

**Truth, Lies, and Bias:
Challenging Interpersonal Deception Theory**

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COMM 519: Capstone Seminar

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18 April 2021

Abstract

Each and every day, we become senders and receivers of deception. As receivers, at times, we experience suspicion which, when visible, can alter the course of the deception. Most people believe they are far better at identifying deception than research shows to be true. All of this falls under the rather large umbrella of Interpersonal Deception Theory (IDT). IDT is a macro-level deception theory that has much support in the Communication field and was originally theorized by Buller and Burgoon, but it also has its challengers. There is a noteworthy group who feel their work discredits IDT and renders it useless. In the process of this project, arguments for and against will be laid out in plain and organized fashion, and the reader will have the opportunity to judge for themselves.

Keywords: communication, interpersonal, deception, theory, interaction, deceiver

Chapter 1: Introduction and Theoretical Framework

David Buller and Judee Burgoon (1996) studied deception in experiments throughout their careers. What they found is that people often find themselves obliged to lie in situations in order to keep from clashing with others, make themselves look better, save face for someone else, move a relationship ahead, or move a relationship backward. They talk about lying, telling half-truths, or simply being evasive (Griffin, Ledbetter, & Sparks, 2015). “Buller and Burgoon label these three strategies *falsification*, *concealment*, and *equivocation*” (Griffin et al., 2015, p. 98). Interpersonal Deception Theory (IDT), claims that these three strategies are harder to notice than the average person would think. Most people think that they would notice certain nonverbal cues, tipping them off that someone is lying. However, the large part of deception research shows that the nonverbal cues traditionally associated with deception, such as rushed speech and lack of eye contact, do not result in deception any more than they do honesty (Griffin et al., 2015). “When tested under controlled laboratory conditions, people rarely are more than 60 percent accurate in their ability to spot deception, while a just-by-chance 50 percent detection rate is more common” (Griffin et al., 2015, p. 99). Buller and Burgoon saw that much of the previous research on deception did not involve a degree of interaction. Interaction, they realized, is key to deception because a receiver’s reaction to deception often alters the course of the deception itself. In order to describe the reality of multi-faceted interactions between receivers and deceivers, there was a need for an IDT (Griffin et al., 2015, p. 99).

The theory has many aspects. These are the propositions of IDT, as summarized by Griffin et al. (2015):

1. What deceivers and respondents think and do varies according to the amount of interactive give-and-take that's possible in the situation.

2. What deceivers and respondents think and do varies according to how well they know and like each other.
3. Deceivers make more strategic moves and leak more nonverbal cues than truth tellers.
4. With increased interaction, deceivers make more strategic moves and display less leakage.
5. Deceivers' and respondents' expectation for honesty (truth bias) is positively linked with interactivity and relational warmth.
6. Deceivers' fear of being caught and the strategic activity that goes with that fear are lower when truth bias is high, and vice versa.
7. Motivation affects strategic activity and leakage. (a) People who deceive for their own self-gain make more strategic moves and display more leakage. (b) The way respondents first react depends on the relative importance of the relationship and their initial suspicion.
8. As relational familiarity increases, deceivers become more afraid of detection, make more strategic moves, and display more leakage.
9. Skilled deceivers appear more believable because they make more strategic moves and display less leakage than unskilled deceivers.
10. A deceiver's perceived credibility is positively linked to interactivity, the respondent's truth bias, and the deceiver's communication skill but goes down to the extent that the deceiver's communication is unexpected.
11. A respondent's accuracy in spotting deception goes down when interactivity, the respondent's truth bias, and the deceiver's communication skill go up. Detection is positively linked to the respondent's listening skills, relational familiarity, and the degree

to which the deceiver's communication is unexpected.

12. Respondents' suspicion is apparent in their strategic activity and leakage.

13. Deceivers spot suspicion when it's present. Perception of suspicion increases when a respondent's behavior is unexpected. Any respondent reactions that signal disbelief, doubt, or the need for more information increase the deceiver's perception of suspicion.

14. Real or imagined suspicion increases deceivers' strategic activity and leakage.

15. The way deception and suspicion are displayed within a given interaction changes over time.

16. In deceptive interactions, reciprocity is the most typical pattern of adaptive response.

17. When the conversation is over, the respondent's detection accuracy, judgment of deceiver credibility, and truth bias depend on the deceiver's final strategic moves and leakage as well as the respondent's listening skill and remaining suspicions.

18. When the conversation is over, the deceiver's judgment of success depends on the respondent's final reaction and the deceiver's perception of lasting suspicion (p. 99).

In this project, IDT will be used as the foundation of all inquiry. In the process of exploring IDT, light will be shed on findings that resulted directly from its ideas, and ones that resulted from disagreement with the theory. In the process, there will hopefully arise a better understanding of human deception. The world of human communication is fascinating, and each new addition to communication knowledge is worthy of investigation. This is how truth is sought, and how an understanding of humankind can be had.

Problem Statement

A lot has happened in the world of Communication since IDT was theorized. There is doubt as to the firm hold IDT has on the realities of deception. Challengers have emerged over the past 25 years, and it is important to sift through them. IDT is not the first attempt at understanding deception. Just as studies prior to IDT may have been limited or flawed, flaws and limitations have been found in IDT by multiple parties. Each new study that references IDT either confirms or challenges the ideas that Buller and Burgoon put forth in 1996. It is up to the reader to decide where IDT stands after all of these years.

Significance of the Study

Deception is a common mammalian game, and with their intellectual capabilities, humans are likely the all-time masters of deception. Based on comments by R.W. Mitchell and N.S. Thompson (1986), ‘human deception develops out of previous expectations which are built on communication and knowledge. The deceptive person designs a pretension tailored to the beliefs of the victim, thereby succeeding in extending a lie or changing existing convictions.’ (Hermann, 2016, p. 44)

Humans are so skilled in deception because it is something that happens all the time. “Deception and suspected deception arise in at least one quarter of all conversations (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1994; Turner, Edgley, & Olmstead, 1975)” (Buller & Burgoon, 1996, p. 203). Humans spend a great deal of time straying from the truth. There have to be methods for understanding that deception. How can we begin to detect deception if we do not understand it? As mentioned, the likelihood of identifying deceptive communication is around 50%. There is a need to better understand deceptive communication in order to know when it is happening. When police officers interview a subject, it would help them a great deal to have methods they can use to tell if the subject is deceptive. When romantic partners become less

than trustworthy, their counterparts need ways of discovering if they can be trusted. It is theories such as IDT and the other devices mentioned throughout this project that have the power to open up new passages of thought regarding deceptive communication. Lying is so common among humans that we even lie to ourselves. Through the building up of structures of knowledge on deception, we can begin to solve the age-old riddle of deception. If we can understand how deception works, maybe we can make so we can have a degree of certainty as to whether or not deception exists in a give circumstance. According to Buller and Burgoon (1996), what we do in the process of communication is able to affect each party's thoughts and actions, and an incredibly important aspect of communication is the ability to judge credibility. Their work is remarkably significant, as is the work that follows in its footsteps.

Research Question

This project investigates ways in which evaluations of the communications IDT theory have evolved over the years. Specifically, it will look at how communication scholars responded to IDT, and how Buller and Burgoon countered those responses. It will consider the studies that claim to reject IDT, as well as the studies that confirm the phenomena predicted by IDT. The question it will ask will be simple:

RQ: How has deception research evolved since IDT was theorized?

Limitations

This project is not without its limitations. Obviously, the findings are limited to those that are able to rooted out on the basis of an individual effort. It is possible that, in the process of researching where deception research has travelled since IDT, there will be studies that are missed or simply omitted based on the judgement of the author. This project is limited due to the fact that it will not be comprehensive, or even try to be comprehensive, due to the large amount

of research in the field of Communication and deception, more specifically. That being said, the author will make the best effort to address writings that directly confirm and disagree with IDT. Also, there will be an effort to present some of the history of deception research. This will be limited to those who later chose to discuss IDT. This will give a perspective on their views regarding IDT, but will be limited in the sense that previous research on deception will be omitted. In the interest of zeroing in on the ripples created by IDT, the project will be limited in its scope, and as mentioned before, will not be comprehensive. This project attempts to trace the influence of IDT over the years.

Further, there are limitations caused by the era in which this project has been researched. Throughout most of 2020 and the part of 2021 that has already come to pass, the Coronavirus pandemic has affected basically every aspect of human life. This includes the field of research. The retrieval of information not found online has become essentially impossible, as universities have closed their doors and retreated to online formats. Because this project was created based solely upon sources that can be found online, it lacks the well-rounded nature of pre-pandemic research. Luckily, many books and most journals exist in online formats.

Definitions

For the purpose of providing definitions that pertain to this project, there will be a focus on the definitions provided by Buller and Burgoon (1996) in their original article theorizing IDT. While other scholars may find there are more specific or detailed definitions, it seems appropriate to include the very basic and broad definitions that Buller and Burgoon put forth at the beginning of their article. If everything will be looked through the lens of IDT, why not utilize the definitions most pertinent to the theory? The definitions that follow will provide an appropriate background for this project.

Interpersonal Communication

According to Buller and Burgoon (1996),

Interpersonal communication, at its simplest, can be defined as the dynamic exchange of messages between two (or more) people. Interpersonal communication may or may not be interactive: To the extent that it entails synchronous rather than delayed turn exchanges and opportunities for immediate feedback and mutual influence, it is interactive (p. 205).

They wanted to start with a more general definition because scholars tend to disagree about the finer points of interpersonal communication (Buller & Burgoon, 1996). “Scholars disagree on whether interpersonal communication must also be dyadic, face-to-face, unmediated, idiosyncratic or ‘personal’ in character” (Buller & Burgoon, 1996, p. 205). This definition is more than adequate for the purposes of this project because it is not colored with opinion. It is a simple, widely agreed upon definition that can carry us through the extent that this project wishes to travel. For the purpose of this project, we will be investigating face-to-face interpersonal communication. One of the main reasons that IDT was theorized was to describe what happens during face-to-face communication (Buller & Burgoon, 1996)

Deception

According to Buller and Burgoon (1996),

Deception is defined as a message knowingly transmitted by a sender to foster a false belief or conclusion by the receiver (see Ekman, 1985, and Knapp & Comadena, 1979, for further discussions of definitional issues in deception). More specifically, deception occurs when communicators control the information contained in their messages to convey a meaning that departs from the truth as they know it. This rules out mistaken or

unintended lies. The receiver's counterpart to deception is perceived deceit or suspicion.

Suspicion refers to a belief, held without sufficient evidence or proof to warrant certainty, that a person's speech or actions may be duplicitous. (p. 205)

It is important to be aware of both deception and suspicion, because, in looking at interpersonal deception, we must look at both the sender and the receiver's experiences. This is because both the sender and receiver have influence over one and other (Buller & Burgoon, 1996). "IDT is a theory of deception and reactions to actual or perceived deception" (Buller & Burgoon, 1996, p. 206)

Chapter 2: Literature Review

Now that we understand the meaning of *interpersonal communication* and *deception*, we can move on to a thorough review of the literature surrounding the intersection of these topics and IDT. It is important to not only consider those studies that confirmed or challenged IDT, but also to see what some of those researchers had to say about the field of interpersonal deception prior to the theorization of IDT. Combining the critical and the congratulatory with some of the very building blocks of deception research will give us some idea of where IDT came from, and where it has gone since it was theorized.

Telling Lies

In DePaulo and Rosenthal's 1979 study, Men and women (20 each) were videotaped while describing someone they liked, someone they disliked, someone they were ambivalent about, someone they were indifferent about, someone they liked as though they disliked him or her, and someone they disliked as though they liked him or her. Accuracy at detecting that some deception had occurred was far greater than accuracy at detecting the true underlying affect, and people who were good at detecting that deception was occurring were not particularly skilled at reading the speakers' underlying affects. However, people whose deception attempts were more easily detected by others also had their underlying affects read more easily. Speakers whose lies were seen more readily by men also had their lies seen more readily by women, and observers better able to see the underlying affects of women were better able to see the underlying affects of men. Skill at lying successfully was unrelated to skill at catching others in their lies. A histrionic strategy (hamming) was very effective

in deceiving others, and this strategy was employed more by more Machiavellian people, who also tended to get caught less often in their lies (p. 1713)

This an earlier example of a study that most likely influenced Buller and Burgoon in their theorization of IDT. Bella DePaulo's work was cited extensively in the 1996 article on the theory. It is unsurprising that DePaulo would later become one of the leading critics of the theory. She was studying deception long before IDT was theorized.

Actual and Perceived Cues to Deception: A Closer Look at Speech

This study examines “specific verbal and paralinguistic cues that might reveal when deception is occurring or that might be used by perceivers in their attempts to detect deception” (DePaulo, Rosenthal, Rosenkrantz, & Green, 1982, p. 291). It also examines “quantitatively the correspondence between actual cues to deception and perceived cues to deception” (DePaulo et al., 1982, p. 291). DePaulo et al.'s (1982) results were as follows:

When senders pretended to like people they really disliked, their descriptions were less positive and more neutral than when they honestly described people they really did like. When feigning disliking, senders uttered more nonfluences than when expressing honest disliking. All of these cues were used by perceivers in their judgments of deceptiveness; in addition, perceivers judged as deceptive descriptions that were spoken slowly and contained many um's and er's (p. 291)

This study likely had an influence on Buller and Burgoon's later work in the area of deception. However, Buller and Burgoon mainly discuss nonverbal cues. It is possible that they saw DePaulo et al.'s work on the subject of verbal cues as comprehensive, and did not feel the need to include sections on it as they theorized IDT. Regardless, this is an important article on speech and deception.

Effects of Actual Deception and Suspiciousness of Deception on Interpersonal Perceptions

There are certain benefits to being the deceiver in a conversation. For one, they can analyze their targets responses in order to decide how to best deceive them. That being said, there are benefits, as well, to being the target. They can ask probing questions and attempt to lead the deceiver into giving up their position. Of course, the target must have some idea that they are the target of deception in order to capitalize on the benefits of being the target (Toris & DePaulo, 1984).

In this article that predates IDT, interviewers were asked to interview outgoing and reserved interviewees. In the process, an equal number of interviewees were deceptive and truthful. For example, those who were naturally outgoing acted reserved, and vice versa. The results showed that interviewers could not better identify deceptive behavior when they were told that deception was on the way. Interviewees who were questioned by interviewers with foreknowledge about deception felt they had less success furthering their false image (Toris & DePaulo, 1984).

Interpersonal Deception Series

Buller and Burgoon first published their theorization of IDT in 1996, but as early 1991 they had begun deriving the theory in articles published in a wide variety of scholarly journals. What begins as an article by Buller quickly turns into a full series on Interpersonal Deception, with Burgoon soon joining the fold. Each one serves to bolster and provide evidence for IDT and its described phenomenon. They both lay the groundwork for the theory and confirm it. Included here are pertinent selections from that series.

Article 1: “Deceivers’ Reactions to Receivers’ Suspicious and Probing”

Buller, Strzyzewski, & Comstock (1991) found that most previous research was focused on basic psychological processes that affected the behavior of deceivers. Receivers were not seen to actively join in the process of communication. In fact, both receivers and deceivers were considered to lack any choice about or influence on the process of communication, and receivers were seen as mere spectators rather than functional participants. It was not very often that receivers were seen to respond to deceivers' communications, actually influencing the character of the deceptive messages through their responses.

The first article in the Interpersonal Deception series investigates the possibility that probing could be an effective strategy in detecting deception. It suggests the idea that probing questions actually serve to provide evidence of deception suspicion, leading deceivers to correct their nonverbal communication in order to seem more honest in the face of suspicion (Buller, Strzyzewski, & Comstock, 1991). As Griffin et al. (2015) summarized about IDT, "real or imagined suspicion increases deceivers' strategic activity and leakage" (p. 99). The findings of this article simply confirm an aspect of this IDT postulation.

Article 2: "The Inferiority of Conversational Participants as Deception Detectors"

Before 1991, "most studies of deception detection [had] examined assessments of veracity by observers of deception rather than actual participants in deceptive conversations" (Buller, Strzyzewski, & Hunsaker, 1991, p. 25), but, at the time this article was published, scholars were beginning to investigate the deception detection abilities of active conversational participants. This work would inform, support and build the theory of IDT, which was still in process. The article arrived at the same time, and in the same scholarly journal, as the first article in the Interpersonal Deception series.

This study juxtaposed the ability to detect deception of those taking part in communication and those serving as bystanders to communication. It was anticipated that those taking part in communication would have a higher degree of truth-bias than those standing on the outside looking in. It was also expected that they would have a more difficult time noticing deceptive communication (Buller, Strzyzewski, & Hunsaker, 1991) Because very little research had been done in this area, the results held added weight at the time.

This article created a foundation for IDT's postulation that "a respondent's accuracy in spotting deception goes down when interactivity, the respondent's truth bias, and the deceiver's communication skill go up. Detection is positively linked to the respondent's listening skills, relational familiarity, and the degree to which the deceiver's communication is unexpected" (Griffin et al., 2015, p. 99). By allowing researchers to begin focusing on those who are being deceived, this huge step in deception research blazed a trail for others to follow. It also formed some of the building blocks for IDT.

Article 3: "Effects of Deceit on Perceived Communication and Nonverbal Behavior Dynamics"

At the beginning of this article, Burgoon and Buller (1994), stated:

Much past research on deception has examined it individually and noninteractively. Here we argue for broadening our understanding of deception by examining it as a dyadic and interactive event. Assumptions of an interpersonal perspective, articulated in Interpersonal Deception Theory, are advanced. These include recognizing the agency of both parties to interpersonal exchanges, examining such exchanges at multiple levels, incorporating measures of communication related perceptions and interpretations as well

as behaviors, recognizing that behaviors may be strategic as well as nonstrategic, and viewing such behavior as dynamic rather than static (p. 155)

This article consists of a study in which subjects were told to be varying degrees of truthful and untruthful to interviewers. Interviewers were told to act as if they suspected the interviewees to varying degrees. The results were consistent with IDT: deceivers were more unsure and indefinite, less immediate and more reserved, lacked a positive affect and composure, and generally made a worse impression than people who were telling the truth.

“An interpersonal perspective requires conceptualizing and analyzing deception as a dynamic, evolving process. If a receiver's awareness of partner's possible duplicity {a.k.a. suspicion) sets up a chain reaction of offensive and defensive maneuvers by both, then behavioral patterns evidenced at the outset of an exchange may differ radically from those manifested later.” (Burgoon & Buller, 1994, p.158). This article is important because it continues to recognize “the agency of *both* parties in shaping the interchange” and “encourages distinguishing strategic from nonstrategic activity” (Burgoon & Buller, 1994, p.157).

Article 4: “Effects of suspicion on perceived communication and nonverbal behavior dynamics”

IDT postulates that suspicion on the part of the audience can cause behavioral changes on the part of the deceiver. In this study, interviewers were encouraged to be suspicious or unsuspecting of people who may or may not have been telling the truth. Results showed that the deceivers altered their behavior based on perceived suspicions coming from the interviewers (Burgoon, Buller, Dillman, & Walther, 1995).

The authors were in the process of testing different aspects of IDT, before it was published. In this article they were focusing on the level of suspicion of someone who is the

target of deception. The fact that the target is able to influence the deceiver through varying degrees of suspicion made these targets a much more important part of the process of deception than previously understood. At the crux of the issue was a study of the communication between deceivers and deception targets (Burgoon et al., 1995). As Griffin et al. (2015) summarized about IDT, “real or imagined suspicion increases deceivers' strategic activity and leakage” (p. 99). The idea that deceivers are influenced by receivers' suspicion was confirmed.

Article 5: “Accuracy in Deception Detection”

“Guided by interpersonal deception theory, the... experiment examines the influences of suspicion, deception type, question type, relational familiarity, and expertise on accuracy in detecting truth and deceit. An adult sample of novices and a second sample of experts (military intelligence instructors and related military personnel) participated in interviews with strangers or acquaintances during which interviewers gave some truthful answers and some deceptive answers” (Burgoon, Buller, Ebesu, & Rockwell, 1994, p. 303). Half of the interviewers were told to act suspicious. They found that there is indeed a truth-bias in interpersonal communication, that familiarity leads people to attribute honesty to their conversational partners, “that suspicion led experts and novices to see acquaintances as even more honest and strangers as even less honest” (Burgoon et al., 1994, p. 318), and that interviewers judged falsification as a deception strategy most poorly (Burgoon et al., 1994). There are a number of propositions of IDT that discuss truth bias, as shown previously. This study is a good jumping off point to an in-depth discussion of truth bias.

This is the first of the Interpersonal Deception series to address deception detection directly. Burgoon et al. (1994) discuss the fact that, over the years, a trend has been seen towards dishonesty, whether it be business, interpersonal, or academic. There was an urgent

need for inquiry into deception detection. The opposing force to deception is suspicion, and targets of deception can use their suspicion as a way to detect deception.

Article 6: “Effects of Preinteractional and Interactional Factors on Deceiver and Observer Perceptions of Deception Success”

Previous research on whether deception is successful has centered around the views of the person being lied to, ignoring what the deceiver thinks. This study looks at how different aspects before and during deception affect what the deceiver and those observing think about how successful the deception is. The researchers found that these aspects differed for receivers and deceivers” (Burgoon, Buller, Guerrero, & Feldman, 1994). “In line with [IDT] (Buller & Burgoon, 1994, in press; Burgoon & Buller, 1994), the success of a deceptive act is hypothesized to depend on both communication-relevant preinteractional factors (e.g., self monitoring, social skills) and interactional factors (i.e., those associated with actual communication between interactants” (Burgoon et al., 1994, p. 263).

This study has a fresh perspective for the time because it looks at deception from more than one viewpoint. In the past, people were asked how it felt to be lied to, and whether they thought someone was lying or not. This study’s “results clearly indicate that senders and receivers are not on the same ‘wavelength’” (Burgoon et al., 1994, p. 277).

Article 7: “Behavioral Profiles of Falsification, Equivocation, and Concealment”

Previous research on deception has typically examined how deceivers behave when falsifying information in a noninteractive context. Guided by [IDT], the authors propose that deception may take a variety of forms, reflecting differences in the way senders strategically control message information and the differences in the behavioral profiles accompanying those strategies. The current experiment examined the impact of deception

type (falsification, concealment, equivocation), receiver suspicion, receiver expertise, and relational familiarity on strategic and nonstrategic behavior. Two adult samples, novices and experts (military intelligence instructors), participated. Interviewers, half of whom were induced to be suspicious, followed a standard protocol of questions. Interviewees answered the first two questions truthfully and then enacted one of the deception forms. Participants evaluated one another's behavior after the interview, and trained coders measured the nonverbal behavior. No clear behavioral profile emerged for deception in general. Instead, behaviors associated with deception were strongly influenced by deception type, suspicion, and familiarity, suggesting that preinteractional and interactional features are important determinants of sender behavior. Of the deception types, participants rated equivocation as most brief, vague, and hesitant, whereas falsification was rated lowest on these characteristics. Behaviorally, senders were best able to suppress behavioral activity when equivocating and least able to when falsifying (Buller, Burgoon, White, & Ebesu, 1994, p. 366).

IDT highlights strategy when it comes to conversational interplay during deception (Buller et al., 1994). “IDT combines assumptions from the study of deception and interpersonal communication to move beyond individual and internal psychological processes to dyadic and external communicative patterns that defy explanation by a single intrapsychic, behavioral, or interpersonal mechanism” (Buller et al., 1994, p. 367). This is a key study in support of IDT because preinteractional and interactional factors we were not often looked at in past studies. This makes results related to IDT more complex than previous research (Buller et al., 1994).

Theories About Deception and Paradigms for Studying It: A Critical Appraisal of Buller and Burgoon’s Interpersonal Deception Theory and Research

DePaulo, Ansfield, and Bell (1996) had “serious reservations about the usefulness of [Buller and Burgoon’s] perspective as currently articulated as a guide to research and even deeper concerns about the methodological and substantive adequacy of the research that they have reported in the pair of empirical papers in this section of the special issue” (p. 297). They claim that IDT is “a synthesis but not a theory” (DePaulo et al., 1996, p. 297), partially because it never asks *why* about the deception issue (DePaulo et al., 1996).

As stated by DePaulo et al. (1996),

Even if we had no reservations whatsoever about the methodology of the study, we would still have concerns about the results. Together, the three of us have puzzled for many hours over these results. We are highly motivated and interested readers of the research on deception. But we cannot make sense of the results in either of the two empirical papers that are reported in this section of the issue. We all found it frustrating even to try (p. 308).

Reflections on the Nature of Theory Building and the Theoretical Status of Interpersonal Deception Theory

This article is a response by Burgoon and Buller (1996) to the fact that their “colleagues chose... to center on whether IDT *is* a theory, whether it is needed, and whether the two sample empirical investigations testing it are valid” (p. 311). DePaulo and others challenge whether or not IDT is even a theory, and whether its claims are explainable.

In response to DePaulo et al., Burgoon and Buller (1996) state,

We have said that IDT is in its early developmental stages. As such, it is best viewed as a work in progress and will doubtless undergo changes as the body of interactive deception data accumulates and we flesh out further the explanatory calculus of the theory. Of

course, the real test of IDT will be in how well the hypotheses generated by it withstand empirical tests and how well it accounts for other empirical data. We are encouraged by the results so far and believe that IDT offers the most comprehensive and coherent characterization of deception in interpersonal contexts to date (p. 327).

Testing Interpersonal Deception Theory: The Language of Interpersonal Deception

As evidenced by the title of the article, this study tests IDT. Researchers “investigated verbal nonimmediacy, which [they] believe is used strategically by senders to withhold information, appear vague or uncertain, and be less specific” (Buller, Burgoon, Buslig, & Roiger, 1996, p. 285). IDT predicts “that language choice in deceptive messages would reflect strategic attempts to manage information through nonimmediate language... IDT also holds that communicators manage verbal behavior to deceive successfully” (Buller et al., 1996, p. 268).

Buller et al. (1996) found that, “Ultimately, the data provided additional confirmation for IDT. As explained by the theory, communicators adapt to changes in ongoing interaction, by selecting alternative deception forms. They also adapt to receiver suspicion and to preexisting characteristics of conversational patterns, in this case relational and behavioral familiarity” (p. 285).

A Probability Model of Accuracy in Deception Detection Experiments

Levine et al. (1999) question the conclusions drawn from previous detection accuracy studies. Levine et al. show that because people are most often truth-biased, only truth accuracy is above chance and that lie accuracy is typically below chance variables (e.g., familiarity, suspicion, probing) are often not general across truth and lie accuracy. An individual’s accuracy in detecting lies is also contingent the ratio of lies to the total number of statements judged (i.e., the truth-lie base rate). These findings challenge

several previously and widely held beliefs about deception detection including the belief that humans can detect deception at slightly above chance levels (Park & Levine, 2001, p. 201)

The Effects of Truth–Lie Base Rate on Interactive Deception Detection Accuracy

According to Levine, Clare, Green, Serota, and Park (2014),

The truth–lie base rate is a critical yet underappreciated factor in deception detection. It refers to the proportion of truthful and deceptive messages judged in a deception detection task. It is theoretically important because the nature of the base-rate effect has implications for the plausibility of key theoretical assumptions that undergird and distinguish between different theories of deceptive communication (p.350).

At the center of this study is the Park-Levine Model (PLM), which presents a different view of deception than IDT. As Levine et al. (2014) put it,

No historically influential deception theory includes base rate as part of its logic, explanation, or prediction. Base rates play no role in the explication of leakage (Ekman & Friesen, 1969), four-factor theory (Zuckerman, DePaulo, & Rosenthal, 1981), or IDT (Buller & Burgoon, 1996). As no historically influential theory of deception has suggested that base rate might be important, the efforts of most deception researchers have been invested elsewhere (p. 351).

Rejoinder to Levine, Clare et al.’s Comparison of the Park–Levine Probability Model

Versus Interpersonal Deception Theory: Application to Deception Detection.

This article is a response to Levine et al.’s (2014) article “The Effects of Truth–Lie Base Rate on Interactive Deception Detection Accuracy.”

This rejoinder makes 6 points: (a) the [PLM] is a description not an explanation; (b) IDT and its empirical support are seriously mischaracterized; (c) application of the PLM to interactive deception is based on a faulty understanding of what constitutes interactive deception; (d) the test pitting IDT against the PLM is invalid; (e) IDT offers a rival explanation for the pattern of results; and (f) empirical data show that deception judgments covary dynamically with deceptiveness of the messages being produced (Burgoon, 2015, p. 327).

Burgoon's (2015) "objective in this rejoinder has been to clarify the positions taken by IDT, to correct mistaken claims about IDT, to identify where IDT and PLM make the same predictions, and to offer rival explanations for the PLM stance that human judgment of others' communication is merely a random activity" (p. 345).

Base Rates, Deception Detection, and Deception Theory: A Reply to Burgoon (2015): Base Rates, Deception Detection, and Deception Theory

This article is a response to Burgoon's (2015) article "Rejoinder to Levine, Clare et al.'s Comparison of the Park–Levine Probability Model Versus Interpersonal Deception Theory: Application to Deception Detection." The authors of each article disagree on multiple fronts regarding interpersonal deception. "Key points of disagreement include (a) the degree to which message recipients are sensitive to sender veracity and (b) the extent to which interactivity moderates the veracity and base-rate effects specified by PLM" (Park & Levine, 2015, p. 350).

"This essay continues a debate about the relative scientific merits of the [PLM] and [IDT] with regard to accuracy in deception detection" (Park & Levine, 2015, p. 350). "According to PLM, people are truth-biased, truth-bias makes people insensitive to deception, and as a consequence, base rates affect accuracy regardless of interactivity. IDT, in direct contrast, holds

that people are sensitive to the veracity of other's communication and that interactivity is a key moderator" (Park & Levine, 2015, p. 350).

Chapter 3: Methodology

The research methods used in this project were related to the Rutgers University Libraries. First, an investigation was launched into IDT: how it was theorized and supported in the years around its publication. The first searches were administered directly through the Rutgers University Libraries database. This created a firm foundation for the project.

The Interpersonal Deception series posed some difficulty, because not every article sought was available directly through the university database. However, these articles were able to be found using further searches via the Communication & Mass Media Complete database and the Google Scholar database. One thing that was difficult was knowing just how many articles comprised the Interpersonal Deception series. They seemed to go on ad infinitum. In the end, a reasonable number had to be chosen that would give a general view of the confirmations of IDT's propositions.

One thing that was especially tricky was finding all of the rejoinders and responses to different articles on the differing opinions about IDT and PLM. In some cases, it required working backward using in-text references as clues to find specific articles. In the end, a clear picture of the disagreements regarding IDT came to light after research via all three databases that were utilized. This was the most difficult part of the actual research.

At the end of the day, the research seemed to move forward quite naturally. There was a lot of research already present on the subject, but it was possible to whittle it down to the most representative and pertinent information. Finally, there was a sense that each article selected had its own unique importance and contribution to the final product. The Literature Review was done chronologically because the project sought to see how time had treated IDT, the research question being:

RQ: How has deception research evolved since IDT was theorized?

The Review allows the reader to see the progression of ideas that took place over the years.

Most of the sources ended up being, unsurprisingly, from Communication journals, with the highest number coming from *Communication Monographs*. Still, there were useful sources obtainable from social psychology journals. One article came from the *Journal of Nonverbal Behavior*. All the journal's presented are reputable, and each article was peer-reviewed prior to publication.

Chapter 4: Results and Findings

Over the course of almost 20 years, there was a spirited back and forth in the field of Communication regarding IDT. Buller and Burgoon (1996) brought together interpersonal communication and deception concepts with IDT. According to them, what we do in the process of communication is able to affect each party's thoughts and actions. Something incredibly important to communication is the ability to judge credibility. The same year, DePaulo et al. (1996) came out with a scathing article that offered up the possibility that IDT did not even deserve theory status, among other damaging arguments. Soon after followed a response by Burgoon and Buller (1996), stating that IDT was meant to be further developed, that it was in its early stages. Then, Park and Levine (2001) came up with the PLM. Levine et al. (2014) said that what sets the PLM apart from IDT and other theories is their recognition of the truth-lie base rate, which "refers to the proportion of truthful and deceptive messages judged in a deception detection task" (p. 350). Burgoon (2015) responded by essentially saying that they were analyzing the results incorrectly and that PLM is "a description not an explanation" (p. 327). Finally, Park and Levine (2015) responded by saying that the two camps had fundamental disagreements about the field of communication, and that "according to PLM, people are truth-biased, truth-bias makes people insensitive to deception, and as a consequence, base rates affect accuracy regardless of interactivity. IDT, in direct contrast, holds that people are sensitive to the veracity of other's communication and that interactivity is a key moderator" (p. 350).

DePaulo et al.'s (1996) Commentary on IDT

According to DePaulo et al. (1996), "when we first agreed to write this commentary (before we had read any of the papers in this issue), we expected our remarks to be full of praise. This was a data-based expectation, developed from our knowledge of Buller and Burgoon's

previous contributions to the field” (p. 309). Regretfully, they say that “Buller and Burgoon’s propositions do not meet the criteria described by philosophers of science. There is no explanatory glue that binds them together. New propositions could readily be added, and existing ones modified or deleted, with little consequence for the synthesis as a whole.” (DePaulo et al., 1996, p. 299). They begin by questioning the theory-hood of IDT, saying that “at the heart of theories in the social sciences are ‘why’ questions. These theories are developed to help us understand interesting, important, and often puzzling phenomena. For example, Wegner’s (1994) ironic process theory addresses the question of why people sometimes do or say or think exactly the opposite of what they intended. We cannot find the ‘why’ question in Buller and Burgoon’s synthesis” (DePaulo et al., 1996, p. 298). Later, they take issue with Buller and Burgoon’s data (DePaulo et al., 1996). One problem they had with the data was that “the variables included in the design are a miscellaneous assortment of factors that might be important to interpersonal deceptive communication. Apparently they are important (or so we might conclude if the design were not so flawed), but in complex ways that defy comprehension” (DePaulo et al., 1996, p. 308). Further, “the propositions in Buller and Burgoon’s [theory] are a mixture of falsifiable and nonfalsifiable statements” (DePaulo et al., 1996, p. 298). DePaulo et al. (1996) go on to say that “the authors are not describing for us a program of research in which one study builds on and clarifies the results of the ones that came before. They are just telling us about sets of studies, all of which happened to be about the same topic and which produced results that are inconsistent and noncumulative.” (p. 309). To DePaulo et al. (1996), “their synthesis has little that is truly systematic to say about what kinds of variables should be most important, alone or in combination. They do predict certain interactions among variables, but these are scattered and do not cohere into a meaningful parsimonious explanatory framework” (p. 299).

Burgoon and Buller's (1996) Response

In the same issue of *Communication Theory*, Burgoon and Buller (1996) serve up a response to DePaulo et al.'s (1996) critique. According to Burgoon and Buller (1996), "theories are intended to make the inexplicable explicable, to bring order and understanding to experience, to stimulate further hypotheses about the empirical world, and to enable humans to apply such knowledge so as to gain control of their environs. Does IDT fit this description? Yes" (p. 311-312). They state that "contrary to DePaulo et al.'s (this issue) claim that virtually any set of variables can be added to or subtracted from our model, IDT foregrounds what we consider to be the most salient communication-relevant factors and incorporates them into statements specifying functional relationships among antecedents, interaction processes, and consequences of deceptive interchanges" (Burgoon & Buller, 1996, p. 313)

Burgoon and Buller's (1996) response to IDT's tendency to not ask "why" is that "explanatory power is often purchased at the expense of predictive specificity, a point cogently made by Dubin (1978) in his power and precision paradoxes: Explanation and prediction are independent of one another such that powerful explanation does not guarantee precise prediction, and great precision does not ensure understanding" (p. 314). They note that a "criterion that DePaulo et al. raise is the matter of falsifiability - an undisputed feature of good theory-claiming that IDT includes many nonfalsifiable features. Frankly, we are perplexed by this claim. It is unclear how the hypotheses derived from IDT's propositions differ from the kinds of hypotheses DePaulo and associates have tested" (p. 318). In closing, Burgoon and Buller (1996) go on to say,

it should be apparent that DePaulo et al. were highly selective in the experimental procedures they chose to examine and critique. Had they considered the full breadth of

our research program, they might have come to the conclusions we have—that no single paradigm should be used exclusively and that the multiplicity of approaches we have used have produced many convergent findings, lending greater support to IDT (p. 327).

Levine et al.'s (2014) comparison of the PLM and IDT

According Levine et al. (2014),

IDT characterizes interaction as involving vigilance, metacommunicative competence, and strategic gamesmanship while [PLM] views most communication interaction as operating on a presumption or default of honesty that enables efficient communication but makes people vulnerable to deceit. Truth-bias and poor accuracy at detecting lies are very well documented in the literature (Bond & DePaulo, 2006), and the preponderance of research appears more in line with the [PLM] view than IDT. A second critical difference between the [PLM] and IDT relates to how truth-bias is predicted to affect accuracy. IDT's Proposition 11 posits that truth-bias lowers accuracy (Buller & Burgoon, 1996). The [PLM], in contrast, specifies that the relationship between truth-bias and accuracy depends strongly on the base rate. Truth-bias lowers accuracy only when lies are more prevalent than truths. When the base rate is 50–50 as in most experiments, truth-bias does not affect accuracy at all (Levine et al., 1999) (p. 355).

They go on to defend Buller and Burgoon to a certain extent, saying that IDT is “first and foremost a theory of interpersonal deception, and that the findings from the previous base-rate studies and meta-analyses do not involve interpersonal interaction” (Levine et al., 2014, p. 355)

However, as Levine et al. (2014) continue,

Findings of a linear and positive effect for base rate in interactive deception, for both participants and observers, previously acquainted communicators and strangers, and

honest and deceptive prior sequences would provide compelling evidence that the [PLM] extends to interpersonal deception, as well as providing evidence inconsistent with the core IDT assumptions (p. 356-357).

Burgoon's (2015) response to Levine et al. (2014)

Burgoon (2015) begins her response to this by saying that “PLM is not a theory of deception detection. It is merely a description of a phenomenon. Theories are meant to predict and explain, and [Levine et al.] call out other theories for not including base rates in their explanations or predictions. Yet the PLM itself lacks any explanation for why it occurs except one: chance” (p. 328) She goes on to say that, “For the PLM model to hold, [Levine et al.] assumes that people’s judgments are entirely random, that they neither attend to the messages and behaviors of their interlocutors nor engage in any systematic processing of the messages they receive. This is a rather peculiar position to be taken by communication scholars. It implies that the communication itself is irrelevant” (Burgoon, 2015, p. 328-329) She states that, “if chance or randomness is the only ‘explanation,’ the PLM is disconfirmed by the vast majority of Levine’s recent experiments” (Burgoon, 2015, p. 329). Burgoon (2015) continues, saying that “Because the [Levine et al.] article relies exclusively on the 1996 original publication of IDT, it mischaracterizes IDT in other ways. By ignoring not only the 10 years of research from which IDT initially emerged but also the 18 years of empirical investigations and chapters that have been published since the first rendition appeared, [Levine et al.] have failed to address the many revisions and further explanations in IDT that have been published” (p. 330). Levine et al. (2014) had said that “no historically influential theory of deception has suggested that base rate might be important” (p. 351). Burgoon’s (2015) response to that is that “nothing in IDT logically prevents taking base rate into account. So, it is incorrect to draw the inference that

because a theory is silent on a phenomenon, it has dismissed it as unimportant... The claim that base rate has been ignored is factually incorrect. Many deception scholars have pointed out that the use of a 50/50 base rate is a limiting factor because it does not model the true, low base rate in the real world.” (p. 331). Burgoon (2015) responds to Levine et al.’s statements about truth-bias by saying,

There is some semantic gamesmanship going on here. IDT proposes, *ceteris paribus*, that detection of deception worsens, the more that the judge is truth-biased and conversely, the less truth-biased the judge is, the more accurately the judge will detect deception. Of course if the base rate for deception deviates from 50/50, the extent of the inaccuracy will increase or decrease accordingly, but the relationship between bias and accuracy will remain an inverse one (p. 343).

Park and Levine’s (2015) Reply to Burgoon (2015)

In this rejoinder, we explain why the PLM and IDT are logically contradictory, and why it is that if both fit the data equally well neither would fit the data very well. PLM presumes independence of observation and insensitivity to other’s lies whereas IDT is predicated on the exact opposite. Empirically, we show that Professor Burgoon’s results fit the veracity effect (Levine, Park, & McCornack, 1999) more closely than her data fit IDT’s sensitivity to deception hypothesis. Finally, we will explain why Burgoon’s interactive data lead to the same conclusions about accuracy and truth-bias as the findings of noninteractive deception detection experiments. Because both interactive and noninteractive experiments lead to identical conclusions about truth-bias and accuracy regardless of interactivity, interactivity is not the all-important consideration as IDT claims (Park & Levine, 2015, p. 351)

Park and Levine (2015) go on to say that

If research really did show, as Burgoon (2015) claims, that receivers are attuned to the veracity of other's communication, then IDT is right and PLM would be wrong. But, this is not what research shows at all. What decades of research does show is that while people are significantly better than chance at distinguishing truths from lie, rates for lie detection per se are actually below 50% (Bond & DePaulo, 2006; Levine et al., 1999).

Burgoon's (2015) position is empirically incorrect (p. 353-354)

Park and Levine (2015) also add that "Burgoon and IDT emphasize the importance of interactivity. Interactive deception, she says, is different in a myriad of ways that matter for deception detection accuracy. But, we do not see the empirical basis for that claim in either her data or in meta-analysis (p. 360).

Chapter 5: Outcomes and Conclusions

The Problem

The issue at hand concerned IDT and where the research on deception detection had travelled over the years since its theorization. Each time that a critical article arose on the subject of IDT, Burgoon was there to reply and offer rejoinder to the statements made against IDT. In one case, it was very early in the life of IDT, and in another case, it was 8 years down the line. The research question was as follows:

RQ: How has deception research evolved since IDT was theorized?

This project began by describing IDT and outlining its propositions. The problem, this project makes clear, is that much has happened in the world of Communication since IDT's theorization. Each challenge to IDT's credibility had to be considered and analyzed. As mentioned, however, it is up to the reader to decide whether IDT withstood the test of time.

Project Significance

Deception is such a common thing. It occurs so often that we usually do not even notice it. It would be incredibly useful to be able to understand the workings of deception, and maybe even detect it when it happens. IDT has made a lot of claims. It brought a macro-level understanding of interpersonal deception to the table when there was no such thing to be had. However, since then, Buller and Burgoon's fellows have taken issue with IDT on, at least, two notable occasions. It is important to consider these challengers in order to get an accurate picture of where deception research stands.

Major Findings

The subject of this project has been a spirited back and forth between DePaulo et al. (1996), Burgoon and Buller (1996), Levine et al. (2014), Burgoon (2015), and Park and Levine

(2015). When DePaulo et al. (1996) considered the comprehensive theory of IDT, they really wanted to love it. However, their first recognition was that IDT – in their opinion – did not even meet the qualifications necessary to actually be a theory. They went on to say that there were flaws in the experimental design and that some of the statements made were not falsifiable. Burgoon and Buller (1996) followed up with a reply in the same issue of *Communication Theory*, saying that IDT did indeed qualify as a theory. They were mystified by the claims that aspects of their theory were not falsifiable. They put forth that DePaulo et al. must not have taken a complete enough look at IDT, that they merely picked and chose things to disagree with.

Years later, Levine et al. (2014) published an article critical of IDT. They stated that IDT completely missed and left out research on the truth-lie base rate, which Levine et al. saw as crucial to deception research. Burgoon (2015) responded that the actual base rate in the real world is much lower than in Levine et al.'s (2014) experiments, and that Buller and Burgoon (1996) had been aware of the truth-lie base rate all along. She also stated that PLM is not a theory but a simple description. In response, Park and Levine (2015) state that they were able to find a confirmation of PLM in Burgoon's (2015) own data.

Discovered along the way was also a great deal of research in support of IDT. It is easy to forget the mountains of evidence that have been produced in that confirm the postulations of IDT. While these articles include at least one of the original theorists, they have been reviewed by their peers prior to publication. It is hard to say what is correct in this situation. At the outset, there appears to be more support for IDT than detractors. Still, DePaulo, Levine and others are respected Communication and Psychology scholars. Because everyone involved is highly reputable, it makes judging the dispute that much harder.

Recommendations

A recommendation of this project would be for multiple independent parties to conduct their own research into IDT and its phenomena. That way, a general understanding of whether the points brought up by DePaulo et al. and Levine et al. had any veracity could arise. Both parties seemed to have an answer for everything, so it would be important to address each question they were posed independently, and see if any light could be shed on the issue.

Another important step would be to research if there have been any other challenges to the PLM. Obviously, we have seen what IDT is up against, but we did not go into detail as far as any other critical appraisals of PLM. It would be interesting to see if there is as much conversation around PLM as there is around IDT. It would be hard to know for sure which one to trust if we have not seen the reaction to PLM. Both parties seem to be so sure of themselves that it is sure to be contested either way. One thing seems to be certain, and that is the fact that deception research will always be interesting.

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