

message judgments in comparison to field or lab subjects (Liao et al, 2021; Miller et al, 1987).

This level of deliberation, especially if deception is detected, may result in subjects trending

negative in their evaluations. It was understood in the experimental design that online subjects

would not be responding under a state of expected mindlessness at the level of the field

experiment. However, the use of the more complex survey design may have primed even further

deliberation.

Furthermore, the online experiment elicited responses from communication student

subjects. Student samples are classically understood to be more compliant to researcher's

requests, resulting in reduced effect sizes, and, considering the directives of their teachers within

their communication classes, potentially more inclined to evaluate messages critically (Burnett &

Dune, 1986; McCroskey & Dunham, 1966; Rossiter, 1976). This may represent a clear

explanation for why students responded to social identity cues with lower (though non-

significantly different) scores on believability in comparison to the control group. With more

information provided, and following the main propositions of the unimodel (Kruglanski &

Thompson, 1999), students may have acted in the direction of what they believed their teachers

(and the researcher) wanted: A punctilious and critical evaluation of communication.

This explanation may also address the measured effects of self-uncertainty in this project.

The salience of religious and sports identities was only subtly suggested so as to prevent early

deception detection, but students taking a survey as part of their completing communication

course requirements may have been inextricably behaving under a condition of salience for their

student identities. If self-uncertainty plays a part in student subject behaviors, it could motivate them even further to evaluate survey messages critically, as doing so may suggest clear fulfillment of their student roles and reinforcement of their self-conceptual clarity.

Football fan self-categorization may have represented a problematic choice for some respondents, as the categorization does not represent specific team affiliations. Negative assessments related to football fan cues may have stemmed from individuals assigning negative stereotypes to the categorization, even as respondents chose to identify themselves as football fans. Secondary analysis on both cue groups could determine which categorizations showed respondents choosing identity-matching materials for their own profile creations, and respondents who chose the football fan identity for themselves may not have felt it appropriate to display that categorization in the manner of the induction. Furthermore, sports team affiliation and requisite rivalries with other affiliations can represent a contentious subject, as individuals are more likely to harshly evaluate sources from a rival team (Bee & Dalakas, 2015). The sample for this online study also attended a university that, during the data collection, featured on national news for a public display of fan vandalism during a high-profile game. Consequently, the football fan identity may have suffered pejoration at the time.

Future Research

The hypotheses tested in this study should be tested again in a less complex experimental design, addressing a more diverse sample without using deceptive tactics and focusing on the salience or relevance of the social identity under consideration. For this study, addressing a student sample, subjects were not purposively collected according to their religious or sports categorizations, and messages for evaluation (about helping the homeless) were not designed to

necessarily favor one group. To ensure the salience and appropriateness of the messages under testing, however, such a screening may be necessary in future studies.

Put another way in the terms of this study, bullshit pseudo-reasoning may only be significantly effective on Christians when it is supporting claims relevant to Christianity, in addition to being accompanied by Christian source cues (Wyer, 2010). The necessity of such a transformation of the experimental paradigm may suggest a reduction of ecological validity for bullshit's effect, however.

Furthermore, though self-uncertainty's effects were minimal, the effects of group identification and fusion may represent relevant phenomena for consideration. Individuals who are self-uncertain may reduce their uncertainty through group membership, as UIT suggests, or they may feel more uncertain when faced with some identities, particularly those social identities with which they feel conflict (Choi & Hogg, 2020). Highly identity-fused individuals, on the other hand, may not perform or judge in favor of their in-group for the sake of uncertainty reduction so much as self-enhancement, as they consider their group and personal identities inseparable (Swann et al, 2012). Self-uncertainty may be considered trait-like, but its effects are highlighted when individuals are confronted with situationally increased self-uncertainty or group-related threat (Hohman, Hogg 2018). Future studies stimulating a threat response, especially if that threat necessitates turning to group sources, may address both the self-uncertainty aspects and epistemic authority aspects (Kruglanski et al, 2010) of understanding receptivity to bullshit pseudo-reasoning.

Chapter Four: Field Experiment

The field experiment tested the operationalization of bullshit pseudo-reasoning as a communication tactic in the field with target compliance as the goal. If bullshit-receptive message targets bias intuitive over reflective thinking, as Pennycook et al (2015) hypothesized, then bullshit communication strategies, in a low-effort context, may affect compliance similarly to placebic information. Langer et al (1978) and subsequent replications found that requests accompanied by placebic information yielded compliance rates significantly higher than those yielded by direct requests but did not differ significantly from the use of specific reasoning. Langer et al (1978) posited that this effect stems from "mindlessness" in behavior, or the common acting out of interactions according to stimulated heuristics without deliberation. The judgment of bullshit statements as believable should also positively predict compliance for bullshit-accompanied requests.

Varying source cues and message ambiguity again, the field experiment followed a similar factorial design and general model as the online experiment, except with inductions occurring in synchronous face-to-face conversations within a public situation. The field experiment tested the following hypotheses patterned directly after those in the online experiment, but with compliance as the outcome variable and requests accompanied by reasoning as the message alternative to bullshit pseudo-reasoning. Furthermore, in contrast to the online experiment's use of a sports-related identity cue, the field experiment presented identification with a university student group.

H6: (a) Source cues identifying the source as sharing the target's social categorization positively predict compliance in comparison to the control. A positive relationship

with (b) the social identifiability, i.e. social attractiveness and trustworthiness, of

the source, in sequence with (c) evaluation of message believability, mediates the

aforementioned source cue effect.

H7: Pseudo-reasoning messages do not differ significantly from reasoning in their

positive prediction of compliance in comparison to the control.

H8: (a) Distinctive social identity source cues and pseudo-reasoning messages interact to

produce effects on compliance greater than those in groups lacking either

induction. A positive relationship with (b) the social attractiveness and

trustworthiness of the source, in sequence with (c) evaluation of message

believability, mediates the aforementioned interaction effect.

H9: (a) Self-uncertainty positively predicts compliance with compliance gaining

messages combining social identity source cues and pseudo-reasoning

inspirational statements. (b) Self-uncertainty positively moderates the relationship

between social attractiveness/trustworthiness of the source and message

believability that mediate the aforementioned relationship.

Participants

On the campus of a large university in the Southern United States, research confederates

solicited subjects on public walkways. Fourteen confederates organized into pairs attempted

encounters with 446 individuals, and following message inductions, attempted to administer

post-hoc surveys and obtain informed consent.

Due to research confederate errors, 35 encounters were removed from the analysis. Of the

remaining attempts, 38 encounters involved respondents who rebuffed the requester without

attending to the entire induction message, rendering the message reasoning inductions moot for those cases. For the complete analysis of induction effects, 375 cases remained. Of these, 97 complied with requests to take the post-induction survey, in which participants reported demographic information, and three were removed from the survey analysis for incomplete responses. Additionally, in order to better account for potential sex effects, research confederates were instructed late in the data collection period to record the sex of respondents who did not opt to take the survey.

Of those responding, 45% self-identified as female and 49% as male, with 4% reporting as nonbinary/third gender. With other-reported sex added, a further 24 individuals were classified as female and 33 as male, with most of the sample's sex remaining unreported. Furthermore, of those responding to the survey demographic items, 6% identified as Asian, 4% identified as Black or African American, 85% identified as White, and 5% identified as "other." Regarding religious categorizations, 3% identified as Buddhist, 63% as Christian, 26% as non-religious, and 5% as "other." Regarding their relationship with the university hosting the experiment, 81% reported affiliation. Reported ages of participants ranged from 18-37, with 20 the median reported age.

Procedure

Research confederates from a large Southern United States university's student population were trained in the experimental procedure, as well as research ethics, and carried out the requisite experimental inductions without knowledge of the hypotheses. The prosocial marketing test loosely followed the example of Gueguen et al (2015), who tested compliance

with an organ donor registry request as an effect of message agents' wearing religious iconography.

Pairs of confederates, comprising one male and one female, wore religious or university categorization paraphernalia for identity cue inductions and wore nothing distinctively socially identifiable (either as belonging to the religious group or the university student group) for the control group. The religious paraphernalia included a T-shirt bearing a cross logo and the name of a fabricated religious organization on the front ("Spiritual Life Church") with a Bible verse excerpt ("... for I am gentle and humble in heart…" ~ Matt. 11:29). Appendix B contains the specific T-shirt design. Control paraphernalia consisted of black shirts, jeans, and minimal hair accessories or jewelry.

Confederates did not select subjects, but instead approached any qualifying subject that appeared in front of them. Confederates only approached those who appeared to be over the age of 18 and/or walk without the accompaniment of a group. Confederates did not know the study's hypotheses. Confederates generally alternated soliciting five subjects with the reasoning induction, then five with the pseudo-reasoning induction, and so forth. Instruction of research confederates involved trial preparation in public spaces, and female confederates, for the sake of uniformity, were assigned the task of administering the inductions with research subjects. Male confederates, alternatively, were assigned the task of soliciting informed consent, debriefing subjects, and requesting that they complete the accompanying survey.

The procedure for solicitation ran as follows: One of the pair of confederates, appearing alone but observed by the other from a short distance, approached a potential research subject with a greeting that rapidly transitioned into the purpose of their approach. Depending on that

instance's activated induction, the confederate introduced their affiliation with "Spiritual Life Church" before making the first request and providing the specific reason/pseudo-reason. Carrying a noticeable clipboard with lists of signed names and email addresses, the confederate requested that the target sign a petition if willing to spread the word and get more signatures. This request preceded either (a) a specific reason for why the subject should get involved with the scholarship, or (b) the inspirational bullshit item from the preliminary study and online experiment, *i.e.,* "Helping farm families shows a charitable heart, which plants the seeds of progress."

An example confederate script follows, with the religious group categorization induction in italics.

"Hi! *I'm from Spiritual Life Church, and* we're trying to help start up a new state sponsored scholarship for students from [region] farming communities, so we're getting signatures to show community interest."

Following these statements, the confederate provided the pseudo-reasoning statement or the following specific reasoning: "Helping out farm families will make it easier for them to come back from pandemic income loss, and that in turn will help restore the economy."

The auxiliary confederate recorded the selected subject's responses: refusal or compliance. Confederates did not attempt to respond to requests for elaboration regarding the specific reasoning or bullshit statements beyond polite acknowledgement, stating "I'm not sure, I just volunteered to get signatures," and reiterating what was already said. Auxiliary confederates made a note of targets who requested elaboration. For targets who immediately disengaged upon

encounter with the confederate and left before debriefing, confederates tallied their refusal for later considerations of the source cue effects.

If the target complied with the signature request, the confederate then suggested that they write down their email address to show potential interest in helping spread awareness or raise funds. The auxiliary confederate tallied the target's response as a potential marker of yet greater compliance. Occurring at any time within the request episode, confederates also requested that the subject take a one-page leaflet containing fabricated scholarship information and graphics, with a false email address and incomplete phone number. Appendix B contains a leaflet example. Finally, representing a fourth request, the confederate asked the message target to take more than one leaflet to potentially pass them around to others.

After the compliance gaining episode resolved, the auxiliary member of the confederate pair approached and debriefed the research subject, providing them with the informed consent document, demographic questions, and questionnaires measuring the social attractiveness and trustworthiness of the message source, the believability of their message, self-uncertainty, and religious group affiliation and identification. Respondents received an incentive to immediately complete the survey via entry into a lottery to win a gift card.

Measures

Apart from the measurement for compliance, analyzed along "refusal," and "compliance" levels for the four requests, measurements for social attractiveness, trustworthiness, message believability, and self-uncertainty involved adaptations of the scales used in the online experiment. Identification, as used before, was also included for potential secondary analysis. Scales were abbreviated to aid the appearance of a shorter survey in the field.

Results

Measurement Models

Before hypothesis testing, each of the four relevant scale variables' measurement models was subjected to confirmatory factor analysis (CFA) using SPSS AMOS in the same procedure used for the Preliminary Study and the Online Experiment.

For the field experiment surveys, the CFA for social attractiveness yielded four items (factor loadings M = 0.57, s = 0.39) in a unidimensional model showing moderate consistency with the data, with RMSEA = .12, GFI = .97, $\chi 2$ (2) = 5.08, ns. For trustworthiness, the CFA yielded four items (factor loadings M = 0.77, s = 0.09) in a unidimensional model showing moderate consistency with the data, with RMSEA = .14, GFI = .97, $\chi 2$ (2) = 5.52, ns. The CFA for believability yielded four items (factor loadings M = 0.76, s = 0.04) in a unidimensional model showing consistency with the data, with RMSEA < .001, GFI = .99, $\chi 2$ (2) = .34, ns. The CFA for self-uncertainty yielded four items (factor loadings M = 0.70, s = 0.10) in a unidimensional model showing moderate consistency with the data, with RMSEA = .11, GFI = .98, $\chi 2$ (2) = 4.38, ns. The CFA for the total complex model including all four constructs showed questionable fit, yielding indices of RMSEA = .11, GFI = .80, $\chi 2$ (98) = 198.70, p < .001. Table 17 presents the variable correlation matrix. Tables 18-21 present the items under analysis.

Regarding tests for the effect of sex, a T-test yielded no significant difference in compliance (*p* = .62). Potential differences between research confederates was also tested via a one-way ANOVA for the seven induction agents. Significant differences were found for some research staff, *F*(6,368) = 8.80, *p* < .001 – therefore, further analyses controlled for the

confederate difference effect, with none yielding an interaction effect between the categorical variables and differences in confederates.

Of the 375-participant sample, 9.1% of respondents chose not to comply with any request, 14.1% complied with the first request only, 22.7% complied with only the first two requests, 23.7% complied with the first three requests, and 30.4% complied with all four requests.

Hypothesis Testing

For the field experiment, H6 hypothesized that social identity cues would elicit greater compliance in comparison to the control, and H7 hypothesized that both specific reasoning and pseudo-reasoning, differing non-significantly from each other, would elicit greater compliance than the control. H8 predicted that the categorical variables or pseudo-reasoning and identity cues would interact positively. To test these hypotheses the data was first entered into an ANOVA using the 375-participant data set. Table 22 presents the cell means.

The ANOVA did not detect significant main or interaction effects for the categorical variables, the full model presenting $F(8,366) = 1.24$, $p = .28$, offering no support for the . However, breaking the main effects down into linearly independent pairwise comparisons using estimated marginal means for the population, the pseudo-reasoning condition showed a significant difference from the control condition ($p = .03$). To explore this further, a test of linear regression, dummy coding the categorical variables with control groups as referent, found a significant effect of pseudo-reasoning on compliance, presenting $R = .14$, $F(1,259) = 4.74$, $p = .03$.

After the sample was limited to the 94 acceptable survey respondents, an ANOVA revealed no significant main or interaction effects on compliance for the categorical variables, the full model presenting $F(8,366) = 1.24$, $p = .28$. The hypotheses therefore were offered no support by the overall model. However, a test of linear regression, dummy coding the categorical variables, found a significant simple effect of pseudo-reasoning ($M = 2.70$) on compliance in comparison to the control ($M = 2.35$), presenting $R = .28$, $F(1,62) = 5.14$, $p = .03$. The pseudo-reasoning effect, according to further regression analyses on levels of the identity cues category, showed significance only in combination with the religious identity cue ($M = 3.78$) in comparison to the control ($M = 2.76$), $R = .50$, $F(1,24) = 7.787$, $p = .01$. However, the cell for the interaction contained only a sample of 9 respondents, suggesting only very limited support for the interaction hypothesis. See Table 23 for the cell means. Figure 3 depicts the differences between categories on compliance for the surveyed sample.

Further ANOVAs for the intervening variables uncovered a significant effect on social attractiveness, but none regarding trustworthiness or believability, thus eliminating the utility of path analysis for the proposed model. The ANOVA testing social attractiveness as an outcome variable detected significant differences, with $F(8,85) = 4.17$, $p < .001$. Though the main effects were non-significant, a significant interaction effect of reasoning and identity cues was found for social attractiveness, $F(4,85) = 6.32$, $p < .001$. A test of linear regression with dummy coding for the message reasoning variable showed that, on the level of religious identity cues, pseudo-reasoning ($M = 6.31$) showed a significant effect on social attractiveness in comparison to the control ($M = 5.13$), $R = .56$, $b = 1.17$, $t(24) = 3.30$, $p = .003$. On the level of university identity cues, reasoning ($M = 6.47$) showed a significant effect compared to the control ($M = 5.61$) on
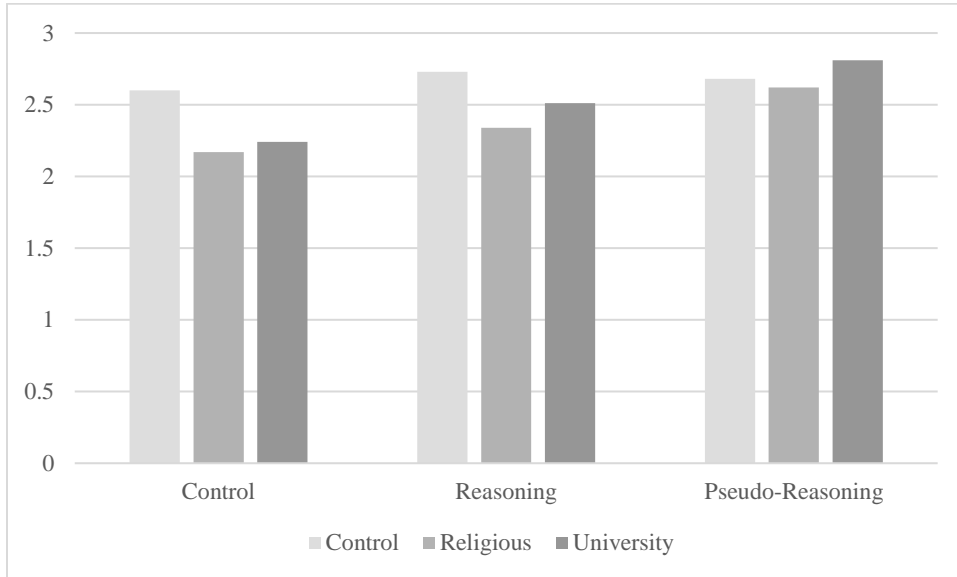
Figure 3. *Field Experiment (Full) Compliance by Reasoning Type and Social Identity*

social attractiveness, with $R = .54$, $b = .86$, $t(16) = 2.57$, $p = .02$. On that same level, however, pseudo reasoning ($M = 4.73$) also showed a significant effect, but in the reverse direction, predicting lower evaluations than the control, $R = -.54$, $b = .89$, $t(16) = -2.31$, $p = .02$. However, the small sample size for the surveyed group prevents the drawing of confident conclusions regarding categorical interactions. See Table 24 for a summary of dummy-coded correlation coefficients on the experiment outcome variables.

Among the survey respondents, ANCOVAs detected no interaction effect between self-uncertainty and the categorical variable effects for any of the source or message judgment variables. H9 found no support.

ANOVA and regression analyses were conducted again when controlling for Christian religious categorization, limiting the sample to 62 respondents, and university categorization, limiting the sample to 72. However, controlling for categorization resulted in cell sample sizes too small for relevant analysis. Furthermore, ANCOVAs with self-uncertainty still yielded no interactions with categorical variables, thus eliminating support for H9.

Discussion

The hypotheses for the field experiment predicted similar patterns to the online study, though with compliance as the outcome. The results were similar, showing a modest pattern in line with some of the hypotheses, but generally non-significant results for overall models, as between-group variance was not different enough from within-group variance. The effect of reasoning type on compliance was found more robust than in the online experiment, according to pair-wise dummy-coded regression tests of simple effects, and though no significant interactions

were found on compliance via the overall ANOVA, pseudo-reasoning's effect was most pronounced on the level of Christian identity cues.

Similar to the online study's findings regarding trustworthiness, but presenting significant interactions between the categorical factors, the field experiment discovered reasoning type effects on social attractiveness. Pseudo reasoning yielded an effect in interaction with religious social identity cues, and reasoning yielded a positive effect in interaction with university identity cues, for which the overall ANOVA was significant. The pseudo-reasoning effect presented positive social attractiveness with the Christian identity cues and negative results with the university identity cues. When controlling for religious categorizations, no significant negative effects in the university identity condition appeared.

On one hand, this suggests that the sample, primarily university students, may have questioned the legitimacy of political action from a student group, expecting more specific reasoning from their peers. Alternatively, the language of the pseudo-reasoning message may have struck them as inappropriate for the student identity context. Students were approached in a location where they knew encounters with street solicitors was likely, and social marketing can reach a saturation point with populations that learn to ignore compliance gaining messages (Gamian-Wilk & Dolinski, 2020) – prosociality may have been associated with religious identity while a marketing orientation may have been associated with student identities. One other potential explanation is that students, combining the social identity cue with the nature of the compliance gaining message, may have attributed poor stereotypical qualities to individuals who appeared connected to local, in this case Appalachian, identity groups, especially as the inductions featured rural farming themes. Appalachian groups are commonly victims of negative

stereotyping, such as involving drug addiction and poor education, and this stereotype engenders disaffection from non-Appalachians (Rittenour et al, 2020).

In terms of the intervening variables, the proposed model could not be supported, though some significant categorical variable effects were suggested by regression tests on social attractiveness. Again, similar to the online study, some social identity cue effects were observed, but not always in the predicted direction. Self-uncertainty, with the data collected, did not display a noticeable effect.

Limitations

The most obvious limitation apparent in the field experiment was the meager collection of surveys from respondents – perhaps an ambitious task, considering that each individual approached by research staff were busily on their way somewhere else, and student confederates found it nigh impossible to solicit survey responses from non-compliant subjects. This difficulty in the field represents one of many potential limitations related to field work in general, as individuals were likely moderated in their responses due to time of day, weather patterns, workload based on time in the school year, news regarding COVID-19 policy, etc. Controlling for self-categorization in the surveyed sample resulted in effects differing from the full data set, and the dramatic reduction in sample size, with requisite increases in Type II error possibility, could represent a more reliable cause for these different effects than the variable control. Additionally, while results were supportive regarding social attractiveness, the variable yielded problematic fit compared to the others, and featured a reliability alpha of only .61.

As with the online study, even considering the difficulty of obtaining surveys in the field, a less complex factorial design would reduce this limitation (Smith et al, 2002). Additionally,

paring down sample sizes may have caused difficulty in achieving fit for the measurement models, especially regarding social attractiveness and parallelism between all the defined variables. Another contributing factor may have been that respondents in the field, right after having spoken to the message agent, were potentially uneasy about evaluating her while standing nearby.

Research confederates became especially concerned when they wore the Christian social identity cue T-shirt, as the area in which they most often collected data became the site of anti-abortion protests from a local Christian group on more than one occasion. Research confederates required continuous re-training in removing their own selection bias and resisting self-fulling prophesies when they anecdotally perceived difficulty collecting data while using particular inductions. Furthermore, each agent communicating the inductions to respondents took to the training at different rates, and some maintained enthusiasm more than others.

The prosocial nature of the compliance gaining messages may have represented a major limitation for the experiment. On one hand, prosocial messaging is known to drive compliance effects and potentially blur the effects of structure or technique (Dillard & Hale, 1992). On the other hand, the baseline request – about helping farm families – may have been so attractive on its own that it contributed to range restriction (Dobson, 1988), as most subjects exhibited highly compliant behavior. This may have been further exacerbated by most respondents' identifying as students and emerging adults, with their median reported age at 19 years, as they may have been especially more inclined to respond positively to research confederate peers. Furthermore, the baseline request solicited help for individuals from a particular region of the United States

(Eastern Tennessee) from a particular social subset (farm families) – social identities likely shared, but unaccounted for, by many of the experiment's subjects.

The high overall compliance rate (91%) suggests that the field experiment's sample may represent only the upper end of a supposed population sample. If it were assumed that the range restriction reflected only the top half of the normal distribution for the population, and that this study population reflected only highly compliant individuals, then the standard deviation for the sample would be assumed to be 60% as large as that of the population. Considering that adjustment and applying the direct correction of range restriction (Schmidt & Hunter, 2015, pp. 128-129), the $R = .14$ for the contrast of pseudo-reasoning on compliance versus the control would be recalculated to $R' = .26$. Using meta-analytic data, Samson-Secrieru and Carpenter (2017), citing Boster et al (2016), assumed the maximum population variance for compliance as .25. Using the same value in correcting for range restriction, the pseudo-reasoning effect would be calculated as $R' = .27$. However, this still represents only a modest effect size, and without a more direct comparison with meta-analyzed findings, the best course of action for resolving the experiment's range restriction problem is to engage in further investigations with more diverse samples and more carefully designed requests.

Future Research

Field experimentation can be a complicated endeavor, but it represents an effective way to highlight communication phenomena *en vivo*. From this dissertation's results, pseudo-reasoning appears to have only a modest effect on message acceptance and compliance. However, for the subject of pseudo-reasoning bullshit, the parallels with placebic information are worth exploring, taking constructs of threat and emotion into consideration. This has been

exemplified in Dolinski et al's (2002) work on the "fear then relief" compliance gaining

technique. In that study, the experimenters induced subjects to jaywalk before inducing a feeling

of threat in them by sounding a police whistle. Afterwards, the experimenters showed that the

whistle was a prank, and then initiated another confederate's communication of a compliance

gaining message. Dolinski and colleagues found that an inducement of threat followed by an

inducement of relief stimulated a greater tendency in subjects to ignore the non-reasoning of

placebic messages.

Taking that phenomenon under consideration, it may be fruitful in future research to

consider not only the stimulation of uncertainty and/or fear in subjects, as has been addressed in

UIT, but also to apply that pattern to predicting the effectiveness of group leadership or mass

communication. The kinds of bad faith bullshit described by researchers such as Cohen (2002)

and Bengoetxea (2017) represent instances of powerful actors, seeking to deflect targets away

from challenging communication, using bullshit to inflate impressions of their status as the

"right" source of information. This may take the form of strategically highlighting an object of

fear or threat before, via pseudo-reasoning, creating an impression of the message agent as

capable of resolving that threat. Furthermore, self-uncertainty remains a variable that may yet be

assailable in the field, as further research may require its priming via challenging messages to

respondents (i.e. accusations of non-prototypicality), which may further motivate subjects toward

seeking quick resolutions in their message interpretation.

Though not as severe as in the results of the online study, this project found unexpected

negative effects for social identity cues. Religious categorizations may have been especially

reductive in the inductions, as some religious groups are more exclusivist than others, and may

regard an unfamiliar church with distrust. Religious affiliation represents more than the simple performances displayed in the inductions, as the relational ties within religious groups are often directly parallel to family support (Haji & Lalonde, 2012). Furthermore, young adults' views of religion tend to be in flux, and wildly varied, as they renegotiate their beliefs in an unfamiliar, but sometimes liberating, college environment (Longest & Uecker, 2021).

Guéguen et al (2015) used Christian symbolism to predict prosocial compliance effects with the understanding that, on a cultural level, their sample associated Christianity with good will. This research assumed that individuals would attend to social identity as the unambiguous message element toward which their judgments would shift, but it could be argued that a discussion of "charitable" work further matches especially well with religious values and rhetorical conventions (*e.g.,* "Whoever closes his ear to the cry of the poor will himself call out and not be answered," Proverbs 21:13; *English Standard Version Bible*, 2001). Bullshit is less often "called out" when it contains word choices that fit respondents' ideological values (Shedletsky, 2021).

Furthermore, the university identity cues involved attachment to a college environment that regularly marketed social action to students, and all experiments took place during the first semester returning to in-person classes during the 2021 COVID-19 pandemic, during which prosocial health marketing became ubiquitous. While religious, university, and (per the online study) sports-related social groups may represent strong sources of identification for research subjects, a minimal groups approach within laboratory tasks could effectively account for contextual moderators.

Chapter 5: General Discussion

This research purported to test "bullshit receptivity" (BSR) as individuals' cognitive and behavioral responses to bullshit within controlled influence communication processes. In that sense, "bullshit" is effectively conceptualized as a form of pseudo-reasoning enacted within an influence process that functionally replaces missing (or unwanted) reasoning. This assumes, for contrast, a definition of "reasoning" adhering to conventions of argument necessitating specificity, concreteness, and logical associations between claims and evidence (Grice, 1989; Kuhn, 1991; Toulmin, 2003). On a strategic level, "bullshit" describes a mode of communication that uses abstract, ambiguous, or otherwise equivocal message constructions in service to a communicator's desired impression formation. From early considerations of its psychological antecedents to later investigations of its structure and function, bullshit involves the utterance of claims that need not be true nor false, but, in their "unclarifiable unclarity" (Cohen, 2002), capitalize upon a message target's propensity for assigning meaning to bullshit messages. This research proposed that individuals who accept bullshit assign meaning based upon their lay epistemic motivation to seek, highlight, and clarify message elements that are relevant to a syllogistic conclusion (Kruglanski et al, 2006; Kruglanski & Thompson, 1999).

The experiments in this project tested the general hypothesis that individuals encountering claims or compliance gaining messages supported by bullshit pseudo-reasoning would fail to differentiate them from reasoning, as pseudo-reasoning would appear to qualify as evidence in favor of message acceptance and compliance. The hypotheses suggested that social identity cues, particularly those with which subjects self-categorized, would facilitate subjects' arresting of message evaluations and bias their processing in favor of message acceptance and

compliance. Theory suggests individuals would approach the kind of abstract, ambiguous messages involved in bullshit with interpretive tools empowered by the knowledge and attitude structures normed within their group memberships (Schultz et al, 2008; Smith & Hogg, 2008).

The hypotheses predicted that social identity cues would positively interact with pseudo-reasoning, assuming that the unambiguous cue information would focus subjects' judgment and result in lenient evaluation of the intentionally ambiguous message arguments. It was suggested that the ambiguous nature of pseudo-reasoning bullshit, putting definition within the imaginative capabilities of the message receiver, could also result in greater effects than the conventional reasoning approach when combined with social identity cues. Furthermore, the hypotheses proposed that self-uncertainty would motivate the positive evaluation of pseudo-reasoning in interaction with social identity cues. All of these hypotheses named message acceptance or compliance as their outcomes, but with social attractiveness, trustworthiness, and believability constructs measured as parts of the evaluation process.

Conservative statistical analysis by way of ANOVA and ANCOVA yielded little support for the hypotheses regarding the outcome variables of message acceptance and compliance, and the proposed path of source and message evaluations could not be supported. However, patterns in line with the hypotheses appeared within tests of dummy-coded linear regression and some ANOVA simple effects, particularly on the intervening variables of trustworthiness and social attractiveness.

For the full online sample, and when controlling for identity categorizations, message reasoning effects presented data in line with the hypotheses on the trustworthiness dependent variable. Reasoning and pseudo-reasoning showed positive effects while not differing from each

other, and this effect remained when controlling for Christian self-categorizations. For football

fans, only reasoning significantly affected message acceptance, and only pseudo-reasoning

significantly affected trustworthiness. No other patterns in line with the hypotheses appeared on

believability or message acceptance, and message reasoning type did not appear to interact

significantly with social identity cues. Self-uncertainty, for the full online sample, only positively

interacted with identity cue effects on the religious identity cue group on message acceptance

and social attractiveness. Only when controlling for football fan categorization did self-

uncertainty show a similar interaction effect on message acceptance with the football fan identity

cue groups. Self-uncertainty appeared to have no interaction with the message reasoning

inductions.

For the full field sample, the overall ANOVA did not detect significant differences for

compliance, but simple effects testing showed a significant effect for pseudo-reasoning. For the

much smaller surveyed sample, again considering simple effects tested via dummy-coded linear

regression, pseudo-reasoning affected compliance significantly within the religious identity cue

condition, though the cell sample size was problematically small. Among the intervening

variables, only social attractiveness correlated significantly with compliance, and the results of

the overall ANOVA suggested that direct effects of the categorical variables were not strong

enough to fully support the hypothesized evaluation process.

Less than a third of the field sample responded to post-induction surveys, and this may

have contributed to the non-significance of some associations between responses to the survey

instruments and compliance. The preliminary replication study had detected a significant direct

effect of self-uncertainty on BSR, but the experiments found only negative associations with

message judgement outcome variables, and in the field experiment showed no significant interactions with subjects' source or message evaluations. Still, significant interaction effects between categorical variables appeared for social attractiveness. Reasoning positively affected social attractiveness with the university identity cue, but pseudo-reasoning yielded a positive effect for the religious identity cue and a negative effect for the university identity cue. However, all detected interactions in the small surveyed sample involved minuscule cell sample sizes, especially when controlling for self-categorization, therefore preventing substantial conclusions.

Between the preliminary replication study and the results of the experiments, self-uncertainty's role in bullshit message judgements appeared inconsistent. On one hand this may be due to differences in socially identifiable information between the studies. In the experiments, subjects encountered individuals (or simulated individuals) who represented their student peers in addition to the social identity cues associated with certain conditions, and their group-based presentations may have interacted with subjects' internal analysis of their own membership and its presentation. Individuals who are highly identified with their groups more often report low self-uncertainty, as their bond with their social group has leant them certainty (Choi & Hogg, 2020). Highly self-uncertain individuals, however, may yet feel insecure about their own prototypicality, and they may find their self-concept threatened and/or be motivated to perform membership by enacting criticism when viewing a peer (in age and social status) that makes prosocial claims or performs prosocial acts.

The preliminary replication study did not present socially identifiable information – it displayed statements assuming no details about source information other than those associated with the research environment. This void of information, for an individual that persistently seeks

out and depends on group-based epistemic authority, may stimulate them to retrieve attitudes and evaluation-relevant information from their personal history with group-relevant knowledge. Under uncertainty, individuals make judgments based on whatever relevant knowledge is accessible to them (Kruglanski & Thompson, 1999). Brown et al's (2019) findings suggest that individuals stimulated to use personalized, individual judgment sources are more likely to detect, and negatively evaluate, bullshit. Highly self-uncertain individuals, however, persistently depersonalize their self-conceptions in favor of group prototypes – when other individuals might rely on individual attitudes, self-uncertain individuals likely turn to attitudes communicated within their group-centered experiences. The knowledge structures produced by such experiences may then guide the processing of source-unidentified bullshit statements.

Though effects were weak, evaluations of bullshit pseudo-reasoning appeared stronger for compliance in the field experiment than message acceptance in the online experiment. Much of the prior bullshit literature casts BSR as a message processing failure, but bullshit itself may more often in nature represent an artifact of normal reality sharing communication processes (Higgins, 1992; Spicer, 2020). Prior correlational analyses have also found associations with the openness facet of conscientiousness and agreeableness personality dimensions (Čavojová et al, 2020; Pennycook et al, 2015). Self-uncertainty was selected as a construct for analysis in this research partially under the assumption that individuals in search of relevant tools for evaluation were psychologically dependent upon their groups, but individuals may also regard bullshit as an interesting baseline for creative thought – a way of communicating that signals a cooperative reality sharing heuristic. More than dependency and unresolved uncertainty, exploration and affiliation could more directly motivate BSR when communication is more interpersonal.

Anecdotally, research staff involved in the field experiment commonly reported that, after debriefing, several subjects would express interest in the topics of the inductions and the study. In contrast to the online experiment's deindividuation, even minimal channel-rich interactions in the field experiment could account for the stronger bullshit-compliance relationship and significant effects on social attractiveness.

Bullshit pseudo-reasoning engendered a generally minor effect on the interpretations and evaluation of influence messages. Further refinements and replications are required for the experimental approaches, but even with corrections for range restriction and, potentially, error attenuation, it appears that pseudo-reasoning, alone and in combination with social identity cues, yields an effect, though weak and prone to moderation, on message acceptance, compliance, and, possibly, other related influence outcomes.

Limitations

Design complexity represented a major limitation affecting this project, as increasing the factors involved in ANOVA and ANCOVA increase the error rate, and using multiple levels within factorial designs can make achieving sufficient cell sample sizes, ergo sufficient statistical power, more difficult (Morrison, 2010; Smith et al, 2002).

That this research did not assess individuals' attitudes about homelessness or the plight of farm families represents a limitation of the studies, and future research should address respondent attitudes in terms of both relevance to the context of communication as well as individual value-relevant involvement, which both affect message deliberation (Johnson & Eagly, 1989).

One of the main limitations of this research involved its relatively uncomplex approach to the highly complex field of concepts known to the social identity family of theories. Design choices for these studies reflected considerations of induction subtlety and simplicity, but at the cost of excluding some factors that would be effective to consider in later studies and secondary analysis. For example, when further exploring the effects of social identity cues, more effort should go toward priming and measuring the salience of social identity for respondents (Haslam et al, 1999; Smith et al, 2007) and crafting inductions that represent issue relevance for the social identity under question (Wyer, 2010).

This project's samples also potentially limited its resulting effects, especially as student samples may vary widely in their evaluative capabilities on levels of years in college and discipline of study (Meltzer et al, 2012). Furthermore, the onset of the COVID-19 pandemic in 2020 resulted in moderating socio-psychological factors, such as gathering habits, the communication and habituation of new health behavior patterns, and shaken trust in epistemological authority (Shalev, 2021). As a result, many of the decisions made regarding research design for these projects was more risk-sensitive than a pre-pandemic environment would have allowed.

Implications and Future Research

Depending on individuals' processing time, cognitive ability, access to relevant information, and motivation to attend to messages and retrieve information relevant to their processing, the use of bullshit pseudo-reasoning – parallel to many other persuasion and compliance gaining techniques (Rains et al, 2018) – varies considerably in its effects. Bullshit's explication over time has not developed a list of sufficiency criteria for message content, but

instead has broadly described it as carefully unmeaningful and un-substantive, used in communication to support an impression, generally, that someone has something useful to say. This set of studies has contributed somewhat to the understanding of "bullshit" as a communication phenomenon functionally similar to placebic information, operationalizing it with message structures known to the bullshit literature, such as abstraction and oblique metaphor (Cohen, 2002; Thompson, 2016). Placebic information, another replacement for reasoning in influence communication, yields effects comparable to reasoning, but not under conditions of high request effort or attributions of agent responsibility and control (Langer et al, 1978).

What differentiates bullshit pseudo-reasoning from placebic information is that bullshit does not represent a static placeholder containing non-information so much as a type of clarity-obscuring strategy that, in combination with other stimulating factors, allows message targets to assign novel meaning based on the attitude and knowledge structures that are accessible to them. LET research has found that combining ambiguous message elements with elements that present strength or positive valence results in targets' biasing of message judgment in favor of the non-ambiguous information. Erb et al's (2007) experiments testing such a phenomenon featured individuals making positive judgments, altered by stimuli from message arguments, about ambiguous source cues. The current research featured familiar social-identity-based source cues hypothesized to bias targets' judgments about message content, but the results showed that these cue effects were not consistently positive or negative across the samples. Menegatti and Rubini (2013) carried out analyses that showed political leaders relying upon more abstract support for their claims when addressing political ingroup members (*i.e.* their political base) than when

addressing mixed groups or outgroups, and this finding is convergent with the understanding that group leaders, in maintaining their social power, capitalize on individuals' tendency to favor prototypical ingroup messaging with less careful and negative deliberation than if the information came from an outgroup (Clarkson et al, 2017; Hogg, 2018; Smith & Hogg, 2008).

Influence targets may more likely detect placebic information than bullshit pseudo-reasoning, and further experimentation should test this in light of prior predictions (e.g. those of Pennycook & Rand, 2019) suggesting that BSR occurs because of impulsiveness and/or unmotivated reasoning. Bullshit likely retains an effect, at least on source judgments, under conditions of more careful message deliberation than what would be expected under conditions of mindlessness. The hypotheses and results of the current research point to BSR as relying upon individuals' arrested judgment processes. In Spinozan processing terms, targets should divert their message judgment toward automatized biases before their deliberative faculties can differentiate pseudo-reasoning from reasoning. However, some of the attractiveness of pseudo-reasoning may lie in its stimulation of just enough deliberative judgement to allow respondents to make connections between the information in the influence message and their prior attitudes. A similar explanation has been put forward for the tendency of message targets to positively evaluate metaphor-accompanied messages and their sources (see Shen & Bigsby, 2013, for a review).

The structures of compliance gaining techniques in particular present commonly weak and inconsistent effects. Prior attitudes and requisite behavioral intentions represent the most powerful predictors of influence outcomes (Rains et al, 2018). Recent research has shown that impulsiveness and low cognitive reflective behavior, though highlighted as strong predictors in

previous correlational BSR studies, do not present consistent effects in experiments addressing attitudinal and source credibility factors (Littrell et al, 2020; Littrell et al, 2022).

The experiments within this dissertation featured bullshit as an influence technique without the facilitation of particularly effortful exchange or coordination between interlocutors. In the online study, respondents engaged with an asynchronously presented, anonymous writer of very little information. In the field experiment, respondents engaged in fleeting encounters with a message agent who followed a simple script. In sum, the communication behaviors featured in this project represented mainly impersonal interactions. Bullshit under a broader conceptualization, which takes into account its proposed function as a kind of casual social binder in coordination between communicators (Frankfurt, Spicer), suggests that its effects may be more readily observable under conditions of interpersonal conversation.

Individuals share reality often by engaging in ambiguous and abstract "tuning" with one another (Echterhoff et al, 2009; Higgins, 1992), in which they tailor their messages to match the perceived attitudes of their audience, especially when goals of affiliation are shared. The message judgments involved in this research may not represent the most important processing-level constructs within an informal conversation, as individuals may not be motivated to judge each other's message qualities so much as each other's potentiality for positive relationship and communication outcomes. The predicting of communication outcomes or reduction of interpersonal uncertainty represent classically understood fundamental processes in communication (Berger & Calabrese, 1975; Sunnafrank, 1988).

Though bullshit has been named a strategy familiar to more deceptive actors (Bengoetxea, 2017; Cohen, 2002; Frankfurt, 2005; Thompson, 2016; Van Bavel et al, 2020),

those message patterns likely achieve their function when the actor's audience perceives them as a source with whom they share a relationship, and bullshitters may enact more or less deceptive and cooperative goals in their relational communication. Humans sometimes develop, maintain, and draw boundaries in relationships by exchanging incrementally more or less equivocal communication, and future research should examine the use of bullshit tactics within not only the construction of lies, but also the careful utterance of difficult truths (McCornack et al, 2014). Relational factors also should contribute to individuals' judgments of epistemic authority, and this is highlighted in prior social identification and identity fusion literature (Besta et al, 2016; Shalev, 2021; Smith et al, 2007; Swann et al, 2012), as individuals expand in their self-view and apprehension of reality via their experiences with others, particularly those with whom they can form and reinforce a social identity.

Furthermore, considering the identities presented in this research, relationship strength and the social stakes associated with ties in Christian groups, football fan groups, and university groups likely differ to the extent that identification, its stability, and its relationship to norms of communication and influence produce differing effects on judgments of other group members and their communication. Social identification is a dynamic phenomenon informed by individuals' on-line judgments about interactants, and specific goals related to situational context can change perceptions of group prototypes, though core value perceptions tend to remain stable (Hogg & Smith, 2007). Purposive sampling and measurements of group entitativity, or the consensual unification of group members into perceiving their group as a synergistic whole, may address social group differences. On the other hand, controlled laboratory testing assigning subjects into minimal groups has effectively illuminated some identification effects within the

social identity construct's history (Hogg, 2007; Mullin and Hogg, 1998). The discrepancy

between self-uncertainty's effect in the preliminary study and its lack of effect in the experiments

may represent the result of error due to some identities creating, rather, than reducing uncertainty

(Choi & Hogg, 2020). Furthermore, a minimal groups approach would allow researchers more

control over the foci of group prototypicality and requisite social and/or epistemic authority.

Self-uncertainty more consistently motivates individuals to perform group identification

and positively evaluate ingroup-supported messages when both social identity and self-

uncertainty are made salient by the recognition of an active threat to either or both (Choi &

Hogg, 2020). A need for uncertainty reduction should especially motivate subjects' judgments

when, specifically, collective identity is called into question, and this can take the form of threats

to a group's unity or challenges to an individual's membership (Hogg & Mahajan, 2018;

Hohman et al, 2017). Therefore, future research addressing self-uncertainty as a potential cause

for BSR should induce threat. This would further extend and follow the pattern set by Brown et

al (2019) in inducing need for belongingness, a predictor of BSR, within a minimal groups game.

Adding another layer, the current research did not address individuals' assessments of messages

from sources with whom they did not share identities, and future research considering identity

factors should investigate how bullshit is coordinated and interpreted when communicated by an

outgroup member and/or featuring value-dissonant message content.

Conclusion

Prior research on BSR phenomena has suggested that some individuals have a trait-like

susceptibility to the evaluation of "meaningless" message constructions as meaningful. A more

interaction-based communication approach to the bullshit concept would suggest that to qualify

an objective standard of meaningfulness would represent a limited view of the concept, and that any meaning ascribed to bullshit must come from coordinated understanding between interactants in a communication process. The results of this research suggest that the targets of influence attempts are generally motivated to make positive judgements about message agents (if not as much the messages themselves) when influence communication features constructions that appear to represent supportive reasoning, whether that reasoning adheres to classic standards of clarity or not. In a lesser fashion, this set of studies, notwithstanding requisite systematic and random error, yielded some evidence that individuals make judgements about persuasive and compliance gaining messages in favor of accessible message elements, such as social identity cues. Further controlled testing is necessary for the hypothesis that bullshit pseudo-reasoning, by dint of its construction as a kind of communication puzzle piece meant to fit all other pieces, facilitates message targets' activation of accessible knowledge and attitude structures.

If "bullshit" represents a kind of superordinate communication strategy that replaces missing or unwanted reasoning with pseudo-reasoning, then its explication requires systematic attention to the subordinate message constructs – such as ambiguity, metaphor, or sesquipedalian word choice – that yield different simple cue effects within different communication contexts. Additionally, including and beyond social identities, further testing should address the control of message and situational elements that bias message processing, such as the inclusion of threatening and uncertainty-stimulating information. Furthermore, addressing situational and broader context, it remains important to consider that bullshit, in the view of communication as a dynamic and constitutive process, involves rules and patterns of communication that may find definition according to the social goals and linguistic histories of particular groups (Dalton,

2016; Spicer, 2020). This research used an induction featuring language that may not represent universally understood abstraction and ambiguity, regardless of the communicator's intention for it, but the function of the messages was situated within the communication of persuasion and compliance gaining. Bullshit's explication has been overdependent on cognition-based correlational investigations divorced from situation – without translating the concept to processes within nature, it remains an artifact of the academic imagination.

Ideally, future experiments should examine the full process of bullshit communication, controlling social and situational antecedents, such as pressure to perform (Petrocelli et al, 2019); priming and measuring psychological antecedents, such as "low concern for truth" (Frankfurt); testing differences between subordinate message structures, such as "International Art Language" (Turpin et al, 2020); and observing communication outcomes and moderating factors, such as source credibility and prior attitudes (Littrell et al, 2022). Further research is needed that presents bullshit tactics and their interpretation as occurring within controlled communication episodes measured with sufficiently defined instruments. Otherwise, "bullshit" suffices only to describe itself.

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Appendix A: Instruments

Primary Instruments

Believability

Message believability was assessed using McCroskey & Teven's (1999) five semantic

differential items.

Agree 1 2 3 4 5 6 7 Disagree

False 1 2 3 4 5 6 7 True

Incorrect 1 2 3 4 5 6 7 Correct

Wrong 1 2 3 4 5 6 7 Right

Yes 1 2 3 4 5 6 7 No

Compliance

Immediate compliance utilizes a measurement assigning scores according to whether

respondents did or did not comply with the three requests, coding responses as follows:

0: No compliance.

1: Compliance with one request.

2: Compliance with two requests.

3: Compliance with three requests.

4: Compliance with all four requests.

Confederates will also take note of unpredicted emergent phenomena, such as

respondents who request elaboration and respondents who immediately disengage with the

confederate.

"Inspirational" Bullshit Receptivity

The following 16 bullshit items and 4 mundane statements (italicized below), shuffled, tested target bullshit receptivity in the preliminary study. A 7-point Likert scale judging the messages' inspirational quality followed each statement. The analysis used the mundane items' scores for contrast, a check similar to that used by Pennycook et al (2015) and Evans et al (2020).

1. A charitable heart plants the seeds of progress.

2. If we all do our part, the impossible becomes possible.

3. Human potential is unlocked when we strive for generosity.

4. A true hero does good deeds for others, and those deeds make new heroes.

5. Generous citizenship creates a legacy of hope.

6. Only optimistic sacrifice can end the blight of poverty.

7. Self-sacrifice is a policy that lifts people up.

8. Without social responsibility, there is no unity, and without unity, there is no progress.

9. Helping the needy strengthens the bond of the brotherhood of man.

10. Generosity toward the less fortunate opens a door to community fellowship.

11. Charity is the soul of grace, and grace is the hallmark of a good community.

12. Giving someone a hand up creates a blossoming of karmic glory.

13. Giving is the concrete that lays the foundations of civilization.

14. Love between people is the cause and reward of unselfish action.

15. A charitable spirit is the key to bringing all citizens together.

16. Giving of yourself to others is the first step in building a community spirit.

17. *Combining resources means access to more resources.*

18. The poor are often in need of help.

19. Social cooperation is often a part of a culture's value system.

20. Individuals sometimes ask for your money because they need it.

Message Acceptance

Message acceptance was loosely adapted from Zhao et al's (2011) perception of argument strength scale, involving selected items that could address any informational message type. Italicized items are reverse-coded.

1. This person shared information that is important to me.

2. The message they shared helped me feel confident.

3. The message they shared put thoughts in my mind that made me want to pay attention.

4. *The message they shared made me want to **stop** paying attention.*

5. Their messages made me think good thoughts.

An additional four items were adapted from LaFrance and Boster's (2001) argument quality scale, converted from semantic differentials into Likert-type items.

1. Their message was convincing.

2. Their message was reasonable.

3. *Their message was unsound.*

4. What they said was plausible.

Pseudo-Profound Bullshit Receptivity

The items used below represent high-mean-scoring items from Pennycook et al's (2015) original studies. Each item is followed by a Likert scale measuring the degree to which

respondents found the statement "profound." For the sake of survey uniformity, the measure was adapted for these studies to a 7-point structure:

1. Hidden meaning transforms unparalleled abstract beauty.

2. Wholeness quiets infinite phenomena.

3. Consciousness is the growth of coherence, and of us.

4. Perceptual reality transcends subtle truth.

5. As you self-actualize, you will enter into infinite empathy that transcends understanding.

6. Our minds extend across space and time as waves in the ocean of the one mind.

7. Every material particle is a relationship of probability waves in a field of infinite possibilities. You are that.

8. Nature is a self-regulating ecosystem of awareness.

9. We are not an emergent property of a mechanical universe but the seasonal activity of a living cosmos.

10. As beings of light we are local and non-local, time bound and timeless actuality and possibility.

Self-Uncertainty

Self-uncertainty is measured with 12 7-point Likert items eliciting level of agreement with the following statements based on an instrument used in recent tests of UIT (Hohman et al, 2017; Hohman & Hogg, 2015), with numbers 6 and 11 reverse coded:

1. My beliefs about myself often conflict with one another.

2. On one day I might have one opinion of myself, and on another day I might have a different opinion.

3. I wonder about what kind of person I really am.

4. I feel that I am not really the person I appear to be.

5. When I think about the kind of person I have been in the past, I'm not sure what I was really like.

6. I seldom experience conflict between the different aspects of my personality.

7. I think I know other people better than I know myself.

8. My beliefs about myself seem to change very frequently.

9. If I were asked to describe my personality, my description might end up being different from one day to another.

10. Even if I wanted to, I don't think I would tell someone what I'm really like.

11. In general, I have a clear sense of who I am and what I am.

12. It is often hard for me to make up my mind about things because I don't really know what I want.

Social Attractiveness

Social identifiability, using a method similar to Carr et al (2013), was measured using 12 social attraction items from McCroskey et al (2006) on 7-point Likert-type agreement scales in addition to an eighth item addressing perception of the source's group status. Reverse-coded items are italicized.

1. I think he/she could be a friend of mine.

2. I would like to have friendly chat with her/him.

3. *It would be difficult to meet and talk with her/him.*

4. *We could never establish a personal friendship with each other.*

5. *He/she just wouldn't fit into my circle of friends.*

6. He/she would be pleasant to be with.

7. He/she is sociable with me.

8. *I would not like to spend time socializing with this person.*

9. I could become close friends with her/him.

10. He/she is easy to get along with.

11. *He/she is unpleasant to be around.*

12. *This person is not very friendly.*

Trustworthiness

Source trustworthiness was measured using McCroskey & Teven's (1999) six semantic differential items measuring source trustworthiness.

Honest 1 2 3 4 5 6 7 Dishonest

Untrustworthy 1 2 3 4 5 6 7 Trustworthy

Honorable 1 2 3 4 5 6 7 Dishonorable

Moral 1 2 3 4 5 6 7 Immoral

Unethical 1 2 3 4 5 6 7 Ethical

Phoney 1 2 3 4 5 6 7 Genuine

Auxiliary Instruments

Agreeableness

Trait agreeableness was measured using the HEXACO-60 (Ashton & Lee, 2009) scale of the Big Five Personality traits, which analyzes the agreeableness construct along construct

"facets" of forgiveness, gentleness, flexibility, and patience. Items 3, 6, 8, and 9 are reverse-coded.

1. I rarely hold a grudge, even against people who have badly wronged me.

2. My attitude toward people who have treated me badly is "forgive and forget."

3. People sometimes tell me that I am too critical of others.

4. I tend to be lenient in judging other people.

5. Even when people make a lot of mistakes, I rarely say anything negative.

6. People sometimes tell me that I'm too stubborn.

7. I am usually quite flexible in my opinions when people disagree with me.

8. When people tell me that I'm wrong, my first reaction is to argue with them.

9. People think of me as someone who has a quick temper.

10. Most people tend to get angry more quickly than I do.

Conspiracy Belief

Fifteen items were adapted 7-point Likert-type items from Brotherton et al's (2013) short form generic conspiracist beliefs scale. The original scale measured five factors, but the authors suggest the short form as a unidimensional measure in practical use. Pennycook et al (2015) also used the 15-item short form.

1. The government is involved in the murder of innocent citizens and/or well known public figures, and keeps this a secret.

2. The power held by heads of state is second to that of small unknown groups who really control world politics.

3. Secret organizations communicate with extraterrestrials, but keep this fact from the public.

4. The spread of certain viruses and/or diseases is the result of deliberate, concealed efforts of some organization.

5. Groups of scientists manipulate, fabricate, or conceal evidence in order to deceive the public.

6. The government permits or perpetrates acts of terrorism on its own soil, disguising its involvement.

7. A small, secret group of people is responsible for making all major world decisions, such as going to war.

8. Evidence of alien contact is being concealed from the public.

9. Technology with mind control capacities is used on people without their knowledge.

10. New and advanced technology which would harm current industry is being suppressed.

11. The government uses people as patsies to hide its involvement in criminal activity.

12. Certain significant events have been the result of the activity of a small group who secretly manipulate world events.

13. Some UFO sightings and rumors are planned or staged in order to distract the public from real alien contact.

14. Experiments involving new drugs or technologies are routinely carried out on the public without their knowledge or consent.

15. A lot of important information is deliberately concealed from the public out of self-interest.

Group Identification

Group identification was measured using the 10-item pattern of adaptation from previous social identity research presented in Hogg & Hains (1998), with 7-point Likert scales of agreement:

1. Members of my religious group are important to me.

2. I identify with other members of my religious group.

3. I have strong ties with other members of my religious group.

4. I am happy to identify myself as a member of my religious group.

5. I feel a strong sense of belonging with other members of my religious group.

6. I would rather belong to my own religious group than to another religious group.

7. I like other members of my religious group.

8. My attitudes and beliefs are similar to those of other members of my religious group.

9. I feel I fit in well with other members of my religious group.

10. Members of my religious group work well together as a team.

Identity Fusion

Identity fusion scale items came from Gomez et al (2011) and were adapted for selected group categorization. In this list, the default "my group" descriptor is shown.

1. I am one with my religious group.

2. I feel immersed in my religious group.

3. I have a deep emotional bond with my religious group.

4. My religious group is me.

5. I'll do for my religious group more than any of the other members would do.

6. I am strong because of my religious group.

7. I make my religious group strong.

Need for Cognitive Closure

A short form of the NFCC scale items were adapted from (Roets & Van Hiel, 2011) with the scale treated as a unidimensional measure, as had been done in previous research (Roets & Van Hiel, 2007).

1. I find that a well-ordered life with regular hours suits my temperament.

2. I find that establishing a consistent routine enables me to enjoy life more.

3. I enjoy having a clear and structured mode of life.

4. I don't like to go into a situation without knowing what I expect from it.

5. I don't like to be with people who are capable of unexpected actions.

6. I dislike unpredictable situations.

7. When I have made a decision, I feel relieved.

8. When I am confronted with a problem, I am dying to reach a solution very quickly.

9. I would quickly become impatient and irritated if I would not find a solution to a problem immediately.

10. I don't like situations that are uncertain.

11. I feel uncomfortable when I don't understand the reason why an event occurred in my life.

12. I dislike it when a person's statement could mean many different things.

13. I dislike questions which could be answered in many different ways.

14. I feel irritated when one person disagrees with what everyone else in a group believes.

15. I do not usually consult many different opinions before forming my own view.

Appendix B: Induction Elements

Chapter 3 Icon Choices

Chapter 3 Control Induction

The following are profile elements chosen and written by another respondent from a prior study or earlier in this study:
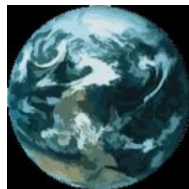
Avatar:

Catch Phrase: You do you!

Inspiring/Call-to-action Message: I think everyone should help the homeless more often.

Chapter 3 Religion and Pseudo-Reasoning Induction

The following are profile elements chosen and written by another respondent from a prior study or earlier in this study:
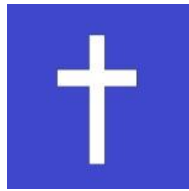
Avatar:

Catch Phrase: "I am gentle and humble in heart" – Matthew 11:29

Inspiring/Call-to-action Message: I think everyone should help the homeless more often. Giving to shelters shows a charitable heart, which plants the seeds of progress.

Chapter 3 Sports and Reasoning Induction

The following are profile elements chosen and written by another respondent from a prior study or earlier in this study:

Avatar:

Catch Phrase: Football is life

Inspiring/Call-to-action Message: I think everyone should help the homeless more often. Giving to shelters means rehab and resources to help them rejoin and give back to society

Chapter 4 Social Identity Inductions

The following design adorned a T-shirt worn by the research confederate in the religious group categorization induction (next page). For the university induction, confederates wore apparel with the university logo.
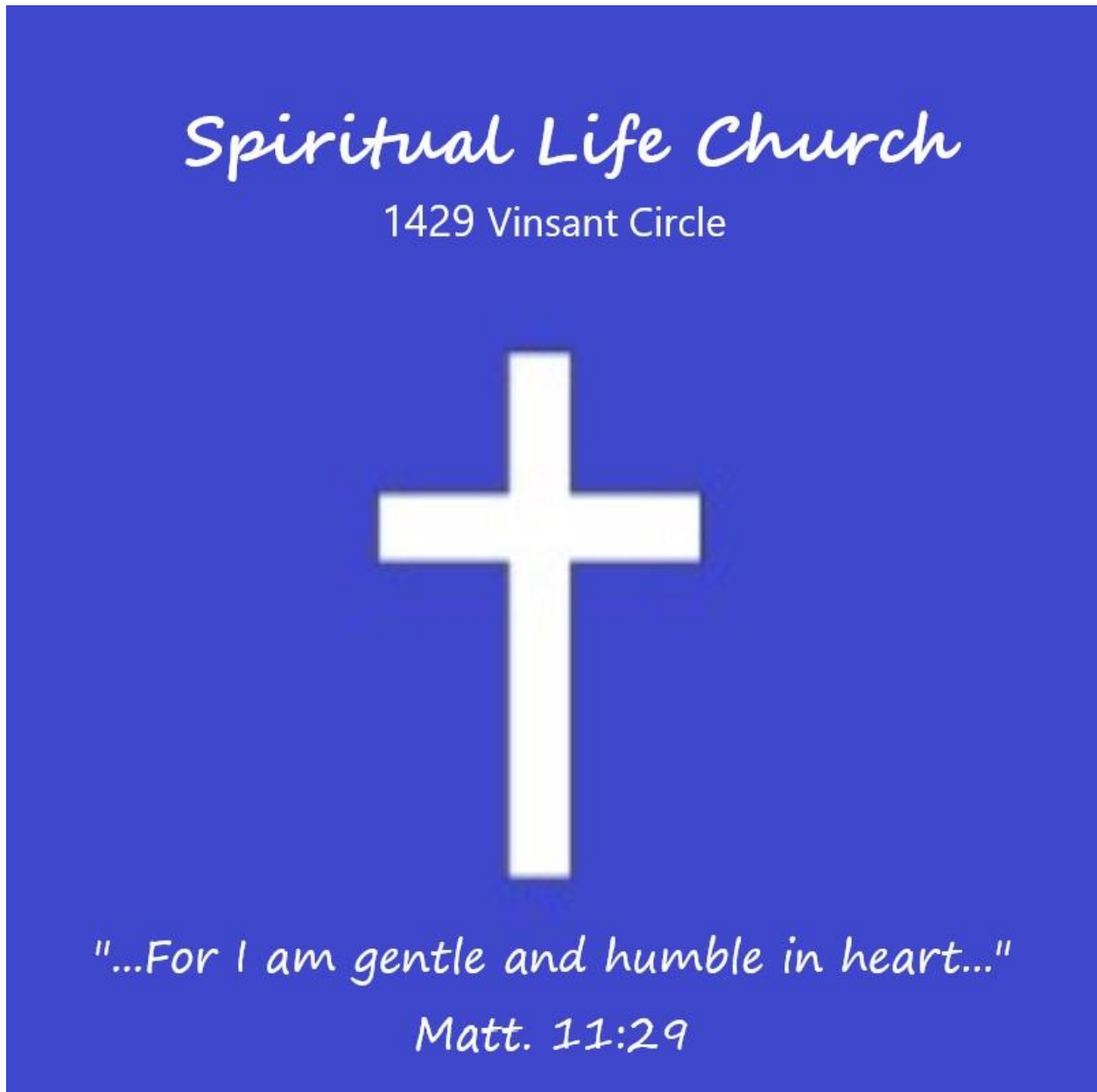
Chapter 4 Print Material

The field experiment involved the use of a signed petition with lines for email addresses following each signature line. Additionally, the confederates offered small leaflets promoting possible further information for the subject of the request, the design for which follows.

Help our Eastern Tennessee farm kids go to college!

The Dennis Fund scholarship, if sponsored by the Tennessee Department of Education, will help incoming students from farm communities
- major in the sciences at our state higher education institutions.
- get support for career education and development in agriculture.

We need community support and enough signatures to put this on the official education platform!

For more information, call (662)245544, or email us at DennisFund6489@gmail.com

Appendix C: Tables

Chapter 2 Tables

Table 1

Descriptives, alphas, and correlations

Variables	*M, SD, α*	1	2	3
1. IBSR	5.11, 1.16, .91			
2. PPBSR	4.77, 1.42, .89	.75**		
3. SU	3.94, 1.88, .95	.38**	.47**	

Note: * *p* < .05, ** *p* < .01; IBSR = inspirational bullshit receptivity, PPBSR = pseudo-profound bullshit receptivity, SU = self-uncertainty.

Table 2

Descriptives and factor loadings for inspirational BSR

Items	*M*	*SD*	Min-Max	Factor Loadings
A charitable heart plants the seeds of progress.	5.38	1.35	1-7	.68
If we all do our part, the impossible becomes possible.	5.16	1.58	1-7	.70
A true hero does good deeds for others, and those deeds make new heroes.	5.13	1.51	1-7	.72
Without social responsibility, there is no unity, and without unity, there is no progress.	4.97	1.50	1-7	.57
Giving is the concrete that lays the foundations of civilization.	5.12	1.53	1-7	.79
Love between people is the cause and reward of unselfish action.	4.97	1.58	1-7	.78
A charitable spirit is the key to bringing all citizens together.	5.04	1.51	1-7	.78
Giving of yourself to others is the first step in building a community spirit.	5.10	1.42	1-7	.78

Table 3

Descriptives and factor loadings for pseudo-profound BSR

Items	M	SD	Min-Max	Factor Loadings
Hidden meaning transforms unparalleled abstract beauty.	4.73	1.85	1-7	.83
Perceptual reality transcends subtle truth.	4.76	1.77	1-7	.78
As you self-actualize, you will enter into infinite empathy that transcends understanding.	4.88	1.78	1-7	.81
Our minds extend across space and time as waves in the ocean of the one mind.	4.66	1.79	1-7	.78
Every material particle is a relationship of probability waves in a field of infinite possibilities. You are that.	4.83	1.70	1-7	.69
We are not an emergent property of a mechanical universe but the seasonal activity of a living cosmos.	4.76	1.72	1-7	.65

Table 4

Descriptives and factor loadings for self-uncertainty

Items	M	SD	Min-Max	Factor Loadings
On one day I might have one opinion of myself, and on another day I might have a different opinion.	4.00	2.02	1-7	.92
I wonder about what kind of person I really am.	4.05	2.00	1-7	,88
When I think about the kind of person I have been in the past, I'm not sure what I was really like.	3.82	1.99	1-7	.89
I think I know other people better than I know myself.	3.91	2.15	1-7	.90
My beliefs about myself seem to change very frequently.	3.91	2.08	1-7	.88

Table 5

Per-item inspirationality and ambiguity for IBSR

Items	Inspirational		Ambiguous	
	M	*SD*	*M*	*SD*
1. A charitable heart plants the seeds of progress.	5.38	1.35	5.16	1.38
2. Human potential is unlocked when we strive for generosity.	5.16	1.59	4.90	1.48
3. A true hero does good deeds for others, and those deeds make new heroes.	5.28	1.50	4.61	1.69
4. Generous citizenship creates a legacy of hope.	5.13	1.51	4.96	1.66
5. Only optimistic sacrifice can end the blight of poverty.	4.73	1.70	4.98	1.39
6. If we all do our part, the impossible becomes possible.	5.32	1.39	4.96	1.62
7. Self-sacrifice is a policy that lifts people up.	4.92	1.70	4.69	1.61
8. Without social responsibility, there is no unity, and without unity, there is no progress.	4.97	1.50	4.57	1.63
9. Helping the needy strengthens the bond of the brotherhood of man.	5.13	1.50	4.59	1.67
10. Generosity toward the less fortunate opens a door to community fellowship.	5.08	1.48	4.59	1.61
11. Charity is the soul of grace, and grace is the hallmark of a good community.	5.25	1.53	4.71	1.79
12. Giving someone a hand up creates a blossoming of karmic glory.	4.64	1.71	5.12	1.42
13. Giving is the concrete that lays the foundations of civilization.	5.12	1.53	4.67	1.59
14. Love between people is the cause and reward of unselfish action.	4.97	1.58	4.76	1.67
15. A charitable spirit is the key to bringing all citizens together.	5.04	1.51	4.41	1.77
16. Giving of yourself to others is the first step in building a community spirit.	5.10	1.42	4.78	1.81

Table 5 (Continued)

Per-item inspirationality and ambiguity for IBSR

	Inspirational		Ambiguous	
Items	*M*	*SD*	*M*	*SD*
17. Combining resources means access to more resources.	4.73	1.83	4.39	1.87
18. The poor are often in need of help.	4.29	1.97	4.06	2.05
19. Social cooperation is often part of a culture's value system.	4.71	1.71	4.61	1.75
20. Individuals sometimes ask for your money because they need it.	4.05	2.09	3.67	2.01

Note: "Mundane" items are in italics.

Chapter 3 Tables

Table 6

Descriptives, alphas, and correlations

Variables	*M, SD, α*	1	2	3	4
1. SA	4.96, 0.92, .73				
2. TRU	5.39, 1.07, .84	.54**			
3. BEL	5.90, 1.20, .95	.36**	.39**		
4. ACC	4.70, 1.13, 88	.51**	.51**	.48**	
5. SU	4.10, 1.08, .84	-.19**	-.12*	-.02	-.08

Note: * $p < .05$, ** $p < .01$; SA = social attractiveness, TRU = trustworthiness, BEL = believability, ACC = message acceptance, SU = self-uncertainty.

Table 7

Descriptives and factor loadings for social attractiveness

Items	*M*	*SD*	Min-Max	Factor Loadings
I think he/she could be a friend of mine.	5.14	1.26	1-7	.72
It would be difficult to meet and talk with her/him.	5.05	1.40	1-7	.41
He/she would be pleasant to be with.	5.03	1.12	1-7	.76
He/she is easy to get along with.	5.06	1.04	1-7	.74

Note: Italicized item is reverse-coded.

Table 8
Descriptives and factor loadings for trustworthiness

Items	*M*	*SD*	Min-Max	Factor Loadings
Honest ... Dishonest	5.56	1.15	1-7	.71
Trustworthy ... Untrustworthy	5.27	1.28	1-7	.82
Unethical ... Ethical	5.63	1.24	1-7	.70
Phony ... Genuine	5.10	1.54	1-7	.79

Note: Italicized item is reverse-coded.

Table 9
Descriptives and factor loadings for believability

Items	*M*	*SD*	Min-Max	Factor Loadings
False ... True	5.92	1.26	1-7	.95
Incorrect ... Correct	5.85	1.31	1-7	.91
Wrong ... Right	5.89	1.29	1-7	.90
Yes ... No	5.93	1.29	1-7	.88

Note: Italicized item is reverse-coded.

Table 10
Descriptives and factor loadings for message acceptance

Items	*M*	*SD*	Min-Max	Factor Loadings
This person shared information that is important to me.	5.05	1.31	1-7	.63
The message they shared helped me feel confident.	4.08	1.47	1-7	.74
The message they shared put thoughts in my mind that made me want to pay attention.	4.66	1.43	1-7	.85
Their messages made me think good thoughts.	5.13	1.23	1-7	.77
Their message was convincing.	4.60	1.48	1-7	.85

Table 11

Descriptives and factor loadings for self-uncertainty

Items	*M*	*SD*	Min-Max	Factor Loadings
My beliefs about myself often conflict with one another.	3.85	1.65	1-7	.73
On one day I might have one opinion of myself, and on another day I might have a different opinion.	4.64	1.67	1-7	.72
I wonder about what kind of person I really am.	4.51	1.83	1-7	.65
I feel that I am not really the person I appear to be.	3.65	1.71	1-7	.62
When I think about the kind of person I have been in the past, I'm not sure what I was really like.	3.97	1.69	1-7	.53
I seldom experience conflict between the different aspects of my personality.	4.10	1.56	1-7	.07
I think I know other people better than I know myself.	3.79	1.67	1-7	.49
My beliefs about myself seem to change very frequently.	3.89	1.65	1-7	.78
If I were asked to describe my personality, my description might end up being different from one day to another.	4.01	1.70	1-7	.72
It is often hard for me to make up my mind about things because I don't really know what I want.	4.62	1.67	1-7	.57

Note: Italicized item is reverse-coded.

Table 12

Full data cell means for message acceptance

Identity Cue:	None (Control)	Religious	Sports	Total
Control Message	$M = 4.75$, $SD = 0.89$ $n = 40$	$M = 4.74$, $SD = 1.25$ $n = 40$	$M = 4.24$, $SD = 1.15$ $n = 39$	$M = 4.58$, $SD = 1.12$ $n = 119$
Specific Reasoning	$M = 4.78$, $SD = 1.09$ $n = 40$	$M = 4.87$, $SD = 1.16$ $n = 40$	$M = 4.88$, $SD = 1.12$ $n = 38$	$M = 4.84$, $SD = 1.11$ $n = 118$
Pseudo-Reasoning	$M = 4.95$, $SD = 0.99$ $n = 37$	$M = 4.52$, $SD = 1.25$ $n = 38$	$M = 4.62$, $SD = 1.20$ $n = 38$	$M = 4.69$, $SD = 1.16$ $n = 113$
Total	$M = 4.82$, $SD = 0.99$ $n = 117$	$M = 4.71$, $SD = 1.22$ $n = 118$	$M = 4.58$, $SD = 1.18$ $n = 115$	$M = 4.70$, $SD = 1.13$ $n = 350$

Table 13

Full data dummy-coded categorical effects

Variable:	SA	TRU	BEL	ACC
Specific Reason	$R = .10, p = .15$	$\boldsymbol{R = .20, p = .002}$	$R = -.07, p = .29$	$R = .12, p = .07$
Pseudo-reason	$R = .05, p = .43$	$\boldsymbol{R = .18, p = .01}$	$R = -.07, p = .27$	$R = .05, p = .46$
Religious	$R = -.11, p = .11$	$R = -.01, p = .90$	$\boldsymbol{R = -.18, p = .01}$	$R = -.05, p = .46$
Sports	$\boldsymbol{R = -.18, p = .01}$	$\boldsymbol{R = -.18, p = .01}$	$R = -.01, p = .86$	$R = -.11, p = .09$

Note: SA = social attractiveness, TRU = trustworthiness, BEL = believability, ACC = message acceptance. Message factor correlations calculated with control groups (no reason, no identity cue) as referents.

Table 14

Full data cell means for trustworthiness

Identity Cue:	None (Control)	Religious	Sports	Total
Control Message	$M = 5.42$, $SD = 0.98$ $n = 40$	$M = 5.28$, $SD = 1.14$ $n = 40$	$M = 4.64$, $SD = 1.15$ $n = 39$	$M = 5.12$, $SD = 1.13$ $n = 119$
Specific Reasoning	$M = 5.58$, $SD = 1.02$ $n = 40$	$M = 5.66$, $SD = 1.15$ $n = 40$	$M = 5.47$, $SD = 1.02$ $n = 38$	$M = 5.57$, $SD = 1.06$ $n = 118$
Pseudo-Reasoning	$M = 5.56$, $SD = 1.00$ $n = 37$	$M = 5.47$, $SD = 1.07$ $n = 38$	$M = 5.36$, $SD = 0.83$ $n = 38$	$M = 5.49$, $SD = 0.97$ $n = 113$
Total	$M = 5.52$, $SD = 0.99$ $n = 117$	$M = 5.50$, $SD = 1.12$ $n = 118$	$M = 5.15$, $SD = 1.07$ $n = 115$	$M = 5.39$, $SD = 1.07$ $n = 350$

Table 15

Christian sample cell means for trustworthiness

Identity Cue:	None (Control)	Religious	Sports	Total
Control Message	$M = 5.42,$ $SD = 0.96$ $n = 29$	$M = 5.38,$ $SD = 1.16$ $n = 31$	$M = 4.73,$ $SD = 1.18$ $n = 28$	$M = 5.19,$ $SD = 1.14$ $n = 88$
Specific Reasoning	$M = 5.48,$ $SD = 1.07$ $n = 31$	$M = 6.00,$ $SD = 1.01$ $n = 30$	$M = 5.53,$ $SD = 1.12$ $n = 29$	$M = 5.67,$ $SD = 1.08$ $n = 90$
Pseudo-Reasoning	$M = 5.56,$ $SD = 0.88$ $n = 26$	$M = 5.84,$ $SD = 0.85$ $n = 25$	$M = 5.34,$ $SD = 0.84$ $n = 27$	$M = 5.57,$ $SD = 0.87$ $n = 78$
Total	$M = 5.48,$ $SD = 0.97$ $n = 86$	$M = 5.73,$ $SD = 1.05$ $n = 86$	$M = 5.21,$ $SD = 1.10$ $n = 84$	$M = 5.47,$ $SD = 1.06$ $n = 256$

Table 16

Football fan cell means for message acceptance

Identity Cue:	None (Control)	Religious	Sports	Total
Control Message	$M = 4.54,$ $SD = 1.10$ $n = 13$	$M = 4.61,$ $SD = 1.02$ $n = 17$	$M = 4.06,$ $SD = 0.89$ $n = 14$	$M = 4.41,$ $SD = 1.01$ $n = 44$
Specific Reasoning	$M = 4.78,$ $SD = 1.17$ $n = 18$	$M = 4.96,$ $SD = 1.24$ $n = 19$	$M = 5.38,$ $SD = 1.17$ $n = 9$	$M = 4.84,$ $SD = 1.19$ $n = 46$
Pseudo-Reasoning	$M = 5.10,$ $SD = 0.58$ $n = 16$	$M = 4.57,$ $SD = 1.46$ $n = 18$	$M = 4.78,$ $SD = 0.75$ $n = 20$	$M = 4.80,$ $SD = 1.01$ $n = 54$
Total	$M = 4.82,$ $SD = 0.99$ $n = 47$	$M = 4.72,$ $SD = 1.24$ $n = 54$	$M = 4.67,$ $SD = 1.00$ $n = 43$	$M = 4.74,$ $SD = 1.09$ $n = 144$

Chapter 4 Tables

Table 17

Surveyed sample descriptives, alphas, and correlations

Variables	*M, SD, α*	1	2	3	4
1. SA	5.60, 1.02, .61				
2. TRU	5.39, 1.07, .84	.51**			
3. BEL	5.90, 1.20, .85	.42**	.69**		
4. COMP	4.70, 1.13, n/a	.23*	.16	-.02	
5. SU	4.10, 1.08, .80	-.21*	-.35**	-.37**	.04

Note: * $p < .05$, ** $p < .01$; SA = social attractiveness, TRU = trustworthiness, BEL = believability, COMP = compliance, SU = self-uncertainty. COMP is a single factor.

Table 18

Descriptives and factor loadings for social attractiveness

Items	*M*	*SD*	Min-Max	Factor Loadings
I think he/she could be a friend of mine.	5.52	1.54	1-7	.85
I would like to have a friendly chat with her/him.	5.60	1.50	1-7	.90
We could never establish a personal friendship with each other.	5.18	1.81	1-7	.48
He/she just wouldn't fit into my circle of friends.	6.11	1.09	2-7	.06

Note: Italicized items are reverse-coded.

Table 19
Descriptives and factor loadings for trustworthiness

Items	*M*	*SD*	Min-Max	Factor Loadings
Honest ... Dishonest	6.06	1.29	2-7	.84
Untrustworthy ... Trustworthy	5.99	1.20	2-7	.84
Moral ... Immoral	5.65	1.78	1-7	.76
Phoney ... Genuine	5.85	1.44	1-7	.64

Note: Italicized items are reverse-coded.

Table 20
Descriptives and factor loadings for believability

Items	*M*	*SD*	Min-Max	Factor Loadings
Agree ... Disagree	5.94	1.38	1-7	.78
False ... True	5.64	1.52	1-7	.76
Incorrect ... Correct	5.67	1.46	2-7	.80
Yes ... No	5.81	1.32	2-7	.71

Note: Italicized items are reverse-coded.

Table 21
Descriptives and factor loadings for self-uncertainty

Items	*M*	*SD*	Min-Max	Factor Loadings
I feel that I am not really the person I appear to be.	2.41	1.60	1-7	.59
When I think about the kind of person I've been in the past, I'm not sure what I was really like.	2.85	1.72	1-7	.75
If I were asked to describe my personality, my description might end up being different from one day to another.	3.03	1.84	1-7	.81
In general, I have a clear sense of who I am and what I am.	2.24	1.40	1-7	.66

Note: Italicized item is reverse-coded.

Table 22

Full data cell means for compliance

Identity Cue:	None (Control)	Religious	University	Total
Control Message	$M = 2.60$, $SD = 1.19$ $n = 48$	$M = 2.17$, $SD = 1.28$ $n = 41$	$M = 2.24$, $SD = 1.40$ $n = 49$	$M = 2.35$, $SD = 1.30$ $n = 138$
Specific Reasoning	$M = 2.73$, $SD = 1.30$ $n = 44$	$M = 2.34$, $SD = 1.45$ $n = 35$	$M = 2.51$, $SD = 1.04$ $n = 35$	$M = 2.54$, $SD = 1.27$ $n = 114$
Pseudo-Reasoning	$M = 2.68$, $SD = 1.18$ $n = 50$	$M = 2.62$, $SD = 1.47$ $n = 37$	$M = 2.81$, $SD = 1.28$ $n = 38$	$M = 2.70$, $SD = 1.29$ $n = 123$
Total	$M = 2.67$, $SD = 1.21$ $n = 142$	$M = 2.37$, $SD = 1.40$ $n = 113$	$M = 2.49$, $SD = 1.28$ $n = 120$	$M = 2.52$, $SD = 1.29$ $n = 375$

Table 23

Surveyed sample cell means for compliance

Identity Cue:	None (Control)	Religious	University	Total
Control Message	$M = 3.10$, $SD = 0.88$ $n = 10$	$M = 2.76$, $SD = 0.97$ $n = 17$	$M = 2.89$, $SD = 1.05$ $n = 9$	$M = 2.35$, $SD = 0.95$ $n = 36$
Specific Reasoning	$M = 3.50$, $SD = 0.91$ $n = 12$	$M = 3.00$, $SD = 1.23$ $n = 9$	$M = 3.17$, $SD = 1.17$ $n = 9$	$M = 2.54$, $SD = 1.09$ $n = 30$
Pseudo-Reasoning	$M = 3.44$, $SD = 0.73$ $n = 9$	$M = 3.78$, $SD = 0.67$ $n = 9$	$M = 3.39$, $SD = 0.82$ $n = 10$	$M = 2.70$, $SD = 0.79$ $n = 28$
Total	$M = 3.35$, $SD = 0.84$ $n = 31$	$M = 3.09$, $SD = 1.04$ $n = 35$	$M = 2.89$, $SD = 0.98$ $n = 28$	$M = 3.13$, $SD = 0.96$ $n = 94$

Table 24

Dummy-coded categorical effects

Variable:	SA	TRU	BEL	COMPa	COMPb
Specific Reason	*R* = .23, *p* = .07	*R* = -.04, *p* = .74	*R* = -.07, *p* = .60	*R* = .14, *p* = .27	*R* = .08, *p* = .23
Pseudo-reason	*R* = .04, *p* = .74	*R* = -.06, *p* = .64	*R* = -.04, *p* = .75	***R = .28, p = .03***	***R = .13, p = .03***
Religious	*R* = -.08, *p* = .50	*R* = .07, *p* = .59	*R* = -.03, *p* = .80	*R* = -.14, *p* = .26	*R* = -.11, *p* = .07
University	*R* = -.08, *p* = .55	*R* = -.09, *p* = .51	*R* = -.15, *p* = .25	*R* = -.23, *p* = .08	*R* = -.07, *p* = .25

Note: SA = social attractiveness; TRU = trustworthiness; BEL = believability; COMPa = compliance, survey sample; COMPb = compliance, full sample. Message factor correlations calculated with control groups (no reason, no identity cue) as referents.

Vita

Dennis N. McCarty grew up moving house every three or four years with his parents and four sisters, his father having served as a chaplain in the U.S. Air Force. He learned to appreciate change and pluralism in the highly mobile military dependent lifestyle, and he developed a thirst for knowledge and wild theorizing. In his adult life, he has embraced new travel experiences and sought to hone his skills as a writer and artist.

Dennis graduated with his B.A. in Print Journalism and his M.S. in Education from Harding University in, respectively, 2006 and 2012. He has spent most of his career teaching oral and written communication skills to adult learners, his first full time teaching job being as an instructor of English as a foreign language in Wuhan, Hubei Province, China. He began his doctoral studies at the University of Tennessee in 2018, during which he focused his research on interpersonal influence processes.

Dennis continues to carry out research projects concerning compliance gaining messages and interpersonal communication through a social cognition lens, and he has committed himself to service to the communication discipline by contributing to reviewing and administration for divisions of the National Communication Association and the Southern States Communication Association. He aspires to use his knowledge to continue teaching and empowering emerging adults, as well as to continue expanding communication theory regarding fundamental patterns of influence through experimental research.