

THESIS

MADE YOU LAUGH:

THE INTERPRETATION OF INTERACTIVE LAUGHTER WITHIN FRIENDSHIPS

Submitted by

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In partial fulfillment of the requirements

For the Degree of Master of Arts

Colorado State University

Fort Collins, Colorado

Summer 2020

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ABSTRACT

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Although past scholars have studied laughter as a form of communication, prior research is scarce on how laughter is perceived by interactants. This mixed methods study deepens scholarly understandings of laughter as both a communicative act and a form of affection by investigating how friends in dyadic interactions make meaning of the laughter they share during those interactions. Pairs of friends were video-recorded having a short, light-hearted conversation. Following the conversation, each individual watched the video, explaining at each instance of laughter what they were feeling and why they believed laughter occurred at that point in the conversation. Data from both interactants was then compared to examine the types of laughter that were manifested in conversations as well as patterns regarding participants' perceptions and communication of laughter. In general, previous laughter categories were supported by the data, but new categories were also identified, including laughing out of *relatability* (show understanding), *lighten* (decrease stress or negative feelings), *memory* (remember the situation being discussed), *reactionary* (because the other person laughed first), *anticipation* (expecting something funny to happen), *cue* (indicate that the other person should laugh), *common joke* (previously shared and recognized humor), *mental image* (picturing the event or story), and *endearing* (out of love) laughter. A new categorization system is proposed which assesses laughter in terms of its relational effects along the spectrums of *prosocial-antisocial* and *basic-complex*; in particular, *prosocial* laughter is examined as an affectionate

behavior according to the definitions from Floyd's Affection Exchange Theory. This study offers a deeper understanding of laughter as a crucial yet understudied form of nonverbal communication by highlighting the relational meanings and implications of laughter among friends.

ACKNOWLEDGMENTS

My deepest gratitude goes to Dr. Meara Faw, without whom this project would not have been possible. As the first person to encourage me when I expressed interest in studying laughter, she continued offering her support and insights on the project as it developed from the initial idea to a full-fledged thesis study. She gave so much time and energy to me throughout the past two years while also juggling her own projects and opportunities, and for that, I am forever grateful. She is a true inspiration, and I hope to someday be as influential to someone else as she has been to me.

My appreciation also goes to my committee members: Dr. Elizabeth Williams and Dr. Rachel Lucas-Thompson. Dr. Williams shared so many unique insights and suggestions throughout this process, pulling on her own work and expertise to help make my project so much stronger than it could have been without her. Dr. Lucas-Thompson provided fresh perspectives and amazing recommendations which helped cue me into some habits, assumptions, and writing trends that I overlooked. I have learned so much about the research process from both of these incredibly intelligent committee members.

Additionally, I am eternally grateful to those whose efforts contributed to my journey thus far, in ways I could never have fully recognized or appreciated sufficiently at the time. My gratitude goes to Mr. David Deibert, for giving me my lowest grade on an English class assignment and expecting true excellence in writing. To Dr. Steve Martin, Dr. Jody Roy, and Dr. Deano Pape, for all their enthusiasm, patience, and brilliance throughout the start of my study in Communication. And to the CSU Department of Communication Studies as a whole; this

project was greatly improved because of the departmental funding I received, which is just one of countless ways I have felt heavily supported in this department.

I would also like to thank my family and friends for their endless love and encouragement, without whom none of this would be possible. First, I am so blessed to have such wonderful and supportive parents; thank you, Mom and Dad, for all the Alexa calls, hugs (virtual and in-person), cards, care packages, reminders to keep things in perspective, and for being my first teachers in both communication (the “conversational catch” lesson) and humor (“If a canoe flies by with its left tail light burnt out...”). My gratitude also goes out to my brother, for checking in regularly, reminding me to enjoy living in Colorado while learning here, and being my inspiration to do cool things. A big “thank you” goes to my aunts and uncles for their phone calls, text messages, surprise mail, and eagerness to talk to me about my work— thanks for being my “proofers” to see if my research makes sense to people outside the academy!

Finally, I am forever grateful to Ryan, for all the washed dishes, cooked meals, bear hugs, weekend getaways, and words of encouragement he’s offered over the past two years. I am thankful for Kristina Lee, for sharing so many “secrets” of grad school and serving as not only a peer mentor but also a true friend. And, of course, my gratitude goes to my cohort of colleagues, who made this short journey to our MA degrees so much more wonderful than I ever could have imagined. To my “pod-mates”: Lauren Seitz, for becoming one of my first CSU friends and being there for work chats, after-work hangouts, and spicy food commiseration; Katie Patterson, for being my constant classmate and helping me through classes we loved and ones we didn’t understand; Taylor Weigel, for being my pun appreciator and “let’s figure this out together” buddy; and Ben Pettis, for joking so often about dropping out that it guaranteed that neither of us actually did. And to the rest of my cohort: Allison, Henry, Kennedy, and Sage, for making these

years not only educational but also entertaining. I have learned much from all of you, and I am so excited to see how you continue to make the world a better place.

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CHAPTER 1 – INTRODUCTION

In 1998, The Barenaked Ladies (a popular Canadian rock band) released a hit song called “One Week”, which included the following lines: “How can I help it if I think you’re funny when you’re mad? Trying hard not to smile, though I feel bad. I’m the kind of guy who laughs at a funeral; can’t understand what I mean? Well, you soon will.” In these lines, the pop band brings up an interesting and important topic in a funny, upbeat way: laughter and the meaning humans associate with it.

Despite the common assumption that laughter is an involuntary reflex (Gendry, 2018), many instances of laughter reflect socially learned behaviors that are intentionally performed to maintain an individual’s desired public image (Provine, 2000). Consider a teacher or boss telling a joke—their subordinates often laugh whether or not they truly find the joke funny in order to remain in good standing with this person. Similarly, on a first date, the couple is probably conscious and strategic about how often and how loudly they laugh in order to communicate liking and affiliation appropriately. These and other examples suggest that the assumption that people laugh when something is legitimately funny or out of a natural reflex is not entirely accurate.

Therefore, the goal of this study is to gain a deeper understanding of laughter’s co-constructed meaning in interactions by allowing laughers themselves to articulate what that laughter means to them. To assess laughter as an intentional relational act and to determine more closely what meanings humans assign to laughter, this paper outlines the results of a qualitative analysis of laughter within same-sex friendships in which two friends had a short conversation

with each other and then, in an interview with the researcher, elaborated upon the meaning they ascribed to the laughter that occurred during that conversation.

In this paper, I first offer a review of the importance of nonverbal communication in relationships, particularly focusing on the theoretical framework of Affection Exchange Theory (Floyd, 2006). I then summarize the research on humor in relationships before offering an overview and explaining the implications of the research exploring laughter more specifically. This will culminate in the articulation of several research questions, and I will then outline the specific methodological approach and results related to these questions. Finally, I finish with a discussion of the general implications of these results and how laughter is an essential communicative act for interpersonal relationship maintenance and for the consideration of current communication theory. Overall, I argue that communication researchers must recognize how laughter interactants make meaning of the laughter they experience in interactions in order to more fully understand the relational consequences of laughter. In order to unpack these considerations, however, it is important to understand laughter as a unique form of nonverbal communication.

CHAPTER 2 – LITERATURE REVIEW

Interpersonal and Nonverbal Communication

Communication scholars study how people create and find meaning in the world from different viewpoints that create unique explanations regarding why studying communication is important (Griffin, 2012). Scholars within the objective worldview assume that reality is objectively separate from people's experiences, following the "assumption that truth is singular and is accessible through unbiased sensory observation" (Griffin, 2012, p.14). In contrast, scholars who take on an interpretive worldview assume that "reality" exists only in human understanding, and that human experiences impact what we understand to be true and real. These scholars, then, believe that people linguistically assign meaning and value to all types of communication, and they assume that multiple meanings or realities are possible within a single interaction or relationship (Griffin, 2012).

Both worldviews accept that communication is important, but interpretive communication scholars argue that communication impacts humans' experiences of the world and, therefore, how we define reality, truth, and even our very identities (Griffin, 2012). In this perspective, communication is often viewed as constitutive, as it "[...] defines, or constructs, the social world, including our selves [sic] and our personal relationships" (Baxter, 2004, p.3). Thus, in studying communication, communication scholars are essentially studying people's construction of reality and humankind's own "humanness" (Stewart, 2012, p.7). Regardless of the context for any given interaction, any time people communicate, they are "co-constructing meaning and defining their shared reality" (Stewart, 2012, p.16). Therefore, under this

paradigm, the study of human communication is crucial for understanding why people think they way that they do as well as how and why they behave in certain ways.

Although communication between individuals can occur in many forms and contexts, perhaps the most recognizable distinction regarding forms of communication is the separation of *verbal* communication from *nonverbal* communication. Individuals generally assume that their verbal communication, or the words or language they use (written, spoken, or signed) has the greatest impact on daily life and the creation of their reality (see Lupyan & Ward, 2013; Sapir, 1929; Whorf, 1956). However, nonverbal communication, or all the ways humans communicate aside from the specific words they use, is arguably just as powerful, represents a more diverse category of human communication and used more frequently than verbal communication (Beebe et al., 2014; Burgoon et al., 2011).

The Power of Nonverbal Communication

Although people consciously choose when to interact with others using words, they constantly communicate nonverbally with those around them (Beebe et al., 2014). In fact, scholars have confidently claimed that “[...] because of the ubiquitous nature of nonverbal communication, you cannot *not* communicate” (Beebe et al., 2014, p.191). Any meaningful behavior, action, or display that is not words- or language-based fits under the umbrella of nonverbal communication (Beebe et al., 2014). Thus, nonverbal communication represents an enormous swath of human behavior, and the messages conveyed through nonverbal cues are extremely important.

In his seminal 1967 study, Albert Mehrabian, a prominent natural scientist and trained engineer who was fascinated with psychology, conducted a study examining aspects of verbal and nonverbal communication and how individuals make meaning from different verbal and

nonverbal cues (Faculty Page: Albert Mehrabian, n.d.). In this study, he found that only 7% of a message's total impact comes from verbal communication, whereas 93% of the emotional impact from a message comes from nonverbal cues. He further broke this down by outlining that approximately 38% of emotional meanings stem nonverbal vocal cues and 55% from nonverbal visual facial cues (Hegstrom, 1979, p.134; Lapakko, 1997). Although this study has largely been dismissed as oversimplifying the highly complex nature of human communication (see Hegstrom, 1979), Mehrabian's work drew attention to the massive impact nonverbal communication can have on people's understanding of messages and spurred an important movement to document and understand the various nonverbal cues used in human communication and their diverse meanings across contexts.

To further examine the role of nonverbal versus verbal communication in interactions, researchers have studied how people react to conflicting verbal and nonverbal messages (e.g., verbally describing how happy one is while looking angry). In one experiment, individuals were asked to rate the perceived friendliness of a person delivering a message while using consistent or conflicting verbal and nonverbal cues (Argyle et al., 1971). Their results indicated that participants relied heavily on nonverbal cues versus verbal cues when interpreting these messages, with nonverbal cues influencing message understanding nearly six times more than verbal cues (Argyle et al., 1971). Subsequent research findings align with these early results, revealing that when verbal and nonverbal cues conflict, people rely more heavily on nonverbal communication to determine the meaning of the message (Burgoon et al., 2011).

Researchers have since argued that the different components of a message cannot be separated into such easily quantifiable numbers as Mehrabian originally asserted, yet research does suggest that nonverbal cues play a major role in communication and can heavily influence,

change, or even overpower a verbal message (Burgoon et al., 2011; Hegstrom, 1979; Lapakko, 1997). These nonverbal cues take different forms and span numerous subcategories, highlighting the complexity and diversity of nonverbal communication.

Forms of Nonverbal Communication

Theorists have grouped nonverbal communication into different categories in order to better understand them and their impact in interactions. This categorization system offers a way to discuss the unique ways that people create, transmit, perceive, and interpret meanings through various nonverbal communication methods (Burgoon et al., 2011). One commonly used categorization system involves eight forms of nonverbal cues which, according to the categorizers, encompass all nonverbal communication techniques: *kinesics* (body movement), *vocalics* (non-word vocal features), *physical appearance and adornment* (how someone looks and dresses), *proxemics* (distance and space), *haptics* (touch), *chronemics* (use and orientation of time), *environment and artifacts* (the world around the communicators), and *olfactics* (smells) (Burgoon et al., 2011; Guerrero, 2014).

Although these categories are widely accepted and referenced within the field of communication studies, they become problematic when considering laughter as an act of communication, as laughter does not have an obvious home in any of these categories. The closest option seems to be *vocalics*, which encompasses other non-word vocal cues such as tone, tempo, pauses, and volume (Burgoon et al., 2011). However, *vocalics* is generally reserved for “the way people say words” (Guerrero, 2014, p.54). This suggests that laughter and other similar acts were not intended to fit in this category, leaving laughter without a clear home in the common categorization of nonverbal communication cues.

Perhaps for this reason, a second typology of nonverbals was proposed, complete with a new category of nonverbal communication: *nonverbal vocalizations*, or sounds people make that carry meaning without words, such as screaming, crying, or laughing (Szameitat et al., 2011). *Nonverbal vocalizations* and other forms of nonverbal communication are crucial components of interaction, particularly within relationships (Argyle et al., 1971; Szameitat et al., 2011). Although various theories articulate how nonverbal communication can influence relationships, one communication theory, Affection Exchange Theory (Floyd, 2001), specifically focuses on the importance of both nonverbal and verbal communication as they relate to communicating affection in personal relationships. Therefore, this theory offers insight into the potential communicative and relational effects of *nonverbal vocalizations* like laughter as an essential communicative process.

Affection Exchange Theory

As a form of nonverbal communication, laughter serves as one of many ways a person can communicate without using words. A particularly important way that people within relationships engage in nonverbal communication is by expressing affection, or engaging in behaviors that let their relational partners know that they are valued and important (Floyd & Morman, 1998). These affectionate messages—whether verbal or nonverbal—have many positive impacts on relationships and on human health. Floyd and Morman (1998) defined affectionate communication as “[...] an individual’s intentional and overt enactment or expression of feelings of closeness, care, and fondness for another” (p.145). Floyd (2006) summarized his studies of affectionate communication when he outlined Affection Exchange Theory (AET), in which he outlined a systematic explanation for why engaging in verbal or nonverbal affectionate behaviors often results in increased liking of the other individual and

enhanced well-being. He explains that affectionate communication is crucial to relationship development (Floyd, 1997). His theory offers interesting propositions that explain why affection, and perhaps laughter, are so powerful in relationships.

Affection Exchange Theory: Overview

According to AET, communication is one of many behaviors performed by people to increase their chances of survival and procreation (Floyd et al., 2015). The theory is built on the concept of *inclusive fitness*, carrying the assumption that all people have an innate desire to survive and to reproduce (Floyd et al., 2015). As such, it assumes that people engage in certain behaviors to increase their likelihood of surviving, thriving, and procreating, although these behaviors are not always done consciously (Floyd et al., 2015). One way a person can increase their chances for survival and success in life is to find and maintain satisfying, healthy, and beneficial relationships, as individuals in relationships have a support network to lean on during threatening or difficult situations (Floyd et al., 2015). Therefore, affectionate behavior improves relationships and, ultimately, can help improve a person's life and chances of survival. AET specifically points out how engaging in affectionate communication behaviors with other people is rewarding and beneficial for humans through five key propositions.

The first proposition of AET is that people need affection, and they are born with the ability to send and receive affection (Floyd, 2006). People naturally want and need to know they are loved and cared for, and they communicate this affection to others in different ways. The second proposition of AET is that the emotional experience of affection may or may not be the same as the behaviors used to express affection (Floyd, 2006). In other words, actions do not always inherently reflect true, underlying feelings. A person may feel affection for another without expressing it, or a person may express affection without feeling it. People can act more

affectionate than they feel (for example, someone can say “I respect you” without actually feeling respect for the other person).

AET’s third proposition brings up the benefits of exchanging affection, arguing that both giving and receiving affection is beneficial in that it aids human viability by maintaining crucial connections and social resources (Floyd et al., 2015). Affectionate communication increases people’s success in establishing and maintaining relationships, which can help them in various ways throughout their lives. The fourth claim of AET focuses on individuals’ unique needs and preferences. Each person’s *optimal tolerances* for affection are different, so not all people need or want equal amounts of affection (Floyd, 2006). According to this proposition, some people want great amounts of affection, while others need relatively little affection to be content in a relationship. The theory refers to this range as a person’s *optimal tolerance* and indicates that a person’s affectionate communication (both received affection and sent affection) needs to remain in that ideal range for the person to remain content in the relationship (Floyd, 2006). AET’s fifth proposition builds on proposition four by explaining why some affection is undesired and can be harmful for relationships. Experiencing affectionate behavior that is outside a person’s range of optimal tolerance results in a negative response (Floyd, 2006). Thus, people respond negatively if they are receiving too much unwanted affection or if they are not receiving enough desired affection.

Overall, AET claims that affection is essential for human health (physical, emotional, and relational), but only if the affectionate communication falls within a person’s optimal range of tolerance (Floyd et al., 2015). Furthermore, the desire to receive or not receive affection impacts how a person interacts with others (Floyd & Burgoon, 1999). For example, if an act of affection

is unwanted, a person will change how they behave to try to communicate their disinterest and manage the unwanted affectionate communication (Floyd & Burgoon, 1999).

In addition to potentially eliciting negative responses from the recipient, affection can also have negative effects when a person receives affection and feels pressured to reciprocate those expressions (Floyd & Burgoon, 1999). Affective expressions carry inherent expectations of reciprocity (e.g., people expect their expression of “I love you” to be followed by an “I love you, too”). Negative feelings can result for both interactants if the receiver does not similarly feel or convey affection in return (Floyd, 2006). However, when affectionate behaviors are desired and the amount expressed falls within a person’s optimal range, AET argues that those affectionate exchanges have positive effects on the person and the relationship in which they are employed, although the specific behaviors employed likely look different across varying cultural and relational contexts (Floyd, 2006; Floyd et al., 2015).

Affectionate Behaviors

Affectionate communication is heavily influenced by society and culture, so the context of any given interaction largely shapes the definition of what constitutes a display of affection (Floyd, 2006). For example, in the United States, a variety of nonverbal cues are commonly referenced in studies of affection, including hugging, shaking hands, kissing on the lips, kissing on the cheek, holding hands, putting an arm around someone’s shoulders, smiling, proximity to someone else, and leaning towards someone (Floyd, 1997; Floyd & Burgoon, 1999). Studies in the United States also focus on several common verbal indications of affection, such as phrases like “I love you,” “I care for you,” or “I value our relationship” (Floyd, 1997, p.72).

The Affectionate Communication Index suggests that most affectionate communication within the United States can be sorted into three general categories: *verbal*, *direct nonverbal*, and

indirect nonverbal (also called *social supportiveness*) (Floyd et al., 2015; Floyd & Morman, 1998). *Verbal* affection includes communicated phrases such as “I love you,” “You’re a good friend,” or other expressions of value and liking (Floyd & Morman, 1998). *Direct nonverbal* affectionate communication includes wordless acts that are culturally considered as displays of affection, such as hugging, holding hands, or kissing (Floyd et al., 2015; Floyd & Morman, 1998). Finally, *indirect nonverbal* displays (also called *social supportiveness*) involve behaviors done to support the other person and the relationship, such as helping with tasks, doing favors, or giving social or material support to a relational partner (Floyd et al., 2015; Floyd & Morman, 1998). Interestingly, laughter is omitted from these three divisions of affectionate behaviors,

Laughter is one way people communicate both positive and negative feelings to each other (Kurtz & Algoe, 2017). Because AET indicates that communicating positive feelings in the form of affection is generally beneficial to relationships and to the people in those relationships, laughter is also an important behavior when it displays affection. With this understanding of AET and nonverbal communication, laughter becomes more approachable as a subject of study for communication scholars. However, in order to approach laughter as a specific act of affectionate behavior, a deeper understanding of humor, which is often assumed to be the precursor for laughter, is helpful.

Humor in Relationships

Humor, or the “intentional verbal and nonverbal messages which elicit laughter, chuckling, and other forms of spontaneous behavior taken to mean pleasure, delight, and/or surprise in the targeted individual”, has been heavily studied from a communicative lens (Booth-Butterfield & Booth-Butterfield, 1991, p.205). Individuals use humor to help maintain their relationships and keep their partners at a desired degree of closeness (Ayres, 1983; Canary et

al.,1993; Stafford & Canary, 1991). Humorous communication, then, is “a shared social event where individuals employ verbal and nonverbal messages that often elicit laughter, chuckling, and other spontaneous behaviors indicative of pleasure or surprise in the targeted receiver” (Booth-Butterfield & Wanzer, 2018, p.1-2). Laughter, one of the desired outcomes of humor, is almost exclusively exhibited in the presence of others (Provine, 2000). Therefore, understanding humor as a relational act offers deeper insight into one of the reasons laughter can appear in relational communication, providing a starting point for understanding the way that laughter influences relationship experiences and outcomes.

Humor Outcomes

Humor can produce a variety of outcomes within an interaction depending on the type of humor used and the nature of the relationship (Aylor & Oppliger, 2003; Bressler & Balshine, 2006; Hall, 2013, 2017; Kurtz & Algoe, 2017; Rizzo et al., 1999; Treger et al., 2013; Ziv, 2010). These effects can be positive or negative. For example, Bressler and Balshine’s (2006) study of humor revealed that humorous people are often considered more socially adept than non-humorous people, but they are also often assumed to be less intelligent and less trustworthy. Similarly, humor can increase feelings of social cohesion and belonging while decreasing social tension (Holmes, 2000). However, humor can also be used to attack people individually (such as bullying or exclusion from a group) or to attack groups of people (such as negative stereotyping) (Alberts & Drzewiecka, 2008, Ziv, 2010). These findings reveal that humor influences relationships by serving numerous social functions which can be beneficial (prosocial) or harmful (antisocial) for the relationship in which it is performed.

Beneficial Outcomes

Initial interactions, as one context where humor occurs, have received extensive scholarly attention. The use of humor when meeting new people often results in positive interaction outcomes by increasing the chance that the relationship continues, making the interactants like each other more, and increasing the level of enjoyment of the interaction for both participants (Treger et al, 2013; Ziv, 2010). Perhaps for these reasons, people are drawn to individuals with humorous traits, and, given the choice, people prefer romantic partners who use humor over those who do not (Bressler & Balshine, 2006).

In addition to benefiting initial dyadic interactions, humor is also a valuable behavior in early interactions within social groups. Using humor and laughing at a group's use of humor results in a higher likelihood of being accepted into a new social group (Ziv, 2010). Furthermore, humor is useful as a tool to test out new social groups; when attempting to join a social group, humor can be used to determine how the group feels about certain issues such as political views and therefore to decide whether a newcomer is a good fit for that group or not (Ziv, 2010). Once the individual is part of the group, humor can reinforce group ties, strengthen cohesion, and increase feelings of solidarity within that group (Holmes, 2000; Ziv, 2010). Thus, humor is not only beneficial for increasing liking but is also useful as an indication of whether the relationship is a positive, mutual fit for all interactants.

While humor is helpful in initial interactions, it can also be beneficial for people in ongoing relationships. For example, humor can be useful for romantic partners, sometimes resulting in greater relationship satisfaction and interest (Hall, 2013, 2017; Kurtz & Algoe, 2017). Similarly, simultaneous laughter supports and facilitates relationships, as laughter that occurs by two individuals at the same time creates positive emotions, increases perceived

similarity between partners, and is correlated with greater relationship satisfaction (Kurtz & Algoe, 2017).

In long-term romantic relationships, humor can also benefit both partners (Hall 2013; 2017). When certain types of humor are used in long-term relationships, relational partners report that it lightens the mood and makes the relationship more enjoyable, resulting in higher relationship satisfaction (Hall, 2013; Maki et al., 2012). Couples in which at least one partner has a high humor orientation (the tendency to use humor more generally) report higher satisfaction with their relationship than couples without a humor-inclined member (Maki et al., 2012), and most heterosexual married couples believe humor is a crucial component in their marriage (Ziv, 1988). Clearly, humor is useful for building and maintaining happy, satisfying romantic relationships.

Finally, humor can be valuable in professional settings, as students have more positive perceptions of their teacher and are more likely to communicate with their instructor outside the classroom when the teacher uses humor in the classroom (Aylor & Oppliger, 2003). Similarly, managers who use humor create a more positive, enjoyable work environment and are more liked by employees (Rizzo et al., 1999). Overall, then, humor can be beneficial for people in various kinds of relationships. From new relationships to romantic partners to workplace connections, humor can have positive outcomes and can be a powerful communication tool to extend and improve relationships. However, not all humor is beneficial for all people, as humor can also be used in negative ways that harm relationships.

Harmful Outcomes

Some instances of humor can damage a relationship. Just as unwanted affectionate behaviors can harm the relationships in which they are enacted, certain types of humor can have

negative or damaging effects on relationship members (Floyd & Burgoon, 1999; Floyd et al., 2015; Hall, 2011; Ziv, 2010). In dyadic relationships, humor can be used to make fun of one's partner directly to or indirectly about the partner in a social setting (Hall, 2017). This hurtful humor often results in negative feelings about the relationship by the person being insulted, as they feel embarrassed about themselves or about their partner (Hall, 2011). Furthermore, humor can also be used to distance oneself from one's partner (Hall, 2017). For example, a person might avoid a serious conversation by making a joke about an issue (Hall, 2017). This use of humor can result in decreased feelings of closeness within the relationship. These types of harmful humor are negatively correlated with relationship satisfaction (Hall, 2017).

Similarly, negative outcomes can result when inappropriate or unkind humor is used in groups. Humor is occasionally used to attack group outsiders (e.g., laughing at people who are not in the group) or to enforce internal group norms (e.g., aggressively using humor as a warning or as a way to punish group members who do not follow established norms) (Bergson, 1911; Ziv, 2010). Each of these uses of humor results in negative feelings for certain individuals, whether inside or outside the relationship.

Overall, then, humor, like affectionate communication, can have positive or negative consequences in various contexts. As an *indirect verbal* display of affection, some kinds of humor can benefit the relational participants, but when it is an unwanted, aggressive, or inappropriate act, humor can create negative feelings for relational members. Therefore, humor is an important communicative act that has powerful impacts on a relationship. As such, numerous scholars have attempted to categorize humor in order to develop a deeper understanding of this relational act. Reviewing these categorization systems offers a starting point for understanding the connected relational behavior of laughter.

Categorization of Humor

Considering the various effects of laughter, there is no universal explanation for why people laugh. Laughter is heavily influenced by the social, environmental, and cultural context as well as the people involved (Glenn, 2003; Platow et al., 2005). Many people assume laughter results from experiencing something humorous, but in a study of more than 1200 observed conversations, Provine (2000) found that most laughter is not directly linked to an objectively humorous statement (like a joke). Instead, many instances of laughter take place as people work to be polite or sociable towards others (Provine, 2000). This fascinating finding indicates that laughter is a more nuanced, conscious form of communication that needs additional attention by communication researchers. To unpack the various functions laughter can serve as well as the underlying motivations for why people laugh, several scholars have articulated categorization systems for humor. These categorizations, while not exactly focused on laughter, can be helpful in identifying some different types of laughter that may occur in relationships (Berger, 1997, 2016; Dunbar et al., 2012; Giles & Oxford, 1970; Hall, 2011, 2017; Martin et al., 2003; Wildgruber et al., 2013).

Humor's Target

One classification system developed by several scholars includes four categories of humor: *affiliative*, *self-enhancing*, *self-defeating*, and *aggressive* humor (Martin et al., 2003). This categorization system bases its categories on the intended target of the humor. For example, *affiliative* humor is generically funny humor that is not targeted towards any particular person—generic jokes, stories, or non-person-centered humor (Hall, 2013; Martin et al., 2003). Affiliative humor includes sharing a funny joke or general story (“Why did the chicken cross the

road?” or “A guy walks into a bar” jokes). These are innocent jokes, which have no target and are, therefore, generally humorous and not at anyone’s expense (Freud, 1960).

The remaining three categories of humor identified by Martin et al. (2003) can be sorted into a category described by Freud (1960) as *tendentious* humor (provocative or opinionated humor), as they have a purpose and target a specific individual or concept (p.90). *Self-enhancing* humor promotes a positive public image of the speaker without being detrimental or damaging to others (Martin et al., 2003). For example, a person sharing a story about something humorous that they did that day without communicating a negative view of oneself (“I went to the recycling center, but I forgot the recycling! It was so funny.”). In contrast, *self-defeating* humor consists of statements that are funny at the expense of the speaker, often communicating negative feelings about oneself (Hall, 2013). An example might include a person starting with the line, “I’m so stupid!” and then telling others about a time when they made a mistake or did not know something that was common knowledge. This type of humor also includes the humor where someone complains about how everything has gone wrong for them that day or sharing “my life sucks” stories while trying to be funny.

Finally, *aggressive* humor includes humor that is funny at someone else’s expense, including “sarcasm, teasing, ridicule, or derisive humor” (Hall, 2013, p. 276). These statements are always about another person and can either be said directly to the target of the joke (“You’re so stupid, I can’t believe you did that!”) or said to others about someone not present (“He’s so stupid, I can’t believe he did that!”). Each of these categories of humor illustrates how people can use different humor techniques, which each have different targets and, therefore, different potential outcomes. These four categories are likely linked to laughter, as a person can laugh in general (affiliative or self-enhancing) or at someone (self-defeating or aggressive).

Humor's Content

Although relational humor is most often categorized using Martin et al.'s (2003) typology, other types of humor, such as that found in written material, fit better into other categories. For example, after analyzing a large quantity of books containing humorous content, Berger (2016) found 45 techniques people use in attempt to be funny or to generate laughter, which he sorted into four categories: *language*, *logic*, *identity*, and *action* (Berger, 1997, p.3). According to his research, humorous texts generally utilize one or more of those techniques (Berger, 2016).

Language techniques involve word play, irony, and other linguistic-based humor which requires an understanding of the language of the joke for the humor to be understood (Berger, 1997; 2016). Consider the joke, *what is the difference between a well-dressed man on a bicycle and a poorly dressed man on a unicycle? Answer: Attire*. This pun involves a play on words and requires an understanding of the English language to know that a bicycle has two tires, and a unicycle has one tire, so the difference between the two types of cycles is *a tire*. However, the listener must also understand that “attire” is a word for clothing, so the difference between a well-dressed man and a poorly dressed man is their clothing—their *attire*. The humor fails without an understanding of the language.

Logic techniques in jokes include situational humor in which the subjects of the joke find themselves in strange, absurd, awkward, or other unbelievable or humorous circumstances (Berger, 1997, 2016). Consider the following joke, based in situational humor:

Sherlock Holmes and Dr. Watson go on a camping trip. After a good dinner and a bottle of wine, they retire for the night, and go to sleep. Some hours later, Holmes wakes up and nudges his faithful friend. "Watson, look up at the sky and tell me what you see."

“I see millions and millions of stars, Holmes” replies Watson.

“And what do you deduce from that?”

Watson ponders for a minute.

“Well, astronomically, it tells me that there are millions of galaxies and potentially billions of planets. Astrologically, I observe that Saturn is in Leo. Horologically, I deduce that the time is approximately a quarter past three. Meteorologically, I suspect that we will have a beautiful day tomorrow. Theologically, I can see that God is all powerful, and that we are a small and insignificant part of the universe. What does it tell you, Holmes?”

Holmes is silent for a moment.

“Watson, you idiot!” he says. “Someone has stolen our tent!” (Jokes—Philosophy and Logic, n.d.).

This joke involves situational humor in which the two parties are in a ridiculous setting in which they are sleeping and do not realize their tent has been stolen. According to Berger (1997; 2016), this would be considered logic-based humor, as for the reader to understand the joke, they need to recognize how absurd the situation is.

Identity techniques include humor about a person or about someone’s personality; for example, embarrassment, parody, and stereotypes are all considered *identity* humor techniques (Berger, 2016). In the United States, blonde jokes would be one type of identity humor, as these jokes are funny at the expense of the blonde character. Finally, jokes involving *action* include chase scenes, slapstick humor, or speed concepts (Berger, 2016). The popular films by *The Three Stooges* utilized a great deal of slapstick humor; similarly, many children’s television

shows involve speed humor where characters (like Bugs Bunny) zoom around the screen—the action-packed chase scenes are often seen as a type of funny humor.

Considering how humor can positively or negatively impact relationships, then, these different techniques for humor have important implications for which types of humor should or should not be used in order to have the desired outcomes. Each of these categories of humor have specific content and different targets. Therefore, the funny material can be sorted by its content, which each type of content likely creating different effects on the conversational interactants (Ziv, 2010). For example, in the United States, someone with blonde hair will likely have a slightly different reaction to a blonde joke than someone with non-blonde hair. These categorization systems suggest that the way humorous messages are communicated and the content of those messages matter. Considering humor categorizations can lead to interesting insights into how that humor influences the relationship. However, just as humor can have different content, it is also likely that laughter can likely carry different meanings, conveying unique messages between individuals and ultimately influencing the relationship between interactants.

Humor's Relationship Effects

Each of the above categorization systems could also be understood by considering the relational outcomes associated with the different types of humor. In assuming a more relational approach towards humor categorizations, Hall (2011, 2017) found that all humor could be considered either *positive* or *negative*. Unlike the previous categories, this system focuses more on the relationship in which the humor is performed; instead of offering a sender-based distinction (categorizing humor based on the intended target or content of the joke-teller's message), this categorization system makes sense of humor by the relational outcomes it

produces. Hall (2017) labeled some instances of humor *prosocial* or *positive*, meaning that the humor created generally good feelings and resulted in higher levels of relationship satisfaction. Prosocial humor ultimately promotes relational health and happiness. *Affiliative* and *self-enhancing* humor tend to be more prosocial, creating positive feelings and building up the relationship (Martin et al., 2003).

However, other instances of humor can be *antisocial* or *negative* and are negatively correlated with satisfaction in a relationship (Hall, 2017). Hall (2011) discovered that the use of negative humor often results in embarrassment either about the self or the other interactant(s). *Aggressive* humor and *self-defeating* humor might be more likely to produce negative outcomes on relationships when used in certain ways and thus, are often considered *negative* humor (Martin et al., 2003).

The four categories identified by Berger (1997, 2016) can also be positive or negative. For example, in the United States, a blonde joke (*identity* humor) could be positive if shared with a group of friends who have a history of telling these jokes. However, this type of joke could be negative if shared with someone who does not appreciate that kind of humor. Similarly, *language* humor could be positive if shared with people who have a common understanding of the language of the joke, but this type of humor could have negative effects if used to “out” or make fun of someone who does not understand the language or know the meaning of a word.

This two-category system is particularly important for understanding humor as a component of relationships. When used within relationships, humor can have positive or negative effects on that relationship, depending on what is communicated (the content) as well as when and how it is used (the context). Therefore, humor bring the relational partners closer together (similar to desired and appropriate affectionate exchanges), but humor can also drive a

wedge between people, especially when that humor is negative (Floyd et al., 2015; Hall, 2011, 2017).

With this understanding of the different uses and categorizations of humor, then, an overview of the types of laughter that have been identified becomes more understandable. Just as humor, which often leads to laughter, can be categorized in different ways, people's laughter can also be sorted into several different categories, some of which parallel the above categories, and some of which differ from humor categories. These categories offer a deeper understanding of the communicative effects of humor and laughter, but more importantly, the categories offer insights into how laughter, like humor or affectionate communication, can impact the members of a relationship.

Laughter Research

Like humor, laughter can be a powerful act when employed within a relationship. Laughter is almost exclusively performed in social settings (Provine, 2000), and it can perform various relational functions. Laughter within relationships is often assumed to occur simply in reaction to a laugh-inducing physical stimulus (such as someone being tickled) or as a response to something funny (such as a joke) (Gendry, 2018). However, when considered as a social act communicating affection, various studies suggest that laughter is a powerful and valuable aspect of relational communication. These studies offer insight into the physical and relational outcomes that result from interpersonal exchanges involving laughter.

Laughter Outcomes

Physical Outcomes

Laughter can positively impact an individual's physical health and well-being, increasing their reported happiness in various contexts while also decreasing physiological stress hormones

(Dunbar et al., 2012; Vlahovic et al., 2012; Yim, 2016; Zillman et al., 1993). Additionally, the endorphins released during laughter in response to comedy also increase a person's subsequent tolerance for discomfort and pain (Dunbar et al., 2012; Zillman et al., 1993) and increase their immune system's ability to fight disease (Yim, 2016). Given this evidence strongly outlines the measurable, meaningful effect that laughter has on people's physical well-being, contexts in which people laugh merit further exploration. With its connections to physical health, laughter again mirrors other forms of affectionate communication (Floyd et al., 2015). However, not only is laughter like affection in its physical benefits, but laughter can similarly enhance relationship well-being (Floyd et al., 2015).

Relational Outcomes

Humans laugh even before learning how to speak (Glenn, 2003). When combined with other developed verbal and nonverbal communication skills, laughter can positively influence relationship outcomes (Alberts & Drzewiecka, 2008; Glenn, 2003; Kurtz & Algoe, 2017; Vlahovic et al., 2012). For example, when dyads share laughter, they report feeling greater similarity to one another and greater happiness (Kurtz & Algoe, 2017; Vlahovic et al., 2012). Laughter also facilitates more seamless relationship interactions, allowing relational partners to display affiliation, friendliness, and intimacy—some of the same goals that are often accomplished through other forms of affectionate communication (Floyd & Morman, 1998; Glenn, 2003). Furthermore, laughter is beneficial in its ability to protect group members' inclusion, to show solidarity with the group, and to communicate their belonging within that group (Alberts & Drzewiecka, 2008; Ziv, 2010). These findings indicate that laughter can, indeed, generate positive feelings in a relationship and therefore can maintain or extend the

relationship. In this way, laughter, like affectionate communication, is an important act that can positively influence both individuals within the dyad and across larger social groups.

However, as with other forms of communication, research suggests that not all uses of laughter are positive, as people can use laughter in cruel ways through mockery, derision, or the belittling of others (Glenn, 2003). If it is unwanted or cruel, laughter likely has similar effects as unwanted affection, creating negative feelings which result in the relational partners becoming less close (Floyd, 2006; Floyd et al., 2015). Considering some of these outcomes of laughter suggests that, like humor, there are different uses and forms of laughter, and some scholars have begun to categorize laughter by those forms.

Categorization of Laughter

Laughter's Content

People do not laugh in only one way or in one context; they laugh for a variety of reasons, and each type of laughter is unique (Provine, 2000). Laughter takes various forms which serve specific relational functions and are marked by specific sounds (Provine, 2000). First, some laughter has been described as *mirthful laughter*, or laughter that results from something we find genuinely funny, causing us to laugh out loud (Berger, 2016). Others have described this laughter as reflex-like or joyful laughter that is unforced, relaxed, and results from a stimulus the person finds genuinely funny. This type of laughter is unique from other types of laughter, such as laughter resulting from taunting or tickling (Dunbar et al., 2012; Wildgruber et al., 2013). Each type of laughter is marked by different brain activity and results from different stimuli (Wildgruber et al., 2013).

In addition to this joyous, reflex-like laughter, scholars have noted that there are numerous instances in which people laugh when something is not objectively laugh-out-loud

funny (Provine, 2000). This type of laughter is highly social in nature and less reflex-like than joyful or tickling laughter (Dunbar et al., 2012; Wildgruber et al., 2013). *Social laughter* is performed to accomplish a social goal, such as making someone feel more comfortable, communicating attention, or conveying a person's mood in a specific context (Provine, 2000). Just as affection can be displayed but not always experienced or felt to the same degree, a person can laugh without feeling that the cause of that laughter is truly, undeniably funny (Floyd et al., 2015). In fact, one study that examined more than 1200 conversations found that social laughter was the most common form of laughter (Provine, 2000). These results indicate that laughter is a strategic communicative act enacted to accomplish numerous relational goals.

Although numerous scholars have focused their attention on the differences between *joyful*, *tickling*, *taunting*, and *social* laughter, Giles & Oxford (1970) sorted laughter into seven categories: *humorous*, *social*, *ignorance*, *anxiety*, *derision*, *apologetic*, and *tickling*. Later scholars also added two more categories: *joyous* laughter (Foot & Chapman, 1976), and *evasion* laughter (Foot & McCreddie, 2006, as cited in Laadegaard, 2013). Furthermore, Vlahovic et al. (2012) also identifies *symbolic* laughter (e.g., written laughter indicators such as "LOL"). Each of these categories are divided based on the specific reasons for laughing, or the content or target of the laughter (similar to the humor categorization systems of Berger, 2017 and Martin et al., 2003). According to these categorization systems, laughter results from something, and these categories assume that laughter happens for a reason and as a reaction to something. Therefore, knowing what leads to laughter is important for understanding how that laughter, like a display of affection, is understood and affects both relational partners.

Laughter's Causes

Tickling. One of the numerous reasons why people laugh is because they cannot help themselves due to a physical stimulus—in other words, they laugh when they are tickled (Provine, 2000). Tickling is one of the most consistent causes of laughter, and, perhaps, one of the most unique (Provine, 2000). Studies have revealed that tickling is a particular type of laughter that cannot be easily duplicated or performed on command (Provine, 2000). If a person is ticklish, they will laugh in a very specific, reactionary way.

Processing Information. In addition to tickling, people often laugh in reaction to an observed (rather than physical) stimulus. When a person receives information visually or verbally, they sometimes laugh. Berger (2016) suggests that people laugh because their expectation for what will happen is incongruent with actual reality. This is often the case when people laugh at jokes, as a good punchline is unexpected and surprising (Berger, 2016). Other scholars suggest that people laugh not only when they are surprised by something, but also when they are relieved or when they feel superior to another person (Glenn, 2003; Ladegaard, 2013). As people process the constant stream of information that they are receiving, laughter is one possible reaction, whether reacting to jokes, humorous situations, or other observations. In this way, laughter is a reaction to communication stimuli that allows both interactants to make meaning in their shared context together.

Sending Information. People not only laugh in response to tickling or as they receive information, but many instances of laughter function as attempts to send information to others. For example, laughter often reinforces a person's membership in a group, communicating to others that the laugher belongs in the group or is similar to the other group members (Ziv, 2010). Similarly, dyads feel greater similarity to each other when both partners laugh at the same thing

(Kurtz & Algoe, 2017), and members of certain cultures may laugh at offensive jokes as a way to please the joke-teller and protect their inclusion in a group or show that they possess a sense of humor, which is a desirable and admirable trait in some cultures (Alberts & Drzewiecka, 2008; Bressler & Balshine, 2006; Treger et al., 2013). Another laughter study revealed that, when individuals believed laughter was coming from their in-group or self-identified social group, they were more likely to laugh and were also more likely to rate the laughable material as humorous (Platow et al., 2005). These performances of laughter, then, are used to send very specific and important nonverbal relational messages to other people.

In addition to building, maintaining, and signaling group affiliation, laughter can be used to emphasize or underscore the importance of an experience. For example, researchers found that people telling stories of traumatic events actually laughed during their story-telling. This laughter, rather than showing how the situation was humorous, was instead used to convey how serious the situation actually was (Ladegaard, 2013). In these contexts, laughter serves as a unique way to communicate a specific, layered message, underscoring that laughter is a complex and strategic communicative act performed within conversations and relationships.

Taken together, these studies reveal that laughter is a communicative, social act which can operate like a display of affection, communicating positive feelings within relationships. These various categorizations of both humor and laughter based on their content, target, or stimuli suggest that both laughter and humor are complex acts which should not be taken lightly. Laughter, particularly as a nonverbal way to communicate affection, matters for relationships and for the people in those relationships. Because of its complexity, scholars have started investigating similarities across situations and interactions in which laughter occurs to identify conditions, rules, or social expectations for laughter. Just as certain factors affect when humor is

appropriate or when affection can be displayed and whether it is or is not beneficial for the relationship, laughter is similarly constrained and guided by certain contextual requirements (Floyd et al., 2015).

How We Laugh: Requirements

When laughing, people in the United States tend to follow requirements or social norms regarding when, where, how, and why they laugh, especially in the context of conversations. The first general requirement for laughter is that in order for it to exist, other people usually must be around (Bergson, 1911; Provine, 2000). According to one study, laughter occurred 30 times more often when in a social setting as opposed to when people were alone, and that laughter was sometimes similar to a “behavioral chain reaction” in that one person’s laughter often resulted in laughter from surrounding individuals (Provine, 2000, p.129). A study of humorous videos revealed that videos watched in the presence of friends drew more smiles and laughter than those watched alone (Fridlund, 1991). Thus, laughter is a highly relational and interactional act (Glenn, 2003); this provides support for considering laughter as a display of affection—affectionate behaviors and laughter are inherently social (Floyd et al., 2015; Provine, 2000).

The second necessity for laughter is that not only does the presence of other people matter, but who those people are is also important. People tend to laugh more when others are laughing, especially when they believe the laughers are part of their in-group (Platow et al., 2005). More specifically, when people are around others they care about or others perceived to be similar to themselves, they are more likely to laugh in higher quantities. Therefore, the first two prerequisites for laughter can be summed up by saying that laughter is heavily dependent on the social context in which it occurs, but it does require a social context (Purcell et al., 2010).

Thirdly, laughter almost always ranks lower than speech in interactional importance (Glenn, 2003). Most laughter does not begin until after speaking stops; people generally wait to laugh until the end of a complete sentence or question (Provine, 2000). Furthermore, most laughter stops as soon as someone begins talking again (Jefferson et al., 1977). Thus, speech, or verbal communication, is afforded precedence in human communication, although both are used to communicate. This contrasts with previous findings that interactants emphasize nonverbal cues more than verbal cues when interpreting emotions. Interestingly, laughter (a specific type of nonverbal cue) is treated as less important than the words people say during a conversation (Argyle et al., 1971; Burgoon et al., 2011; Hegstrom, 1979; Jefferson et al., 1977; Lapakko, 1997; Provine, 2000). Regardless of the primacy afforded to laughter or not, it is clear that social norms and expectations dictate how individuals engage in laughter, with laughter often playing a subordinate role to the verbal content of the message (Argyle et al., 1971).

A fourth condition for laughter recognizes the dyadic interplay that occurs when people laugh. This finding states that there are three possible responses to a person who begins laughing or does something to elicit laughter (Jefferson, 1979). The first response is to accept the invitation to laugh by laughing along. The second is to remain silent to signify confusion, and the third is to decline the invitation to laugh (often communicating disapproval) by ignoring the invitation and moving on with the interaction (Billig, 2005; Dodds & Kirby, 2013; Glenn, 2003; Jefferson, 1979). These responses suggest that there are acceptable and expected reactions to laughter; when a person initiates an exchange by laughing, the interactant's responses should fall into one of these three categories, according to social norms of laughter. Therefore, both members of the interaction influence how meaning is created in the conversation and determine whether the initial laugh is successful or not.

The first possible response to laughter (accepting the invitation by laughing along) is also guided by an additional rule (Jefferson, 1979). Glenn (2003) expands on this fifth condition of laughter: the most common way for multiple people to share laughter is for the speaker to start laughing first and then to be joined in that laughter by the listener(s). Rarely do the listeners initiate the laughter (Glenn, 2003). These five requirements for laughter define when and how people laugh and shed light onto laughter as interactive and cooperative way of making meaning. Despite its importance in interaction, however, the research on laughter is lacking in how people understand laughter. All this research on laughter suggests that laughter does, indeed, matter for relationships, not only in the content of what causes people to laugh, but also in the ways that the interactants understand that laughter. Thus, laughter is a form of communication which matters for both people in the interaction, and it has important relational implications as a potential display of affection. With this background knowledge in mind and an awareness of the gaps in the current laughter literature, this study was designed and conducted to expand the research on how laughter operates and is understood in relationships.

The above findings about laughter suggest that, like humor, there are different forms of laughter, and like nonverbal communication, the meaning of that laughter is co-constructed within interactions. However, the research determining exactly how laughter is used and understood by the laughers themselves is scarce, and therefore our communicative understanding of laughter as a relational act is relatively limited and shallow. This study attempts to deepen that understanding and develop a more thorough understanding of laughter as communication. Because laughter seldom happens when a person is alone, and because some of the most commonly considered members of a person's in-group are their friends, this study will address

laughter within friendships to discover more about how laughter is interpreted from the perspectives of the interpreters themselves.

While previous laughter studies have often approached the phenomenon of laughter from a physical perspective (for example, see Dunbar et al., 2012; Vlahovic et al., 2012; Yim, 2016; Zillman et al., 1993), from a theoretical perspective (Glenn, 2003), or through an objective analysis of laughter by a researcher (Provine, 2000), this study adds to the literature by offering an explanation of how the laughers themselves actually co-construct and understand the laughter that they produce in their own interactions. Therefore, to gain a better understanding of laughter as understood by the interactants who are actively constructing the meaning of that laughter, this study is guided by the following question:

RQ1: How do individuals interpret the laughter that occurs within dyadic friendship interactions?

Laughter as Affectionate Communication

Although assessing how interactants understand the laughter they use in their interactions would alone provide interesting results, combining two previously uncombined areas of research—laughter and Affection Exchange Theory—will further deepen our understanding of laughter as a communicative phenomenon. According to Affection Exchange Theory, people need a certain amount and type of affection, although their feelings of affection can differ from their expression of that affection (Floyd, 2006). There are numerous affectionate behaviors identified by AET, but interestingly, laughter is not one of them. Although the causes for, reactions to, and categorization of laughter vary in the limited research which has been done on laughter, laughter is clearly a powerful relational act. Positive and friendly laughter makes people feel included in groups, similar to one another, and generally satisfied with each other

(Alberts & Drzewiecka, 2008; Glenn, 2003; Kurtz & Algoe, 2017; Vlahovic et al., 2012).

Furthermore, just like affectionate behaviors which fall outside a person's optimal range of tolerance, laughter can be harmful for a relationship if used in certain ways (Floyd, 2006; Floyd et al., 2015; Glenn, 2003).

Tying these two areas of research together, then, provides insights into how laughter functions relationally. Affectionate communication is “those behaviors that encode feelings of fondness and intense positive regard and are generally decoded as such by their intended receivers” (Floyd et al., 2015, p.312). Although all instances of laughter may not be classified as displays of affection according to the definition outlined by AET, the findings that laughter (and humor) can increase feelings of fondness suggest that perhaps this communicative behavior should be considered a form of affectionate communication. Therefore, in order to combine these two previously separate areas of research and to enhance our limited understanding of how laughter operates within our relationships, this study is also guided by the following question:

RQ2: How does laughter function as an exchange of affection in friendships?

To answer these two guiding research questions, a study was developed to deepen our understanding of laughter, assessing laughter not only from the researcher's objective perspective but also from the laughers' perspectives.

CHAPTER 3 – METHODS

To answer the above research questions more clearly, this study consisted of several stages of data collection and analysis. Pairs of participants were recruited to have a short, video-recorded conversation with each other and were then interviewed about their experience, particularly about their understanding of the laughter that occurred during their conversation. A more detailed description of the data collection and analysis process follows.

Participants

Because laughter seldom occurs when a person is alone (Bergson, 1911; Provine, 2000), this study assessed laughter within dyads. Participants for this study included previously-acquainted same-sex friendship dyads; much research has been done on humor in romantic relationships, initial interactions, and the understanding of humor and laughter as personality traits, but little research has addressed laughter in platonic friendships (Bressler & Balshine, 2006; Hall, 2017; Treger et al., 2013). Same-sex friends who had been friends for at least one month were chosen to attempt to mitigate some potential effects of romantic attraction (Bressler & Balshine, 2006; Treger et al., 2013) and to increase the likelihood that the friendship was a steady one (for more detailed examples of the links between similarity and friendships, see Alves et al., 2011, and Hafen et al., 2011). Furthermore, in order to increase the accuracy of communication between the researcher and participants, speaking fluent English was included as an additional inclusion criterion.

In total, 17 dyads ($n = 34$) were recruited via flyers placed around the university campus, word-of-mouth invitations in various lectures and classes, and announcements placed on class websites (see Appendix A for examples). All recruitment procedures and the data collection

steps for this study were approved by the Institutional Review Board at Colorado State University, and each dyad was compensated for their participation with a \$10 gift card for a coffee shop in Fort Collins. Furthermore, several university classes offered optional extra credit for student participation. Of the 34 participants, 71% ($n = 24$) identified as female, and 29% ($n = 10$) identified as male (see Table 1, next page, for a summary of participant demographics by dyad). The majority of participants were White/Caucasian ($n = 25, 74\%$), but several participants identified as Asian ($n = 2, 6\%$) or Hispanic/Latina(o)(x) ($n = 5, 15\%$). Two participants selected “Other” as their race/ethnicity (6%). Participant ages ranged from 18-29 years old ($M = 21.56, SD = 2.77$). Relationship lengths for the dyads ranged from less than six months ($n = 2, 12\%$) to more than five years ($n = 1, 16\%$), with most dyads selecting 6-12 months ($n = 6, 35\%$) as the length of their relationship. The remainder of dyads marked 1-2 years ($n = 4, 24\%$) and 2-4 years ($n = 4, 24\%$) as the amount of time they knew each other.

Procedures

Data collection proceeded in two phases which were modeled after Gottman’s (1985) and Levenson & Gottman’s (1983) methods for studying affect in marital interactions. In the first phase, participants engaged in a five-minute video-recorded conversation with each other. In the second phase, participants were interviewed separately by the researcher while watching their recorded conversation. Each appointment lasted between 60 and 90 minutes, and this study consisted of 17 appointments.

Phase 1

At the onset of the research appointment, the researcher welcomed the participants and introduced herself to them. She briefed them about the nature of the study and obtained informed consent. Participants were then given two minutes to write down a few entertaining, humorous,

Table 1*Demographic Data & Summary of Conversations*

Gender	Age A	Age B	Race A	Race B	Rel. Length	Conversation Summary	Notes/Observations on Laughter
Male	26	25	Other: White/Asian	Hispanic/Latina(o)(x)	6-12 months	One participant: stories about embarrassing & strange situations from past couple weeks; bathroom humor	
Female	23	18	White/Caucasian	White/Caucasian	<6 months	Discussing skiing and recent individual experiences	
Female	20	19	White/Caucasian	White/Caucasian	1-2 years	Giggly, laughing a lot; discussing ridiculous situations	All interviewed laughs involved participant A
Female	20	19	Asian	White/Caucasian	<6 months	Talking about future trips/plans, relationships, & school; hesitant to openly state a lot of things ("filtering")	All interviewed laughs involved participant B
Male	19	19	White/Caucasian	White/Caucasian	2-4 years	Chatting about recent ski trip together; poking fun at third party friend	6 laugh instances in conversation
Male	24	22	White/Caucasian	White/Caucasian	1-2 years	School-related conversation; discussing & making fun of third-party friend's recent actions	
Female	19	18	White/Caucasian	White/Caucasian	6-12 months	Giggly, nervous laughter, especially from one participant; discussing recent individual skiing trips	All interviewed laughs involved participant B
Female	21	21	White/Caucasian	White/Caucasian	1-2 years	Discussing bugs & fears of bugs, exaggerated words & gestures	
Female	24	22	White/Caucasian	White/Caucasian	6-12 months	Inside jokes, commonly discussed TV shows; stories about personal relationships & school experiences	
Female	20	20	White/Caucasian	Other: Black & White	2-4 years	Discussing recent shared class experiences, making fun of classmates	
Male	22	22	White/Caucasian	Hispanic/Latina(o)(x)	6-12 months	Calmly swapping stories about recent experiences--video games, school; some competitive banter	7 laugh instances in conversation; No shared laughter
Female	27	23	Hispanic/Latina(o)(x)	White/Caucasian	6-12 months	Lots of giggly, nervous laughter; self-deprecating & humorous stories from both participants; exaggerations	
Female	29	27	White/Caucasian	White/Caucasian	2-4 years	Swapping personal dating stories & experiences	Most laughs from A; No shared laughter
Female	22	21	Asian	Hispanic/Latina(o)(x)	5+ years	Sharing stories of weekend experiences & discussing study; A: serious, tired, & focused, B: nervous & giggly	All interviewed laughs involved participant B
Female	21	21	White/Caucasian	White/Caucasian	2-4 years	Many stories from one participant: recent experiences & referring to common/inside jokes; exaggerated actions	All interviewed laughs involved participant B
Male	19	18	White/Caucasian	Hispanic/Latina(o)(x)	6-12 months	Discussing love of squirrels, referring to shared texting conversations; recounting high school experiences	
Female	21	21	White/Caucasian	White/Caucasian	1-2 years	Mostly serious conversations about families & home-life; discussing upcoming school shut-down & high stress	

or interesting experiences they had within the past two weeks; initial pilot studies indicated that giving participants time to consider their recent experiences as back-up conversation topics resulted in more natural conversations. The participants were then asked to engage each other in a five-minute light-hearted conversation, with the suggestion that if they struggled to find topics to discuss, they could refer to their remembered experiences. The participants were instructed: “I’d like you to have a five-minute conversation with each other about any topic. Please try to keep it somewhat light, remembering that you are being recorded. If you feel you’re running out of ideas of things to talk about, feel free to refer to your list and explain one of the experiences you’ve had recently. Do you have any questions before I leave the room?” Results from an initial pilot study suggested that these instructions were helpful for participants to engage in a five-minute conversation, and that five minutes was long enough for friends to discuss multiple issues while generating several instances of laughter from each conversational partner. The researcher then started recording on an iPad framed on both participants and left the room. After five minutes, the researcher returned and stopped the conversation and the recording, and the study continued with the interview portion.

Phase 2

In the second phase of data collection, the researcher asked one participant to move to a separate room. The other participant (“interviewee”) was asked to join the researcher in a one-on-one interview which involved watching their video-recorded conversation and answering questions about their recorded conversational experience (see Appendix B for interview questions).

While watching the video during the interview, the researcher paused the video and ask the interviewee a series of questions regarding the purpose, feelings, and assumptions behind each

incident of the interviewee's laughter. Sample questions included "What was going through your mind at this moment in the conversation?", "How did you feel at this point?", and "Why did you laugh here?", or, more specifically, "Why did this part of the conversation lead to a laugh-out-loud response for you?"

At each instance of laughter by the non-present participant ("partner"), the researcher paused the video and asked the interviewee a series of questions about their perceptions regarding the purpose of the laughter and how the interviewee believed their friend was feeling. Sample questions included, "What do you think they were feeling at this moment?" and "Why did they laugh here?" Finally, at each instance of joint laughter (laughter produced simultaneously by both participants), the interviewee was asked to respond to both sets of questions regarding the reasons for their own laughter as well as their presumed understanding of their partner's laughter.

To limit participant fatigue during the study, each interviewee was interviewed about no more than ten laughter instances. Preliminary tests of the data collection process suggested that the point of data saturation sought by this study occurred at around ten laugh instances, at which point participants' interest and ability to think deeply about their experiences also began waning.

The initial round of questions listed above involved the interviewee's own *self-generated* explanations for the laughter that occurred. After this portion of the interview was completed, the researcher revisited each of the interviewee's responses with the interviewee, reminding the interviewee of the context and the interviewee's initial answers and explanations. Then, the interviewee was shown two lists that provided more specific options pulled from literature for describing their feelings and their reasons for laughing (see Appendices C and D). The first list included terms from the Positive and Negative Affect scale (Watson et al., 1988), and the second

list included reasons for laughter generated from both the laughter and humor literature (Berger, 2016; Dunbar et al., 2012; Giles & Oxford, 1970; Wildgruber et al., 2013). For each laughter instance, the interviewee was reminded of their initial answer and was asked to identify one or more adjectives to describe their own or their conversation partner's feelings. They were also asked to choose one or more reasons articulating the cause of the laughter from the list, or they could create their own reason (*Other*) if they felt their reason for laughing was not on the list.

After each answer (no more than 10) was revisited, the participants switched places, and the second participant completed the interview about their recorded conversational experience, answering questions about the same laughter instances as the first participant—first openly, and then while considering the lists provided. After the interview for the second participant was complete, participants were brought together, debriefed, and compensated.

Organizing the interviews in this way offered insight into each individual's assumptions about the laughter that occurred by giving them the chance to articulate exactly what they were feeling and what the reasons were for their laugh-out-loud responses. This setup also allowed for a richer understanding into how people believe they use and understand laughter, as participants were given the chance to explain both their own and their partner's laughs, and comparing the responses offered deeper insight into the co-construction and collective understanding of laughter. After all data was collected, the research process proceeded with data analysis.

Analytic Strategy

The analysis of this data involved finding various themes across participants' feelings and across the causes, explanations, and understandings of laughter as explained by the participants. Qualitative coding following Tracy's (2018) phronetic iterative analysis and comparisons of partners' responses about the same laugh instances resulted in a few themes across friends'

understandings of laughter and also revealed whether friends interpreted each other's laughter in similar or different ways. In general, this analysis involved several different techniques. First, participants' initial self-generated responses about feelings and reasons for laughing were analyzed for themes (Tracy, 2018). This involved assessing participants' own self-generated responses and then analyzing their list-based reasons for laughing. Additionally, within dyads, the two individuals' answers were labeled in comparison to one another as being similar, different, or mixed. Counts were taken of the number of laughs that occurred in each conversation, the number of laughs that were addressed in the interviews, and the number of times each list category appeared. More specifically, to answer each of the identified research questions, the following steps were taken.

RQ1: How do individuals interpret the laughter that occurs within dyadic friendship interactions?

To address RQ1, the interview data was coded using Tracy's (2018) phonetic iterative approach to reveal themes and similarities within and across friendships, taking the research questions, participant responses, and the findings from previous research studies into account during the analysis. First, participants explained their own self-generated feelings and laughter reasons before engaging in coding their own responses in order to increase accuracy and ensure a high level of resonance between the researcher's descriptions and the participants' actual experiences (Tracy, 2010). During the interview process, participants were asked to identify the category from the literature that best described their own experience for both their feelings and their reasons for laughing. These list-based responses were then assessed for the most often-used categories, and the responses which did not fit into the pre-determined categories were *in vivo*

coded and combined into thematic categories that were missing in current categorizations (Saldaña, 2016; Tracy, 2018).

In addition to sorting the list-based reasons, the researcher also engaged in first-cycle coding of participants' own self-generated explanations (Saldaña, 2016). Codes were identified by condensing participants' responses to short phrases, searching for themes across participants' responses, and searching for similarities to research-based categories. Participants' own wordings and explanations were kept with the shortened phrases in a form of Saldaña's (2016) *themeing the data* or *in vivo coding* to maintain accuracy and resonance between the categories and the individuals' words (Tracy, 2018). This first level of sorting resulted in 475 total self-generated explanations of laughter, which combined into 26 categories in the second cycle coding, including some categories from literature and some newly generated codes (see Table 2, p.48, for the list of self-generated laughter reasons) (Saldaña, 2016; Tracy, 2018). These secondary codes were created with the categorizations of laughter reasons from literature in mind (Berger, 2016; Dunbar et al., 2012; Giles & Oxford, 1970; Wildgruber et al., 2013), following Tracy's (2018) approach of tying the literature, codes, and findings together.

Finally, each interviewee's responses were compared to their partner's responses to determine whether the explanations of laughter aligned with each other and to determine which types of laughter were most misinterpreted¹. This comparative analysis offered deeper insights into how often each category or type of laughter was both understood and co-constructed in these friendship interactions. After all interview responses were coded, categorized, and assessed, the second research question was addressed, tying the results from this study to the broader literature on AET.

¹ In this paper, the term "misinterpreted" is used to refer to laugh instances which were described or understood differently by the two partners and is not intended to be an indication of being wrong or incorrect.

RQ2: How does laughter function as an exchange of affection?

In order to answer RQ2, claims from Affection Exchange Theory were used to shed light on the relational effects of laughter during conversations between friends. First, the results from the study were assessed for themes, patterns, and general findings of how the meanings of laughter are co-constructed by both members of the conversation or relationship. Then, those findings were compared to claims from AET about what constitutes affectionate behavior. When paired with AET claims, the qualitative interview data from this study offers insights on how laughter can bring people closer together in their relationships, but the data also provided insights into different types of laughter, some of which may be more affectionate than others. This provides support for viewing positive laughter as a type of affection within friendships. In the process of answering these two research questions, various interesting results were uncovered.

Reliability & Validity

In order to ensure the reliability of this study, several techniques were used which were based on Tracy's (2010) criteria for excellent qualitative research and Creswell & Creswell's (2018) steps for qualitative research design. First, in order to provide a holistic account of the research study per Creswell & Creswell's (2018) suggestions, a detailed description of the background and other influences on this study is provided along with the results. An explanation of the focus of the study, the researcher's role and positionality in the study, the selection of participants, and the context for the study are provided as thick descriptions of the research process, adding to the *credibility* of this study (Tracy, 2010).

Second, throughout the data collection and analysis processes, previous research was used as the basis for most coding schemes. In general, the data analysis process followed

Tracy's (2018) phronetic iterative approach to coding and research. The research began with a pinpointed issue—the reasons and meanings friends assign to laughter—which was followed by a process of examining and revisiting the research, context, and study findings numerous times to determine how they best fit together. More specifically, throughout the study, the researcher coded data openly and then also tied those codes back to existing scholarship, searching for the link between the data, the research question, and previous findings and field understandings (Tracy, 2018).

Furthermore, participants were given lists of choices for their feelings and their reasons for laughing during the study; these lists were created from existing literature which specifically identified some reasons for laughter (Berger, 2016; Dunbar et al., 2012; Giles & Oxford, 1970; Wildgruber et al., 2013). These previously identified types of laughter were also used to categorize participants' initial responses (their stated reasons for laughing prior to seeing the list), but participants' responses were also allowed to stand alone as their own self-described views. Using the same coding scheme (the lists of reasons and feelings) across multiple stages of the data collection and analysis process improved the overall reliability and quality of this study in terms of both the *meaningful coherence* with current literature (Tracy, 2010) and the qualitative characteristic of using both *deductive* and *inductive* data analysis (Creswell & Creswell, 2018).

In addition to taking steps to ensure consistency and greater reliability across multiple stages of the research process, various aspects of this study contributed to the internal and external validity of the research being done. First, to enhance the internal validity of the study, this research project was marked by *good credibility*, as it was based in theory and previous research, with participants reflecting on their own responses using multiple avenues—first, their

own words, and then the words from laughter literature (Tracy, 2010). Researcher notes and recorded responses were checked with the participants (*member checking*) throughout the highly interactive interview process, and participants were pushed to provide clarifications if their responses were not clear (Creswell & Creswell, 2018). As Tracy (2010) points out, good qualitative research resonates well with participants' own experiences while being sincere and ethical, representing participants' ideas in the way they intended them to be represented. In addition to taking these steps, this research was also highly *participatory*, as the participants were involved in determining what the study would highlight—they chose the conversation topic, they articulated their own thoughts, and they tied those thoughts to categories from research (Creswell & Creswell, 2018).

Furthermore, the topic of laughter within friendships is *timely*, relevant, significant, and interesting, making it a worthy topic for study (Tracy, 2010). Little to no research has been done on people's understanding of laughter or on laughter as a display of affection (Floyd, 2006; Floyd et al., 2015). Therefore, this research also makes a significant contribution to the laughter literature by linking laughter to Affection Exchange Theory, extending both the theory and scholarly understanding of laughter as a relational action. Additionally, the methods used in this study were novel modifications of previous study methods (Levenson & Gottman, 1983), allowing participants to speak for themselves regarding their own experiences but also allowing them to re-experience those feelings and ideas by watching a video of their conversation, creating a context for accurate interpretations and explanations of the experience. Thus, this study makes a *significant contribution* to both the theoretical and methodological literatures, as well (Tracy, 2010).

Finally, several techniques were used to increase the external validity of this research study. The use of previous research to establish the coding scheme suggests that this study fits within and extends previous research in this area (Tracy, 2010). Similarly, to help provide a context for comparison with any future studies, thick and detailed descriptions about the data collection process and the results are provided to paint a clear picture for the reader (Tracy, 2010). With this deeper understanding of the steps that were taken to ensure the excellence of this research, the process of data collection becomes more understandable, and the results from this study become interesting insights into how laughter is used as both a form of communication and as an act of affection.

Researcher Positionality Statement

Because the researcher plays such a central role in the data collection and analysis process in qualitative research, acknowledging the researcher's positionality, values, assumptions, and biases becomes crucial for understanding the research outcomes. My experiences as a relatively new researcher allowed me to approach this study with a fresh perspective rather than one highly shaped and refined by years of scholarship. As an individual originally from the midwestern United States, I communicate using certain assumptions and norms which are likely not the standard for all people, such as regularly responding nonverbally and verbally, smiling, and making regular eye contact during conversations and interviews.

As an able-bodied, educated white female, I approach this study from a position of privilege which has afforded me certain opportunities that are not available to all people. Due to my years working and studying within American academic institutions, I bring certain biases to this research, and, although I have made every effort to ensure objectivity, these biases may have shaped the way I understood and interpreted the data. To limit the impact of my own biases on

the data, I took several steps to ensure the results were as participant-driven as possible; for example, I allowed participants to speak for themselves by asking open-ended questions during the interview, and rather than articulating reasons for laughter based on my own personal experiences, I pulled examples from previous laughter literature and built the interview process around those examples. However, I approached this study with the assumptions that participants would be willing and able to articulate their own experiences and thoughts, and that they would be honest. Although this may not have always been true, I believe despite my own biases, the study was productive and interesting, producing unique, exciting results. However, as this study did not only involve a researcher but also involved various participants, understanding their role in the study also offers greater insight into the results.

CHAPTER 4 – RESULTS

Overall, this study offered insights into the feelings participants experienced during their conversations, specifically while communicating through laughter. This study also allowed participants to articulate in their own words and using terms from literature the driving forces behind their laughter. These results, both individually and comparatively within each dyad, help develop our understanding of how laughter is understood and used within relationships. A total of 17 dyads (34 participants) participated in this study, resulting in approximately one hour and 39 minutes of total recorded conversation time, featuring 402 laugh instances. Of those 402 total recorded laugh instances, 247 (61.44%) of them were discussed during participant interviews and then analyzed by the researcher, resulting in various insights into the two research questions guiding this study.

The first goal of this study was to identify how friends co-construct the meaning of their laughter within their interactions. To answer the first research question, members of the friendship dyads were asked individually to explain the underlying reasons for the laughter that occurred during the conversation, either their own, their partner's, or the shared laughter. Participants explained the laughter in their own words (referred to as *self-generated laughter reasons* in this report) before being shown a list of reasons for laughter as identified by scholars (referred to as *list-based reasons* in this report) and asked to articulate which category best fit their own description and understanding of the laughter instance.

In addition to compiling these self-generated and list-based laughter reasons, within each dyad, the individuals' descriptions of laughter instances were compared to each other, revealing various trends across dyads in how laughter is used, understood, and interpreted in friendships

and offering insights into the first research question: *RQ1: How do individuals interpret the laughter that occurs within dyadic friendship interactions?*

Laughter Interpretations in Friendships

Self-Generated Reasons

When asked to explain their own or their partner's laughter using their own words, participants gave numerous reasons for laughing. Participants offered a total of 475 self-generated descriptions for the laugh instances that occurred in their conversations. These descriptions were combined into 26 different categories, some of which were linked to previous laughter literature (e.g., *social, derision, ignorance*), and some of which stood alone as new descriptions of laughter (e.g., *reactionary*, or laughter in response to their friend's laughter; *common joke*, or laughter at a regularly made joke or statement in the relationship; and *relatability*, or laughter out of understanding) (see Table 2, next page). The most common self-generated reasons for laughing (for themselves or their partner) as described by participants prior to seeing any lists from literature were *anxiety/awkward* ($n = 82, 17\%$), *humorous* ($n = 72, 15\%$), *derision* ($n = 47, 10\%$), *social* ($n = 40, 8\%$), *reactionary* ($n = 39, 8\%$), and *memory/re-living it* ($n = 35, 7\%$).

Anxiety/Awkward. First, various participants described numerous laugh instances ($n = 82, 17\%$) as resulting from feelings of awkwardness, anxiety, or discomfort, saying they laughed because they “felt awkward” or “to make it less uncomfortable” (13-01²). Some participants indicated that they consciously laughed as they were “trying to figure out how to react” (11-02) or attempting to “break the tension” (11-02; 18-01). Similarly, one participant noted that starting

² Laugh IDs are included to provide a more detailed picture of the variety in responses across dyad number and within conversations. Laugh IDs consist of the dyad number (10 through 27) followed by the laugh number (01 through 10). For example, “13-01” refers to the first laugh that occurred during dyad 13's conversation. Note: Any laugh number of 00 (e.g., “12-00”) indicates a laugh instance which was only explained by one participant.

Table 2
Self-Generated Laughter Reasons: Description & Times

Interviewee		Partner		Combined List		
Descriptions	Count	Descriptions	Count	of Codes Used	Count	Percent
Annoyed	1	Anticipation	8	Anxiety/Awkward	82	17%
Anticipation	9	Anxiety	14	Humorous	72	15%
Anxiety	35	Awkward	23	Derision	47	10%
Awkward	10	Common joke	10	Social	40	8%
Common Joke	9	Confused	1	Reactionary	39	8%
Competitive	2	Cue	8	Remembering	35	7%
Complimenting	1	Derision	22	Mental Image	28	6%
Confusion	1	Endearing	4	Lighten	24	5%
Cue	1	Humorous	32	Common joke	19	4%
Derision	25	Ignorance	3	Relatability	19	4%
Humorous	40	Lighten	16	Anticipation	17	4%
Ignorance	1	Mental Image	13	Surprise	11	2%
Internal	9	Proud	2	Cue	9	2%
Lighten	8	Reactionary	25	Internal	9	2%
Mental Image	15	Relatability	10	Endearing	4	1%
Reactionary	14	Remembering	14	Ignorance	4	1%
Relatability	9	Ridiculous	4	Ridiculous	4	1%
Remembered	21	Social	21	Uncertainty	3	1%
Social	19	Surprise	6	Competitive	2	0%
Surprise	5			Confused	2	0%
Uncertainty	3			Proud	2	0%
Unusual	1			Annoyed	1	0%
				Complimenting	1	0%
				Unusual	1	0%
22 total codes	239	20 total codes	236	26 total codes	475	100%

Note: Numbers indicate the number of times each category was mentioned by participants.

a conversation in front of a camera simply felt unnatural and strange, pointing out their feelings of “uncertainty,” “awkwardness,” being “aware of recording,” and “initiating the conversation” while having an “unnatural conversation start, knowing you’re being recorded” (26-01). Another participant explained her laughter this way: “Sometimes I laugh when I don't know how to react...I was just feeling awkward and uncomfortable” (13-05). Every dyad indicated some feelings of awkwardness, anxiety, or nervousness, and most dyads (all except three) had at least

one member that felt this way at the very beginning of the conversation as a result of participating in an unnatural, recorded conversation for this study.

Humorous. Many participants explained the laughter that occurred in their conversations as resulting from something that was legitimately funny ($n = 72$, 15%). These participants indicated that their laughter resulted from “finding it funny” (18-03), or from saying something that was “genuinely funny” (22-03), simply describing these instances as, again, “It was funny” (16-05; 19-00; 24-02).

Derision. In addition to finding some things objectively funny enough to laugh at, numerous participants explained that their laughter was a result of laughing at someone—themselves, their conversation partner, or a third party not present in the conversation ($n = 47$, 10%). These participants used language to explain their laughter as an attempt “To make fun of [me/them]” (13-02; 15-02; 24-07) or “to poke fun back at him” (20-07). Thus, this laughter was directed at someone and therefore was coded as *derisive* laughter (Giles & Oxford, 1970).

Social. Like the previous category of derisive laughter, this category was derived from laughter research (Giles & Oxford, 1970) and included various types of laughter that had some social goal or aim ($n = 40$, 8%). Self-generated reasons for *social* laughing included laughter to make the other person feel more at ease: “to break the tension and make it more comfortable” (18-01). Other instances of social laughter involved laughing as an acknowledgement of understanding: “to let her know I was listening now and in previous stories about this guy” (22-00), or “laughing ironically, like a ‘Right?’ way to acknowledge her” (24-06). Similarly, some social laughter descriptions included laughter to “fill a void” (26-05) or to “fill time” (18-01); as one participant explained, “It’s how I fill things in when I’m thinking” (13-03). Each of these

instances had a goal of accomplishing something in the interaction or communicating something to the other person, suggesting that these explanations were examples of *social* laughter.

Reactionary. A subset of participants ($n = 39$, 8%) indicated that some laughter in their conversations was simply a reaction to their friend's laughter. These individuals explained their laughter as "because she laughed" (11-02, 16-02), "he laughed first, which made me laugh" (14-04), and "once one person starts laughing, it goes back and forth" (12-00). For these participants, laughter was a natural and uncontrolled but prompted response to their friend's laughter.

Memory/Re-Living It. Numerous participants indicated that some instances of laughter were a result of their own thinking about the story or incident being discussed. These individuals explained laughter as resulting from *remembering* or *mentally re-living* a certain experience as part of the storytelling or story-listening process ($n = 35$, 7%). During conversations, participants would begin laughing, describing their reasons for laughing as stemming from imagining themselves back in the moment featured in their story. For example, participants laughed because they were "thinking of my own experiences" (10-07), "remembering the situation" (17-06) or simply "remembering" the individual or shared memories they were discussing (14-05, 15-05, 18-05). Some participants indicated they or their partner were "thinking back to the situation" (19-05) or "replaying it in my head" (16-05). One participant specifically mentioned that she was thinking about how "it's just a funny memory; I was thinking about it being reported on [in the study]" (24-07). Thus, many participants felt their laughter was a result of memory or mentally re-living an experience during the storytelling process.

Miscellaneous Descriptions. Other notable explanations that were brought up numerous times by various participants were laughing at the *mental image* or visualization of the story being told ($n = 28, 6\%$) (e.g., “it was a funny image” [16-00] or “picturing her doing that” [17-04]), laughing as an attempt to *lighten* the situation or soften harsh comments ($n = 24, 5\%$) (e.g., “we make humor out of our stress” [21-01], “cushioning my directness” [23-06], or laughing to “show her I’m not angry or upset” [23-00]), laughing at inside, repeated, or *common jokes* ($n = 19, 4\%$) (e.g., “that’s a common thing between us; it’s a joke we understand” [18-02] or a “recurring joke” [14-04]), laughing because the laugher could *relate* to the story being told ($n = 19, 4\%$) (e.g., because “I’ve been there” [15-00] or “she can relate to [that situation]” [12-04]), and laughing out of *anticipation* of a funny moment that was yet to come ($n = 17, 4\%$) (e.g., “I’m expecting something crazy to happen; he brought it up, so I know something good is coming” [20-04] or laughing out of “anticipation of what’s coming next” [23-07]).

Participants offered these explanations for the laughter that occurred during the interactions even before seeing the list of laughter reasons pulled from literature, but many of the self-generated explanations did, in fact, align with the reasons they chose from the list of laughter reasons.

List-Based Reasons

Upon seeing the list of laughter reasons described by literature, participants selected several categories more often than others. This research study involved interviewing participants about 247 laugh instances. Participants described each one of these laugh instances by choosing one or multiple reasons from the list provided to them, which resulted in 396 list-based descriptions of laughter.

In this study, the most frequently chosen categories from the list of laughter reasons for laughter produced by the interviewee, the partner, or both were *Humorous* ($n = 118, 30\%$), *Social* ($n = 105, 27\%$), and *Anxiety* ($n = 94, 24\%$) (see Appendix C for the list of laughter reasons presented to participants, and see Table 3 below for the number of times each category was chosen). More specifically, the most common subcategories chosen from within these categories were *Humorous: It was funny* ($n = 118, 30\%$), *Anxiety: I felt awkward/It was an awkward situation* ($n = 41, 10\%$), *Social: It seemed like the appropriate response* ($n = 35, 9\%$), and *Derision: To make fun of them* ($n = 28, 7\%$). Notably, many of these categories overlapped with the self-generated reasons identified by participants: *Anxiety*, *Humorous*, *Derision*, and *Social* were the top categorizations for both self-generated and list-based reasons for laughing.

Interestingly, some participants felt that their own or their partner's reason for laughing did not fit into any of the categories presented to them; these participants chose instead to explain the laughter using the *Other* category, articulating a reason that was not included on the list of laughter reasons.

Other Reasons

Recategorized Reasons. Across all instances of laughter, participants chose the *Other* category 62 times throughout the study (see Table 4, below). Six of these selections (10%) were recategorized into already-existing categories which participants may have overlooked or misunderstood in their reading of the laughter list. For example, one participant described their list-based reason for laughing as *Other* and explained that they laughed out of confusion, explaining "I was like, 'What are you doing, and why?'" (12-01). This was recategorized into

Table 3*List-Based Laughter Reasons*

Laughter Reason (chosen by either participant)	Total
Anxiety	94*
I felt uncomfortable	12
I was nervous	24
I felt scared	0
I felt awkward/It was an awkward situation	41
I was anxious	10
Derision	51*
They said something stupid	12
To make fun of them	28
They said something offensive	1
To make fun of self	7
Social	105*
To let them know I was listening	20
To fill time	8
It seemed like the appropriate response	35
To make them comfortable	16
To be friendly	16
Ignorance	20*
I didn't know how to respond	12
I wasn't sure what was going on	3
I was trying to act like I understood	3
Apologetic	8
I felt bad/To apologize	8
Physical	0
I was being tickled	0
Humorous	118*
They said something truly laugh-out-loud funny	13
I couldn't help it—it was funny	57

Note: List shown to participants and the number of times each (sub) category was chosen. Categories marked with an * indicate that the totals equal more than the sum of the sub-categories because some participants chose the broad category rather than specific sub-categories to explain their own or their partner's laughter

Table 4*Other Categories Articulated by Participants*

Other Description (Participants' words)	Explanatory Quotes	Times Chosen	Recategorized As
Anticipation	"I'm expecting something crazy to happen. He brought it up, so it'll probably be something good." (20-04) "Just knowing it's going to be a sad story; anticipating it." (22-02)	3	-
Choose laughter (Stressful, negative, difficult situations)	"It's a frustrating situation; we're choosing to laugh instead." (22-04) "We make humor out of our stress." (21-01)	4	Other: Lighten
Common Joke (Shared/Previous joke, acknowledgement)	"Acknowledging our relationship connection." (18-06a) "It's a mutual joke from our past." (18-06b)	2	-
Communicate non-seriousness	"Communicating lightheartedness." (20-06) "I'm cushioning my directness." (23-06)	2	Other: Lighten
Competitive	"It was a sort of cocky laughter; laughing out of competition." (20-05)	1	-
Confusion	"I was like, 'What are you doing, and why?!'" (12-01)	1	Ignorance
Conversation-building (Social)	"She was kind of conversation-building, anticipating the sad story coming up." (22-06)	1	Other: Anticipation
Cue them (own joke) (Get them to laugh)	"Part of storytelling is to get them to laugh; trying to get them to enjoy it too." (22-03) "Signal the punchline" or "Seeking the appropriate response" (24-03)	4	-
Cute/Endearing	"Thinking of [the person in the story] bundled up going [sledding] downhill--he's so cute." (26-09) "She finds the things I find entertaining cute or precious--it makes her laugh." (23-06)	2	-
Empathetic	"It was a pity laugh. Like, 'Aww'--an empathetic laugh." (22-00)	1	-
Exaggeration	"Saying 'Everyone was lined up for Jimmy John's;' it was just a funny exaggeration." (14-02) "I'm always so animated--my animation and gesture made her laugh." (24-08)	2	Humorous
Fulfill expectations	"That's a common joke for us--it's the response we always have." (18-02)	1	Other: Common Joke Social

Table 4, cont.

Other Description (Participants' words)	Explanatory Quotes	Times Chosen	Recategorized As
Memory/Remembering/ Past Experiences	"I imagined it first, then told the story, kind of like the whole 'think before you speak' thing." (10-05) "Recalling her uncomfortableness; looking back on it--was the worst thing, but it's just funny now." (24-07) "Thinking of past experiences and memories of previous jokes." (25-00)	7	-
Mental Image	"Thinking of the visual image." (10-06) "The visualization of the spider being torched; just the possible accidental bad end [to the story]." (17-04)	3	-
Natural/Uncontrollable	"It just happened." (10-01)	1	Anxiety
Reactionary (they laughed)	"He laughed first, which made me laugh." (14-04) "It was reactionary, feeding off me laughing." (16-05)	7	-
Reassuring them	"Her extreme desire for dairy is hilarious, but I don't judge her for it." (24-08)	1	Other: Lighten
Relatability	"He's been there before; it was relatable." (10-03) "Relating to it [the story]" (21-01; 21-05; 21-03; 24-02) "She had the same imagery in her mind; relatability." (21-04)	13	-
Relief	"Realizing this [conversation] is going to be fine; like a laugh of relief, exhaling nervous emotions." (24-01)	1	Anxiety
Self-Joke	"He liked that I sort of gave him approval for his joke [through my laughter]." (14-00) "It was like proud or very satisfied laughter, like 'I know I'm not supposed to do it, but I do it anyways.'" (24-00)	2	-
Sharing moment w/friend	"I could picture it; trying to acknowledge the relatability & funny situation." (18-07)	1	Other: Relatability Other: Mental Image
Show interest	"She was setting up the story, I was showing my interest." (22-02)	1	Social
Truthfulness	"Thinking of our shared experiences; we had the same frame, it's safer to laugh about it." (20-08)	1	Other: Lighten Other: Relatability
Total		62	

Note: **Bold-faced** categories were used for second-level categorization

Ignorance: I wasn't sure what was going on. Another participant laughed at the very beginning of the conversation, explaining that he was “wondering what [my friend] wrote down” and that he laughed because “It just happened” (10-01). This participant assigned his laughter to the category of *Other: Natural/Uncontrollable*, but this was recategorized into *Anxiety: I felt awkward/It was an awkward situation*.

Similarly, two participants indicated their belief that *Other: Exaggeration* was a category that was missing from the list of laughter reasons, explaining their laughter as: “Saying ‘Everyone was lined up for Jimmy John’s;’ it was just a funny exaggeration” (14-02), and “I’m always so animated—my animation and gesture made her laugh” (24-08). Although interesting, these explanations seemed to fit best under the category of *Humorous: I couldn’t help it—it was funny*. Like the exaggeration examples, this was recategorized as *Humor: I couldn’t help it—it was funny*. In total, six *Other* reasons were recategorized as *Anxiety* ($n = 2$), *Humorous: I couldn’t help it—it was funny* ($n = 1$), *Ignorance: I wasn’t sure what was going on* ($n = 1$), *Social: It seemed like the appropriate response* ($n = 1$), and *Social: To let them know I was listening* ($n = 1$).

Although these descriptions of *Other* seemed to fit best in already existing categories, other laugh reasons which participants explained using *Other* categories were unique and novel. Some of the laugh instances explained by participants through *Other* descriptions were also explained using existing categories (see “Coupled Causes” below), and some laugh instances were explained only using the *Other* description (see “Solo Selections” below).

Repeated Reports. In addition to these *Other* reasons for laughing which explained laughter in conjunction with existing categories, numerous participants articulated the same *Other* explanations as one another. The most common *Other* categories across all dyads (after

combining categories together) are listed in Table 5 (next page). Many of these explanations were identified by individuals both in their initial, self-generated explanations of laughter (prior to seeing the list of literature-based laughter reasons) and re-articulated after viewing the list as an *Other* explanation of laughter. For example, *relatability* laughter was described by 19 participants before seeing the list of laughter reasons and was still described by 15 participants (24%) as an *Other* explanation of laughter after viewing the literature-based list of laughter reasons.

Other *Other* categorizations were less consistent, however, appearing in both places but significantly decreasing in frequency after viewing the list of laughter reasons (e.g., *reactionary*, *mental image*, *lighten*, *anticipation*, etc.). For example, *reactionary* laughter—laughter in response to seeing someone else laugh—was initially mentioned 39 times prior to viewing the list; after being instructed to describe the laugh instance using the reasons on the list or by articulating a non-listed *Other* reason, participants explained their laughter in terms of *Other: Reactionary* only identified seven times. Similarly, *memory* or *re-living it* was one of the most common self-generated explanations for laughter before seeing the list of reasons ($n = 35$), but after viewing the list, only seven participants described this type of laughter using the *Other* category. For instance, most of the participants who initially described their laughter as resulting from *memory* instead selected *humorous* after viewing the list of laughter reasons ($n = 18$).

Thus, the *Other* categories generally appeared in both the self-generated laughter reasons and the list-based laughter reasons articulated by participants, although the number of times each category was chosen shifted across the study (see Tables 1 and 4, above). Overall, the most common *Other* reasons identified by participants after seeing the list of laughter reasons provided were: *Other: Relatability* ($n = 15, 24\%$), *Other: Lighten* ($n = 8, 13\%$), *Other: Memory*

Table 5*Other Categories Combined by Researcher*

Other Category (Researcher Codes)	Examples	Times Chosen
Relatability	"He's been there before; it was relatable." (10-03) "Relating to it [the story]" (21-01; 21-05; 21-03; 24-02) "She had the same imagery in her mind; relatability." (21-04)	15
Lighten	"It's a frustrating situation; we're choosing to laugh instead." (22-04) "We make humor out of our stress." (21-01) "I'm cushioning my directness." (23-06)	8
Memory/Remembering	"I imagined it first, then told the story, kind of like the whole 'think before you speak' thing." (10-05) "Recalling her uncomfortableness; looking back on it--was the worst thing, but it's just funny now." (24-07) "Thinking of past experiences and memories of previous jokes." (25-00)	7
Reactionary	"He laughed first, which made me laugh." (14-04) "It was reactionary, feeding off me laughing." (16-05)	7
Anticipation	"I'm expecting something crazy to happen. He brought it up, so it'll probably be something good." (20-04) "Just knowing it's going to be a sad story; anticipating it." (22-02)	4
Cue them	"Part of storytelling is to get them to laugh; trying to get them to enjoy it too." (22-03) "Signal the punchline" or "Seeking the appropriate response" (24-03)	4
Mental Image	"Thinking of the visual image." (10-06) "The visualization of the spider being torched; just the possible accidental bad end [to the story]." (17-04)	4
Common Joke	"Acknowledging our relationship connection." (18-06a) "It's a mutual joke from our past." (18-06b)	3
Cute/Endearing	"Thinking of [the person in the story] bundled up going [sledding] downhill--he's so cute." (26-09) "She finds the things I find entertaining cute or precious--it makes her laugh." (23-06)	2
Self-Joke	"He liked that I sort of gave him approval for his joke [through my laughter]." (14-00) "It was like proud or very satisfied laughter, like 'I know I'm not supposed to do it, but I do it anyways.'" (24-00)	2
Competitive	"It was a sort of cocky laughter; laughing out of competition." (20-05)	1
Empathetic	"It was a pity laugh. Like, 'Aww'--an empathetic laugh." (22-00)	1
Total		58

($n = 7, 11\%$), and *Other: Reactionary* ($n = 7, 11\%$). More details about each of these reasons follow.

Other: Relatability. Throughout this study, participants described 15 (24%) laugh instances in terms of *relatability*, categorized as an *Other* explanation for laughter. These participants explained that these instances of laughter resulted from the listener being able to understand the situation in the story, often from having done the same thing or something similar in their own life. For example, one participant told a story about falling asleep during one of his classes, which led to laughter by his friend; he explained the reason for his partner's laughter as a result of an established understanding, explaining, "He's been there before; it was relatable" (10-03). Shortly thereafter, the conversation within this same dyad shifted to a recent experience one participant had on walking in on someone using the bathroom (10-04). The partner explained his own laughter, mentioning how he understood where the story was going and saying "I do that [thing he's complaining about], and he's about to talk about why it's a problem" (10-04). Similarly, in another dyad, the friends swapped stories about the difficulties of living and exercising at high elevation (21-03). One participant laughed at the other's story of running out of breath more quickly and struggling with altitude adjustments, describing her laughter as resulting from "her misfortune, but relating to it" (21-03). Thus, these and other participants explained that the laughter was often prompted by this understanding or relatability.

Other: Lighten. Laughter was also often used as a way to lighten a serious situation in these recorded conversations ($n = 8, 13\%$). This *Other: Lighten* explanation was often paired with more negative categories such as *Anxiety* or *Derision* and worked similarly as the *Cue* laughter, but instead of serving as a signal to encourage the partner to laugh, individuals explained that this laughter was an attempt to let the partner know that the situation was not as

serious as it seemed. For example, one participant told a story about an online dating experience that made her feel uncomfortable and laughed while telling the story; she explained her laughter as trying to “make sure [my friend] isn’t worried—conveying that ‘It’s funny’ and like, ‘I’m good’ as part of the storytelling” (22-04). Similarly, another pair of participants were discussing how stressed they felt about the upcoming school closure due to the COVID-19 virus, and one participant laughed during the conversation. The individual explained the laughter as, “Trying to make a joke out of it and not take it too seriously” (26-07). The partner explained the same laugh instance as a way to “help and make it better; seeing the light in the dark” (26-07). These explanations for this *Other* category were used to describe laughter as a *lighten-ing* technique.

Other: Memory. While both relatability and attempts to lighten the situation caused numerous laughs, several laughs resulted from remembering the experience about which the participants were conversing. These instances were categorized as *Other: Memory*, as participants explained that they laughed because they were remembering the scene, situation, or experience ($n = 7, 11\%$). For instance, one participant told his friend about a video he created, which led to laughter; he explained that he laughed because of “the memory of the video—it was funny” (25-03). In this case, the participant felt that the *humorous* category was not descriptive enough for explaining his laughter; he laughed not because the conversation itself was funny, but because the memory of the video was funny to him. Similarly, another participant explained why he laughed as he was in the middle of telling a story, saying, “I imagined it first, then told the story, kind of like the whole ‘think before you speak’ thing” (10-05) and categorizing his own laughter as a result of *remembering*. This participant pointed out that although his laughter in that moment did not correspond to anything funny in the actual conversation, the *memory* of the story he was sharing kicked out a laugh-out-loud response for him.

Other: Reactionary. Finally, another common *Other* explanation for laughter articulated by participants after seeing the list of laughter reasons from literature was *Other: Reactionary* laughter ($n = 7, 11\%$). According to these participants, some laughter resulted out of a response to the friend's laughter. These participants explained, "He laughed first, which made me laugh" (14-04) and "[Her laughter] was reactionary, feeding off me laughing" (16-05).

Each of these participant-described reasons for laughing that did not appear on the list of literature-based reasons given to them (see Appendix C) was mentioned by several different participants. However, the participants who articulated many of these *Other* reasons also described those same laugh instances using existing categories from the list. In other words, many participants described one laugh instance as belonging to both a category from the list (e.g., *Humorous, Anxiety, Derision, Social*, etc.) and also to a new category not on the list (e.g., *Other: Relatability*). These "coupled causes" are explained below.

Coupled Causes. Of the 62 instances in which participants chose the *Other* category, 57 explanations (92%) were chosen along with list-based explanations; these participants chose the *Other* category but also selected at least one established category from the list to explain the laugh instance in question. For example, one participant laughed during a conversation when both participants quoted a similar pop culture reference at the same time. This participant labeled the laughter as both *Social: It seemed like the appropriate response* and *Other: Acknowledge relationship connection* (coded as *Other: Common Joke*), pointing out that they laughed because it was the appropriate response to a regular occurrence while also trying to "acknowledge our shared connection," recognizing the conversational reference as a common joke between them (18-06).

Another participant explained that his laughter resulted from his close listening to his partner's story, explaining, "I'm expecting something crazy to happen; he brought it up, so I know something good is coming" [20-04] and categorizing that laughter as *Other: Anticipation* but also *Social: To let them know I was listening*, *Social: It seemed like the appropriate response*, and some *Ignorance* because he did not know the rest of the story yet.

Finally, in another dyad, one participant told a story about something that irritated her and was "feeling annoyed, thinking about the situation" (22-04). She laughed as she was telling the story, describing her laughter as a result of being frustrated: "It was a frustrating situation, but I choose to laugh instead of getting mad" and assigning her laughter to the categories of *Other: Choosing to laugh* but also *Derision: To make fun of myself*.

Thus, numerous *Other* categories were paired with various existing categories from the list of laughter reasons, but the small sample size resulted in only one notable theme in these pairings: of the laugh instances described as *Other: Relatable* by participants ($n = 15$), six of them were also described as *Humorous* laughter. These participants felt that this type of laughter resulted from being able to understand and relate to the story being told but also resulted from the story being legitimately funny (10-03a; 10-03b; 10-05; 21-03; 21-05; 24-02). However, although most *Other* reasons were chosen alongside list-based reasons (57 out of 62 instances were paired with reasons from the list provided), a few *Other* articulations were offered as the only explanation for some laugh instances.

Solo Selections. Although most of the *Other* category selections were paired with supplementary explanations from the list of laughter reasons, there were seven cases in which participants only selected the *Other* category to describe a laughter instance. Each of these explanations (*Relatability*, *Reactionary*, *Memory*, *Cue*, *Anticipation*, *Mental Image*, and

Endearing) were repeated from participants' original self-generated explanations of their own laughter. Some participants identified these reasons as standalone explanations for individual laugh instances, but these descriptions and general *Other* categories were also mentioned by other participants who paired them with list-based reasons. For example, one participant selected *Other: Reactionary* as the sole explanation for one laugh instance (16-02a), but several others explained laugh instances from their conversations as both *Other: Reactionary* and *Anxiety* laughter (26-01b; 12-01b) or *Other: Reactionary* and *Humorous* laughter (16-05a; 14-03a). Thus, some participants ($n = 7$, 11%) chose the following categories as solo explanations of certain laugh instances, but other participants articulated these categories as well.

Other: Relatability. The first standalone *Other* selection was labeled as *Other: Relatability* laughter (21-03). The description for laughter by this participant indicated that the laugher was “laughing at the misfortune, relating to it” in the interview. This participant and the others who explained instances of laughter in terms of relatability ($n = 15$, 24%) suggested that the laugher could relate to or understand the experiences and feelings of the individual in the story, and the laugher was laughing to indicate that understanding or relatability.

Other: Reactionary. The second solo explanation of a reason for laughing that was not identified on the main list given to participants was *Other: Reactionary* laughter (16-02a). This participant and her conversational partner explained the reason for laughing as “because she laughed” or “reactionary.” This laughter was simply a reaction, laughing because the other person laughed first. Despite only being listed as a standalone explanation once, this label was listed as an *Other* reason seven times by participants.

Other: Memory. The third unique identification of *Other* laughter was linked to memory or *remembering* situations outside the conversation. According to the laugher, this was because

he “imagined it first, then told the story; like the whole ‘think-before-you-speak’ thing” (10-05). This interviewee and six other participants laughed as they remembered the story, and that memory was humorous to them.

Other: Cue. The fourth *Other* reason for laughing which was explained as the exclusive cause for laughter without other list-based reasons was *Other: Cue*. Although several participants indicated that they used laughter as a reaction to their partner’s laughter ($n = 7$, 11%), these participants mentioned the use of laughter as a way to signal to their friend that the friend should laugh ($n = 4$, 6%). One participant identified this as a standalone reason for laughing, and three participants articulated this reason along with other list-based reasons. In one conversation, a participant laughed while telling the story of an experience at a restaurant: she was speaking enthusiastically while using lots of gestures and accidentally hit her plate, causing the plate to crash and other restaurant visitors to look at her. The friend explained that the storyteller’s laughter was performed to “signal the punchline” or as a method of “seeking the appropriate response” (24-03). In another dyad, a participant recounted a time when she unexpectedly saw someone at a party after that person had claimed to be out of town; the storyteller laughed, and the friend explained that laughter as resulting from self-derisive humor (*Derision: To make fun of self*) and also as a storytelling technique or a way to “get me [the listener] to laugh” (22-03). These instances were examples where participants felt laughter served as a cue to the friend, signaling high points of the stories or indicating appropriate times for the friend to laugh.

Other: Anticipation. The fifth standalone *Other* category of laughter was *Other: Anticipation*. In this case, laughers “knew it was going to be a funny story” and therefore the laughter was an “anticipation of humor” (22-02). For example, prior to participating in the

study, one participant had mentioned an experience to her friend but had not fully disclosed the whole story; when the study conversation started, then, one participant launched into the conversation by asking about that topic, asking, “Okay, who’s the guy at the birthday party?” and chuckling as she asked, explaining her laughter as an indication that she was looking forward to hearing the story. In another dyad, one participant explained her friend’s laughter as she was starting to tell a story about watching a movie she knew nothing about, explaining that “This is one of my favorite stories to tell,” and describing her friend’s laughter as “She sees where it’s going because of our previous conversations” and as a result of “anticipation of what’s coming next” (23-07). This type of anticipatory laughter was mentioned by participants about four different laugh instances (6%).

Other: Mental Image. The sixth *Other* category which was identified once as the sole reason for an individual’s laughter was *Other: Mental Image*. This participant laughed while listening to his friend tell a story about forgetting where his class was, and the laugher explained that he was “thinking of my own experiences” (10-07) and picturing the situation while listening to his friend’s story. Similarly, three other participants ($n = 4$, 6%) also described *Other* reasons in terms of a *Mental Image* as the reason for their laughter, pointing out this missing category from the list of laughter reasons. These participants explained that they laughed because they “could picture it” (18-07), were “thinking of the visual image” (10-06), or were “visualizing the story. I was interested to see how it ended” (17-04). One participant articulated more specifically that she laughed during her friend’s story about trying to use fire to kill a spider on the wall of her house; the laugher explained, “I was picturing her doing that—not thinking about the consequences. It’s a funny image” (17-04). These participants, then, were laughing at the mental image that was conjured during the storytelling process.

Other: Endearing. Finally, the last instance of laughter that was identified as the sole reason for laughing by one participant was *Other: Cute* or *Endearing* laughter (23-06a). In this dyad, one participant explained how she spent her weekend watching a children’s animated movie and kept rewinding the movie to see certain parts again. Both friends laughed during the story, and the storyteller explained her friend’s laughter, saying, “She finds the things I find entertaining cute or precious; it makes her laugh” (23-06a). Similarly, another dyad also described a laugh instance as both *Other: Endearing* and *Other: Recall (Memory)* laughter; during their conversation, one participant referenced a story familiar to both participants, mentioning a trip one of the friends took with her boyfriend. The friend described the laugher’s reaction as resulting from “recalling a memory from someone she loves; kind of like endearing laughter” (24-05). Thus, *Other: Endearing* laughter was mentioned by two participants (3%).

Each of these *Other* reasons for laughing provides additional information about how laughter is understood within interactions, but interesting findings were also revealed when comparing the friends’ answers about their reasons for laughing—whether pulled from the list of laughter reasons or articulated as *Other*, non-listed reasons.

Dyadic Comparisons

During the interview process, both participants from each dyad were interviewed about the same laugh instances. Evaluating whether the two participants assigned the same or different meanings to single laugh instances (i.e., chose the same or different reasons from the list provided) offers unique and interesting insights into the individuals’ understanding of laughter within the context of the friendship. This also offers insight into how friends dyadically co-construct the meaning of laughter in their conversations. Each broad category of laughter (*Anxiety, Derision, Social, Ignorance, Apologetic, Physical, and Humorous*) was represented in

the results except for “Physical,” or laughter resulting from tickling (see Appendix C for the full list of laughter reasons with subcategories, see Table 3 for the number of times each list-based category was chosen, and see Table 6, below, for the number of times each category was interpreted differently or the same by participants).

Table 6
Dyadic Comparisons of List-Based Laughter Reasons

	Total Mentions	Mentioned by Both Friends (Similar)	Mentioned by Only One Friend (Different)
Anxiety	94	45	29
Humorous	118	72	46
Social	105	26	79
Derision	51	20	31
Ignorance	20	0	20
Apologetic	8	3	5

Similar Interpretations. Participants’ interpretations of the laughter that occurred during their conversations tended to converge more often than they diverged when two specific categories were involved—*Anxiety* and *Humorous* laughter. In laugh instances involving these categories, both participants often assigned the laugh instances to the same categories (see Table 6).

Anxiety Laughter. First, participants’ interpretations of *anxiety*-based laughter generally converged with one another. Participants selected the *Anxiety* category from the list of laughter reasons 94 times throughout the study, most often referencing the subcategory of *Anxiety: I felt awkward/It was an awkward situation* (chosen 41 times). Twenty of these 94 mentions were duplicated, as participants assigned the same laugh instance to two subcategories of *Anxiety* (e.g., *Anxiety: I felt awkward/It was an awkward situation* and *Anxiety: I was nervous*). Therefore, 74 total laugh instances were described as being *Anxiety* laughter by at least one participant. Of

these 74 instances, 45 were categorized by both participants as *Anxiety* laughter, and 29 were described differently by the two participants, with only one participant indicating that the laughter was *Anxiety* laughter. Notably, 18 of those 29 instances were described using two broad categories from the list (e.g., *Anxiety: I felt uncomfortable* and *Social: To let them know I was listening*). Thus, only 11 instances of pure *Anxiety* laughter (as identified by one member of the dyad) were interpreted differently by the other member.

Humorous Laughter. Similarly, participants chose the list-based reason of *Humorous* 118 times during the study, many of which were instances of laughter that were described by both members as *Humorous* laughter ($n = 72$). Of those 72 similar interpretations, 20 instances of laughter were described as being only *Humorous* laughter by at least one participant, without being described by multiple categories from the list. Of the 46 instances in which only one participant described the laughter as being *Humorous*, 26 were described using multiple categories (i.e., *Humorous* and *Anxiety* or *Humorous* and *Other: Reactionary*).

Thus, in general, dyad members often interpreted both *Anxiety* and *Humorous* instances of laughter in similar ways. However, although these categories resulted in similar interpretations by dyad members in many cases, participants tended to describe other laugh instances quite differently from each other.

Different Interpretations. The most commonly misinterpreted categories of laughter were *Social*, *Derision*, and *Ignorance* laughter (see Table 6). These three categories, when chosen by one participant about a certain laugh instance, were often described differently by the other participant. Thus, when these categories were involved in the descriptions of laughter by one participant, the other participant's understanding tended to diverge from their friend's.

Social Laughter. First, participants often interpreted *Social* laughter differently from one another. Participants selected *Social* as the category for laughter 105 times throughout the study, only 26 of which were chosen by both participants about the same laugh instance. Thus, 79 explanations of social laughter resulted in different interpretations by the other participant. Of those 79 explanations, 39 were described as both *Social* laughter and at least one other category (e.g., *Social: To let them know I was listening* and *Other: Memory*, or *Social: It seemed like the appropriate response* and *Derision: To make fun of them*).

For example, one participant explained her friend's laughter as simply being friendly (*Social: To be friendly*), but her friend indicated that the laughter was more out of *Derision* towards herself ("I thought I was saying something stupid") and *Anxiety* from the fear of answering the wrong way (16-04). Similarly, another dyad interpreted social laughter differently, as the laugher interpreted her own laugh as *Social: To make them feel comfortable* during a lull in the conversation, but the partner assumed the laugh was out of ignorance, labeling it as *Ignorance: I didn't know how to respond*, and *Ignorance: I wasn't sure what was going on*, explaining that the laugher was probably "unsure of what's coming" and was "wondering what I'm going to say" (24-05). Therefore, *Social* laughter was one of the most misinterpreted categories on the list of laughter reasons; the other commonly misinterpreted category was laughter out of *Derision*.

Derision Laughter. Participants also seemed particularly perplexed by laughter out of *Derision*, struggling to align their descriptions with one another. Participants selected this category 51 times, 31 of which were interpreted differently by both participants. Within these 31 instances, participants labeled 17 laugh instances as both *Derision* laughter and another category. For example, during a discussion about the dangers of walking in wintery weather, one

participant recounted a story about a time he slipped on the ice. The partner laughed at the story, which the speaker interpreted as *Derision: To make fun of them* and *Social: To show I was listening*, but the laugher explained the laughter as simply being able to understand the situation, saying he laughed “because I got it” (10-02) and labeling the laughter as *Other: Relatable*.

Similarly, another participant explained to her friend how the ski hills she learned on were quite different from the ski hills in Colorado. During the conversation, the friend laughed at the story and explained her laughter as *Derision: To make fun of them* because of “her word usage—she said it was lame, so I was making fun of that” (16-06). The storyteller, however, interpreted the friend’s laughter as *Humorous*, assuming she was laughing because “It was funny” (16-06). Thus, laughter out of *Derision* tended to be described differently by the participants in this study.

Interestingly, some participants seemed particularly hesitant to describe their laughter as being *Derision* laughter. Several participants hedged their responses regarding instances of *Derision* laughter with explanations of how their laughter was still positive and was not intended to be mean. For example, one participant pointed out how she was making fun of her friend by “mimicking her,” but quickly modified her answer to explain that she was “also genuinely laughing at and with her” (11-04), and another participant explained her own laughter which was directed at a third person (not present in the conversation) by saying, “We [the person in the story and I] don’t always get along, so I was laughing at her. But I was also thought the story was funny” (24-02). A third participant initially explained her friend’s laughter as only being *Derisive* (“laughing at me”) and *Reactionary* (“because I laughed”) in her self-generated explanations of the laughter. but she later included *Humorous* on her selected reasons for

laughing (13-04). These participants thus seemed hesitant to describe their laughter purely as *Derision*, and this type of laughter frequently involved divergent explanations by pairs of friends.

Ignorance Laughter. Finally, participants described their laughter as resulting from *Ignorance* 20 times throughout the study. Although *Ignorance* laughter was less common than the other categories, this type of laughter was never interpreted similarly by friends. None of these instances were interpreted as *Ignorance* laughter by both participants.

Interestingly, in the cases where one participant interpreted a laugh instance as *Ignorance* laughter, the other interpreted that laugh as any category except *Ignorance* or *Physical*. Participants selected *Anxiety*, *Derision*, *Social*, *Apologetic*, and *Humorous* as reasons for laughing when their friends selected *Ignorance*, but no two participants ever selected *Ignorance* about the same laugh instance.

For example, one pair of participants discussed being sick and trying not to touch anything during the study, and they began joking about touching pens to write down information during their conversation. One participant laughed during this conversation after her friend burst out about how touching pens was just as bad as touching doorknobs; the laugher explained that she laughed out of *Derision: They said something stupid*, but the friend interpreted that laughter as *Ignorance: I didn't know how to respond* (12-02). Similarly, in another dyad, the two friends conversed about how one friend (A) convinced the other (B) to participate in the study with her after her other friends declined her invitation; the second participant (B) pretended to be upset about being asked after other people, which resulted in laughter by the first participant (A). The laugher explained this laughter as *Ignorance: I didn't know how to respond*, saying, "I was trying to read her expressions to see if she was actually angry" (23-02). The other participant, however, interpreted that laughter as *Apologetic: I felt bad* laughter, suggesting that her friend was feeling

guilty about not having invited her first. Thus, *Ignorance* tended to be a difficult category for participants to interpret similarly.

All of these results are both interesting and telling on their own, and upon further inspection, they offer insight into how friends understand and co-construct the meaning of the laughter which occurs in their conversations. However, several results from this study also provided data supporting laughter as an act of affection, offering various insights into the second research question: *RQ2: How does laughter function as an exchange of affection in friendships?*

Laughter as Friendship Affection

In addition to seeking to uncover the meanings friends assign to interactional laughter during their conversations, this study also aimed to reveal connections between laughter's interactional or relational uses and affectionate behaviors. In order to answer this research question, participants articulated their own feelings during the study to reveal whether they were feeling generally positive, negative, or neutral during instances of laughter. Furthermore, participants explained their understandings of laughter in their own terms, which revealed that friends tend to interpret each other's laughter in positive ways when possible. Thus, the following findings revealed that friends' uses and co-constructed meanings of laughter within relationships often do, indeed, serve similar functions as previously identified affectionate behaviors.

Feelings

Throughout the study, participants indicated feeling a variety of ways (see Table 7). The most commonly reported feelings from the Positive and Negative Affect Scale were *Interested* ($n = 39$, reported by 23 participants), *Excited* ($n = 39$, reported by 20 participants), and *Enthusiastic* ($n = 36$, reported by 20 participants), and *Attentive* ($n = 24$, reported by 19 participants).

Participants described their feelings during each laugh instance, and their choices reflect their general feelings of positivity during those instances, as each of these terms is considered a positive term on the Positive and Negative Affect Scale. The most commonly reported negative feeling was *Nervous* ($n = 21$, reported by 15 participants), and participants often explained this as a result of the study context rather than because of their conversation or their friend.

Laughter Reasons

Overall, the most common reasons ascribed to laughter were largely positive during this study, as participants most often chose *Humorous* laughter ($n = 118$) and *Social* laughter ($n = 105$) and as their reasons for laughing (see Table 3). Furthermore, negative types of laughter such as laughter out of *Ignorance* ($n = 20$) or *Derision* ($n = 51$) were often misinterpreted by the two participants (see Table 6).

Additionally, participants identified several new types of laughter which seemed to serve various social and affiliative functions in their relationships and conversations (see Table 5). For example, a commonly reported *Other* category was *Other: Relatability*, which seems to be an intentional way of building affiliation within the friendship and conversation. Just as humor can be useful to connect a person to their in-group members, laughter seems useful for revealing, building, and acknowledging similarity between friends (Platow et al., 2005).

Furthermore, some participants identified specific instances where one friend was intentionally trying to improve the situation and increase positivity in the interaction through their use of laughter, referring to these instances as *Other: Lighten*. These instances involved specific attempts by one person to turn a potentially negative interaction, situation, or feeling into something more positive. For example, one dyad's conversation seemed to hit a lull several minutes into the five-minute recording; one partner chimed in at this point, laughing while

Table 7
Self-Described PANAS Feelings Selected by Participants

Adjectives Reported (Describing Self)	Times Reported (Total)	Number of Participants who Reported Feeling
Interested	39	23
Excited	39	20
Enthusiastic	36	20
Attentive	24	19
Nervous	21	15
Active	14	12
Proud	12	10
<i>Alert</i>	9	8
Ashamed	11	7
<i>Jittery</i>	11	7
Distressed	8	7
Guilty	8	6
Determined	6	6
Upset	6	5
Irritable	4	4
Afraid	3	3
Scared	3	3
Strong	2	2

Note: **Bold** terms are considered “negative” by the scale, *italicized* terms are neutral, and non-bold, non-italicized terms are positive.

Note: “Times Reported” indicates the number of times the feeling was selected from the list. “Number of Participants who Reported Feeling” indicates the number of individuals who chose that term.

asking her friend whether she had ever previously had a conversation while being recorded. The laughter explained that she laughed because she was “lightening the situation,” explaining that “we were trying so hard to push information out, so I decided to talk about what we’re both thinking anyways” (13-00). Thus, participants seemed concerned about ensuring that their friend had positive experiences with them, and they did so by using laughter during their interactions.

Finally, other participants identified *Other: Reactionary* as a new type of laughter which seems to link participants together with one another and reveals participants’ attempts to portray

themselves as similar to one another, building camaraderie, understanding, and affiliation (see Alves et al., 2011 and Hafen et al., 2011). These new *Other* findings of laughter are built on the concept that laughter can benefit both interactants, and laughers seem to sometimes use their laughter to attempt to improve their friends' experiences. The results from this study thus align with the claims of AET, suggesting that laughter can be seen as an affectionate behavior.

Laughter as Affection

Affection Exchange Theory postulates that people need regular affection within their relationships (Floyd et al., 2015). In order to maintain those relationships, people use various techniques to show affection. The reasons for laughing offered by participants within this study suggest that laughter is one of those techniques, likely falling under one of the *nonverbal* (*direct* or *indirect*) categories of affectionate behaviors, depending on the type of laughter which is occurring (Floyd et al., 2015; Floyd & Morman, 1998).

Affectionate communication is defined as “those behaviors that encode feelings of fondness and intense positive regard and are generally decoded as such by their intended receivers” (Floyd et al., 2015). The positive feelings reported by participants during these interactions suggested that in general, they felt positively about their interactions with their friends, particularly about the moments in which laughter was occurring. Furthermore, the most commonly reported laugh reasons were often explained in terms which revealed frequent positivity when laughter was used; for example, participants frequently engaged in *Social* laughter, often used to benefit their friend, and they often reported feeling that their laughter was a result of the conversation being truly *Humorous*.

Finally, various new explanations of laughter as described by the *Other* categories produced by participants offered insights into the ways some participants used laughter in

affiliative and social ways. Several of these attempts were intended to improve the other person's experience during the interaction, suggesting that laughter can be used to communicate feelings of positive regard to the other person. These findings indicated that nine types of laughter identified in this study seem potentially coherent with the definition of affectionate behaviors: *Social*, *Humorous*, *Relatability*, *Lighten*, *Reactionary*, *Anticipation*, *Cue*, *Common Joke*, and *Endearing (Cute)* laughter. Altogether, these results reveal several themes and add to the current literature on laughter in numerous ways, which are discussed below.

CHAPTER 5 – DISCUSSION

The general purpose of this study was to extend our current understandings about laughter as both a communicative act and an affectionate behavior by assessing how laughers themselves co-construct the meaning of their laughter within their own interactions. The overarching results from this qualitative study were interesting and revealing for how laughter is understood in interactions between friends.

First, participants' self-generated reasons for laughing generally aligned with their later explanations which were grounded in laughter literature; although there were changes in the number of times each category was chosen, the kinds of categories articulated were fairly consistent across the sections. List-based categories were used across the study, and new categories which were identified by participants were mentioned multiple times, adding to their legitimacy as concepts that deserve scholarly attention.

Second, in this study, all categories of laughter which had been previously identified in laughter literature were chosen by some participants during the study except for *Physical* (tickling) laughter, as expected. Although participants chose some categories much more often than others to describe the laughter that occurred during their conversations (e.g., *Humorous*, *Social*, and *Anxiety* laughter were much more common than *Derision*, *Ignorance*, or *Apologetic* laughter), this study offered support for all six categories using the laughers' own perspectives and explanations.

The third major outcome that resulted from this study extended previously identified laughter categories and revealed the need for additional categorizations of laughter. During this study, participants described new reasons for laughter that they did not find on the list provided

to them. Upon analysis, this resulted in twelve newly proposed categories of laughter: *Relatability, Lighten, Memory, Reactionary, Anticipation, Cue, Common Joke, Mental Image, Endearing, Self-Joke, Competitive, and Empathetic* laughter. The first ten categories were supported by multiple participants' responses, and the first four categories (*Relatability, Lighten, Memory, and Reactionary*) were mentioned numerous times by various participants.

These *Other* findings suggest that although these reasons for laughing are not currently considered extensively by laughter scholars, they exist and fill some gaps in currently accepted categorizations of laughter. Current content-based categorizations of laughter include laughter out of *anxiety, apologetic, derision, humorous, ignorance, physical, or social* reasons (Giles & Oxford, 1970), but none of these categories account for laughter that results from recognition or shared understanding (*Relatability*), or laughter in reaction to someone else's laughter (*Reactionary*). Furthermore, the results from this study suggest that some previously identified categories may require sub-categories within them. *Social* laughter is defined as “a behavioural response to integrate the individual within a particular social group” (Giles & Oxford, 1970, p.97), or laughter that is “used in a conscious and goal-directed manner to influence and modify the attitudes and behaviors of our social counterparts” (Wildgruber et al., 2013, p.1). Thus, laughter to *lighten* the situation may be a specific type of *social* laughter designed to accomplish a particular social goal—in this case, to lighten the mood, communicate non-seriousness, or convey positive emotions in stressful conversations. Similarly, numerous participants felt that the *Humorous* category did not fully capture the reasons behind their laughter out of *Memory* or *Mental Image*, so perhaps more specificity is required within these previously identified categories.

Finally, when individual answers were compared within each dyad, friends tended to interpret certain types of laughter in similar ways but had divergent understandings of other types of laughter. Participants typically described laugh instances similarly when the laughter was an example of *Anxiety* or *Humorous* laughter. Conversely, when one participant described laughter instances as *Social*, *Derision*, or *Ignorance* laughter, the second friend often interpreted that same instance in other terms, suggesting that these types of laughter have more diversity or complexity in their understanding and meaning.

These four general findings from this study offer support for viewing laughter as a complex, relational act. More specifically, these results accomplish several tasks, as they (a) extend the laughter categorization literature, helping to fill in the missing theoretical typologies of laughter that are already present in humor literature, (b) reveal various different types of laughter which can be sorted into a new model of laughter, and (c) provide support for viewing laughter as an affectionate behavior. Each of these outcomes is discussed in greater detail below, beginning with a discussion of the “laughter trifecta.”

Laughter Trifecta

This study extends our current understandings and categorizations of laughter, working towards the level of detail in our existing scholarly understandings of an area that could be considered laughter’s academic predecessor: humor. Humor research involves three major categorization systems which are useful for assessing and differentiating between types of humor: categorization by *content* (*language, logic, identity, or action* humor) (Berger, 1997), categorization by *target* (*affiliative, self-enhancing, self-defeating, or aggressive* humor) (Martin et al., 2003), and categorization by *relationship effect* (*positive or negative* humor) (Hall, 2011). Each of these categorization systems highlights a unique aspect of the complex communicative

act of humor and is therefore useful at different times and in different contexts. Laughter, too, has been categorized in different ways; in particular, previous laughter research generally refers to laughter based on its *content* or its *cause*, but laughter's relational effects are largely unstudied. Like humor research, categorizing laughter in different ways can lead to a deeper understanding of the complexity of this communicative act, and understanding laughter not only in terms of the content of the laugh message or the cause of that laughter but also according to its use within a relationship offers new insights into laughter as a relational act.

Content

First, laughter has been previously categorized by *content* (*humorous, social, ignorance, anxiety, derision, apologetic, and tickling*) (Giles & Oxford, 1970). This suggests that, as a nonverbal vocalization, laughter can carry various meanings, or different content. The meaning behind laughter, or the content, can reveal much about the purposes and goals driving the laughter. The current study extended this categorization of laughter by providing support for the initial categories proposed by Giles & Oxford (1970) but also revealing new categories such as *relatability, lighten, memory, reactionary, anticipation, and cue* laughter. These new categories are types of laughter that contain certain underlying messages and therefore should be incorporated into previous laughter categorizations by content.

Cause

The second broad classification of laughter is slightly different from humor's categorization system. Instead of mimicking humor's categorization by *target*, laughter scholarship has historically addressed not who is being laughed at, but what is *causing* the laughter. These categories need further development, but scholars have identified several causes for laughter, each of which is a unique and distinct type of laughter: *tickling* (Giles & Oxford,

1970; Provine, 2000), *processing information* (Berger, 2016; Glenn 2003; Ladegaard, 2013), and *sending information* (Kurtz & Algoe, 2017; Ziv, 2010). Each of these matches up with and differs from the above content categorizations, as the focus of this system is about the cause or reason for the laughter rather than the message the laughter is carrying. New categories identified by this literature can fit into these three categories as well; for example, laughter to *lighten* the situation or to *cue* one's relational partner are attempts to *send information*, while laughter out of *relatability* or *anticipation* seem to result from *processing information*. Assessing types of laughter from the lens of a causal categorization system offers a deeper understanding of the production of laughter and the goals driving the communication.

Relationship Effect

Finally, humor's third categorization system—*relational effects*—is entirely absent in current laughter scholarship but is initially supported by these findings. Laughter can be categorized based on the potential relational outcomes it carries, which can be classified on two spectrums. Like humor, laughter can be either *prosocial/positive* or *antisocial/negative* (Hall, 2011), and like other communicative messages, laughter can be either *basic* or *complex* (Watzlawick et al., 1967)

Prosocial/Antisocial. Instances of laughter can be beneficial or harmful for the relationship in which they are performed. Just as humor has been found to be *prosocial* or positive for the interactants, and *antisocial*, or causing negative emotions in at least one of the interactants (Hall, 2011), *prosocial* laughter consists of that laughter which is intended to create good feelings for both interactants. Many instances of laughter that were present in this study seemed to be examples of prosocial laughter; for example, *humorous* laughter was frequently mentioned, which was an instance where the participants were acknowledging the funny

situation or story and often were sharing a laugh about an objectively funny story (according to the participants' own explanations). Sharing laughter has been shown to have beneficial effects on a relationship (Kurtz & Algoe, 2017), so humorous laughter, particularly when shared by both participants, seems to be generally positive laughter.

Similarly, *social* laughter was the second most common reason for laughing for these participants; this type of laughter seems almost exclusively prosocial by definition, as it nonverbally communicates positive messages to the other person, attempting to make them feel valued and good about themselves and the interaction. Some purposes for *social* laughter include fulfilling expectations, making the other person comfortable, and communicating attention to the other person. Each of these is intended to improve the interactional experience for the other person, so *Social* laughter seems to operate in prosocial ways, too.

Various new types of laughter that arose in this study also seem to align with positive relational outcomes. For example, laughter out of *relatability* and *reactionary* laughter each serve as an affiliative acknowledgement of a shared connection between the individuals, which likely increases perceived similarity and therefore brings the partners relationally closer together (Alves et al., 2011; Hafen et al., 2011). Like *social* laughter, laughter to *lighten* the situation or topic being discussed seems to build a more positive experience for both participants, unless the laughter is being used to *evade* a conversation (see Foot & McCreddie, 2006, as cited in Laadegaard, 2013). Thus, various types of laughter seem to have potentially positive impacts on a relationship and could therefore be categorized as *prosocial* laughter.

However, laughter, like humor, can also be *antisocial*, negatively impacting the relationship and creating negative feelings in one or more interactants (Hall, 2011). Considering the different types of laughter discussed by participants, some types of laughter carry the

potential to have negative or antisocial effects on an individual. *Derision* laughter, or laughter directed at someone (either oneself, one's relational partner, or another individual) seems to carry many of the same antisocial properties as antisocial humor. This study provided unique forms of evidence for this concept, as some participants were quite hesitant to describe their laughter as purely *derision* laughter. Just like in a healthy romantic relationship, partners generally try to avoid antisocial behaviors (Hall, 2017); similarly, friends' use of but subsequent hesitance to admit to *derision* laughter suggests that *derision* laughter is also viewed as a negative type of laughter, despite often being done in a lighthearted manner. More specifically, *derision* laughter seems to carry the potential to create negative feelings in the relationship for the person being targeted, so this type of laughter could generally be sorted into the category of *antisocial* laughter.

Other instances of laughter that may have negative effects on the relationship or interaction in which they are performed could be *anxiety* laughter, as this laughter indicates that a person is experiencing negative feelings, and *ignorance* laughter, as this type of laughter could be comparable to *self-defeating* humor by drawing on a person's lack of knowledge about something (Hall, 2011, 2017; Martin et al., 2003). Other than *lighten* laughter which holds the potential to be used as an *evasion* tactic (Foot & McCreddie, 2006, as cited in Laadegaard, 2013), few new categories from this study seemed to fit as examples of negative laughter, likely because these conversations took place between friends and were performed under the instruction to keep the conversation lighthearted.

Although categorizing laughter instances as being either *prosocial* or *antisocial* provides much deeper insights into the uses of laughter within relationships, I also propose another

categorization dimension based on the results of this study: categorizing laughter as either *basic* or *complex*.

Basic/Complex. Just as our cognitions and our communicative plans can be both basic and complex, it seems likely that a link between our inner thoughts and our outward expressions—laughter—could also be both basic and complex (Berger, 2015; Soto-Icaza et al., 2015). Many communicative messages carry both content and relational meaning and thus can be interpreted on both levels (Edwards, 2011; Watzlawick et al., 1967). More basic, content-driven communication tends to focus on the situation at hand, whereas more complex, relational communication involves a deeper discussion (spoken or implied) of the relationship between the interacting individuals (Edwards, 2011; Watzlawick et al., 1967). For example, the content of a message such as “Can you give me a ride tomorrow?” involves a request for the other person to change their actions and accommodate the speaker. The relational aspect of that same message, however, implies that the requester feels comfortable enough with the other person to ask such a favor, or that the other person had previously done similar favors in the past, offering a relational layer to the message. While one message can carry both content and relational aspects, specific interactions can also be content-driven or more relationally driven.

Similarly, laughter, as a unique type of communication, seems able to carry both content (basic) meaning and relational (complex) meaning, and different types of laughter tend to operate on a more basic or a more complex level. Basic forms of laughter include those which are more easily understood and do not require a long-lasting relational connection or a deep consideration of the purposes, causes, and meanings of the laughter. These types of laughter tend to be more content-focused, with fewer relational components. More complex laughter, on the other hand, involves a deeper relationship connection, can be used in multiple ways, and is therefore riskier

for individuals to use, as the chance of misinterpretation is higher. Just as we need and want different levels of complexity and closeness in our relationships (see Altman & Taylor, 1973), it seems likely that we desire both complex and simple communication to keep our interactions interesting. The nonverbal behavior of laughter can therefore be explained in terms of being either *basic* or *complex*.

Basic Laughter. In general, this study's findings revealed that some laughter is relatively easy to interpret for friends, while other types of laughter seem to be misinterpreted more often. The pairs of friends that participated in this study did well at interpreting both truly funny (*humorous*) laughter and uncomfortable, awkward (*anxiety*) laughter. These kinds of laughter could be considered more basic forms of laughter, as they tend to be mainly content-focused messages. In this study, *humorous* laughter was often linked directly to the conversation topic being discussed and often required little social awareness or understanding. This laughter resulted from something that was (according to participants) truly, objectively funny, so the content of the conversation was the driving force behind the laughter, and friends seemed pretty well-equipped to co-construct the meaning of that laughter together in similar ways.

Anxiety-based laughter, such as laughter resulting from feelings of awkwardness, was generally tied to contextual factors—the context of participating in a research study, the room in which the conversation was occurring, the knowledge of being recorded, or, occasionally, the awareness of a conversation topic that one or both members of the interaction were not comfortable discussing openly. In this study, friends seemed able to “read” their friends’ use of this type of laughter and could then match those nonverbal cues with the situation. Again, this type of laughter operates on a simple, content-based level—in this case, communicating something about the situation.

Finally, new types of laughter such as *cue*, *reactionary*, or *mental image* laughter seem to be more basic than other types of laughter. These new categories are highly content-driven, require little knowledge or relational history, and seem to carry little risk or weight in the relationship.

These basic forms of laughter serve as simple relational links, tying the friends together over a mutual sense of humor as they find the same things funny (see Kurtz & Algoe, 2017) or communicating a sense of discomfort to each other and serving as a sort of social lubricant (Ziv, 2010). Basic laughter, as a simpler kind of communication, may help form bonds between individuals, much like individuals need to connect on basic biographical and general communication content before they can dive deeper into more meaningful topics within their relationships (Altman & Taylor, 1973).

Furthermore, basic laughter can operate relationally in a similar way as initial uses of humor—basic laughter could be useful for testing the waters of another individual to determine whether the interaction will go smoothly and should be pursued (Ziv, 2010), or basic laughter can be useful in ongoing relationships as a reinforcing tactic between the individuals, reminding them of their shared emotions or understandings and building camaraderie between the interactants. Although basic laughter is relationally important but relatively simple to understand for friends, other types of laughter seemed more complex and were misinterpreted more often by individuals within the dyads.

Complex Laughter. Although basic laughter seems to serve as the building blocks of a relationship, like the outside layers of Altman & Taylor's (1973) relational onion, complex laughter holds the potential for greater relational rewards and a closer, more meaningful relationship. Complex laughter involves a deeper relational connection, can be used in different

ways and in different contexts, and is thus more likely to be interpreted differently by different people. Just as more personal, risky topics of discussion such as one's moral beliefs or deepest fears require deeper consideration, can be misinterpreted if discussed by relational partners who are not ready or relationally close enough to each other, and hold the potential to greatly damage or benefit the relationship by being introduced, complex laughter carries many of the same possibilities for risks and rewards.

One example of complex laughter include *social* laughter, which contains a content of understanding, care and concern to the other individual (e.g., *to let them know I was listening* or *to make them comfortable*) but operates relationally as an acknowledgement of the relationship and a desire to continue the relationship or the interaction (for instance, communicating to the other person that their feelings are legitimate and are understood, and attempting to improve their experience in the interaction). The complexity of *social* laughter is underscored by the large quantity of misinterpretations of this laughter, which suggests that this laughter is less easy to understand in similar ways and therefore has more complexity than other types of laughter. Other instances of more complex laughter are laughter out of *derision* and *apologetic* laughter, as each of these carries both content meanings and also has deeper relational implications connected to the act of laughing. New categories of complex laughter may include *endearing*, *relatability*, and *anticipation* laughter.

Each of these types of laughter requires a deeper relational history in order to be understood by both members of the interaction. More specifically, complex laughter operates on multiple or deeper levels, not only reacting to the situation or conversation in the moment (for example, the basic form of *humorous* laughter is a reaction to an objectively funny statement at the time of the conversation), but rather, invoking previous knowledge of the relationship,

awareness of the partner's social expectations and understandings, and consideration of the established patterns of communication within the relationship to land successfully. Because these instances of laughter require deeper knowledge of the relationship and operate on more levels than basic laughter, complex laughter tends to be more often misinterpreted by interactants.

However, despite being more complex and more often misinterpreted, these types of laughter also hold the potential to have greater and different influences on the relationship. Because these complex reasons for laughter are connected to both the conversation and the relational context, these laughs reveal a deeper connection between participants and therefore seem to reflect a deeper level of relational awareness when being used. Just as all messages carry both content and relational meaning which is interpreted by both participants, laughter, too, can carry both meanings, and complex laughter seems to hold greater weight, carrying more relational meaning than basic laughter (Edwards, 2011; Watzlawick et al., 1967). Thus, although complex laughter may be at higher risk for misinterpretation, it may also be more relationally rewarding.

Combining these two proposed categorization systems results in a four-way assessment of laughter by *relational effect*: each type of laughter can be analyzed according to whether it is *positive* or *negative* and whether it is *basic* or *complex* (see Figure 1). This relational categorization of laughter suggests that although not all laughter is beneficial for the relationship in which it is performed, some types of laughter can be quite useful for creating positive regard within relationships, and therefore, some types of laughter should be considered types of affectionate behavior.

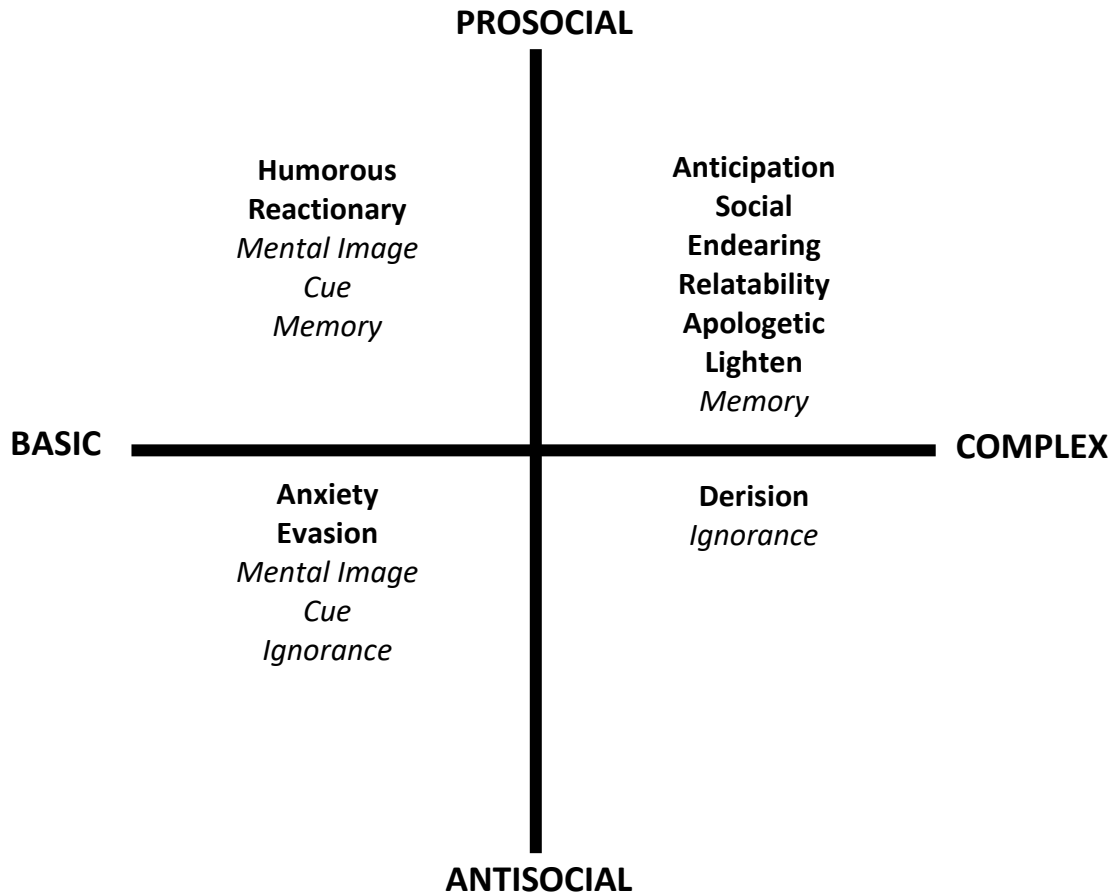


Figure 1

Relational Effects Model of Laughter Categorization

Note: Bold entries are supported by the findings in this study; italicized entries are speculative.

Laughter as Affectionate Communication

Affection Exchange Theory postulates that people need regular affection within their relationships (Floyd et al., 2015). In order to maintain those relationships, people use various techniques to show affection. The reasons for laughing offered by participants within this study suggest that laughter can be one of those techniques, falling under the *direct nonverbal* or *indirect nonverbal* categories of affectionate behaviors, depending on the type of laughter which is occurring (Floyd et al., 2015; Floyd & Morman, 1998). Using the above categorizations of

laughter along the two spectrums of *prosocial/antisocial* and *basic/complex*, positive or prosocial laughter seemingly operates exclusively as a form of affection, potentially creating positive feelings within the relationship and being used in ways that benefit one's relational partner, just like positive forms of humor (Hall, 2011). These instances of laughter can nonverbally communicate to the other individual that they are valued within the relationship by revealing that they are being listened to, cared about, comforted, or related to by their relational partner.

Both basic and complex forms of laughter can be forms of affection. Basic laughter, when positive, can convey similarity while reemphasizing the established communication norms within the interaction. This laughter reinforces shared patterns of communication and common messages between the individuals and can operate as a low-level building block on which to further develop the relationship. Complex laughter, on the other hand, can be useful for acknowledging a deeper relational connection with one's partner, serving more complicated social goals such as communicating interest in the conversation, expressing similarity between the interactants, or fulfilling the other person's expectations for the interaction.

Finally, just as any affectionate behavior can be unwanted, unsought, or overdone, laughter can similarly be used too much, too little, or just enough, suggesting that laughter operates in many of the same ways as other affectionate behaviors, and the relational consequences of positive or *prosocial* types of laughter are the same as the consequences of affectionate behaviors. Therefore, in communicating positive regard and relational interest, and in being interpreted by both individuals in positive ways, *prosocial* laughter, whether basic or complex, serves as affectionate communication and thus should be considered an integral part of many relationships. Overall, these concepts have various implications for laughter and interpersonal scholarship.

Implications

The findings from this study have several implications that are important for our interpersonal relationships and for the study of those relationships.

Relational

Just as we commonly consider both the content of our messages and the relational meaning of our messages in relationships and interactions, we should also be aware of the meaning behind our laughter, recognizing that it, too, contains both content and relational components (Watzlawick et al., 1967). Some types of laughter tend to more closely revolve around the content of the message (*basic laughter*) whereas others are more relationally focused (*complex laughter*). Furthermore, some instances of laughter have *prosocial* impacts on the relationship while others are more *antisocial*, so being careful about the types of laughter we use in our interactions and being aware of the different messages that laughter carries are important considerations for members of relationships.

This complicates the current understanding of this nonverbal act and reveals the importance and potential for laughter as a relational behavior, particularly one that can be used as an affectionate behavior. Although laughter can also be both *prosocial* and *antisocial*, *prosocial* laughter seems to mimic many of the relational consequences as affectionate behavior. As such, laughter becomes not only a nicety to use within conversations, but an important relational performance which can be overused, misused, misunderstood, or positive and beneficial, just like other displays of affection. Thus, laughter as an act of affection sends a powerful message. In addition to these important relational implications of laughter in friendships, this study also reveals numerous theoretical implications of laughter.

Theoretical

This study offers insight into laughter as a relational act and also sets laughter apart as a behavior which is connected to but relationally distinct from humor. Therefore, laughter should be a separate area of study that requires more investigation as a unique form of relational communication. Furthermore, this study begins to categorize types of laughter according to a relational framework, just as humor has been categorized based on the relationship effects different types of humor can have (Hall, 2011). This study provides support for a distinction between *basic* types of laughter and *complex* types of laughter, as well as between *prosocial* laughter and *antisocial* laughter. Thus, the research presented here begins to complicate and add to the categories of laughter that have already been identified, providing theoretical expansions in the existing laughter literature, but more work is needed to understand this interesting and fun relational act.

One area that needs revisiting by laughter scholars is the categorization of laughter. Although numerous reasons for laughing are identified by various scholars (Berger, 2016; Dunbar et al., 2012; Giles & Oxford, 1970; Wildgruber et al., 2013), there are many reasons for laughing which have previously gone unnoticed by research. The *Other* categorizations identified by participants in this study revealed a few of those categories such as *relatability*, *lighten*, *memory*, and *reactionary*, and the new consideration of laughter in terms of its relational effects adds a new understanding of laughter from a theoretical frame. Current categorization systems are not intricate enough to truly capture the complexity of laughter as a relational behavior, and this study attempts to reveal some of those complexities, but there are likely more that went undetected by this study.

Finally, this research has revealed some of the ways prosocial laughter operates as a form of affection, as individuals both use and make meaning from prosocial laughter in ways that mirror other affectionate cues. Laughter can serve as either a *direct* or *indirect nonverbal* display of affection during conversations between friends (Floyd et al., 2015; Floyd & Morman, 1998). Therefore, communication scholars should recognize laughter as a behavior of affection, and laughter scholars should further acknowledge the relational impacts that laughter can have in order to more fully consider laughter as a powerful, nonverbal, and relational act.

Limitations

This study was marked by several limitations. First, data collection was cut short due to the COVID-19 virus, so the study consisted of only 17 dyads which was a smaller sample size than was desired. Furthermore, because all participants were recruited from the same area, the racial, age, and cultural diversity of the sample was limited. Although steps were taken to ensure the quality and accuracy of results, this small sample size and scope limits the generalizability of the findings. Additionally, the limited number of participants prevented the possibility of a more extensive quantitative data analysis to discover possible trends in participants' relational closeness, satisfaction, or other variables that may impact how friends understand laughter. Furthermore, partially because of the small sample size, participant demographics largely lacked diversity in race and age, so this study mainly offers insight into how laughter is understood by individuals within the same culture, leaving other cultural influences to be explored.

Moreover, because these conversations were recorded in a research lab, some types of laughter may have been influenced by the setting itself; for example, nervous or awkward laughter was quite common in this study, but in daily interactions between the same people, that type of laughter may not be as common. Similarly, because participants' descriptions of the

laughter were offered using hindsight rather than in the moment of the laughter, the explanations may have differed from those which participants may offer in a different study, despite the steps that were taken to help the participants mentally place themselves back in the moment of the laughter. Finally, although explanations and reasons for laughing were checked with participants during the interviews, only one coder analyzed this data, offering, again, limited generalizability of the study findings.

Future Directions

Considering these limitations and the work yet to be done on laughter as a unique form of communication results in several suggestions for future studies. First, a continuation of this study with a larger sample size would provide deeper insights into the findings described here while also potentially revealing other uses and understandings of laughter that were not identified by these participants. Additionally, conducting a similar study with members of different types of dyadic relationships—romantic, parent-child, new acquaintances, or co-workers—could provide interesting comparisons about laughter understandings across contexts. A third area of research could branch off of this study to address more specific components of laughter as a display of affection, addressing people's unique optimal tolerances for ideal or desired amounts of laughter in their conversations and relationships. Finally, using the methodologies of this study to conduct a similar study on other types of nonverbal vocalizations such as crying or screaming would provide additional support for the study of these often-forgotten forms of communication which exist in the gap between verbal and nonverbal communication.

Conclusion

This study offers a deeper understanding of how friends make meaning through laughter during conversational interactions. Overall, this study provides support for previous findings about laughter, confirming some of the already-identified types of laughter as well as adding new categories such as *relatability*, *lighten*, *memory*, *reactionary*, *cue*, *anticipation*, and others to these laughter typologies. In addition, this study sets the stage for assessing laughter on three dimensions: *content*, *cause*, and *relational effect*. This rounds out the “trifecta” of categorization systems that is currently present in humor research but has until now been missing in laughter research. Specifically, the *relational effect* categorization of laughter is explained more fully, offering a new model for analyzing types of laughter on two spectrums: the *positive/negative* spectrum and the *basic/complex* spectrum. Finally, these findings are combined to reveal how certain types of laughter, especially positive or *prosocial* ones, serve as displays of affection and should be more carefully considered as such. Therefore, this study addresses the topic brought up by The Barenaked Ladies, helping us all to understand what they mean when they talk about the meaning associated with laughter.

REFERENCES

- Administering IPIP measures, with a 50-item sample questionnaire.* (2019, September 23). International Personality Item Pool. https://ipip.ori.org/new_ipip-50-item-scale.htm
- Alberts, J. K., & Drzewiecka, J. A. (2008). Understanding the communication and relational dynamics of humor. In M. T. Motley (Ed.), *Studies in applied interpersonal communication* (pp. 229–244). Sage Publications.
- Altman, I., & Taylor, D. A. (1973). *Social penetration: The development of interpersonal relationships*. Holt, Rinehart, & Winston.
- Alves, H., Koch, A., & Unkelbach, C. (2016). My friends are all alike—The relation between liking and perceived similarity in person perception. *Journal of Experimental Social Psychology*, 62, 103–117. <https://doi.org/10.1016/j.jesp.2015.10.011>
- Anonymous. (2019). *Joke bank—Blonde jokes*. Laugh Factory. <http://www.laughfactory.com/jokes/blonde-jokes>
- Antonopoulou, E., & Sifianou, M. (2003). Conversational dynamics of humour: The telephone game in Greek. *Journal of Pragmatics*, 35(5), 741–769. [https://doi.org/10.1016/S0378-2166\(02\)00150-9](https://doi.org/10.1016/S0378-2166(02)00150-9)
- Argyle, M., Alkema, F., & Gilmour, R. (1971). The communication of friendly and hostile attitudes by verbal and non-verbal signals. *European Journal of Social Psychology*, 1(3), 385–402. <https://doi.org/10.1002/ejsp.2420010307>
- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of Other in the Self Scale and the Structure of Interpersonal Closeness. *Journal of Personality and Social Psychology*, 63(4), 596–612. <https://doi.org/10.1037/0022-3514.63.4.596>

- Ayres, J. (1983). Strategies to maintain relationships: Their identification and perceived usage. *Communication Quarterly*, 31(1), 62–67. <https://doi.org/10.1080/01463378309369487>
- Baxter, L. A. (2004). Relationships as dialogues. *Personal Relationships*, 11(1), 1–22. <https://doi.org/10.1111/j.1475-6811.2004.00068.x>
- Beebe, S. A., Beebe, S. J., & Redmond, M. V. (2014). *Interpersonal communication: Relating to others* (7th ed.). Pearson Education, Inc.
- Berger, A. A. (1997). *The art of comedy writing*. Transaction Publishers.
- Berger, A. A. (2016). Three holy men get haircuts: The semiotic analysis of a joke. *Europe's Journal of Psychology*, 12(3), 489–497. <https://doi.org/10.5964/ejop.v12i3.1042>
- Berger, C. R. (2015). Planning theory of communication: Goal attainment through communicative action. In D. O. Braithwaite & P. Schrodtt (Eds.), *Engaging theories in interpersonal communication: Multiple perspectives* (2nd ed., pp. 89–102). Sage Publications.
- Bergson, H. (1911). *An essay on the meaning of the comic*. (C. Brereton & F. Rothwell, Trans.). Macmillan and Co. <https://doi.org/10.1037/13772-000>
- Billig, M. (2005). *Laughter and ridicule: Towards a social critique of humour*. Sage Publications.
- Booth-Butterfield, M., & Wanzer, M. (2018). Humor in interpersonal communication. In J. Nussbaum (Ed.), *Oxford Research Encyclopedia of Communication*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190228613.013.660>
- Booth-Butterfield, M., Wanzer, M. B., Weil, N., & Krezmien, E. (2014). Communication of humor during bereavement: Intrapersonal and interpersonal emotion management

- strategies. *Communication Quarterly*, 62(4), 436–454.
<https://doi.org/10.1080/01463373.2014.922487>
- Booth-Butterfield, S., & Booth-Butterfield, M. (1991). Individual differences in the communication of humorous messages. *Southern Communication Journal*, 56(3), 205–218. <https://doi.org/10.1080/10417949109372831>
- Braithwaite, D. O., & Schrodtt, P. (Eds.). (2015). *Engaging theories in interpersonal communication: Multiple perspectives* (2nd ed.). Sage Publications.
- Bressler, E. R., & Balshine, S. (2006). The influence of humor on desirability. *Evolution and Human Behavior*, 27(1), 29–39. <https://doi.org/10.1016/j.evolhumbehav.2005.06.002>
- Burgoon, J. K., Guerrero, L. K., & Manusov, V. (2011). Nonverbal signals. In M. L. Knapp & J. A. Daly (Eds.), *The SAGE handbook of interpersonal communication* (4th ed., pp. 239–280). Sage Publications.
- Canary, D. J., Stafford, L., Hause, K. S., & Wallace, L. A. (1993). An inductive analysis of relational maintenance strategies: Comparisons among lovers, relatives, friends, and others. *Communication Research Reports*, 10(1), 5–14.
<https://doi.org/10.1080/08824099309359913>
- Chapman, A. J., & Foot, H. C. (1976). *Humour and laughter: Theory, research, and applications*. Wiley.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Dimberg, U., Thunberg, M., & Elmehed, K. (2000). Unconscious facial reactions to emotional facial expressions. *Psychological Science*, 11(1), 86–89. <https://doi.org/10.1111/1467-9280.00221>

- Dodds, K., & Kirby, P. (2013). It's not a laughing matter: Critical geopolitics, humour and unlaughter. *Geopolitics*, 18(1), 45–59. <https://doi.org/10.1080/14650045.2012.668723>
- Dunbar, R. I. M., Baron, R., Frangou, A., Pearce, E., van Leeuwen, E. J. C., Stow, J., Partridge, G., MacDonald, I., Barra, V., & van Vugt, M. (2012). Social laughter is correlated with an elevated pain threshold. *Proceedings of the Royal Society B: Biological Sciences*, 279(1731), 1161–1167. <https://doi.org/10.1098/rspb.2011.1373>
- Edwards, R. (2011). Listening and message interpretation. *International Journal of Listening*, 25(1–2), 47–65. <https://doi.org/10.1080/10904018.2011.536471>
- Faculty page: Albert Mehrabian. (n.d.). UCLA College of Life Sciences: Psychology. Retrieved May 17, 2020, from <https://www.psych.ucla.edu/faculty/page/mehrab>
- Floyd, K. (1997). Communicating affection in dyadic relationships: An assessment of behavior and expectancies. *Communication Quarterly*, 45(1), 68–80. <https://doi.org/10.1080/01463379709370045>
- Floyd, K. (2001). Human affection exchange: I. Reproductive probability as a predictor of men's affection with their sons. *The Journal of Men's Studies*, 10(1), 39–50. <https://doi.org/10.3149/jms.1001.39>
- Floyd, K. (2006). *Communicating affection: Interpersonal behavior and social context*. Cambridge University Press.
- Floyd, K., & Burgoon, J. K. (1999). Reacting to nonverbal expressions of liking: A test of interaction adaptation theory. *Communication Monographs*, 66(3), 219–239. <https://doi.org/10.1080/03637759909376475>
- Floyd, K., Hesse, C., & Generous, M. A. (2015). Affection Exchange Theory: A bio-evolutionary look at affectionate communication. In D. O. Braithwaite & P. Schrodt

- (Eds.), *Engaging theories in interpersonal communication: Multiple perspectives* (2nd ed., pp. 309–319). Sage Publications.
- Floyd, K., Mikkelsen, A. C., Hesse, C., & Pauley, P. M. (2007). Affectionate writing reduces total cholesterol: Two randomized, controlled trials. *Human Communication Research*, 33(2), 119–142. <https://doi.org/10.1111/j.1468-2958.2007.00293.x>
- Floyd, K., & Morman, M. T. (1998). The measurement of affectionate communication. *Communication Quarterly*, 46(2), 144–162. <https://doi.org/10.1080/01463379809370092>
- Freud, S. (1960). *Jokes and their relation to the unconscious* (J. Strachey, Ed. & Trans.). W.W. Norton & Company.
- Fridlund, A. J. (1991). Sociality of solitary smiling: Potentiation by an implicit audience. *Journal of Personality and Social Psychology*, 60(2), 229–240. <https://doi.org/10.1037/0022-3514.60.2.229>
- Gendry, S. (n.d.). Five categories of laughter. *Laughter Online University*. Retrieved September 27, 2019, from <https://www.laughteronlineuniversity.com/five-categories-laughter/>
- Giles, H., & Oxford, G. S. (1970). Towards a multidimensional theory of laughter causation and its social implications. *Bulletin of the British Psychological Society*, 23, 97–105.
- Glenn, P. J. (2003). *Laughter in interaction*. Cambridge University Press.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4, 26–42. <https://doi.org/10.1037/1040-3590.4.1.26>
- Gottman, J., & Gottman, J. (2017). The natural principles of love. *Journal of Family Theory & Review*, 9(1), 7–26. <https://doi.org/10.1111/jftr.12182>

- Gottman, J. M., & Levenson, R. W. (1985). A valid procedure for obtaining self-report of affect in marital interaction. *Journal of Consulting and Clinical Psychology*, 53(2), 151–160.
<https://doi.org/10.1037/0022-006X.53.2.151>
- Graham, E. E. (2011a). Affectionate communication index (ACI). In R. B. Rubin, A. M. Rubin, E. E. Graham, E. M. Perse, & D. R. Seibold (Eds.), *Communication research measures II: A sourcebook* (pp. 107–111). Routledge.
- Graham, E. E. (2011b). Humor orientation scale (HOS). In R. B. Rubin, A. M. Rubin, E. E. Graham, E. M. Perse, & D. R. Seibold (Eds.), *Communication research measures II: A sourcebook* (pp. 158–163). Routledge.
- Griffin, E. (2012). Talk about theory. In *A first look at communication theory* (8th ed., pp. 13–24). McGraw-Hill.
- Guerrero, L. K. (2014). Interpersonal functions of nonverbal communication. In C. R. Berger (Ed.), *Interpersonal Communication* (Vol. 6, pp. 53–75). Walter de Gruyter GmbH.
- Hafen, C. A., Laursen, B., Burk, W. J., Kerr, M., & Stattin, H. (2011). Homophily in stable and unstable adolescent friendships: Similarity breeds constancy. *Personality and Individual Differences*, 51(5), 607–612. <https://doi.org/10.1016/j.paid.2011.05.027>
- Hall, Jeffrey A. (2011). Is it something I said? Sense of humor and partner embarrassment. *Journal of Social and Personal Relationships*, 28(3), 383–405.
<https://doi.org/10.1177/0265407510384422>
- Hall, Jeffrey A. (2013). Humor in long-term romantic relationships: The association of general humor styles and relationship-specific functions with relationship satisfaction. *Western Journal of Communication*, 77(3), 272–292.
<https://doi.org/10.1080/10570314.2012.757796>

- Hall, Jeffrey A. (2017). Humor in romantic relationships: A meta-analysis: Humor meta-analysis. *Personal Relationships*, 24(2), 306–322. <https://doi.org/10.1111/per.12183>
- Hall, Judith A., & Bernieri, F. J. (Eds.). (2001). Preface. In *Interpersonal sensitivity: Theory and measurement* (pp. xiii–xiv). Lawrence Erlbaum Associates, Inc.
- Hawk, S. T., Fischer, A. H., & Van Kleef, G. A. (2012). Face the noise: Embodied responses to nonverbal vocalizations of discrete emotions. *Journal of Personality and Social Psychology*, 102(4), 796–814. <https://doi.org/10.1037/a0026234>
- Hegstrom, T. G. (1979). Message impact: What percentage is nonverbal? *Western Journal of Speech Communication*, 43(2), 134–142. <https://doi.org/10.1080/10570317909373961>
- Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family*, 50, 93–98.
- Holmes, J. (2000). Politeness, power, and provocation: How humour functions in the workplace. *Discourse Studies*, 2(2), 159–185.
- Jefferson, G. (1979). A technique for inviting laughter and its subsequent acceptance declination. In G. Psathas (Ed.), *Everyday language: Studies in ethnomethodology* (pp. 79–96). Irvington Publishers.
- Jokes—Philosophy and logic*. (n.d.). Smart Jokes. Retrieved October 21, 2019, from <https://www.smart-jokes.org/logic-funny.html>
- Kurtz, L. E., & Algoe, S. B. (2017). When sharing a laugh means sharing more: Testing the role of shared laughter on short-term interpersonal consequences. *Journal of Nonverbal Behavior*, 41(1), 45–65. <https://doi.org/10.1007/s10919-016-0245-9>

- Ladegaard, H. J. (2013). Laughing at adversity: Laughter as communication in domestic helper narratives. *Journal of Language and Social Psychology, 32*(4), 390–411.
<https://doi.org/10.1177/0261927X13489301>
- Lapakko, D. (1997). Three cheers for language: A closer examination of a widely cited study of nonverbal communication. *Communication Education, 46*(1), 63–67.
<https://doi.org/10.1080/03634529709379073>
- Levenson, R. W., & Gottman, J. M. (1983). Marital interaction: Physiological linkage and affective exchange. *Journal of Personality and Social Psychology, 45*(3), 587–597.
<https://doi.org/10.1037/0022-3514.45.3.587>
- Lupyan, G., & Ward, E. J. (2013). Language can boost otherwise unseen objects into visual awareness. *Proceedings of the National Academy of Sciences, 110*(35), 14196–14201.
<https://doi.org/10.1073/pnas.1303312110>
- Maki, S. M., Booth-Butterfield, M., & McMullen, A. (2012). Does our humor affect us?: An examination of a dyad's humor orientation. *Communication Quarterly, 60*(5), 649–664.
<https://doi.org/10.1080/01463373.2012.725006>
- Martin, R. A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire. *Journal of Research in Personality, 37*(1), 48–75.
[https://doi.org/10.1016/S0092-6566\(02\)00534-2](https://doi.org/10.1016/S0092-6566(02)00534-2)
- McBride, M. C., & Toller, P. (2011). Negotiation of face between bereaved parents and their social networks. *Southern Communication Journal, 76*(3), 210–229.
<https://doi.org/10.1080/10417940903477647>

- Miller-Ott, A. E., & Kelly, L. (2017). A politeness theory analysis of cell-phone usage in the presence of friends. *Communication Studies*, 68(2), 190–207.
<https://doi.org/10.1080/10510974.2017.1299024>
- Ogiermann, E. (2009). Politeness and in-directness across cultures: A comparison of English, German, Polish and Russian requests. *Journal of Politeness Research. Language, Behaviour, Culture*, 5(2). <https://doi.org/10.1515/JPLR.2009.011>
- Planalp, S., & Rosenberg, J. (2014). Emotion in interpersonal communication. In C. R. Berger (Ed.), *Interpersonal communication* (Vol. 6, pp. 273–296). Walter de Gruyter GmbH.
- Platow, M. J., Haslam, S. A., Both, A., Chew, I., Cuddon, M., Goharpey, N., Maurer, J., Rosini, S., Tsekouras, A., & Grace, D. M. (2005). “It’s not funny if they’re laughing”: Self-categorization, social influence, and responses to canned laughter. *Journal of Experimental Social Psychology*, 41(5), 542–550.
<https://doi.org/10.1016/j.jesp.2004.09.005>
- Provine, R. R. (2000). *Laughter: A scientific investigation*. Penguin Books.
- Purcell, D., Brown, M. S., & Gokmen, M. (2010). Achmed the dead terrorist and humor in popular geopolitics. *GeoJournal*, 75(4), 373–385. <https://doi.org/10.1007/s10708-009-9258-9>
- Saldaña, J. (2016). *The coding manual for qualitative researchers*. Sage Publications.
- Sapir, E. (1929). The status of linguistics as a science. *Language*, 5(4), 207–214.
<https://doi.org/10.2307/409588>
- Soto-Icaza, P., Aboitiz, F., & Billeke, P. (2015). Development of social skills in children: Neural and behavioral evidence for the elaboration of cognitive models. *Frontiers in Neuroscience*, 9. <https://doi.org/10.3389/fnins.2015.00333>

- Stafford, L., & Canary, D. J. (1991). Maintenance strategies and romantic relationship type, gender, and relational characteristics. *Journal of Social and Personal Relationships*, 8, 217–242. <https://doi.org/10.1177/0265407591082004>
- Stewart, J. (Ed.). (2012). *Bridges not walls, a book about interpersonal communication* (11th ed.). McGraw-Hill.
- Szameitat, D. P., Darwin, C. J., Wildgruber, D., Alter, K., & Szameitat, A. J. (2011). Acoustic correlates of emotional dimensions in laughter: Arousal, dominance, and valence. *Cognition & Emotion*, 25(4), 599–611. <https://doi.org/10.1080/02699931.2010.508624>
- Tracy, S. J. (2010). Qualitative Quality: Eight “Big-Tent” Criteria for Excellent Qualitative Research. *Qualitative Inquiry*, 16(10), 837–851. <https://doi.org/10.1177/1077800410383121>
- Tracy, S. J. (2018). A phronetic iterative approach to data analysis in qualitative research. *Journal of Qualitative Research*, 19(2), 61–76.
- Treger, S., Sprecher, S., & Erber, R. (2013). Laughing and liking: Exploring the interpersonal effects of humor use in initial social interactions: Humor and liking in social interactions. *European Journal of Social Psychology*, n/a-n/a. <https://doi.org/10.1002/ejsp.1962>
- Vlahovic, T. A., Roberts, S., & Dunbar, R. (2012). Effects of duration and laughter on subjective happiness within different modes of communication. *Journal of Computer-Mediated Communication*, 17(4), 436–450. <https://doi.org/10.1111/j.1083-6101.2012.01584.x>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070. <https://doi.org/10.1037/0022-3514.54.6.1063>

- Watzlawick, P., Beavin Bavelas, J., & Jackson, D. D. (1967). *Pragmatics of human communication*. Norton.
- Whorf, B. L. (1956). *Language, thought, and reality: Selected writings* (J. B. Carroll, Ed.). MIT Press.
- Wiemann, J. M. (1977). Explication and test of a model of communicative competence. *Human Communication Research*, 3(3), 195–213. <https://doi.org/10.1111/j.1468-2958.1977.tb00518.x>
- Wildgruber, D., Szameitat, D. P., Ethofer, T., Brück, C., Alter, K., Grodd, W., & Kreifelts, B. (2013). Different types of laughter modulate connectivity within distinct parts of the laughter perception network. *PLoS ONE*, 8(5), e63441. <https://doi.org/10.1371/journal.pone.0063441>
- Yim, J. (2016). Therapeutic benefits of laughter in mental health: A theoretical review. *The Tohoku Journal of Experimental Medicine*, 239(3), 243–249. <https://doi.org/10.1620/tjem.239.243>
- Zillmann, D., Rockwell, S., Schweitzer, K., & Sundar, S. S. (1993). Does humor facilitate coping with physical discomfort? *Motivation and Emotion*, 17(1), 1–21. <https://doi.org/10.1007/BF00995204>
- Ziv, A. (2010). The social function of humor in interpersonal relationships. *Society*, 47(1), 11–18. <https://doi.org/10.1007/s12115-009-9283-9>

APPENDIX A: RECRUITMENT MATERIALS

Recruitment Flyer

Humor in Friendships
Research Study

How do you & your friend communicate in light-hearted conversations?

You + 1 Same-Sex Friend
Online Sign-up

\$10 Coffeeshop Gift Card (per pair)
Extra Credit

To sign up, scan the QR code
or go to
calendly.com/michelle-matter/humor

For more information, email
HumorCommunicationStudy@gmail.com



In-Class Announcement: PowerPoint Slide (also posted online for some classes)

Humor in Friendships
Research Study

How do you & your friend communicate in light-hearted conversations?

- You + Friend (same-sex)
- Online Sign-up
- ~1 hour appointment
- Learn about...
 - Friendship
 - Interpersonal communication
 - Communication research

\$10 Gift Card (per pair)

Extra Credit!

Sign-up: calendly.com/michelle-matter/humor

More information: HumorCommunicationStudy@gmail.com



In-Class Announcement: Sample Script

Participants are needed for a new research study on humorous communication between friends. This study is taking place over the next month or so and involves participating with a same-sex friend at a time of your choosing. The research appointments take place on campus and usually last about an hour. For participating, each pair will be given a \$10 gift card to a local coffeeshop. Sign up by scanning the QR code, going to the Calendly link, or emailing the study email address. If you're interested, I have some flyers that you can take with you.

APPENDIX B: INTERVIEW PROTOCOL

Phase 1: Open-Ended Questions

Note: *Researcher (R)* refers to the person conducting the study. *Interviewee (I)* refers to the participant in the interview. *Partner (P)* refers to the non-present participant, or the other participating member of the dyad.

During the video recall interview, the researcher and the interviewee will watch the recorded conversation from the beginning. At each instance of laughter in which the interviewee laughed (a maximum number of 10 instances will be discussed), the video will be paused after the completion of the laughter instance, and the interviewee will be asked the following questions.

Interviewee Laugh:

1. What was going through your mind at this moment?
2. Why did you laugh here?

Partner Laugh:

1. What was going through your mind at this moment?
2. Why did your partner laugh here?

Both Laugh:

1. What was going through your mind at this moment?
2. What was going through your mind at this moment?
3. Why did you laugh here?
3. Why did your partner laugh here?

Phase 2: Coding

1. Explain context.
2. At this point in the conversation, you mentioned that you were feeling generally [insert participant's words here]. Which of the following words do you feel most accurately describes that feeling, if any?
 - a. *Researcher gives corresponding positive or negative affect scale list to participant. (See Appendix D)*
3. Do you believe that what [you/your partner] said was truly funny?
4. You indicated that [you/your partner] laughed because of [insert participant's words here]. Do you see that reason, or a similar one that better describes the reason, on the list?
 - a. *Researcher gives corresponding list of reasons to laugh to participant. (See Appendix C)*

APPENDIX C: LIST OF LAUGHTER REASONS

Reasons for laughing, shared with the participant after initial description (in their own words) for why they (or their partner) laughed at a particular instance.

Anxiety

- I felt uncomfortable
- I was nervous
- I felt scared
- I felt awkward/It was an awkward situation
- I was anxious

Derision

- They said something stupid
- To make fun of them
- They said something offensive

Social

- To let them know I was listening
- To fill time
- It seemed like the appropriate response
- To make them comfortable
- To be friendly

Ignorance

- I didn't know how to respond
- I wasn't sure what was going on
- I was trying to act like I understood

Apologetic

- I felt bad/To apologize

Physical

- I was being tickled

Humorous

- They said something truly laugh-out-loud funny
- I couldn't help it—it was funny

Other: _____

APPENDIX D: LIST OF FEELINGS (PANAS)

“At this point in the conversation, you mentioned that you were feeling generally [insert participant’s words here]. Which of the following words do you feel most accurately describes that feeling, if any?”

Interested	Alert	Distressed
Excited	Attentive	Upset
Strong	Jittery	Guilty
Enthusiastic		Scared
Proud		Hostile
Inspired		Irritable
Determined		Ashamed
Active		Nervous
		Afraid