

**INTERPRETING TEASING THROUGH TEXTING: THE ROLE OF EMOJI,
INITIALISMS, RELATIONSHIPS, AND REJECTION SENSITIVITY IN
AMBIGUOUS SMS**

KRISTEN KEANE

Thesis submitted to the University of Ottawa
in partial fulfillment of the requirements for the
Doctorate in Philosophy degree in Clinical Psychology

School of Psychology
Faculty of Social Sciences
University of Ottawa

Abstract

Playful teasing is an ancient form of interaction that now occurs through computer-mediated communication. Teasing through short message service texting is examined conceptually and empirically in this dissertation. Teasing and computer-mediated communication are framed in the theoretical lens of social information processing in Chapter 1. The development of study materials and stimuli to examine teasing through texting, using iterative focus groups and online pilot data collection, are detailed in Chapter 2. The two studies that examined message features, social context, and rejection sensitivity in the context of playful teasing via texting are presented in Chapter 3. The influence of two commonly used message features (the “winking face with tongue” emoji and the “lol” initialism) on teasing text message interpretation, compared to unadorned texts, were investigated in Study 1. Rejection sensitivity was also examined in relation to interpretation. Texts with the emoji contributed to more positive interpretations compared to texts with the “lol” initialism or unadorned texts, providing the first evidence that emoji and initialism function differently in the context of teasing. The influence of social context (the sender-receiver relationship) on the interpretation of teasing texts, and the relationship between message interpretation and rejection sensitivity were examined in Study 2. Teasing texts sent by close friends were rated more positively than those from acquaintances. In both studies, higher rejection sensitivity was related to more negative interpretations of teasing texts, however, teasing texts with the emoji did not show this pattern. The studies’ findings are discussed in Chapter 4 in the context of social information processing theory and in practice, examining implications for individuals with rejection sensitivity and practices for text message composition.

Keywords: teasing, texting, social information processing, emoji, initialisms, social context, rejection sensitivity

Acknowledgements

“It is good to have an end to journey towards; but it is the journey that matters, in the end.”

- Ursula K. Le Guin

This journey has been transformative, and it has involved numerous people who have been instrumental in supporting me, many of whom I met along the way. This dissertation would not have been possible without you and I am truly grateful for each and every one of you.

My sincerest thanks go to my supervisor, Dr. Stuart Hammond, for his steadfast support, patience, and encouragement. I am very grateful for your commitment to my success and for helping me navigate this dissertation journey. Thank you for your flexibility, adaptability, and your unwavering presence while working virtually during the pandemic. Your collaborative and validating approach fostered the momentum which brought this dissertation to life. The skills you have imparted will help me thrive long into my career.

I would also like to express my sincerest gratitude to my committee members, Dr. Cristina Atance, Dr. Isabelle Boutet, Dr. Pierre Gosselin, and, Dr. Tracy Vaillancourt, as well as to my external examiner, Dr. Lucy Betts, each of whom has played a unique role in my journey. Thank you for your guidance and for sharing your expertise through your insightful comments, suggestions, and feedback.

Warmest thanks to Dr. Alastair Younger who welcomed me into the graduate program and supervised me for several years prior to his retirement. I am forever grateful to you for encouraging me to pursue a dissertation topic about which I was truly passionate. I would also like to extend my sincerest appreciation to Dr. Dwayne Schindler. I truly valued your guidance, advice, and abundance of patience during our consultations.

I am also grateful for the many wonderful clinical supervisors that I have been so fortunate to have worked with during my practica and residency. You have each had a role in shaping me as a clinician and I am looking forward to spreading my wings as I venture into full-time clinical practice.

To my amazing friends – thank you for knowing when to lean in and when my absence meant I was hard at work. For those of you in the program, words cannot express how thankful I am to have embarked on this journey together with you. A special thanks to those who have helped me keep everything in perspective during this last leg. Thank you to my fellow Eastern Health residents. You were my rocks while living on *The Rock* and you each hold a very special place in my heart. I will forever cherish our Newfoundland and Labrador journey together and our everlasting friendships. The unique experiences we had during residency, including the historic *Snowmageddon* and navigating work from home during the COVID-19 pandemic, not only brought us closer but formed memories that will never be forgotten. You are all, *Best Kind*.

Finally, there are not enough words to express my heartfelt gratitude to my family. Throughout my academic pursuits, you have provided the secure foundation that has helped me achieve my goals. You have always known when to give a little nudge or when your quiet presence speaks volumes. You have enthusiastically worn many hats over the years, including but not limited to, being my roommates, chauffeurs, movers, sounding boards, editors, and most of all, my biggest cheerleaders. Your endless support has certainly not gone unnoticed, and I am forever grateful for your tireless dedication to my success. I have never walked this journey alone. I am excited to see where the next journey takes me!

Academic Contributions and Statement of Co-Authorship

Included in this dissertation is a two-study manuscript (Chapter 3) entitled “Interpreting Teasing Through Texting: The Role of Emoji, Initialisms, Relationships, and Rejection Sensitivity in Ambiguous SMS”, with supplemental materials (Chapter 2), which have been submitted to a Canadian journal. The manuscript and supplemental materials have been modified slightly for this dissertation. Kristen Keane is the first author of the submitted manuscript and was responsible for the conceptualization of the research questions, method design, obtaining ethics approval, participant recruitment, focus group facilitation, data collection, data analysis, literature review, and manuscript writing and editing. Dr. Stuart Hammond is the second author on the submitted manuscript. His contributions include writing and editing, and data analysis.

Table of Contents

Abstract.....	ii
Acknowledgements.....	iii
Academic Contributions and Statement of Co-Authorship	v
Table of Contents.....	vi
List of Tables	ix
List of Figures	x
Chapter 1: General Introduction	1
Social Information Processing Accounts of Interaction	4
Social Information Processing Model and Teasing Interactions.....	9
Social Information Processing and Texting	15
Teasing Through Texting	19
Summary of Introduction and Dissertation Overview.....	22
Chapter 2: Development of Study Materials and Stimuli (Focus Groups and Pilot Testing).....	23
A Phased Approach to Stimuli Development, Piloting, and Studies Design	24
Phase I: Focus Groups and Stimuli Development	26
Phase II: Online Piloting and Stimuli Refinement.....	28
Conclusion.....	30
Chapter 3: Interpreting Teasing Through Texting: The Role of Emoji, Initialisms, Relationships, and Rejection Sensitivity in Ambiguous SMS (Study 1 and Study 2).....	32

Abstract.....	33
Introduction	34
Teasing Through Texting.....	35
The Present Studies	38
Study 1: Examining Message Features and Rejection Sensitivity in Relation to the Interpretation of Teasing Texts	41
Introduction	41
Method	41
Results.....	46
Study 1 Discussion.....	50
Study 2: Examining the Sender-Receiver Relationship and Rejection Sensitivity in Relation to the Interpretation of Teasing Texts.....	51
Introduction	51
Method	52
Results.....	55
Study 2 Discussion.....	57
General Discussion.....	58
Limitations and Future Directions.....	62
Conclusion.....	63
Chapter 4: General Discussion	64
Social Information Processing, Teasing, and Texting.....	65

Main Findings.....	66
Practical Implications for Teasing and Texting.....	73
Limitations and Future Directions.....	76
Conclusion.....	78
References.....	80
Appendices.....	105
Appendix A: Certificate of Ethics Approval	105
Appendix B: Consent Forms	108
Appendix C: Focus Group Facilitator Guide.....	115
Appendix D: Focus Group Workbook	119
Appendix E: Demographic and Texting Questionnaire	124
Appendix F: Supplemental Descriptive Results from the Texting Questionnaire	125
Appendix G: Pilot Text Message Stimuli Items.....	129
Appendix H: Study 1 and Study 2 Teasing Stimuli and Control Items.....	134
Appendix I: Rejection Sensitivity Questionnaire	137
Appendix J: Follow-Up Reflection Questions	140

List of Tables

Chapter 3: Interpreting Teasing Through Texting: The Role of Emoji, Initialisms, Relationships, and Rejection Sensitivity in Ambiguous SMS (Study 1 and Study 2)

Table 1. Study 1 Text Message Stimuli Interpretation by Message Feature, Item Block, and Group.....	46
---	----

Appendices

Table F1. Descriptive Statistics of Participants' Average Number of Texts Sent and Received Daily.....	126
--	-----

List of Figures

Chapter 1: General Introduction

Figure 1. Social Information Processing Model of Communication	7
Figure 2. Social Information Processing Model Applied to the Encoding and Interpretation of Teasing	14
Figure 3. Core Components of the Social Information Processing Model Adapted for Texting Interactions	16
Figure 4. Integrated Social Information Processing Model Illustrating Teasing Via Texting.....	21

Chapter 2: Development of Study Materials and Stimuli (Focus Groups and Pilot Testing)

Figure 5. Research Design Flow: Three Phase Approach.....	25
Figure 6. Example Item from Focus Group Workbook	27

Chapter 3: Interpreting Teasing Through Texting: The Role of Emoji, Initialisms, Relationships, and Rejection Sensitivity in Ambiguous SMS (Study 1 and Study 2)

Figure 7. Main Studies: The Role of Message Features, Social Context, and Rejection Sensitivity.....	40
Figure 8. Study 1 Block Design	43
Figure 9. Study 1 Teasing Text Message Stimuli Variations (a) Text Message Alone, (b) Text Message and Initialism, and (c) Text Message and Emoji; and the Interpretation Scale	44
Figure 10. Mean Response by Message Feature Condition	48
Figure 11. Study 2 Text Message Stimuli Sender Manipulation	54

Appendices

Figure F1. Participants' Average Number of Texts Sent and Received Daily	125
Figure F2. Average Number of People with Whom Participants Text Daily	127
Figure F3. Participants' Most Frequent Text Messaging Contact	128

Chapter 1: General Introduction

Computer-mediated communication (CMC) has become an integral part of everyday social interaction. Broadly defined, CMC encompasses communication that transpires through networked computer technology (Liang & Walther, 2015; Thurlow et al., 2004), and in contrast to the everyday use of “computer” as a synonym for desktop or laptop computers, its technical usage extends to devices such as *smartphones*. CMC-capable phones are multimodal (e.g., text, images, audio, and video), increasingly accessible (e.g., lower prices; miniaturization), and are now owned by a majority of the global population (Taylor & Silver, 2019). The rate of smartphone ownership rises to 97% among 15- to 44-year-old Canadians (Statistics Canada, 2018). Unsurprisingly, given the ubiquity of smartphones, issues related to CMC are increasingly appearing in the mental health literature (e.g., cyber-aggression, the fear of missing out [FOMO], texting anxiety; Dempsey et al., 2019; Mishna et al., 2018; Vorderer et al., 2016).

Smartphones and other computers allow for diverse modes of CMC including video calls, however, *short message service* [SMS], or “texting”, remains the most popular form of CMC (Harrison & Gilmore, 2012; Lenhart, 2012; Skierkowski & Wood, 2012)¹. Texting affords social interaction that is unobtrusive, overlapping, and has distinct temporal qualities, which fosters a sense of *constant connectedness* (Harrison & Gilmore, 2012; Pettigrew, 2009; Thompson & Cupples, 2008; Thurlow et al., 2004). The discreetness of text messaging allows for fewer situational constraints as to how and when communication takes place compared to audio or video calls (e.g., from a classroom, work meeting, movie theatre, bathroom; Harrison & Gilmore, 2012; Pettigrew, 2009; Thurlow & Poff, 2013). Texting interactions can overlap, allowing for concurrent interactions (Reid & Reid, 2010; Srivastava, 2005) and the potential for a greater

¹ Texting has remained the most popular form of CMC even during the COVID-19 pandemic (Juvonen et al., 2021).

number of social interactions than by means of other forms of communication. Text messaging enables individuals to transcend physical proximity to maintain social proximity and seems to function as an extension of our being (Srivastava, 2005; Thompson & Cupples, 2008). Boundaries between in-person and text-based interactions are often blurred (e.g., a dialogue that is initiated in a face-to-face interaction can effortlessly continue via texting or vice versa) and the types of interactions which occur face-to-face also occur through texting (e.g., planning, arguing, teasing). University students check their text messages on average every 4 minutes (Harrison et al., 2015), and the permeation of texting in daily life can lead to dependency (e.g., Skierkowski & Wood, 2012), social violations (e.g., Harrison et al., 2015), and problematic use (e.g., texting while driving; Gliklich et al., 2016). University-aged students, and younger cohorts, generally fall into a subset of the population coined as *digital natives*, those who have been immersed in a world of digital technology for most of their lives (Prensky, 2001). There is some evidence that digital natives use and experience CMC differently than *digital immigrants*, those who have adopted its use later in life (Kesharwani, 2020; Palfrey & Gasser, 2008; Riordan et al., 2018; Vodanovich et al., 2010), however, a full and comprehensive picture has yet to emerge.

Understanding CMC, and its commonalities and differences with face-to-face interaction, is important to psychological research and practice. The central studies in the present dissertation examined *playful teasing* through texting, and the role of message features, social context, and rejection sensitivity in the interpretation of teasing texts. These concepts are each defined as they are introduced in relation to the model presented below. Although the core studies of the dissertation focused specifically on teasing through texting, nevertheless, by framing the issue in a *social information processing* (SIP) model, the commonalities and differences of CMC compared to face-to-face interaction in the context of teasing are demonstrated in the

introduction, and the studies' findings are framed in terms of theoretical and practical implications for understanding texting in the discussion. As such, the present dissertation makes broader contributions to research and practice regarding CMC. In the general introduction (Chapter 1) the SIP model, and research on teasing, CMC, and texting, situated in the model, are reviewed. In Chapter 2 the stimuli development and piloting phases are outlined, and design considerations for the two main studies are discussed. In Chapter 3 a two-study paper on teasing through texting currently under review at a peer-reviewed journal (modified for the dissertation) is presented. In the general discussion (Chapter 4) the results from the current research in the context of SIP theory are revisited and the practical relevance of the findings is discussed.

Social Information Processing Accounts of Interaction

As the name suggests, *social information processing* (SIP) originated in cognitive science *information processing* approaches to communication and efforts to model the mind on computers (Knapp, 1986; Huesmann, 1998; Newell & Simon, 1965). SIP was selected as a theoretical lens to facilitate understanding teasing through texting because of its history in examining provocative forms of communication that are prone to breakdown, both in face-to-face interaction and more recently in CMC contexts. For example, SIP is discussed in research focusing on misinterpretation (e.g., hostile attribution of intent; Crick & Dodge, 1994) and aggression (e.g., Arsenio et al., 2009; Calvete & Orue, 2012; Crick & Dodge, 1996). Research on CMC has also used a SIP framework (e.g., Dooley et al., 2009; Runions et al., 2013). For example, Runions et al. (2013) used a SIP model to examine both the unique features of CMC (e.g., permanency, lack of cues, ambiguity, visibility, portability) and commonalities with in-person aggression in an examination of cyber-aggression and victimization. Researchers have called for greater empirical study of SIP within the context of CMC (Dooley et al., 2009;

Runions et al., 2013). The present dissertation contributes to that call and is the first to present a SIP account that examines playful teasing through CMC.

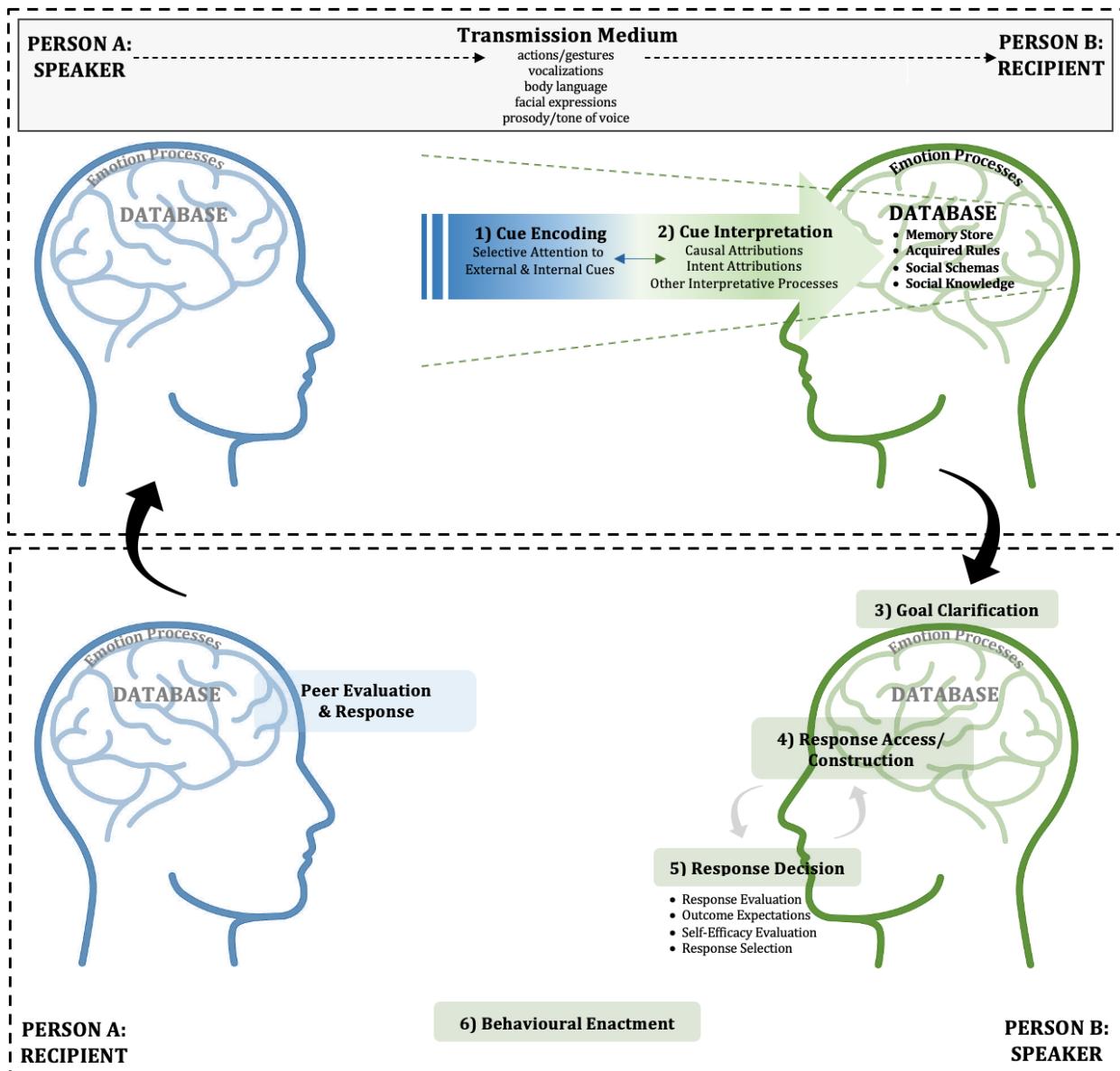
Figures 1 through 4 below illustrate the step-by-step incorporation of teasing and CMC into a SIP model. In its most basic form, information processing (see Figure 1, top) depicts a speaker (or sender) encoding information, a medium by which information is transmitted, and a recipient (or receiver) who decodes the information. Social information processing expands on information processing models to capture the social cognitive mechanisms involved in the processing of social stimuli, and how individual differences arise in the processing of stimuli (see Figure 1; Crick & Dodge, 1994; Huesmann, 1998; Lemerise & Arsenio, 2000). Broadly, SIP models postulate that individual differences arise in communication because individuals selectively attend to and interpret social cues (which Crick and Dodge call external cues) and emotions (which Crick and Dodge call internal cues) based on an individualized *database* of accumulated and integrated social experiences stored in memory. Individual experiences (e.g., salient interactions with attachment figures or peers) form an individualized database, which is further shaped by biological predispositions such as temperament and emotion processes (Crick & Dodge, 1994; Lemerise & Arsenio, 2000). The resultant database encompasses an individual's memories, mental representations (e.g., schemas and scripts), and social knowledge which influence the view of self, others, and the world (Crick & Dodge, 1994), and expectations regarding how others will behave in social interaction (Burgoon & Jones, 1976).

The database plays a crucial role throughout Crick and Dodge's (1994) SIP model, which breaks communication down into six steps (see Figure 1). Although the entire model is described below, the empirical studies described in Chapter 3 depict only Step 1 and Step 2 of the model and more will be said about Steps 3 through 6, as they relate to texting, in the General

Discussion. Step 1 begins with the assumption that the speaker has already emitted some information: for example, a supervisor (speaker) pulls aside an employee (recipient) after a team meeting and asks the employee, “Do you have time to talk?” The first step of processing involves the individual in the recipient role attending to and encoding cues from the speaker (e.g., actions, verbalizations, body language, prosody), as well as situational cues (e.g., social context), and internal cues (e.g., emotional and somatic arousal). The subsequent interpretation of these cues (Step 2) involves meaning making, including attributions of intent and causality (e.g., the employee may interpret the supervisor’s actions as an opportunity to commend their contributions during the meeting). Interpretation also involves the recipient’s view of themselves (e.g., hard worker, skilled), their view of the speaker (e.g., respectful, collegial), and past experiences with the speaker (e.g., supervisor often provides praise).

Figure 1

Social Information Processing Model of Communication (Adapted from Crick & Dodge, 1994)



Note. The figure adapts Crick & Dodge's (1994) six-step SIP model. The classic model of information processing overlays the figure in the grey shaded rectangle. The upper half of the figure (top dashed rectangle) illustrates Person A (blue) in the speaker role and Person B (green), the recipient, encoding and interpreting the transmitted information. The bottom half of the figure (bottom dashed rectangle) depicts the processing stages in which Person B transitions to

the role of speaker (the development and enactment of a response) and Person A becomes the recipient. Feedback loops are illustrated (with arrows) between cue encoding (Step 1) and interpretation (Step 2), and between response access/construction (Step 4) and response decision (Step 5). The database and emotion processing are social cognitive features rather than steps per se (e.g., Lemerise & Arsenio, 2000). Adapted from “A Review and Reformulation of Social Information Processing Mechanisms in Children’s Social Adjustment,” by N. R. Crick and K.A. Dodge, (1994), *Psychological Bulletin*, 115(1), p. 76 (<https://doi.org/10.1037/0033-2909.115.1.74>). Copyright 1994 by the American Psychological Association.

Steps 3 through 6 describe the recipient transitioning to the role of speaker. In the third step, the individual clarifies their goals for the interaction (e.g., relationship enhancement, self-preservation, retaliation). Responses are then accessed (based on activated social scripts) or constructed, with the identified goals in mind (Step 4), and subsequently appraised and selected with consideration given to the predicted outcomes and self-efficacy in executing the response (Step 5). Step 6 is the production of the selected response which, once enacted, starts the cycle anew with the other individual as a recipient (Crick & Dodge, 1994). Although the steps follow a sequential order, Crick & Dodge (1994) recognize the simultaneous nature of social information processing (i.e., engaging in multiple processing activities at the same time) and the presence of feedback loops between stages. For example, while the employee is inferring the meaning of the supervisor's spoken feedback, they continue to encode and interpret new incoming information (e.g., body language, tone of voice), while concurrently developing a response (e.g., demonstrate active listening and thank the supervisor for the feedback provided) which is in line with their goal (e.g., maintaining a respectful working relationship) and their activated scripts of professional interactions.

Social Information Processing Model and Teasing Interactions

The SIP model describes successful communication, however, the model also applies to instances when communication breaks down, such as from misattributions of intent (e.g., Crick & Dodge, 1994; Fiske & Taylor, 2017). Most SIP researchers have focused on instances of communication breakdown, either by studying forms of communication that are intrinsically provocative (e.g., aggression), or more benign forms of communication that some individuals are more prone to misinterpret (e.g., reactive aggression to ambiguous social stimuli). *Playful teasing* is a mode of social communication that can contribute to communication breakdown

because of its intrinsic ambiguousness. However, as opposed to *hostile teasing*, which is mean-spirited and enacted with the goal of hurting or humiliating the recipient (Keltner et al., 2001; Kruger et al., 2006), playful teasing is a form of communication which uses provocation in a manner intended to strengthen relationships and foster a sense of closeness (Beck et al., 2007; Buglass et al., 2020; Dynel, 2008; Gorman & Jordan, 2015; Haugh & Pillet-Shore, 2018; Keltner et al., 2001; Pawluk, 1989). The provocative and surprising aspect of teasing can be thought of as a violation of expectations (Eckert et al., 2020; Reddy & Mireault, 2015), that being a deviation from how an individual is anticipated to behave in the social exchange based on mental representations of the specific person, the relationship, the situational context, and social norms more broadly (Burgoon & Jones, 1976). Playful teasing is considered successful when the violation is appraised positively by the recipient.

Playful teasing occurs in a variety of social contexts and is used as a means of achieving a range of relational goals (e.g., reciprocal enjoyment, flirting, conversation initiation, conflict diffusion; Beck et al., 2007; Mills, 2018; Shapiro et al., 1991). Some evolutionary theorists have postulated that playful teasing is highly conserved through evolution, as it is also present in non-human primates (Eckert et al., 2020). Although a developmental account of teasing is beyond the scope of this dissertation, playful teasing occurs even in early infancy (e.g., offer-withdrawal games between parent and child; Reddy & Mireault, 2015), and as children move into middle childhood and adolescence, they begin to explicitly understand the prosocial aspects of teasing (Barnett et al., 2004; Keltner et al., 2001; Mills, 2018). Relational context has been highlighted as an important factor in the interpretation of playful teasing (Alberts et al., 1996; Buglass et al., 2020; Mills, 2018; Steer et al., 2020). Playful teasing is particularly common in closer relationships such as among family, friends, and romantic interests (Barnett et al., 2004; Beck et

al., 2007; Dynel, 2008; Mills, 2018; Pawluk, 1989), nevertheless, it can also facilitate the initiation or enhancement of new relationships (Haugh & Pillet-Shore, 2018). Teasing without or with less relational context and common ground can be riskier and more difficult to interpret (Buglass et al., 2020; Kowalski, 2000). Due to its provocative and unexpected nature, the extent to which teasing is tolerated, welcomed, and enjoyed also depends on the individual's perception of the teaser (e.g., likability, desirability, status) and the appraised value of their relationship (Burgoon & Jones, 1976; Burgoon, 2016).

In playful teasing, the coupling of incitement (e.g., a jarring statement) and redressive cues (e.g., winks, smiles) leaves the interaction ambiguous and open to interpretation (see Keltner et al., 2001; Kowalski, 2004; Mills & Carwile, 2009; Mills, 2018; Shapiro et al., 1991). Redressive markers used in instances of hostile teasing are typically insincere and intended to negate responsibility (e.g., "I was only kidding"; Baas et al., 2013; Haugh, 2016; Mills & Carwile, 2009). In playful teasing, the markers are genuine signals of playfulness, however, the blurred line between aggressive teasing (laughing at) and playful teasing (laughing with) can make the true intention behind these interactions difficult to ascertain. If misinterpreted, playful teasing can result in a provocation that may sting more than intended, contributing to intra- and interpersonal problems (Bhutani et al., 2014; Kowalski, 2000; Ledley et al., 2006) rather than building and strengthening relationships.

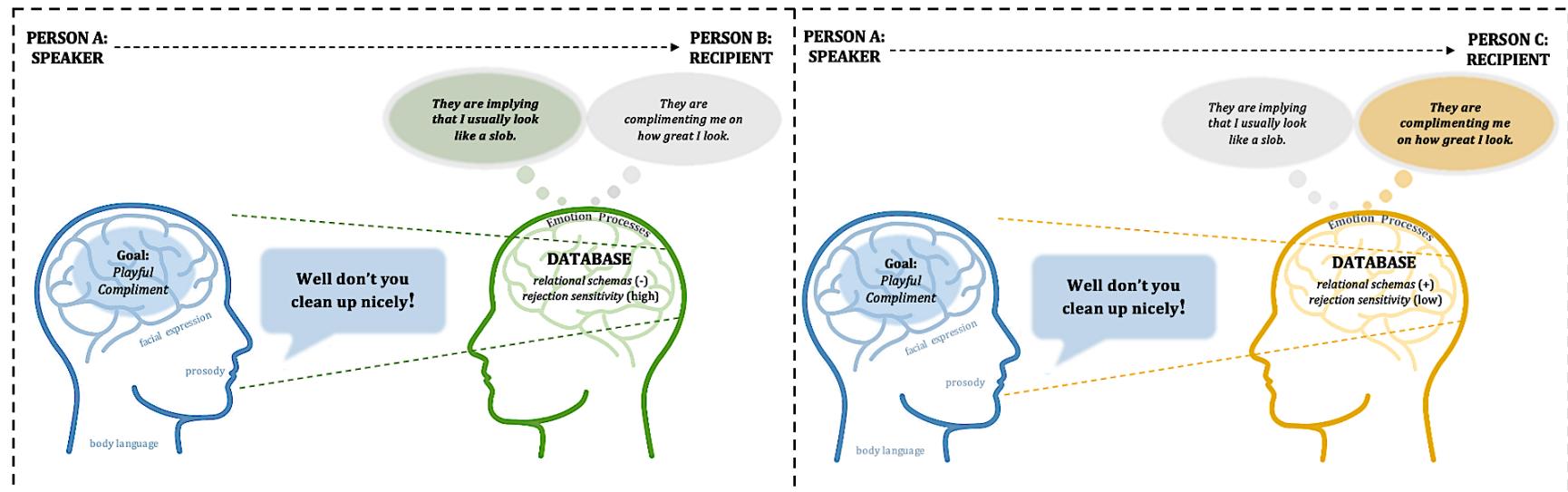
Figure 2 lays out an abbreviated SIP model of playful teasing, showcasing the encoding and interpretation of teasing (Steps 1 and 2). Figure 2 illustrates an instance where a person correctly interprets, and another person misinterprets, an instance of playful teasing. The model assumes that the speaker selected teasing as a means of achieving a social goal (e.g., flirting, bonding, cheering up, shared enjoyment; Beck et al., 2007), and made an utterance (e.g., "Well

don't you clean up nicely!"'), which is accompanied by redressive markers (e.g., prosody, facial expression, body language) to signal playful intent. The tease itself and additional cues are then selectively attended to and interpreted by the recipient as illustrated in the steps outlined in Figure 1. As in Figure 1, the model is founded on the principle that the recipient's individualized database is at the core of social information processing.

Figure 2 illustrates a dichotomy in interpretation between individual recipients (see Figure 2 left vs. right), with negative and positive interpretations of the same social stimuli. Recipient interpretations are prompted by activated mental representations in the database. The database is formed from past social experiences, positive and negative (e.g., rejection; Dodge et al., 2003). Figure 2 illustrates two aspects of the database related to social knowledge and schema, *social context* and *rejection sensitivity*. Social context is the relationship and familiarity with the speaker (Gorman & Jordan, 2015; Keltner et al., 2001; Kowalski, 2004), which activates a relational schema for that person (Baldwin; 1992; e.g., the speaker is mean, the speaker is caring). Relational schemas consist of mental representations of the self in the interaction, the other person in the interaction, and beliefs based on patterns of interaction (Baldwin, 1992; Holmes, 2000; Salmivalli et al., 2005). Mental representations are more specific and individualized with increased familiarity with the speaker, in contrast to more generalized representations based on social norms (Burgoon, 2016). Schemas increase processing efficiency but can also be skewed causing important social information to be neglected. Biases in schemas are linked to psychological and social dispositions (e.g., anxiety, depression, rejection sensitivity; Pietrzak et al., 2005; Orue et al., 2014; Wright et al., 2009). Social stimuli that are ambiguous, as is the case with teasing, are at risk of being interpreted as potentially threatening and are at particular risk of biased interpretation (Alberts et al., 1996; Crick & Dodge, 1994;

Kingsbury & Coplan, 2016; Kowalski, 2000; Nowakowski & Antony, 2013; Pietrzak et al., 2005; Waite et al., 2015).

Rejection sensitivity is a cognitive-affective processing disposition that leads individuals to “defensively expect, readily perceive, and overreact to social rejection” (Downey et al., 1998, p. 1089; further discussed in Chapter 3). Early experiences of social rejection (e.g., by parents, peers, and others) are thought to contribute to the development of heightened expectations of rejection in later relationships (Feldman & Downey, 1994; London et al., 2007). This hypervigilance to signs of rejection is activated in social situations in which rejection is deemed possible, including with newly acquainted or close relationships, impacting how an individual thinks, feels, and responds in the interaction (Downey & Feldman, 1996; Downey et al., 1998; Pietrzak et al., 2005). Detected threat (actual or perceived rejection) leads individuals high in rejection sensitivity to react anxiously (“flight”) or aggressively (“fight”) in defence (Downey et al., 1998; London et al., 2007). Unfortunately, overreaction especially in the case of faulty detection, can result in a self-fulfilling prophecy in which rejection becomes realized (Meehan et al., 2018; Romero-Canyas et al., 2010). Internalizing (e.g., social anxiety, depression) and externalizing (e.g., aggression) difficulties have been described as consequences, as well as drivers, of rejection sensitivity (Beeson et al., 2020; Chango et al., 2012; Downey et al., 1998; London et al., 2007; Marston et al., 2010; Zimmer-Gembeck et al., 2016).

Figure 2*Social Information Processing Model Applied to the Encoding and Interpretation of Teasing*

Note. Figure 2 illustrates individual differences in the encoding and interpretation of teasing. The goal of the speaker in both examples is to compliment the recipient in a playful manner. The verbal transmission is accompanied by redressive markers (e.g., use of facial expression, body language, and prosody) which can be modified in real time by Person A. Person B (green; left) and Person C (gold; right) enter the interaction with their own emotion processes and database through which the teasing statement and accompanying cues are filtered, leading to an interpretation. In this example, the interpretation of the same social stimuli is depicted as polarized (negative; positive), to illustrate the methodology developed and used in Chapters 2 and 3.

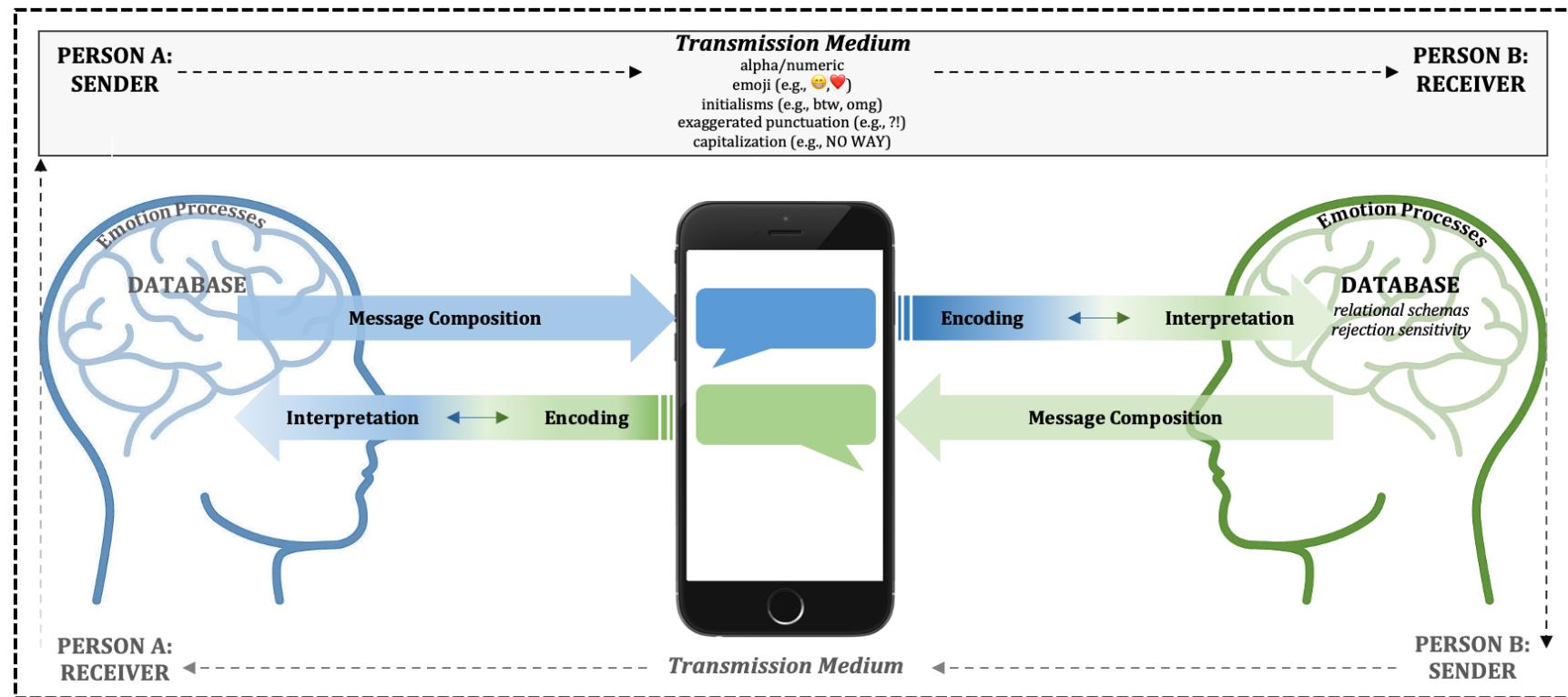
The coloured interpretations (thought bubbles) in Figure 2 illustrate how ambiguous stimuli may be detected by the database as threatening or complimentary. The diagram on the left could reflect a recipient whose relationship with the speaker and/or sensitivity to rejection contributes to a negative interpretation, resulting in a misinterpretation of a playful tease. The diagram on the right could reflect a recipient with a positive relational schema of the speaker and/or is low in rejection sensitivity, resulting in a successful interpretation of playful teasing.

Social Information Processing and Texting

With the rise of CMC in daily life, researchers have begun to examine the application of the SIP model to CMC contexts (e.g., cyber-aggression; Dooley et al., 2009; Hilvert-Bruce & Neill, 2020; Runions et al., 2013). The most popular form of CMC, texting, involves the use of mobile/smartphone SMS to send concise, text-based messages between devices (Thurlow & Poff, 2013). Even though text messaging was originally designed, and is still used, to provide notifications (e.g., system errors, emergency alerts, voicemail notifications; Crystal, 2008; Thompson & Cupples, 2008), personal communication is the primary use of texting (e.g., between friends and acquaintances) and text-based communication can facilitate the initiation, development, and maintenance of relationships (Walther, 2011). As laid out in Figure 3, the main difference between face-to-face communication and texting is the medium of communication (Schrock, 2015). Unlike face-to-face communication which allows for prosody and body language, texting consists of a message and any *message features*. Despite the restrictions imposed by the text-based medium, communicators adapt to the parameters of the medium (e.g., greater number of exchanges, increased and selective self-disclosure) and use accommodations (e.g., message features) to meet their relational goals (Walther, 1992; Walther, 1996).

Figure 3

Core Components of the Social Information Processing Model Adapted for Texting Interactions



Note. Figure 3 depicts SIP and text message communication. The notable shift in language (compared to Figures 1 and 2) reflects terminology used to describe the communication medium (i.e., sender for speaker; receiver for recipient). The “message composition” stage in this figure encapsulates goal clarification, response access/construction, and response development (Steps 3 to 5) of Crick and Dodge’s (1994) model.

Message features include grammatical and symbolological mechanisms that are commonly used as proxies for face-to-face cues in their absence (Crystal, 2008; Plester et al., 2009; Walther, 1992). The inclusion or absence of even minor cues in text-based CMC (e.g., use of a period) can change how a message is understood, especially by digital natives (Riordan et al., 2018). For example, exaggerated capitalization (e.g., WHAT) and punctuation (e.g., !!!) are simple adaptations to plain text that can be used for emphasis and tonal variation. Two other commonly used message features, *emoji* and *initialisms*, were the focus of Study 1 (Chapter 3).

Emoji are pictographs that can be added into text-based CMC (Bai et al., 2019; Dresner & Herring, 2010). Although earlier emoji, known as emoticons, used standard keyboard symbols (e.g., :)), the Unicode standard now allows users to include graphic images (e.g., ☺) which have continued to evolve thematically (e.g., faces, animals, food/drink, activities, objects, symbols) and in graphical detail (e.g., 🤗). These minuscule graphics serve many social, emotional, and communicative functions in text-based interactions (Erle et al., 2021). Emoji are used to convey emotion and tone (e.g., communicating affect/attitude, softening or intensifying tone), and provide contextual and disambiguating cues (Derks et al., 2008; Kaye et al., 2016; Riordan, 2017; Sampietro, 2020; Shovholt et al., 2014). Emoji also serve as interaction tools facilitating communication (e.g., by indicating turn taking, backchannel communication, and illocutionary force; Dresner & Herring, 2010, Li & Yang, 2018). Digital natives more commonly avail of these functions, particularly when communicating with same-aged peers (Bosch, 2018), compared to older individuals who use and interpret emoji more literally (e.g., representing a specific activity/action; Herring & Dainas, 2020). Emoji can facilitate message understanding (Daniel & Camp, 2020) and can influence attributions made about the sender's attitude, disposition, and intent (Boutet et al., 2021; Völker & Mannheim, 2021).

Initialisms are acronyms (e.g., “LOL” for “laugh[ing] out loud”, “JK for “just kidding”) that emerged because texting was initially restricted to 160 characters (Trosby et al., 2010) and texting with earlier phone keypads (e.g., T9) was arduous. Initialisms, like emoji, serve many of the above-described functions. Beyond their literal meanings, some initialisms are used as tone modifiers, signals of intent, or affective responses (e.g., Forbes & Buchanan, 2019; Tagliamonte, 2016). There is far more limited research regarding initialisms in contrast to other commonly used message features such as emoji. Emoji and initialisms are described further in Chapter 3 (for reviews see Bai et al., 2019; Crystal, 2008; Manganari, 2021).

In the SIP model, although the medium of texting is different from face-to-face communication, the steps in the model (i.e., as illustrated in Figures 1 and 2) otherwise remain the same. Therefore, while message features provide social information (Derks et al., 2008; Plester et al., 2009; Walther, 1992), nevertheless they are also susceptible to misinterpretation (Kelly & Miller-Ott, 2018; Runions et al., 2013). The interpretation of the message content and the message features is influenced by individual recipient differences, as it is in face-to-face communication. Accumulated experiences with the sender (in person and/or through CMC), and mental representations of the relationship, provide a framework on which to base interpretations (as illustrated in Figure 2). Text-based CMC tends to be less problematic in well-founded relationships (Jacobson, 2007; Rettie, 2009), where the interlocutors have greater stored knowledge and relational schemas of one another. In summary, in contrast to face-to-face interactions that take place in a situational context and involve the concurrent transmission of multiple social cues (e.g., actions, statements, body language, prosody), texting interactions are reduced to the content of the message and the context afforded by the receiver’s knowledge of the sender.

Teasing Through Texting

Even though playful teasing is important to relationships, and texting is an integral form of modern communication, very little attention has been paid to playful teasing through texting. Researching teasing through texting provides an opportunity to examine people's interpretation of two potentially ambiguous forms of social communication (e.g., Edwards et al., 2016; Kelly & Miller-Ott, 2018; Runions et al., 2013). Building on Figures 1 through 3, an integrated SIP model of teasing through texting is proposed in Figure 4, depicting an individual who has misinterpreted a playful tease that has been transmitted via text message. Figure 4 highlights that the ambiguity of a well-intended tease may be further exacerbated by the constraints of the medium, such as the restrictiveness of social cues and lack of immediate social feedback in texting (e.g., Crystal, 2008; Hertlein & Chan, 2020; Runions et al., 2013), resulting in misinterpretation.

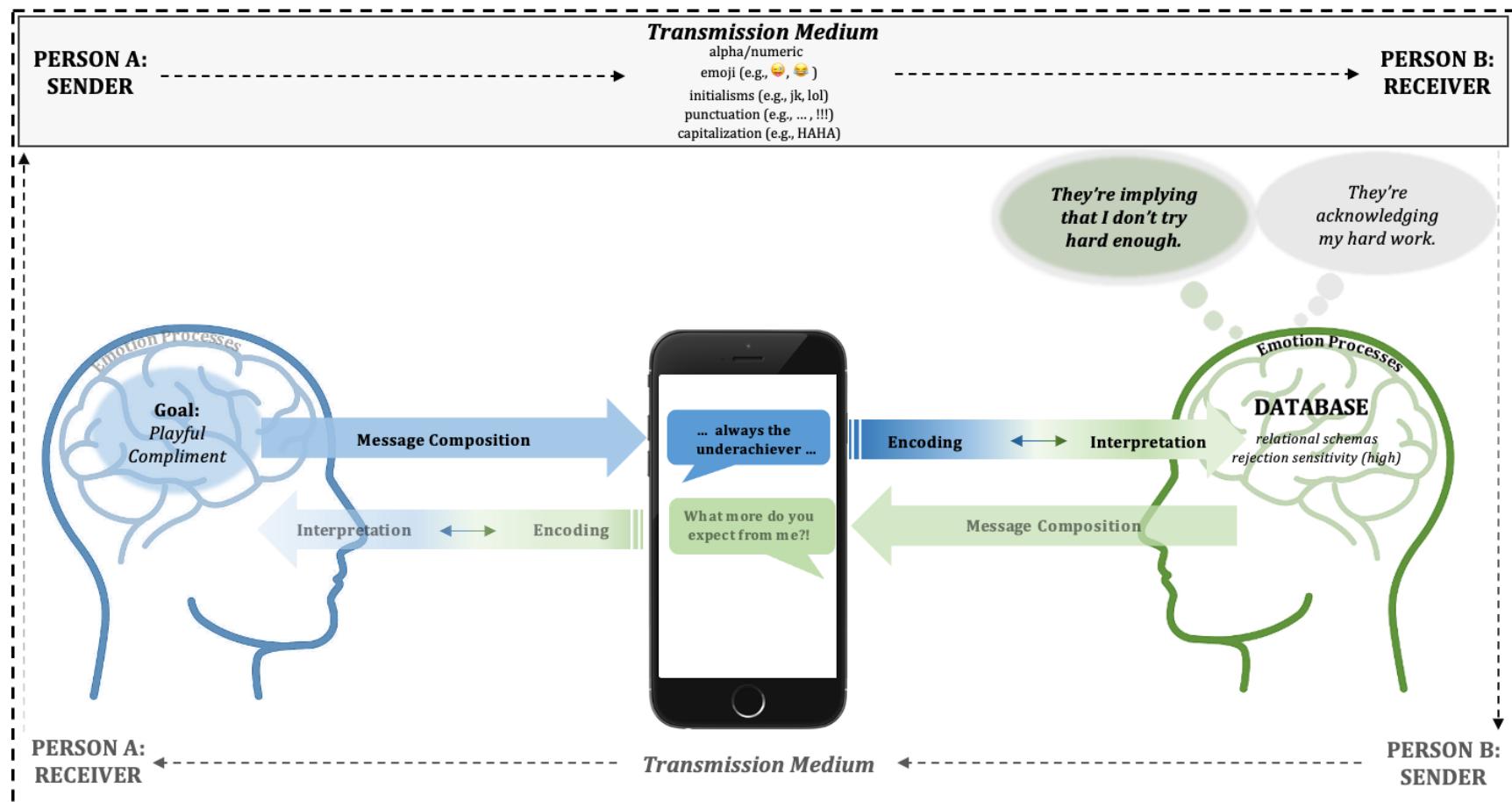
As previously described, playful teasing requires a provocation, which is interpreted based on the context and the redressive markers used to signal intent (Keltner et al., 2001; Kowalski, 2004; Pawluk, 1989). Teasing often incorporates irony or sarcasm, both of which rely heavily on the coupling of paralinguistic cues (e.g., wink, smile, nudge) to signal the playful versus critical tone behind the utterance (Keltner et al., 2001). The lack of face-to-face cues in texting may increase the relative importance of message features, social context, and individual differences on interpretation. Message features, such as the tongue (i.e., :-P) and wink (i.e., ;-)) emoticons/emoji, facilitate the interpretation of sarcastic/ironic text-based messages (Derks et al., 2008; Filik et al., 2016; Sarkar et al., 2014; Thompson & Filik, 2016; Weissman & Tanner, 2018). Both symbolic representations of a wink and a stuck-out tongue appear to denote a degree of humour and sarcasm, and interpretation may be influenced by their pairing with either a

positively or negatively valenced message (Sarkar et al., 2014). Not surprisingly, emerging research on the “winking face with tongue” emoji (a synthesis of the two aforementioned message features) suggests it is also related to sarcasm, teasing, and playfulness (Jaeger et al., 2019; Subramanian et al., 2019), although no research has directly examined its impact on message interpretation. Hancock (2004) found that ellipses (i.e., ...) were more frequent markers of sarcastic intent as compared to emoticons in CMC, however, subsequent studies have found that sarcasm is communicated more effectively by emoticons (Filik et al., 2016; Thompson & Filik, 2016).

Figure 4 gives an example where the message feature used to communicate tone is punctuation (i.e., ellipses). The receiver’s individualized database, which includes relational schemas and rejection sensitivity, impacts the interpretation of teasing via texting. This example shows an individual who has misinterpreted the sender’s playful tease.

Figure 4

Integrated Social Information Processing Model Illustrating Teasing Via Texting



Note. Figure 4 integrates SIP, teasing, and texting.

Summary of Introduction and Dissertation Overview

In this chapter, the concept of CMC and the social phenomenon of playful teasing were introduced, and CMC and teasing were connected through a SIP account of communication. The SIP model was used to facilitate an understanding of the interpretation of ambiguous forms of communication, such as teasing, that can result in misattributions of intent. Figure 2 highlighted that the interpretation of playful teasing relies on playful signals, contextual cues, and individual differences. Figures 3 and 4 demonstrated that the medium of the exchange shapes the interpretation of the interaction, and that within the context of teasing via texting, message features and sender knowledge are instrumental. In the two subsequent chapters, the pilot testing and creation of study materials to examine teasing through texting are described (Chapter 2) and the two studies that examined teasing through texting in relation to message features, social context, and rejection sensitivity are presented (Chapter 3). While SIP involves a number of complex dynamic steps (as depicted in Figure 1), the studies outlined in Chapter 3 narrow in on factors related to encoding and interpretation. The remaining SIP steps (e.g., response formulation and enactment) are beyond the scope of the studies, however, their implications will be revisited in the General Discussion (Chapter 4).

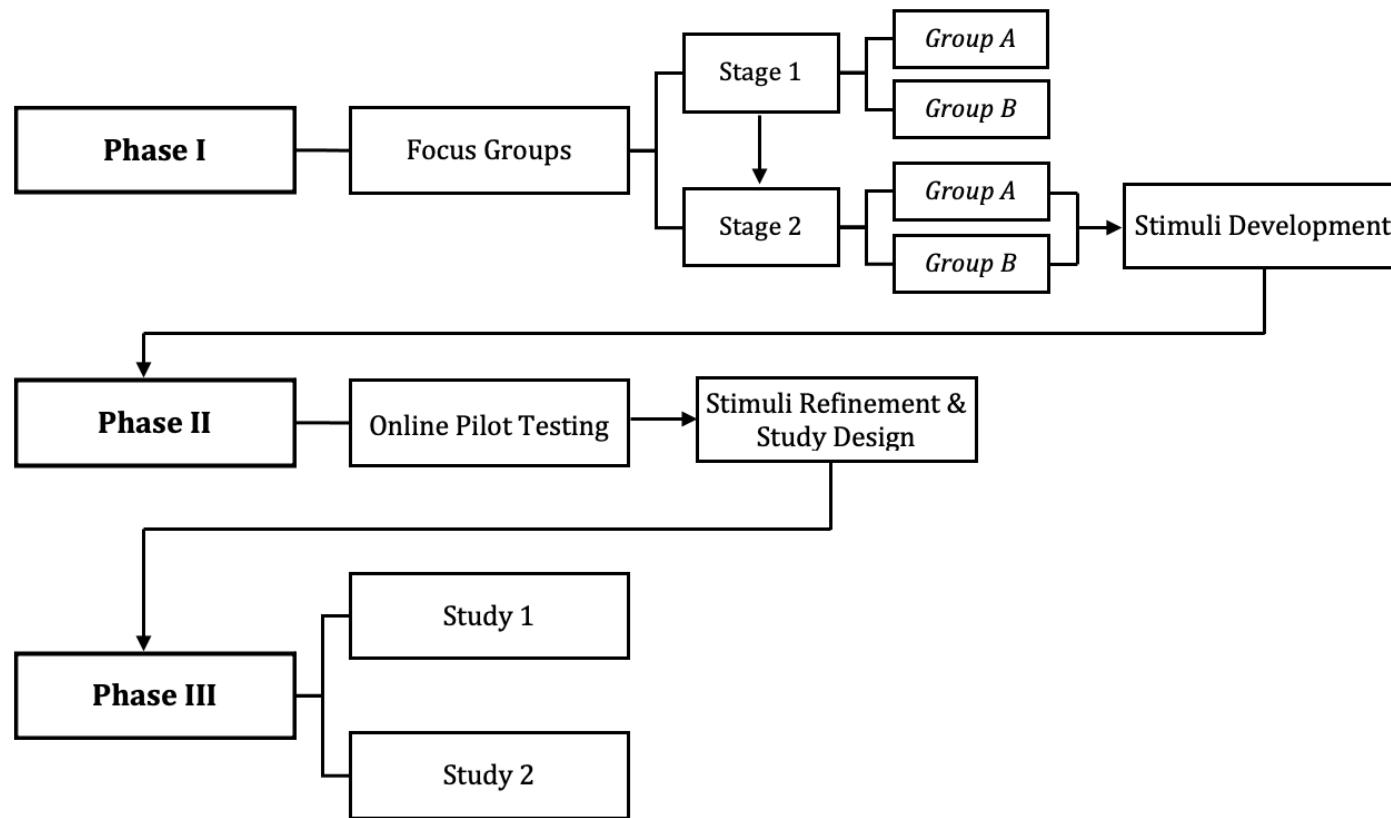
Chapter 2: Development of Study Materials and Stimuli (Focus Groups and Pilot Testing)**Author's Note**

This is a modified version of the supplemental materials submitted with the manuscript entitled “Interpreting Teasing Through Texting: The Role of Emoji, Initialisms, Relationships, and Rejection Sensitivity in Ambiguous SMS” (presented in Chapter 3) to a Canadian journal. Please refer to the statement of co-authorship at the beginning of this dissertation for details regarding first and second author contributions.

A Phased Approach to Stimuli Development, Piloting, and Studies Design

Prior to conducting the two main studies, the creation of ambiguous messages to examine teasing through texting was required (Chapter 3). The development of teasing text message stimuli and the selection of text message features (i.e., emoji and initialism) were conducted across two phases (see Figure 5). These phases included three rounds of pilot testing (i.e., two stages of focus groups for stimuli development and an online pilot study for stimuli refinement). The finalized stimuli were used in the third phase (Study 1 and Study 2 in Chapter 3) to examine message features, social context, and rejection sensitivity in relation to the interpretation of ambiguous teasing texts. Referenced appendices provide the materials described below.

The conceptualization of a phased approach for the development and testing of ambiguous teasing text messages was inspired by previous research (see Kingsbury, 2014). Kingsbury's (2014) dissertation completed at Carleton University, portions of which were subsequently published as Kingsbury and Coplan (2016), examined the interpretation of ambiguous text messages (e.g., "One evening, you get this message from a friend: Can you call me asap?"). Kingsbury developed study materials using focus groups in piloting. One of Kingsbury's (2014) main findings was that the inclusion of the smiley emoticon in ambiguous texts decreased negative interpretations and increased benign interpretations, regardless of participant social anxiety. This inspired the current examination of the role of message features, emoji and initialisms, in playful teasing through computer-mediated communication (CMC).

Figure 5*Research Design Flow: Three Phase Approach*

Note. Figure 5 provides a conceptual overview of the current research design. Arrows indicate the directional flow within and between phases. Phases I and II were conducted in the Winter Semester (2017) and Phase III studies were conducted concurrently in the Fall Semester (2017).

The University of Ottawa Research Ethics Board approved all phases of the current research (see Appendix A). Participants across phases were recruited from first year psychology and communication courses with an opt-out research participation component. Recruitment was conducted online through the Integrated System of Participation in Research portal through which students self-select into available studies. Focus group participants received 2 grade points (out of 100) and participants in the online pilot study and main studies received 1 grade point, as per standard research procedures at the University of Ottawa. Participants were only permitted to take part in one part of the larger study (e.g., an individual could neither participate in a later phase of piloting if they took part in an initial focus group, nor in the main study if they took part in piloting).

Phase I: Focus Groups and Stimuli Development

Stimuli development was facilitated by two stages of focus groups. Each focus group session was capped at 10 participants (see e.g., Krueger, 2002; Powell & Single, 1996) and sessions were 90 minutes in length. Informed consent was collected at the outset (see Appendix B), and an icebreaker activity was used to put participants at ease prior to the group discussion. Initial piloting consisted of two open-ended focus groups that explored teasing generally, teasing via CMC, and the use of emoji and initialisms. Examples of teasing texts were also generated during focus group sessions (for specifics see Focus Group Facilitator Guide; Appendix C). Eighteen undergraduate students (nine per group) between the ages of 18 to 32 ($M = 19.89$, $SD = 3.14$) took part in the initial two focus groups (seven women and two men in each group).

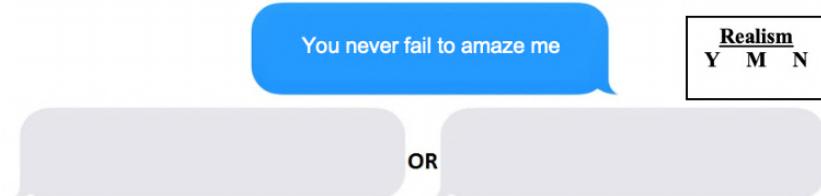
Informed by the first stage of focus groups, a series of initial stimuli teasing text messages and message features were created/selected and turned into a 40-item workbook (see Appendix D). Workbook teasing statements were presented as text message bubbles. Each

statement had two corresponding blank text bubbles to allow participants to fill in a negative/hurtful interpretation and a positive/playful interpretation (see Figure 6 for example item). Participants were asked about the realism of the message (i.e., yes, maybe, no) in a follow-up question. Space was also provided for the generation of novel teasing statements. Participants were also asked in the workbook about emoji and initialisms that are commonly used in teasing text messages. The workbook design is a novel contribution of the current research.

The stimuli workbooks were presented to participants in a second round of two focus groups. Participants first worked independently to provide positive and negative interpretations of the teasing texts, feedback on the message features, and general feedback. Participants were 17 undergraduate students between the ages of 18 and 25 ($M = 19.60$, $SD = 2.00$). There were eight participants in the first focus group (seven women and one man) and nine participants in the second focus group (seven women and two men). Participants were encouraged to annotate the worksheets, modifying the wording of the presented text message statements in order to enhance the realism of the messages. Group discussion followed regarding the text message stimuli and message features. The individual and group feedback from the second round of focus groups was then used to create test stimuli and select message features which were piloted in a larger scale, online study.

Figure 6

Example Item from Focus Group Workbook



Participants in all phases were asked if they owned a cell phone and to provide an estimate of the average number of people with whom they text on a typical day, the average number of text messages they send and receive daily, and to indicate with whom they text (i.e., family, friends, romantic partner, classmates, acquaintances, others) ranked from most to least frequent (see Appendix E for texting questionnaire; see Figures F1 - F3 and Table F1 in Appendix F for a summary of results).

Phase II: Online Piloting and Stimuli Refinement

After the second round of focus groups, 45 teasing statements and positive and negative interpretations for each (see Appendix G), were finalized for online pilot testing. Seventy-six undergraduate students (49 women, 26 men, one undisclosed) between the ages of 17 and 27 ($M = 19.60$, $SD = 1.83$) took part in an online survey conducted using the online survey platform Qualtrics (Qualtrics, Provo, UT). Following the administration of informed consent (see Appendix B), participants were asked a series of questions regarding demographics (i.e., age, gender) and their daily text message practices (as described in Phase I).

Participants were then administered the text message stimuli. Text messages were displayed as screen captures and participants were instructed to read each text message as if they had just received it (see Figure 9a in Chapter 3 for example). In pilot testing, no additional context was provided to ensure messages were ambiguous (for a similar approach see Barnett et al., 2010; Riordan, 2017)². Under the text message, two opposing interpretations (one negative and one positive) were presented as anchors on a 6-point Likert-type scale. Participants were asked, “Which thought is mostly likely to come to your mind?”, as a prompt to rate their degree of agreement (i.e., “definitely”, “moderately”, “slightly”) with one of the two statements. A

² Looking ahead to Chapter 3, the function of contextual information in the interpretation of ambiguous teasing text messages is the focus of Study 1 (message features) and Study 2 (sender relationship).

similar prompt has been used in past research protocols examining ambiguous social scenarios (i.e., Kingsbury & Coplan, 2016; Stopa & Clark, 2000). Ratings for each item were assigned to the participants' responses and could range from 1 (*definitely negative*) to 6 (*definitely positive*). In line with past research (e.g., Kingsbury & Coplan, 2016), participants were additionally asked to rate the realism of the text message on a 5-point Likert-type scale ranging from 1 (*very unlikely*) to 5 (*very likely*). All messages were rated at a mean of 3 (*likely*) or above, so the realism measure was not used to discard any stimuli. Participants were also invited to provide written feedback regarding the teasing statements or message features as an open-ended question at the end of the survey.

Teasing statements that elicited unipolar participant responses (i.e., primarily positive or primarily negative) were determined to be non-ambiguous. Stimulus items that generated variance in responses (i.e., mixed positive/negative interpretations) were conceptualized as ambiguous. Text message statements that were more positively or negatively weighted (i.e., 61% or greater participant endorsement for either interpretation) were removed from the pool of items. This yielded a total of 21 acceptable text messages with item means ranging from 2.96 to 3.87. The remaining items were examined for their relative positive or negative ratings and sorted into blocks (three blocks for Study 1 and two blocks for Study 2) to ensure a mix of item ambiguity. See Appendix H for the list of items selected for inclusion in Study 1 and Study 2.

Participants were presented with four emoji selected from the focus groups and asked which emoji they believed would most likely be used to signal that a teasing text message should be taken in a playful/joking manner. A chi-square analysis revealed a statistically significant difference between participants' emoji endorsement, $\chi^2(3) = 20.11, p < .001$. The “face with tongue” emoji received the least support ($n = 3, 3.9\%$). The “winking face” emoji was endorsed

by approximately one quarter of participants ($n = 20$, 26.3%). A smaller difference was found between the “crying while laughing” emoji ($n = 24$, 31.6%) and the “winking face with tongue” emoji ($n = 29$, 38.2%). No statistically significant gender differences were found. The “winking face with tongue” emoji, a synthesis of the “tongue” and “wink” emoji previously identified as indicators of humour and sarcasm (e.g., Sarkar et al., 2014), was chosen to be included as a Study 1 message feature. The IOS variation of the emoji was used in the stimuli.

Participants were asked the same regarding the two initialisms (i.e., “lol” and “jk”). The lower-case variation of the initialisms was selected after consensus from focus group data determined that these were the most commonly used when engaging in playful teasing. A binomial test revealed a statistically significant difference ($p = .015$) between participants’ endorsement of the “lol” ($n = 49$, 64%) and “jk” ($n = 27$, 36%) initialisms, and the “lol” initialism was selected to be used as a message feature in Study 1. Broken down by gender, women ($n = 49$) endorsed the “lol” initialism ($n = 35$, 71%) significantly more frequently ($p = .004$) than the “jk” initialism ($n = 14$, 29%). Men ($n = 26$), however, did not statistically significantly differ in their endorsements of the two initialisms.

Finally, the 18-item Rejection Sensitivity Questionnaire (RSQ, Downey & Feldman, 1996) was administered to participants (see Appendix I). See Chapter 3 for measure psychometric properties.

Conclusion

The development of stimuli and study materials used to examine the interpretation of playful teasing in CMC, specifically text messaging, was outlined in this chapter. Ongoing consultation with undergraduate students during Phases I and II promoted the ecological validity of the teasing statements, interpretations, and message features selected. The two main studies

(Phase III), which used the finalized stimuli and materials to explore the role of message features, social context, and rejection sensitivity in the interpretation of teasing text messages, are presented in Chapter 3.

Chapter 3: Interpreting Teasing Through Texting: The Role of Emoji, Initialisms, Relationships, and Rejection Sensitivity in Ambiguous SMS (Study 1 and Study 2)

Author's Note

This is a modified version of the manuscript entitled “Interpreting Teasing Through Texting: The Role of Emoji, Initialisms, Relationships, and Rejection Sensitivity in Ambiguous SMS” submitted to a Canadian journal. Please refer to the statement of co-authorship at the beginning of this dissertation for details regarding first and second author contributions.

Abstract

Interpreting teasing, a common form of communication defined by ambiguity, is especially difficult through text messaging as the communicative markers available to signal intent are more restricted compared to face-to-face interaction. Although texting makes the ambiguity of teasing more prominent, nevertheless, there are elements of communication through texting that impact the interpretation of teasing texts. The factors that influence the interpretation of ambiguous teasing text messages, specifically message features (the “lol” initialism and the “winking face with tongue” emoji) and social context (the sender-receiver relationship) were examined. Receiver rejection sensitivity in relation to the interpretation of teasing text messages was also explored. Both the use of the emoji (Study 1) and closer relationships (Study 2) resulted in more positive ratings of teasing messages, but the “lol” initialism did not contribute to more positive ratings of teasing. Across both studies rejection sensitivity was related to more negative ratings of ambiguous text messages but was not related to the interpretation of text messages that used the “winking face with tongue” emoji (Study 1).

Keywords: teasing, text messaging, emoji, initialisms, social context, rejection sensitivity

Interpreting Teasing Through Texting: The Role of Emoji, Initialisms, Relationships, and Rejection Sensitivity in Ambiguous SMS

Playful teasing is a form of communication that includes positive (e.g., poking fun) and negative (e.g., mocking) elements, a duality that contributes to ambiguity being one of teasing's defining features (see Keltner et al., 2001; Kowalski, 2004; Mills, 2018; Shapiro et al., 1991).

Playful teasing leaves some room open to interpretation by the receiver; if a statement is too complimentary, or too mean, playful teasing misses its mark. Although the terms are sometimes used synonymously, playful teasing is distinct from teasing defined as aggression and bullying (Mills & Carwile, 2009) in that playful teasing can foster closeness and intimacy, and plays an important role in relationships (Beck et al., 2007; Dynel, 2008; Gorman & Jordan, 2015; Haugh & Pillet-Shore, 2018; Pawluk, 1989). Increasingly, teasing can occur through computer-mediated communication (CMC). Electronic formats can heighten the inherent ambiguity of teasing as the communicative markers that signal intent in face-to-face interactions are restricted, such as facial expressions and tone (see e.g., Haugh, 2016; Keltner et al., 2001), particularly in digital communication known as *texting* (and more formally as *short message service* [SMS] texts). Texting is an integral and growing part of social interaction, particularly among youth, and even with the emergence of videoconferencing services (Nguyen et al., 2020; Paulet et al., 2011).

Although texting makes the ambiguity of teasing more prominent, nevertheless, there are elements of communication through texting that can impact the interpretation of playful teasing texts. Specifically, message features, social context, and receiver rejection sensitivity were examined in the present studies. Message features of digital communication, such as emoji and initialisms (e.g., “lol” [laugh out loud]), can disambiguate texts (e.g., Forbes & Buchanan, 2019; Lo, 2008; Riordan, 2017) and social context plays a similar role (e.g., Jacobson, 2007), but

neither effect has been examined in the context of playful teasing through texting. The ambiguity of texting is particularly salient for recipients who are socially anxious (see Kingsbury & Coplan, 2016), and the effect may be exacerbated in the context of teasing texts.

Teasing Through Texting

Texts are typically brief and unadorned, making this medium particularly susceptible to misunderstanding (Kelly et al., 2012; Kelly & Miller-Ott, 2018; Kingsbury & Coplan, 2016). As an asynchronous form of communication, texting has reduced affordances for corrective feedback (Byron, 2008; Fox & McEwan, 2017). This is not to say that texts have no communicative markers or contexts. Texts have widely used message features such as emoji and initialisms that can clarify meaning (McSweeney, 2018; Thurlow & Brown, 2003). Texts occur in social contexts that carry different relationship histories that further influence interpretation (Jacobson, 2007; Jin, 2013). Texts are also impacted by characteristics of the receiver and their interpretative biases (Kingsbury & Coplan, 2016). Teasing is also marked by ambiguity, and when teasing occurs through texts this could make the communicative markers even more impactful in parsing the intent of the text. Although research has not directly examined message features, social context (e.g., the sender-receiver relationship), and receiver characteristics (e.g., rejection sensitivity) in the context of playful teasing through texting, related literature provides some insight into the impact of these communicative markers and contexts.

Message Features of Teasing

In-person markers of communication (e.g., smirking, nudging, winking) signal the playful objective of teasing and help the recipient navigate the intention behind the provocation (Keltner et al., 2001; Kowalski, 2004; Pawluk, 1989). In computer-mediated interaction, message features such as *emoji* and *initialisms* may play a similar role to in-person markers

(Riordan & Kreuz, 2010) and assist the attribution of positive intent (Forbes & Buchanan, 2019; Kaye et al., 2016).

Emoji. *Emoji* (絵文字, Japanese for “picture character”) are ideograms coded in the Unicode Standard (for review see Bai et al., 2019; Rodrigues et al., 2018). Emoji are generally thought of as quasi-nonverbal cues (Lo, 2008) that aid communication by conveying affect and tone (Kaye et al., 2016; Sampietro, 2020) and by intensifying or softening the message valence (Derks et al., 2008; Sarkar et al., 2014; Skovholt et al., 2014; Wang et al., 2014). Riordan (2017) found that emoji aid in disambiguating text messages; however, the role of emoji in signalling teasing specifically has yet to be examined. Given that emoji are helpful in signalling joking, irony, and humour (Dresner & Herring, 2010; Filik et al., 2016; Sampietro, 2020; Sarkar et al., 2014; Skovholt et al., 2014; Thompson & Filik, 2016), and facilitating perceived playfulness (Hsieh & Tseng, 2017), it is a reasonable assumption that emoji could play a role in teasing.

Initialisms. Initialisms are shorthand or acronyms composed of the first letters of the words in a phrase (e.g., “btw” for “by the way”). Initialisms are used for efficiency, given the brevity of text messages. Some initialisms have greater expressive capacity (e.g., “lol” for “laugh[ing] out loud”) and can be used to alter the perceived tone of a message and signal humour (Forbes & Buchanan, 2019). “Lol” is the most frequently used laughter variant in texting (Tagliamonte, 2016) and is defined in the Oxford English Dictionary (Oxford University Press, n.d.) as “draw[ing] attention to a joke or humorous statement, or to express amusement”, in a way that surpasses its literal meaning as an audible laugh. The role of initialisms in playful teasing through texting has yet to be examined.

Social Context

Playful teasing occurs in a range of social contexts to achieve an array of relational goals (Beck et al., 2007; Mills, 2018; Shapiro et al., 1991). Teasing can foster closeness in developing (Haugh & Pillet-Shore, 2018) and established relationships (Fiadotava, 2021; Keltner et al., 2001), and in face-to-face communication its interpretation is impacted by the dyad's relationship (Kowalski, 2004). Teasing tends to be experienced as better intentioned in face-to-face communication when it occurs between friends as opposed to acquaintances, as there is greater common ground to facilitate interpretation (Buglass, et al., 2020; Gorman & Jordan, 2015; Jones et al., 2005; Steer et al., 2020). A similar dynamic may be in place in CMC, however playful teasing through the specific modality of texting has yet to be examined.

Rejection Sensitivity

Teasing is also impacted by the recipient's interpretative biases (Alberts et al., 1996; Kowalski, 2004). Social anxiety and rejection sensitivity, which are distinct but related constructs (Downey & Feldman, 1996; Fang et al., 2011; Feldman & Downey, 1994; Gao et al., 2017), contribute to the negative interpretation of social interactions (Kowalski, 2004; Levy et al., 2001; Nowakowski & Antony, 2013). Kingsbury and Coplan (2016) found that individuals with higher social anxiety evaluated ambiguous texts more negatively. In contrast to social anxiety, which is characterized by distress in, and avoidance of, social situations (American Psychiatric Association, 2013), rejection sensitivity specifically involves the overreaction to perceived rejection in ambiguous social situations (Feldman & Downey, 1994), and is of distinctive predictive value when compared to related constructs including introversion and neuroticism, social anxiety, and social avoidance (Downey & Feldman, 1996). No study on the interpretation of ambiguous or teasing texts has directly examined rejection sensitivity.

The Present Studies

The impact of message features (emoji and initialisms) and social context (close friends and acquaintances) on the interpretation of playful teasing text messages was examined in two separate studies (Figure 7). Also explored across both studies was the relation between teasing message interpretation and rejection sensitivity, a cognitive-affective processing disposition that can negatively bias interpretation of ambiguous social interactions (Downey & Feldman, 1996; Downey et al., 1998; Pietrzak et al., 2005).

The primary objective of Study 1 (Figure 7a) was to examine the effect of emoji and initialisms, which can signal humour, sarcasm, and playfulness (e.g., Filik et al., 2016; Forbes & Buchanan, 2019; Hsieh & Tseng, 2017; Sarkar et al., 2014), on the interpretation of teasing texts. While no study has directly examined the interpretation of playful teasing text messages, based on pilot data (described in Chapter 2) and the existing literature, we predicted that:

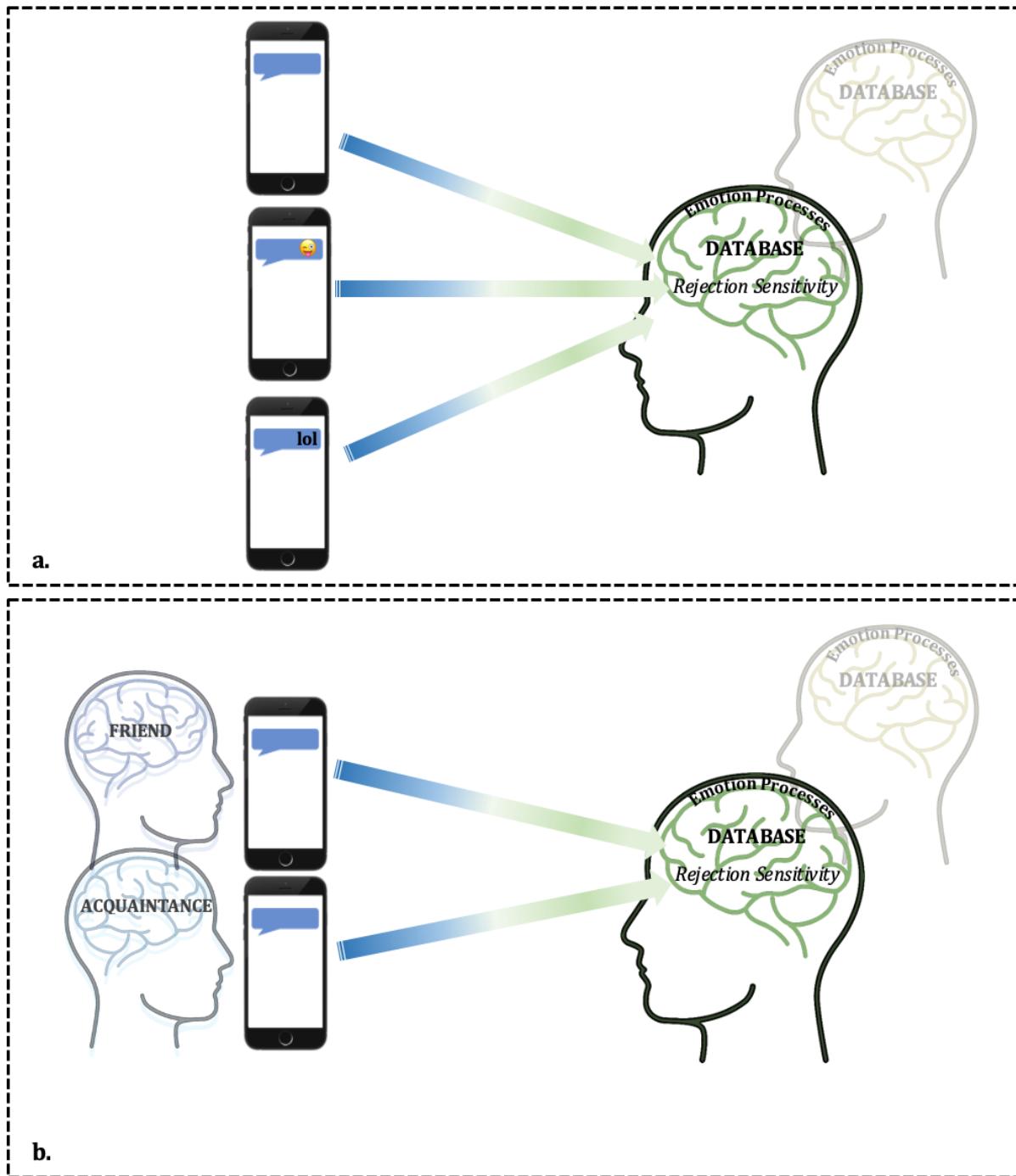
- **Hypothesis 1a:** The emoji (“winking face with tongue”) and initialism (“lol”) would function in a similar manner and indicate playful intent.
- **Hypothesis 1b:** Ambiguous text messages with the emoji (“winking face with tongue”) or initialism (“lol”) would be interpreted more positively compared to ambiguous text messages with no message features (i.e., plain text).
- **Hypothesis 2:** Individuals with higher rejection sensitivity would interpret teasing text messages more negatively compared to those with lower rejection sensitivity.

The primary objective of Study 2 (Figure 7b) was to examine the impact of social context, i.e., the relationship between sender and receiver, on the interpretation of teasing texts. While playful teasing is not exclusive to close relationships (e.g., Haugh & Pillet-Shore, 2018), familiarity and closeness are thought to facilitate interpretation and attribution of intent (Buglass

et al., 2020; Gorman & Jordan, 2015; Jones et al., 2005; Steer et al., 2020). It was therefore predicted that:

- **Hypothesis 3:** Ambiguous text messages sent from a close friend would be interpreted more positively as compared to those sent from an acquaintance.
- **Hypothesis 4:** Individuals with higher rejection sensitivity would interpret teasing text messages more negatively in both close friend and acquaintance contexts.

Although gender differences were not the focus of the present studies, and there is no evidence of gender differences in ambiguous teasing through texting, there is some evidence to suggest that girls and women are more prone to negative interpretations of ambiguous text communication (e.g., Kingsbury & Coplan, 2016) and face-to-face teasing (e.g., Beck et al., 2007) than boys and men. Gender differences in the interpretation of playful teasing text messages were therefore explored.

Figure 7*Main Studies: The Role of Message Features, Social Context, and Rejection Sensitivity*

Note. Figure 7 illustrates the studies' designs and the factors examined. The shadow receiver (in both a and b) signifies that the procedure was run with a number of participants.

Study 1: Examining Message Features and Rejection Sensitivity in Relation to the Interpretation of Teasing Texts

In face-to-face teasing, markers of communication (e.g., winking) facilitate interpretation by signalling playful intent (Keltner et al., 2001; Kowalski, 2004; Pawluk, 1989). In text-based CMC where traditional communicative cues (e.g., tone of voice) are reduced, message features (e.g., emoji and initialisms) may serve a similar function. The primary goal of Study 1 was to examine how message features (the “winking face with tongue” emoji and the “lol” initialism) impact the interpretation of teasing text messages. No previous study has examined the impact of either of these commonly used message features on playful teasing text messages. A secondary goal was to examine rejection sensitivity, a disposition which can impact the perception of ambiguous social interactions (Downey & Feldman, 1996), in relation to the interpretation of teasing texts (with or without message features). The development of ambiguous text messages to examine teasing via texting, and the piloting procedures, were described in Chapter 2.

Method

Participants

Five hundred and two undergraduate students from a Canadian university participated in the study. Five participants were removed during the initial data cleaning phase for failure to complete the study. A further seven participants over 32 years of age were removed as outliers, and this allowed the study to focus on digital natives (e.g., Riordan et al., 2018). An analysis using G*Power 3.1 (Faul et al., 2007), with power set at .80 and an alpha level of $p = .05$, indicated that at a minimum a sample of 160 participants was required to detect a medium effect size. While this would be adequate based on Kingsbury’s (2014) findings, a larger sample size was collected for the present study to detect smaller effects. The final sample consisted of 490

participants (381 women, 108 men, one non-binary). Participants' mean age was 19.09 years old ($SD_{age} = 2.04$, minimum 17 years of age and maximum 32 years of age). All of the participants reported owning a mobile phone that could send SMS text and emoji.

Procedure and Design

Recruitment. Participants were recruited from first year psychology and communication courses with an opt-out research participation component and received 1 grade point (out of 100) for participating in the present study.

Presentation of Tasks. The study was conducted using the online survey platform Qualtrics (Qualtrics, Provo, UT). Following the administration of informed consent (see Appendix B), participants were asked a series of questions regarding demographics (i.e., age, gender) and their daily text message practices (see Appendix E). Participants were then administered the text message stimuli which included three conditions (within-subject Latin Square design as described below): teasing text; teasing text with emoji; and, teasing text with initialism. After the stimuli presentation, follow-up questions addressed text messages both as presented in the study and in daily life experiences. Finally, the 18-item Rejection Sensitivity Questionnaire (RSQ, Downey & Feldman, 1996) was administered to participants.

Latin Square Design. A replicated 3×3 Latin square design was used to control for order effects for the three message feature conditions (text; emoji; initialism; see Figure 8). The two other blocking variables created were for stimuli and participant. For the stimuli block, the 21 text message stimulus items were divided into three equal blocks of seven items (the items were fixed by block). For the participant block, participants were randomly assigned to one of three groups. Use of the Latin square design allowed all participants to be presented with all stimulus items, and an equal number of each message feature. The presentation order of the

stimuli-message combinations was randomized for each participant (though the pairings were fixed by the blocks). Participants also received an additional six non-ambiguous items (two items in each block). Non-ambiguous items were those that were rated as highly positive or highly negative in the pilot testing described in Chapter 2. These non-ambiguous items were used as controls for attention to facilitate the detection of careless responding patterns and were not included in data analysis.

Materials and Measures

Teasing Measure and Coding. Twenty-one ambiguous text messages (see Appendix H) were developed in pilot testing to represent teasing texts (see Chapter 2). Text messages were displayed as screen captures and participants were instructed to read the text message as if they had just received it. No sender context was provided to participants. Under each text message, two opposing interpretations (one negative and one positive) were presented as anchors on a 6-point Likert-type scale (see Figure 9). Participants were asked, “Which thought is most likely to come to your mind?”, as a prompt to rate their degree of agreement (i.e., “definitely”, “moderately”, “slightly”) with one of the two statements. Ratings for each item were assigned to the participants’ responses and could range from *definitely negative* (1) to *definitely positive* (6). For the exact wording of the instructions given to participants see Appendix G.

Figure 8

Study 1 Block Design

	Block 1	Block 2	Block 3
Participant Group 1	text only	text + 😊	text + lol
Participant Group 2	text + 😊	text + lol	text only
Participant Group 3	text + lol	text only	text + 😊

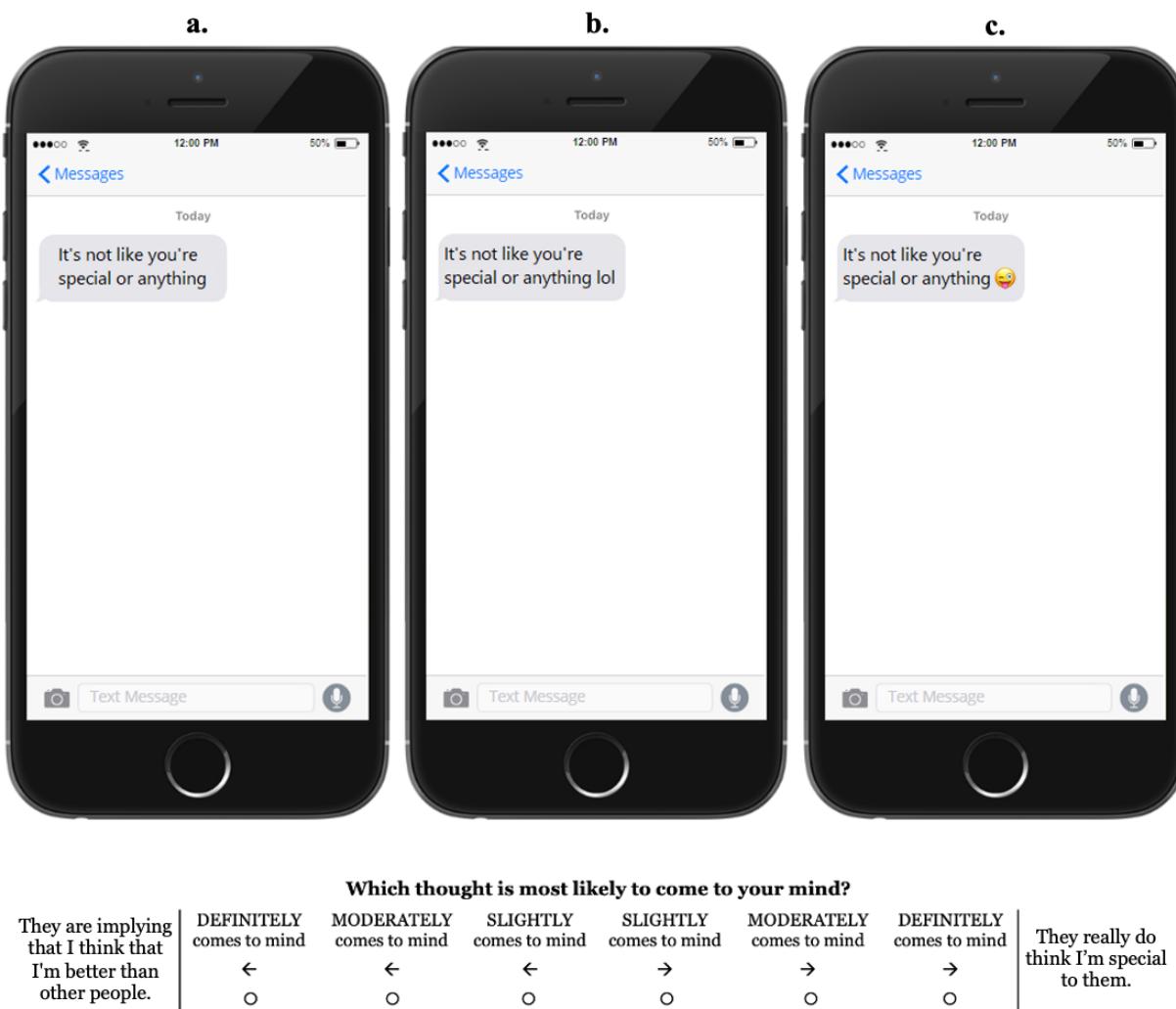
Random Assignment



Message Features. Three variations of message features were presented to the participants (see Figure 9 a, b, c): the teasing text alone, the teasing text with the “lol” initialism, and the teasing text with the “winking face with tongue” emoji. The message features were added to the end of each teasing statement (e.g., “You never fail to amaze me lol,” “You’re such a heartbreaker 😊”). The specific emoji and initialism were selected after piloting determined that these were the most commonly used by people engaged in playful teasing (see Chapter 2).

Figure 9

Study 1 Teasing Text Message Stimuli Variations (a) Text Message Alone, (b) Text Message and Initialism, and (c) Text Message and Emoji; and the Interpretation Scale



A mean message feature score was calculated for each participant (i.e., a mean for the unadorned teasing texts; a mean for the teasing texts with initialism; a mean for the teasing texts with emoji).

Follow-up Questions on Texting and Message Features. Following the administration of the text message stimuli, participants were asked to reflect on whether their ratings of the text messages differed when message features were used (see Appendix J). If they responded yes, they were asked under which condition they believed their ratings were generally more positive and generally more negative. Participants were then asked about whether the same message features make a difference to their interpretation of text messages received in daily life (response options: never, sometimes, often).

Rejection Sensitivity. The Rejection Sensitivity Questionnaire (RSQ, Downey & Feldman, 1996) is composed of 18 hypothetical interpersonal situations in which rejection by another individual is possible (e.g., “You ask someone in class if you can borrow his/her notes,” “You approach a close friend to talk after doing or saying something that seriously upset him/her,” “You ask your parents to come to an occasion important to you”). The interpersonal situations in the RSQ span a range of relational contexts (e.g., someone you don’t know well, someone in one of your classes, a professor, a friend, a close friend, a boyfriend/girlfriend, parents). Participants are asked about their degree of anxiety regarding the outcome of each scenario on a 6-point Likert-type scale (1 = *very unconcerned* to 6 = *very concerned*) and their expectation that the other will accept the request (1 = *very unlikely* to 6 = *very likely*). A rejection sensitivity score is calculated by multiplying the rating of predicted anxiety for each scenario by the reverse of the acceptancy expectation. The final score is determined by calculating the overall average across scenarios. Possible scores range from 1 to 36 and higher scores are

indicative of greater rejection sensitivity. The RSQ has demonstrated strong psychometric properties including strong short-term and long-term test-retest reliability (correlations of .83 and .78, $p < .001$ respectively), as well as high internal consistency ($\alpha = .83$; Downey & Feldman, 1996). The RSQ demonstrated high internal consistency in the present sample, $\alpha = .85$.

Results

Preliminary Analyses

Teasing Text Messages. The descriptive statistics for overall participant responses to the text message stimuli across message features are displayed in Table 1. Broken down by item, participants endorsed the full range of interpretations for each item (i.e., ranging from 1 [negative] to 6 [positive]), reflecting the ambiguous nature of the items.

Table 1

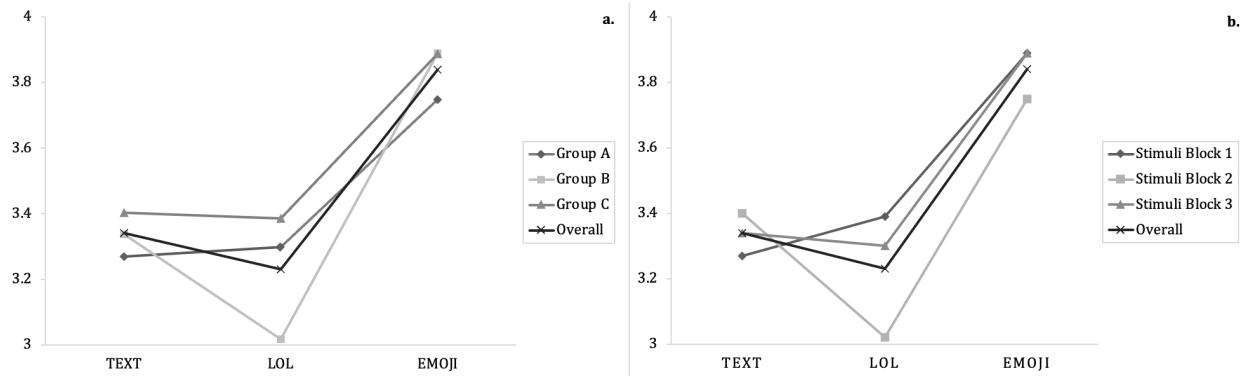
Study 1 Text Message Stimuli Interpretation by Message Feature, Item Block, and Group

	Message Feature Condition		
	text	lol	emoji
Stimuli Item Block	$M (SD)$	$M (SD)$	$M (SD)$
Item block 1	3.27 (0.84) ^A	3.39 (0.91) ^C	3.89 (0.78) ^B
Item block 2	3.40 (0.80) ^C	3.02 (0.74) ^B	3.75 (0.86) ^A
Item block 3	3.34 (0.77) ^B	3.30 (0.77) ^A	3.89 (0.78) ^C
Overall	3.34 (0.80)	3.23 (0.82)	3.84 (0.81)

Note. Means and standard deviations are delineated by message condition, item block, and participant group. Superscripts (i.e., ^A Group A, ^B Group B, ^C Group C) denote the participant group assigned to each set of items.

Latin Square Design Main Effects. The 3 x 3 Latin square design included three participant groups (Group A: 166 participants, Group B: 163 participants, Group C: 161 participants) who were administered three text message item blocks (seven items each) that were paired with the three message feature conditions (Group A: text alone, emoji, initialism; Group B: emoji, initialism, text alone; Group C: initialism, text alone, emoji), with the teasing texts presented in random order. Participants' average score for each message block was calculated and coded by condition. A 3 (Participant Group) x 3 (Item Block) x 3 (Message Feature Condition) ANOVA was then conducted. Statistically significant effects were observed at the .05 significance level for all three main effects. The participant group and item block effects are described immediately below, whereas the message feature effects are discussed in the main analyses. Latin square designs do not allow for the analysis of interaction effects.

Participant Group Effects. The main effect for Participant Group yielded an F ratio of $F(2, 1463) = 4.45, p = .012$, partial $\eta^2 = .01$, indicating a significant difference between participant groups. Post hoc comparisons using the Bonferroni correction identified statistically significant mean differences between Participant Group B ($M = 3.41, SD = 0.84$) and Participant Group C ($M = 3.56, SD = 0.86$), with participants in Group B having responded more negatively than those in Group C ($M_{dif} = -0.14, p = .016$). In particular, participants in Group B endorsed more negative interpretations of the text message stimuli presented with the initialism (see Figure 10a). One item was identified as a potential outlier, however, removing the item did not alter the main effect and was therefore left in for the main analysis.

Figure 10*Mean Response by Message Feature Condition*

Item Block Effects. The main effect for Item Block yielded an F ratio of $F(2,1463) = 3.73, p = .024$, partial $\eta^2 = .01$, however post hoc comparisons using the Bonferroni correction did not reveal statistically significant differences between the three item blocks ($M_1 = 3.51, SD_1 = 0.88$ v. $M_2 = 3.39, SD_2 = 0.85$ v. $M_3 = 3.50, SD_3 = 0.82$). See Figure 10b for illustration.

Gender Differences. There were no significant correlations between gender and the message feature conditions, and mean message feature scores were similar by gender (Women: $n = 381, M_{text} = 3.36, SD = 0.81; M_{lol} = 3.23, SD = 0.80; M_{emoji} = 3.86, SD = 0.81$; Men: $n = 108, M_{text} = 3.27, SD = 0.76; M_{lol} = 3.27, SD = 0.88; M_{emoji} = 3.79, SD = 0.78$). The one participant that did not identify with either male or female gender was not included in the gender analyses. Gender was not correlated with rejection sensitivity. Mean rejection sensitivity scores were not statistically different between women ($M = 10.37, SD = 3.59$) and men ($M = 9.87, SD = 3.60$).

Main Analyses

Message Features. The main effect for the Condition variable yielded an F ratio of $F(2, 1463) = 79.71, p < .001$, partial $\eta^2 = .10$, indicating a significant difference between the text message feature stimuli conditions. Post hoc comparisons were run with the Bonferroni correction applied to test Hypothesis 1a and Hypothesis 1b. Text messages with the emoji ($M =$

$M = 3.84$, $SD = 0.81$) were more positively rated than messages presented as text alone ($M = 3.34$, $SD = 0.80$), $M_{\text{dif}} = 0.50$, $p < .001$, and more positively rated than messages presented with the initialism ($M = 3.23$, $SD = 0.82$), $M_{\text{dif}} = 0.61$, $p < .001$. A statistically significant difference was not found between the text alone and the initialism, $M_{\text{dif}} = 0.10$, $p = .145$.

Follow-up Questions on Texting. Following the administration of the text message stimuli, participants were asked if they thought that their interpretation of the text messages differed when message features were present. Few participants ($n = 24$, 5%) perceived no difference when message features were used. Of those who noted a difference, a comparable number of participants perceived their interpretations to be generally more negative when the messages were presented as text alone ($n = 224$, 48%) or when accompanied by the initialism ($n = 216$, 46%). Only a small proportion of participants ($n = 25$) reported that they believed they had interpreted the messages that were presented as text accompanied by the emoji more negatively, whereas most participants ($n = 360$, 77%) reported more positive interpretations when the text messages included the emoji.

When participants were asked about whether the same message features make a difference to their interpretation of text messages received in daily life, the vast majority of participants reported that message features “often” ($n = 386$, 79%) or “sometimes” ($n = 103$, 21%) impact their interpretation of message tone or meaning. Only one participant stated that message features “never” impact their interpretation of text messages.

Rejection sensitivity. Participants’ mean RSQ score was 10.30 (minimum score of 1.67 and maximum score of 30, $SD = 3.70$). A correlation analysis was used to test Hypothesis 2 and revealed that message interpretation, irrespective of message features, was significantly related to rejection sensitivity, $r(488) = -.16$, $p < .001$, $r^2 = .03$. Participants who were more sensitive to

rejection endorsed more negative interpretations of the ambiguous teasing text messages. Further examination indicated that rejection sensitivity was significantly negatively related to the interpretation of text messages presented as text alone ($r(488) = -.13, p = .003, r^2 = .02$) and messages with the initialism ($r(488) = -.15, p = .001, r^2 = .02$). However, this pattern did not hold true for text messages accompanied by the emoji ($r(488) = -.07, p = .146, r^2 = .00$).

Study 1 Discussion

The primary goal of Study 1 was to examine how message features (the “winking face with tongue” emoji and the “lol” initialism) impact the interpretation of playful teasing text messages. As predicted, ambiguous text messages with the emoji were more positively rated than messages presented as text alone (Hypothesis 1b). However, contrary to the hypothesis (1a) that the emoji and initialism would function in a similar manner signalling playful intent, no difference was found between the text messages presented as text alone compared to those with the initialism, and teasing messages with the emoji were rated significantly more positively than those with the initialism. These findings are the first to suggest that an emoji can be more effective at conveying playful teasing than an initialism. The study specifically compared the “winking face with tongue” emoji and the “lol” initialism, which were identified by participants in pilot testing (see Chapter 2) as the emoji and initialism most likely to be used in playful teasing.

A secondary goal was to examine rejection sensitivity (Downey & Feldman, 1996) in relation to message interpretation. As predicted, overall message interpretation was related to rejection sensitivity, such that individuals more likely to perceive rejection in a social situation were more likely to interpret messages negatively (Hypothesis 2). Further exploration demonstrated that rejection sensitivity was not related to the interpretation of messages presented

with the emoji. These findings suggest that certain message features (in this case the commonly used “winking face with tongue” emoji) may buffer against negative appraisal even in those prone to rejection sensitivity.

Study 2: Examining the Sender-Receiver Relationship and Rejection Sensitivity in Relation to the Interpretation of Teasing Texts

While playful teasing is important for building and strengthening relationships (Beck et al., 2007; Dynel, 2008; Gorman & Jordan, 2015; Haugh & Pillet-Shore, 2018; Pawluk, 1989), and texting is a widely used form of communication (Juvonen et al., 2021; Lenhart, 2012; Skierkowski & Wood, 2012), little attention has been paid to playful teasing through this medium. Relational context has been highlighted as an important factor in the interpretation of teasing (Alberts et al., 1996; Buglass et al., 2020; Gorman & Jordan, 2015; Mills, 2018), and it may be especially important when teasing occurs through the medium of texting where ambiguity can be heightened.

The primary goal of Study 2 was to examine how social context impacts the interpretation of teasing text messages. Past research has suggested that closer relationships contribute to more positive interpretations of communication in contexts of ambiguity (Baldwin, 1992) and do so even in electronic contexts (Byron, 2008). Qualitative focus group research has provided important insights into the role of relational closeness (e.g., friendship) in differentiating between prosocial and antisocial interactions in face-to face and CMC contexts (Buglass et al., 2020; Steer et al., 2020), and this is the first study to quantitatively compare the impact of social context of acquaintances and friends on playful teasing through texting. As teasing text messages may activate receiver rejection sensitivity (Downey & Feldman, 1996), a

secondary goal was to examine rejection sensitivity in relation to the interpretation of teasing texts in both social contexts.

Method

Participants

Four hundred and twenty-six undergraduate students from a Canadian university participated in the study. Fourteen participants were excluded during the initial data cleaning phase for failure to complete the study. An additional 11 participants were removed for failure to meet the manipulation attention check (i.e., reporting that they were never able to keep the sender in mind during the text message stimuli presentation). As in Study 1, a further seven participants who were over 32 years of age were removed to focus the study on digital natives and avoid outliers. The final sample totaled 394 participants (297 women, 97 men). In order to detect a small effect size at an alpha level of $p = .05$, a G*Power 3.1 (Faul et al., 2007) power calculation indicated that at a minimum, 199 participants (for a power of .80) or 327 participants (for a power of .95) were required, and therefore this sample size is adequate. Participants' mean age was 19.31 years old (minimum 17 years of age and maximum 32 years of age, $SD_{age} = 2.26$). All participants reported owning a mobile phone that could send SMS texts.

Procedure and Design

Recruitment. The recruitment process was identical to that used in Study 1. Individuals who had completed Study 1 or the pilot studies (described in Chapter 2) were ineligible to participate in Study 2.

Presentation of Tasks. The testing platform was the same as in Study 1 and the procedures for collecting information on demographics and text messaging practices were also identical. Participants were then administered the text message stimuli (as described below in

“Materials and Measures”). An experimental error occurred with the presentation of two items, which is described below (see “Teasing Measure and Coding”). After stimuli presentation, participants were asked follow-up questions about the impact of social context on texting both within the context of the study and in daily life. As in Study 1, participants then completed the RSQ (Downey & Feldman, 1996).

Counterbalanced Design. The text message stimuli were divided into two blocks (10 items each) and participants were randomly assigned to one of two groups. Half of the participants (Group A: 198 participants) received the first block of items sent from an acquaintance and the second block of items sent from a close friend. Group B (196 participants) received the first block of items sent from a close friend and the second block of items sent from an acquaintance. Although the pairing of items was fixed for each group as described above, the order of presentation of the items was randomized for each participant. Participants selected a close friend and an acquaintance to keep in mind when reading the text messages (see “Social Context” section below). Participants also received an additional four non-ambiguous items as controls for attention (described in Study 1), with two control items in each block.

Materials and Measures

Teasing Measure and Coding. Twenty ambiguous text messages were used to represent teasing texts (see Appendix H). The items were drawn from the same stimuli pool as those used in Study 1 and described in Chapter 2. Items were presented as text alone (i.e., no message features were included in this study). The rating scales and coding were also the same as described in Study 1. Due to an experimental error in stimuli presentation, two items were displayed incorrectly in the second block of items (close friend) displayed to Group A (one item was repeated twice, and one was missing). The items were removed from analysis for both

groups, resulting in blocks with an unequal number of items (i.e., Group A received 10 texts from an acquaintance and eight from a close friend and Group B received 10 texts from a close friend and eight from an acquaintance). The means with the items present (Group A Block 2 $M = 3.91$, $SD = 0.88$; Group B Block 2 $M = 3.67$, $SD = 0.74$) or removed (Group A Block 2 $M = 3.87$, $SD = 0.92$; Group B Block 2 $M = 3.69$, $SD = 0.76$) did not change significantly, and the pattern of results reported below were also similar with the items present or removed.

Social Context. To assess social context, participants were directed to write down the first name of an individual whom they considered to be an *acquaintance* (distinguished as “someone who you know but are not particularly close to [e.g., classmate]”) and someone they considered to be a *close friend*. Participants were instructed that the sender of the text messages (i.e., “Acquaintance” or “Close Friend”) would be identified at the top of the text message (see Figure 11) and that they should read the text message keeping the above-named individual in mind. A practice item with a follow-up attention check (i.e., “Who was the sender?”) was used to ensure participants’ attentiveness to this instruction. After all stimuli items were presented, participants were asked how well they were able to hold the sender in mind during the task. As noted above, those who reported that they were unable to keep the sender in mind were removed from the sample prior to analysis. A mean social context score was calculated for each participant’s responses to the teasing texts from an acquaintance and those from a close friend.

Figure 11

Study 2 Text Message Stimuli Sender Manipulation



Questions on Texting and Social Context. Prior to the administration of the text message stimuli, participants were asked with whom they text most often and to rank the following in order from greatest to least frequency (close friends, family, romantic partners, classmates, acquaintances, and others). As in Study 1, following the administration of the text message stimuli, participants were asked if their interpretation of the text messages differed when the sender was a close friend versus an acquaintance (Appendix J). If they responded yes, they were asked if messages sent from a close friend, and those sent from an acquaintance, were generally more positive or negative. Participants were then asked whether social context makes a difference to their interpretation of text messages received in daily life (response options: never, sometimes, often).

Rejection Sensitivity. As in Study 1, participants' degree of rejection sensitivity was measured using the RSQ (Downey & Feldman, 1996). The internal consistency in the present sample was $\alpha = .82$.

Results

Social Context

Broken down by item, participants endorsed the full range of interpretations for each item (i.e., ranging from 1 [negative] to 6 [positive]), reflecting the ambiguous nature of the items. A paired samples *t*-test was used to test Hypothesis 3 and found a significant difference between the mean interpretation ratings for teasing text messages sent by a close friend ($M = 3.90$, $SD = 0.85$) compared to those sent from an acquaintance ($M = 3.54$, $SD = 0.77$), $t(393) = 6.23$, $p < .001$; $d = 0.31$. The effect size for this analysis falls between Cohen's (1988) convention for a small ($d = .20$) and medium ($d = 0.50$) effect.

Gender Differences

Broken down by gender, women ($n = 297$) rated texts from close friends ($M = 3.97$, $SD = 0.86$) more positively than those from acquaintances ($M = 3.55$, $SD = 0.80$), $t(296) = 6.25$, $p < .001$; $d = 0.36$. Men ($n = 97$) rated texts from close friends ($M = 3.69$, $SD = 0.81$) similarly to those from acquaintances ($M = 3.53$, $SD = 0.68$), and the difference was not statistically significant. Women and men rated texts from acquaintances similarly, and the difference was not statistically significant. Women rated texts from close friends more positively than men, $t(392) = 2.75$, $p = .006$; $d = 0.14$. Although gender differences were not a focus of the present study, the gender differences found here are discussed further in the general discussion. There was no correlation between rejection sensitivity and gender. Mean rejection sensitivity scores were not statistically different between women ($M = 10.75$, $SD = 3.57$) and men ($M = 10.41$, $SD = 3.59$).

Questions on Texting

Following the administration of the text message stimuli, participants were asked if they thought that their interpretation of the text messages in the study differed based on the relationship with the sender. The majority of respondents ($n = 357$, 91%) indicated that they believed that their interpretation was impacted by the sender of the stimuli text messages. A binomial test revealed that participants perceived messages sent from a close friend more positively ($p < .001$; 69% of participants, $n = 246$). No statistically significant difference was found ($p = .138$) for more positive ($n = 164$, 46%) or more negative ($n = 193$, 54%) interpretations of acquaintances' texts.

When asked to consider with whom they text most frequently in daily life, nearly all respondents (99%) indicated texting with close friends ($n = 161$, 42%), romantic partners ($n = 125$, 33%), and family members ($n = 92$, 24%). Very few ($n = 4$, 1%) endorsed most often

texting with classmates. Furthermore, nearly all of the participants reported that the relationship with the sender “often” ($n = 215$, 55%) or “sometimes” ($n = 167$, 42%) impacts their interpretation of message tone or meaning in daily life. Only three percent ($n = 12$) of participants stated that relationship context “never” impacts their interpretation of text messages.

Rejection Sensitivity

Participants’ mean RSQ score was 10.67 (minimum score of 1.89 and a maximum score of 24.44, $SD = 3.58$). In support of Hypothesis 4, a statistically significant correlation was found between rejection sensitivity and the interpretation of text messages when considered irrespective of sender, $r(392) = -.20$, $p < .001$, $r^2 = .04$. Overall, higher rejection sensitivity scores were related to more negative interpretations of teasing text messages. Statistical significance was found between rejection sensitivity and text messages sent by an acquaintance ($r(392) = -.20$, $p < .001$, $r^2 = .04$) and text messages sent by a close friend ($r(392) = -.11$, $p = .035$, $r^2 = .01$).

Study 2 Discussion

The primary goal of Study 2 was to examine how social context (acquaintance and close friend) impacts the interpretation of teasing text messages. As predicted, ambiguous text messages sent from a close friend were more positively rated than messages sent from an acquaintance (Hypothesis 3). However, this pattern only held true for women and not men. Ambiguous text messages sent from a close friend and those sent from an acquaintance were rated in a similar fashion by male participants. A secondary goal was to examine the relationship between rejection sensitivity and message interpretation. As in Study 1, message interpretation, irrespective of sender, was found to be related to rejection sensitivity. Rejection sensitivity was related to text message interpretation in both relational contexts (Hypothesis 4).

General Discussion

The present research demonstrated that message features (Study 1) and social context (Study 2) impact the interpretation of teasing text messages. In Study 1, an emoji (“winking face with tongue”) was linked with greater likelihood that participants interpreted ambiguous text messages more positively (i.e., in a manner consistent with playful teasing). However, and contrary to expectations in the research literature, the initialism “lol” was interpreted no differently than an unadorned ambiguous text. In Study 2, teasing texts received from a close friend were interpreted more positively than texts from an acquaintance by women, but not men. Across both studies, individuals with greater rejection sensitivity were more likely to interpret ambiguous text messages more negatively. However, this was not the case for the interpretation of text messages adorned with the “winking face with tongue” emoji in Study 1.

Message Features

The present study supports the notion that emoji facilitate texting by decreasing message ambiguity (Derks et al., 2008; Skovholt et al., 2014; Thompson & Filik, 2016), and it is the first study to examine emoji specifically in the context of teasing by text (see e.g., homonym disambiguation in Riordan, 2017). While the inclusion of the “winking face with tongue” emoji did not remove all ambiguity, nevertheless, it provided some disambiguation by signalling positive intent. Furthermore, we found that emoji, specifically the “winking face with tongue”, can reduce message ambiguity even when receivers are prone to rejection sensitivity. We used the “winking face with tongue” emoji, a widely used emoji that combines two facial expressions (i.e., the wink and the sticking out tongue) to convey humour. The use of two facial expressions in the emoji could make it more effective in conveying emotions (Matthews et al., 2020) or other non-verbal cues (Dynel, 2008) common in face-to-face interactions. In support of such a view,

the same neurological processing involved in the decoding of irony has been associated with the processing of the “wink” emoji (Weissman & Tanner, 2018). The use of alternative emoji of varying valences or facial expressions (e.g., “crying while laughing”, “upside down smiley”, “face with rolling eyes”) should be examined in future research.

A novel finding of Study 1 is that the “lol” initialism did not have the same impact as the emoji (cf. Forbes & Buchanan, 2019). Initialisms have received far less attention in the research literature; however, it was expected that the use of “lol” would impact interpretations of teasing in a manner similar to emoji. Although the impact of “lol” was similar to that of unadorned text messages, the impact of the initialism appeared to trend more negatively than unadorned text. Runions et al. (2013) and Shariff (2014) argued that initialisms such as “lol” and “jk” (“just kidding”) are at times used as a façade, masking underlying intentional hurtful remarks. The role of initialisms in teasing should be explored in future research.

Social Context

Overall, participants interpreted teasing texts from a close friend more positively than from an acquaintance. The findings support past research where teasing is perceived more positively in closer relationships both in face-to-face contexts (Jones et al., 2005) and through CMC (Gorman & Jordan, 2015), but were examined here for the first time in the context of playful teasing and texting. Participants reported texting most frequently with closer social contacts (e.g., close friends, romantic partners, and family members), and past research has found that playful teasing most often takes place in close relationships (Barnett et al., 2004; Beck et al., 2007; Dynel, 2008; Pawluk, 1989).

Study 2 also found gender differences, in that men did not rate teasing texts from close friends differently than those from acquaintances, whereas women did. Barnett et al. (2013) and

Kingsbury and Coplan (2016) found gender differences related to the interpretation of ambiguous texts and messages, generally suggesting that women have more negative responses to ambiguous communication. The current research found that women rated messages from close friends more positively, suggesting that relational contextualization is an important factor for women.

These findings can be situated in our general understanding of the nature of men and women's social interaction and communication patterns, particularly when comparing same-sex friendships. Women's friendships are portrayed in the research literature as having greater intimacy, expressiveness, and self-disclosure, as compared to men's friendships, which are primarily characterized as agentic and activity oriented (Bell, 1981; Rawlins, 1982; Rose & Rudolph, 2006). Research also suggests that women engage in greater relational maintenance strategies (e.g., supportiveness, openness, interaction; Oswald et al., 2004) and women have a greater tendency to use CMC to do so (Fallows, 2005; Houser et al., 2012). This difference in the perceived closeness and nurturance within women's friendships, as compared to men's friendships, may contribute to the differences in interpretation observed in the current research. Men also have a greater tendency, as compared to women, to take a competitive tone when teasing in same-sex interactions (e.g., "to get even"; Beck et al., 2007) which may influence their attribution of intent as a receiver. Research also suggests that women have a greater preference for texting than men (Kimbrough et al. 2013) and tend to use texting more frequently (Lenhart, 2012; Kimbrough et al., 2013). As communication patterns develop from accumulated CMC interactions (Byron, 2008; Walther, 1992), women may have greater familiarity with playful teasing through texting within their close relationships, possibly contributing to their more positive interpretations of teasing text messages.

Rejection Sensitivity

In both studies, greater rejection sensitivity was related to more negative interpretations of teasing text messages, in line with past research on social anxiety and ambiguity (Kingsbury & Coplan, 2016). However, as noted in Study 1, no relation was found between rejection sensitivity and messages paired with the “winking face with tongue” emoji, suggesting that emoji could buffer against rejection sensitivity. Although the unadorned texts and texts with the “lol” initialism were rated similarly, the mean rating of “lol” texts was lower. Past research suggests that laughter and the fear of being laughed at is related to anxiety and rejection (Downey et al., 2004; Papousek et al., 2014; Ritter et al., 2015), and future research should examine whether the “lol” cue may function in a way similar to laughter. In Study 2, higher rejection sensitivity was related to increased negative interpretations of teasing texts in both social contexts. In both studies, while a relationship was found between rejection sensitivity and message interpretation, the proportion of variance accounted for by rejection sensitivity was small. At a practical level, all of these findings suggest care is needed when teasing through texting; this may be particularly true for those with underlying dispositions, such as rejection sensitivity, that can lead to biased interpretation. Negative interpretations of playful teasing can impact both a receiver’s view of self and their relationship with the sender. Hostile attributions of teasing intent by the receiver may elicit behavioural responses that have interpersonal costs (e.g., avoidance or aggression) leading to relationship ruptures or actual rejection (Downey & Feldman, 1996; Levy et al., 2001; London et al., 2007). An interesting finding is that some message features, such as the “winking face with tongue” emoji, may help reduce the likelihood of misinterpretation and future research should explore the impact of other message features.

Limitations and Future Directions

Message features and social context were examined separately in Study 1 and Study 2. Researchers in future studies could examine these factors in combination, exploring, for example, whether the “lol” initialism functions differently in the context of close relationships (Holtgraves, 2011). As with prior studies, Study 1 used a single message feature per test block (e.g., Filik et al., 2016; Forbes & Buchanan, 2019; Riordan et al., 2018), however, future research could examine naturalistic text messages to explore the use of multiple message features in the context of teasing (e.g., several emoji; emoji and initialisms in combination). Study 2 examined two social contexts and future research could explore additional social contexts such as professional relationships (Riordan & Glikson, 2020). Another limitation of the present research, as with prior research on ambiguous messages (e.g., Kingsbury & Coplan, 2016), is that it forced participants to choose between two interpretations. Although the interpretations presented here were developed in the pilot testing (see Chapter 2), future research may consider having individual participants state their own interpretations of the messages, which researchers could subsequently code for positive and negative elements (see e.g., Riordan et al., 2018).

The present research examined digital natives (i.e., between the ages of 17 and 32). Past research has identified generational differences in the interpretation of subtle linguistic cues in digital communication (Riordan et al., 2018) across the digital native and digital immigrant divide (Prensky, 2001). Additionally, age (apart from familiarity with digital communication) is known to impact the interpretation of teasing, with younger people typically responding to teasing more negatively (Mills, 2018). For both of these reasons, future research should examine teasing through texting in younger and older age cohorts. Additionally, participants were predominately women, and gender differences were found in response to social context. It is

possible that due to the underrepresentation of men in the sample, typical for university psychology courses, potential effects of social context on interpretation were not detected for men. Future work should examine gender differences more closely (see e.g., Jones et al., 2020; Kingsbury & Coplan, 2016) using a balanced sample.

Conclusion

Playful teasing is important for building and strengthening relationships and is founded on ambiguity, which is further heightened by texting. The goal of playful teasing is disrupting standard lines of communication by pushing the boundaries between play and insult. The current research showed that messages features, social context, and rejection sensitivity all play a role in the interpretation of teasing through texting. However, in present day electronic communication some messages features, namely emoji, and closer relationships, are likely to contribute to more successful engagement in the ancient art of teasing.

Chapter 4: General Discussion

Playful teasing through the form of computer-mediated communication (CMC) known as short message service (SMS) texting was examined in this dissertation. In Chapter 1, the research project was framed in a social information processing (SIP) account of communication. The SIP approach has been used to examine communication breakdown and CMC, however, this is the first time SIP was used to examine playful teasing and texting together. In Chapter 2, the two phases of pilot testing used to develop study materials were outlined. A series of ambiguous teasing statements, with corresponding positive and negative interpretations, were generated and refined through two phases of focus groups and an online pilot study. The two-study manuscript, that is currently under review at a journal, was presented in Chapter 3. The studies used the teasing messages described in Chapter 2, which were presented as text message screen captures. The studies in Chapter 3 examined message features (emoji and initialisms), social context (close friends and acquaintances), and individual differences in rejection sensitivity, in the context of teasing text message interpretation. In Chapter 4, the findings of the dissertation are situated in a SIP account and the practical implications of, and future directions for, the research findings are discussed.

Social Information Processing, Teasing, and Texting

SIP models of communication can account for different mediums (i.e., face-to-face, CMC) and individual differences in processing based on a database of social experiences. SIP researchers (e.g., Crick & Dodge, 1994) have primarily focused on misunderstanding in face-to-face interaction and individual differences in interpretation, including those linked to social maladjustment. These themes were drawn upon in the present dissertation to examine teasing through texting, which has a higher possibility for breakdown in communication because of heightened ambiguity. Ambiguity is a defining feature of teasing that is further accentuated by

the medium of texting. SIP models posit that processing is influenced by stored mental representations of the self, others, and the social world. Representations of different social contexts (i.e., close friends and acquaintances), and rejection sensitivity, an individual difference that could be related to biased interpretation, were examined in the dissertation. In four figures in Chapter 1, the SIP account (Figure 1) was applied to teasing (Figure 2), texting (Figure 3), and teasing through texting (Figure 4). The current work extends the SIP model to prosocial text-based social interactions, highlighting the impact of the transmission medium and the differences between playful teasing in face-to-face interaction and CMC. Additionally, by framing the topic in a SIP model, which demonstrates a clear link between cognitions and behaviour, the applicability of the findings to daily communication practices and clinical intervention are evident (e.g., importance of identifying personal biases, thought challenging and reframing, emotional regulation during message interpretation and response construction, interpersonal effectiveness skills, etc.). Although the focus of SIP research is often on misinterpretation, the practical implications of the current research that could contribute to more successful communication are examined in the discussion.

Main Findings

How People Tease Through Texting

In the pilot testing described in Chapter 2, focus group and survey pilot testing participants were asked about the types of messages they use to tease others through text, their message feature usage in real-world teasing through texting, and with whom they text. Participants in the piloting survey and main studies reported texting most often with friends and romantic partners (see Figure F3 in Appendix F). The types of messages used to engage in playful teasing were generated from focus groups. In general, these messages were comments

about the receiver or the relationship between sender and receiver that had an aspect of sarcasm or irony. Some participants generated examples that were more characteristic of hostile teasing, at least as far as the research literature is concerned (e.g., physical size or racial characteristics; Aronson et al., 2007; Jones et al., 2005); however, given that participants indicated texting most with friends and romantic partners, it is possible that these messages would be interpreted differently. In subsequent measure design, only the more ambiguous examples were selected. Participants indicated that the “winking face with tongue” was the most commonly used emoji in teasing through texting (the second-place choice was “crying while laughing”), and “lol” was the most frequently used initialism (the second-place choice was “jk” for “just kidding”).

The Role of Message Features in Teasing Through Texting

The differential impact of message features (“winking face with tongue” emoji and “lol” initialism) compared to unadorned text on the interpretation of teasing text messages was evaluated in Chapter 3 (Study 1). As discussed in Chapter 1, the main difference between face-to-face and texting interactions is the medium of transmission. While in-person markers of teasing include the speaker’s body language, facial expressions, and tone of voice (Figure 2), in text messaging the sender must adopt different manners of signalling playful intent within the constraints of the text-based medium (as described in Figures 3 and 4). In Study 1, text messages that included the emoji were more positively rated than messages presented as text alone or with the initialism. No difference was observed between the unadorned text messages and those paired with the initialism. The findings regarding message features further extend empirical work on the disambiguating capacity of emoji (e.g., Derks et al., 2008; Riordan, 2017; Skovholt et al., 2014) and the interpretation of text-based irony/sarcasm (e.g., Filik et al., 2016; Sakar et al., 2014; Thompson & Filik, 2016) to the context of playful teasing. The differential impact of the

emoji and the initialism ran contrary to hypotheses predicting that both message features would function similarly. The implications regarding emoji and initialisms are discussed further below.

Emoji. Within the context of CMC, emoji play an important role providing social, affective, and communicative cues. Emoji act as markers of the underlying intent of a message, signal message tone, and reduce message ambiguity (Dresner & Herring, 2010; Kaye et al., 2016; Riordan, 2017). Emoji can also shape affective and social attributions regarding the sender (e.g., perception of the sender's emotions, positivity, warmth) which can influence the receiver's interpretation of the message (Boutet et al., 2021; Völker & Mannheim, 2021).

It was predicted that within the context of teasing via texting, the emoji would act as a redressive cue signalling playful intent, reducing the ambiguity of the tease and facilitating positive text message interpretation. The emoticon is thought to have been first used on an online university message board by Scott Fehlman in 1982. He proposed that the symbols “:-)” – called a “smiley” in the literature – be used to mark messages intended as jokes, due to the ambiguity of the medium and risk of misinterpretation (Baron, 2009). The use of jokes, humour, and irony/sarcasm within text-based CMC continues to be facilitated by emoticons/emoji (particularly the “wink” and “tongue” variations; Filik et al., 2016; Sarkar et al., 2014; Thompson & Filik, 2016; Weissman & Tanner, 2018). The current research used the “winking face with tongue” emoji, a positively valenced face emoji that was identified by participants in the pilot work as the most frequently used emoji in teasing. This emoji is noted in the literature as indicating playful, joking, teasing, and fun intent (Jaeger et al., 2019) and also indicating sarcasm (Subramanian et al., 2019), but it had not previously been empirically examined in the context of teasing texts. Interestingly, this particular emoji combines two facial expressions (i.e., the wink and the sticking out tongue) thus transmitting added social information to be processed

alongside the teasing statement. This specific emoji may function more akin to the integration of several playful cues which facilitate communication in face-to-face interactions.

Initialism. As noted above, the finding that playful teasing text messages that included the “winking face with tongue” emoji were interpreted more positively falls in line with previous work that has found that the use of emoji in texting can decrease ambiguity (e.g., Kingsbury, 2014; Riordan, 2017) and increase perceived playfulness (Hsieh & Tseng, 2017). Unlike the emoji, however, the “lol” initialism did not have the same positive effect on the interpretation of teasing texts (although texts with the initialism were not ranked more negatively than unadorned texts). Furthermore, greater sensitivity to rejection was related to more negative interpretations of unadorned teasing text messages and those with the “lol” initialism. While commonly used initialisms such as “lol” and “jk” have been described as “light-hearted” and “good-natured” cues that can positively impact perception in texting (Forbes & Buchanan, 2019), this does not appear to be the case in the context of playful teasing. The finding that the emoji and the initialism functioned differently suggests that it is not only the inclusion of a redressive marker that contributes to the successful recognition of teasing, but how the cue is perceived in the context of an ambiguous provocation.

One explanation for the finding regarding the “lol” initialism is that expressions such as “I was only kidding” and “I’m just teasing”, or initialisms such as “jk” and “lol”, may be used to void culpability when intentions are malicious (Haugh, 2016; Mills & Carwile, 2009; Runions et al., 2013; Shariff, 2014). Within the context of hurtful cyber-teasing by relational partners, Madlock and Westerman (2011) noted that “lol” was the most frequently reported message feature used. It stands to reason that the use of “lol” in instances of playful teasing may activate

the receiver's mental representations of its use in hurtful contexts, stored in their database, skewing its interpretation and negating any positive impact on the teasing message.

Additionally, “lol”, literally meaning to *laugh out loud*, is conceptually intended to represent laughter in text-based CMC. From an evolutionary perspective, laughter functions as a means of strengthening social bonds and accompanies play (Alter & Wildgruber, 2019; Wood & Niedenthal, 2018). However, while laughter has great psychosocial benefits when the product of shared enjoyment or social inclusion (laughing with), it can also cause pain when it occurs in the context of social exclusion and hurtful teasing/bullying (laughing at i.e., “schadenfreude” laughter; Alter & Wildgruber, 2019; Klages & Wirth, 2014). Therefore, laughter is a social cue that has the potential to evoke a range of reactions depending on its interpretation, and this appears to hold true in text-based CMC. Researchers have identified that the fear of being laughed at (i.e., gelotophobia) makes certain individuals prone to biases in interpretation, although the phobia is not recognized diagnostically (Ruch, 2009; Ruch et al., 2009; Ruch & Proyer, 2008). For individuals with this disposition, the transmission of laughter in ambiguous or playful circumstances (e.g., playful teasing), is misinterpreted as hostile (Platt, 2008; Ruch et al., 2014). The fear of laughter has been linked to memories of distressing teasing (Edwards et al., 2010), and is related to anxiety and rejection (Downey et al., 2004; Papousek et al., 2014; Ritter et al., 2015). Within the context of teasing via texting, even when “lol” is intended to signal play and enhance social bonding, it appears to draw on database representations of being laughed at and may be viewed as a sign of rejection (Brück et al., 2018), negatively biasing interpretations.

The Role of Social Context in Teasing Through Texting

The impact of the relationship between receiver and sender on the interpretation of playful teasing text messages was examined in Study 2. Teasing provocations (without message

features) were situated in Study 2 within the social context of either a close relationship (i.e., close friend) or a more distant relationship (i.e., acquaintance). As predicted, teasing texts received from a close friend were interpreted more positively than those from an acquaintance. Findings support previous research that has found that intent is perceived as more amiable when teasing interactions occur in the context of a closer relationship (e.g., Gorman & Jordan, 2015; Jones et al., 2005). However, gender analysis demonstrated that the difference in social context only impacted text message interpretation for female participants. Men did not rate messages sent from a close friend significantly different than those from an acquaintance.

As has been highlighted, teasing through texting may be particularly ambiguous, heightening the importance of other information for interpretation, whether in the medium or in the individual's database. In Study 2, social context was controlled in the experiment by asking the participant to imagine receiving the text from either a specific close friend or a specific acquaintance, selected by the participant. The SIP model predicts that the receiver's relationship with the sender provides additional information for interpretation activating the receiver's stored knowledge about the sender (e.g., sender's character, motivations, attitudes), and relational schemas, which develop through accumulated interactions (Baldwin, 1992; Crick & Dodge, 1996; Walther, 1992). Playful teasing is a form of communication that is more often used in established relationships (Barnett et al., 2004; Beck et al., 2007; Dynel, 2008; Pawluk, 1989), and activation of these social scripts may occur more readily in close relationships. Accumulated texting interactions with a close friend establishes a pattern of communication which contributes to message interpretation (Byron, 2008; Walther, 1992).

An unexplained finding, however, is that while a difference in interpretation of teasing text messages was found for women, this was not the case for men. For men, messages sent from

a close friend were interpreted similarly to those they received from an acquaintance. Messages received from acquaintances were interpreted comparably by men and women, however, messages received from a close friend were interpreted more positively by women. As previously discussed, gender differences in social relationships and communication styles, and in text message communication, may play a role. Insights regarding this finding may come from exploring same-gender versus cross-gender teasing interpretation via texting, but sender gender characteristics were not explicitly studied in this research. Past research has identified gender differences in the interpretation of teasing (e.g., Aronson et al., 2007; Beck et al., 2007; Jones et al., 2005; Keltner et al., 1998) and the interpretation of ambiguous text messages (Kingsbury & Coplan, 2016). Future research should explore sender characteristics, including gender, in the context of playful teasing through texting.

The Role of Rejection Sensitivity in Teasing Through Texting

The relationship between rejection sensitivity and message interpretation was also evaluated in both studies. Across both studies, greater rejection sensitivity was found to be related to more negative interpretations. Overall, the prediction that higher rejection sensitivity would be related to more negative interpretations of playful teasing was supported in both Study 1 and Study 2 with the exception of the use of emoji (Study 1). The impact of rejection sensitivity was small, highlighting that rejection sensitivity is only one contributing factor and other individual differences influencing interpretation warrant further exploration. Additionally, future work should narrow in on teasing topics with relational themes to examine if there is greater activation of rejection sensitivity and impact on interpretation. Rejection sensitivity is further discussed below in terms of practical implications.

Emoji and Rejection Sensitivity. Higher rejection sensitivity was unrelated to message interpretation for teasing text messages with the “winking face with tongue” emoji. The finding is the first to suggest that a relatively simple communication feature could blunt the impact of rejection sensitivity (cf. Kingsbury, 2014, found that a positive emoticon positively influenced text message tone for individuals with social anxiety, but that interpretation bias was still present). The emoji used in the current research may contain greater social information (i.e., more “expressive”; Sampietro, 2020) that may buffer against the tendency of individuals with rejection sensitivity to negatively appraise ambiguous social stimuli, perhaps by tempering the activation of a threat response. Past research has suggested that the emoji mirrors the instrumental use of facial expressions and body language (e.g., Dresner & Herring, 2010; Lo, 2008). From infancy, facial expressions are used as social cues in the decoding of ambiguous behaviour, such as playful teasing (Striano & Vaish, 2006), and the use of the “winking face with tongue” emoji may draw on intrinsic evolutionary responses and acquired social knowledge of play. Future research should attempt to replicate this finding and expand it to other positively valenced emoji.

Practical Implications for Teasing and Texting

The introduction in Chapter 1 and the studies presented in Chapter 3 primarily dealt with Steps 1 (encoding) and 2 (interpretation) of the SIP model (see Figure 1). The findings of the current research demonstrated the impact of message feature transmission, sender social context, and individual receiver differences on the interpretation of ambiguous teasing text messages. As detailed in Steps 3 through 6 of the SIP model, at some point in an interaction the recipient/receiver becomes the speaker/sender. The section below approaches and extends the

research findings from a practical perspective, considering both the act of receiving and that of sending text messages.

The Ambiguity of Texting and Teasing

Playful teasing occurs, and can be successfully accomplished, in text messaging. However, the present research highlights some practical issues that relate to the increased ambiguity of the medium and risk for misinterpretation of teasing as a form of communication.

Using Message Features. Senders need to be aware that the medium of texting is different from face-to-face communication, and that message features should be selected thoughtfully, recognizing the role these features play in communicating intent (e.g., Boutet et al., 2021; Dresner & Herring, 2010). One of the novel findings of the study was regarding emoji, both in general usage, and when used in texts sent to people with higher rejection sensitivity. We demonstrated that the “winking face with tongue” emoji can serve as a playful marker. Participants reported that most of their text communication occurred within close relationships where the emoji could be appropriate, however, some research has shown that emoji can have negative effects in workplace communication, particularly among women (Glikson et al., 2018; Riordan & Glikson, 2020). The positive impacts of emoji are likely context dependent, something that needs to be examined in future research. Furthermore, the “lol” initialism was no more effective than unadorned text at signalling playful intent and may contribute to misunderstanding relative to emoji.

Relationships. As alluded to above, senders should also carefully consider how a message may be interpreted by the receiver, taking into account the level of perceived aggressiveness, topic of teasing, and relationship with the receiver. Text-based CMC can lead to increased disinhibition (Suler, 2004), which in the context of teasing could lead senders to tease

more bluntly than they would in face-to-face interactions. This can be problematic as teasers tend to perceive the tease more positively than the recipient (Gorman & Jordan, 2015; Kruger et al., 2006). This is especially important to keep in mind in stranger or acquaintance communication in which there is far less relational context to situate the message. There is evidence to suggest that in close relationships, individualized forms of communication (for the dyad) emerge in texting, and a shared understanding of meaning facilitates the conveyance of intent (e.g., Holtgraves, 2011).

Rejection Sensitivity. The studies in the dissertation demonstrated that rejection sensitivity was related to increased negative interpretations of teasing text messages, with the exception of when the “winking face with tongue” emoji was used. From a practical perspective, an individual, particularly in a less close relationship, may not be aware of their communication partner’s sensitivity to rejection (Pietrzak et al., 2005). Rejection sensitivity may also be more impactful on teasing text interpretation within the context of acquaintance relationships compared to close friendships. The present research suggests that the use of emoji message features could assist in conveying intent to individuals higher or lower on rejection sensitivity, in the absence of an understanding of the receiver’s personality.

The present research could be used to inform individuals with greater sensitivity to rejection about their own biases in interpretation, encouraging them to weigh alternative interpretations before jumping to conclusions regarding malicious intent. An important caveat to encouraging individuals with rejection sensitivity to engage in reflection, is the potential for rumination with text messages, as suggested by Runions and colleagues (2013). In face-to-face communication, the SIP model demonstrates that there is generally more feedback in the medium (e.g., prosody, body language), and communication is occurring in real time with transmission

and encoding of new information (see feedback loop between Steps 1 and 2 in Figure 1).

Comparatively, text messages are static exchanges with a degree of delay (even if momentary) between message receipt and message response, and a receiver's interpretation can only be checked against the existing message which can contribute to receivers getting "stuck" in a feedback loop (Runions et al., 2013).

Limitations and Future Directions

The research presented in this dissertation provides a foundation for future research examining ambiguous computer-mediated interactions and playful teasing, a form of social interaction which is frequently occurring and yet often overlooked in research. Limitations specific to the two studies, presented briefly in Chapter 3, are further expanded below to inspire future research.

Texting and Non-Digital Natives

The current research focused on digital natives. Digital natives in Canada and elsewhere have extremely high rates of smartphone ownership (Statistics Canada, 2018) and have grown up with CMC, including texting, as a normalized form of communication that is pervasive in their daily lives (Harrison et al., 2015; Paulette et al., 2011). As playful teasing is a universal phenomenon (Eckert et al., 2020; Sperling, 1953), it is no doubt taking place in the texting interactions of non-digital natives. Although the benefits of expanding the current research across age cohorts was discussed in Chapter 3, examining both within and between generation effects, the stimuli items used in the current studies were developed in consultation with an undergraduate population and may be less representative of teasing in other populations (e.g., children or older adults), and may require adaptation for future work. Additionally, research has pointed to generational differences in message feature use and interpretation (Herring & Dainas,

2020; Riordan et al., 2018) that warrant future research in the context of text-based playful teasing.

Teasing and Other Forms of CMC

Texting has continued to prevail as the most popular form of CMC even with the rise of more complex platforms and mediums, such as videoconferencing (e.g., Juvonen et al., 2021). Many of these forms of CMC have integrated message features including emoji (e.g., Zoom has adopted emoji into its videoconferencing platform). The use of message features in other forms of CMC (e.g., in a larger group call) may mirror, or differ, from the use of message features detailed here, and warrants further research. This could also include message features not examined in the current studies (e.g., punctuation and exaggerated capitalization), and more novel message features (e.g., GIFS).

Texting and Relational Contexts

The current research focused on only two broad categories of relationships which were differentiated by relational distance (i.e., close friend and acquaintance). Future research could benefit from expanding the study of playful teasing to other relational contexts in which texting, or other mediums of text-based communication, is common (e.g., family, romantic, collegial). Teasing within online dating platforms may be an especially interesting context to explore given that teasing is often used as a means of flirting (Beck et al., 2007), and yet as demonstrated, interpretation can be more challenging in less developed relationships. Furthermore, while the impact of bystanders has been primarily examined in the context of cyber-aggression (e.g., Machackova et al., 2018; Patterson et al., 2017), a future direction would be to examine the interpretation of playful teasing that occurs in the context of group text messages and the impact of group member response.

Texting and Individual Differences

The SIP model posits that individual differences are a fundamental factor in social information processing. The present research narrowed in on one disposition that impacts processing in social interaction, rejection sensitivity. Future research should explore rejection sensitivity in a sample of individuals with more elevated sensitivity, such as in a clinical population, and should broaden the scope of exploration to evaluate other influential individual differences, including disorders which impact social-cognitive processing (e.g., Anxiety, Autism Spectrum Disorder, Borderline Personality Disorder, Attention-Deficit/Hyperactivity Disorder). Additionally, important factors which could influence teasing texts, but are not explicitly explored in the current research, including teasing history (in-person and computer-mediated) and attitudes about teasing (e.g., Barnett et al., 2013), warrant future research.

Texting and Cultural Differences

Finally, as discussed in the introduction, texting and teasing are both global phenomena. Cultural differences have emerged in research regarding the use of message features (e.g., Kejriwal et al., 2021; Park et al., 2014) and the interpretation of teasing interactions (e.g., Campos et al., 2007). In the present research, texting was examined in an undergraduate population in Canada. With the majority of the global population owning cellphones capable of CMC (Taylor & Silver, 2019), cross-cultural study of teasing in CMC could reveal different impacts of message features and social context.

Conclusion

The goal of this dissertation was to examine the interpretation of playful teasing within the context of texting. In Chapter 1, the research was situated within a social information processing (SIP) framework, marrying two ambiguous forms of social communication, teasing

and texting, and illustrating the commonalities and differences between processing in CMC and face-to-face interactions. The development of study materials, which were used to examine teasing through texting in the two main studies, were outlined in Chapter 2. The core studies which examined several factors related to the interpretation of teasing text messages including medium transmission factors (i.e., message features), social contextual factors (i.e., sender-receiver relationship), and receiver factors (i.e., rejection sensitivity), were presented in Chapter 3 and unpacked in Chapter 4.

This dissertation contributes to both theory and practice regarding playful teasing through texting, and the findings lay the foundation for future exploration of communication and social-cognitive factors that influence playful teasing in CMC. The current research provides the first evidence that the “winking face with tongue” emoji facilitates successful disambiguation of teasing text messages, even in circumstances when receivers are sensitive to rejection. Results also demonstrate that teasing text messages sent by acquaintances can be less positively interpreted than those from close friends. Findings also point to the potentially problematic impact of cognitive-affective processing dispositions, such as rejection sensitivity, on the interpretation of teasing texts.

References

- Alberts, J. K., Kellar-Guenther, Y., & Corman, S. R. (1996). That's not funny: Understanding recipients' responses to teasing. *Western Journal of Communication*, 60(4), 337–357. <https://doi.org/10.1080/10570319609374553>
- Alter, K., & Wildgruber, D. (2019). Laughing out loud! Investigations on different types of laughter. In S. Fröhholz & P. Belin (Eds.), *The Oxford handbook of voice perception*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198743187.013.22>
- American Psychiatric Association. (2013). Anxiety disorders. In *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596.dsm05>
- Aronson, E., Biegler, H., Bond, B., Clark, R. A., Drogos, K., Garcia, M. A., Gleisner, S. G., Hendee, A., Licciardello, V., Linder, S. C., Mannone, S., Marshall, L., Pham, V., Porter, R., Scott, A. M., Volkmann, J. M., & Yahn, A. (2007). Norms for teasing among college students. *Communication Research Reports*, 24(2), 169–176. <https://doi.org/10.1080/08824090701304980>
- Arsenio, W. F., Adams, E., & Gold, J. (2009). Social information processing, moral reasoning, and emotion attributions: Relations with adolescents' reactive and proactive aggression. *Child Development*, 80(6), 1739–1755. <https://doi.org/10.1111/j.1467-8624.2009.01365.x>
- Baas, N., de Jong, M. D. T., & Drossaert, C. H. C. (2013). Children's perspectives on cyberbullying: Insights based on participatory research. *Cyberpsychology, Behavior and Social Networking*, 16(4), 248–253. <https://doi.org/10.1089/cyber.2012.0079>

Bai, Q., Dan, Q., Mu, Z., & Yang, M. (2019). A systematic review of emoji: Current research and future perspectives. *Frontiers in Psychology*, 10, Article e2221.

<https://doi.org/10.3389/fpsyg.2019.02221>

Baldwin, M. W. (1992). Relational schemas and the processing of social information.

Psychological Bulletin, 112(3), 461–484. <https://doi.org/10.1037/0033-2909.112.3.461>

Barnett, M. A., Barlett, N. D., Livengood, J. L., Murphy, D. L., & Brewton, K. E. (2010).

Factors associated with children's anticipated responses to ambiguous teases. *The Journal of Genetic Psychology*, 171(1), 54–72.

<https://doi.org/10.1080/00221320903300395>

Barnett, M. A., Burns, S. R., Sanborn, F. W., Bartel, J. S., & Wilds, S. J. (2004). Antisocial and prosocial teasing among children: Perceptions and individual differences. *Social Development*, 13(2), 292–310. <https://doi.org/10.1111/j.1467-9507.2004.000268.x>

Barnett, M. A., Nichols, M. B., Sonnentag, T. L., & Wadian, T. W. (2013). Factors associated with early adolescents' anticipated emotional and behavioral responses to ambiguous teases on Facebook. *Computers in Human Behavior*, 29(6), 2225–2229.

<https://doi.org/10.1016/j.chb.2013.05.003>

Baron, N. (2009). The myth of the impoverished signal: Dispelling the spoken language fallacy for emoticons in online communication. In L Fortunati & J Vincent (Eds.), *Electronic emotion: The mediation of emotion via information and communication technologies*.

Peter Lang.

- Beck, S., Clabaugh, S. E., Clark, R. A., Kosovski, M. C., Daar, R., Hefner, V., Kmetz, T., McDaniel, S., Miller, L., Moriarty, C., Qian, Z., Raja, S., Ramey, M., & Suri, R. (2007). Teasing among college men and women. *Communication Studies*, 58(2), 157–172.
<https://doi.org/10.1080/10510970701341105>
- Beeson, C. M. L., Brittain, H., & Vaillancourt, T. (2020). The temporal precedence of peer rejection, rejection sensitivity, depression, and aggression across adolescence. *Child Psychiatry and Human Development*, 51(5), 781–791. <https://doi.org/10.1007/s10578-020-01008-2>
- Bell, R. R. (1981). Friendships of women and of men. *Psychology of Women Quarterly*, 5(3), 402–417. <https://doi.org/10.1111/j.1471-6402.1981.tb00582.x>
- Bhutani, R., Sudhir, P. M., & Philip, M. (2014). Teasing experiences, interpersonal sensitivity, self-schema and psychological distress in youth: An exploratory study. *Psychological Studies*, 59(3), 241–251. <https://doi.org/10.1007/s12646-014-0261-y>
- Bosch, O.J., & Revilla, M. (2018). The use of emojis by Millennials. Research and Expertise Centre for Survey Methodology. https://www.upf.edu/documents/3966940/6839730/Working+Paper_Emoji_Substantive.pdf
- Boutet, I., LeBlanc, M., Chamberland, J. A., & Collin, C. A. (2021). Emojis influence emotional communication, social attributions, and information processing. *Computers in Human Behavior*, 119, Article e106722. <https://doi.org/10.1016/j.chb.2021.106722>
- Brück, C., Derstroff, S., & Wildgruber, D. (2018). Fear of being laughed at in borderline personality disorder. *Frontiers in Psychology*, 9, Article e4.
<https://doi.org/10.3389/fpsyg.2018.00004>

- Buglass, S. L., Abell, L., Betts, L. R., Hill, R., & Saunders, J. (2020). Banter versus bullying: A university student perspective. *International Journal of Bullying Prevention*, 3(4), 287–299. <https://doi.org/10.1007/s42380-020-00085-0>
- Burgoon, J.K. (2016). Expectancy violations theory. In C.R. Berger & M.E. Roloff (Eds.), *The International Encyclopedia of Interpersonal Communication*. John Wiley & Sons, Inc. <https://doi.org/10.1002/9781118540190.wbeic102>
- Burgoon, J.K., & Jones, S.B. (1976). Toward a theory of personal space expectations and their violations. *Human Communication Research*, 2(2), 131–146. <https://doi.org/10.1111/j.1468-2958.1976.tb00706.x>
- Byron, K. (2008). Carrying too heavy a load? The communication and miscommunication of emotion by email. *The Academy of Management Review*, 33(2), 309–327. <https://doi.org/10.5465/AMR.2008.31193163>
- Calvete, E., & Orue, I. (2012). Social information processing as a mediator between cognitive schemas and aggressive behavior in adolescents. *Journal of Abnormal Child Psychology*, 40(1), 105–117. <https://doi.org/10.1007/s10802-011-9546-y>
- Campos, B., Keltner, D., Beck, J. M., Gonzaga, G. C., & John, O. P. (2007). Culture and teasing: The relational benefits of reduced desire for positive self-differentiation. *Personality & Social Psychology Bulletin*, 33(1), 3–16. <https://doi.org/10.1177/0146167206293788>
- Chango, J. M., McElhaney, K. B., Allen, J. P., Schad, M. M., & Marston, E. (2012). Relational stressors and depressive symptoms in late adolescence: Rejection sensitivity as a vulnerability. *Journal of Abnormal Child Psychology*, 40(3), 369–379. <https://doi.org/10.1007/s10802-011-9570-y>

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Erlbaum Associates. <https://doi.org/10.4324/9780203771587>
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information processing mechanisms in children's social adjustment. *Psychological Bulletin, 115*(1), 74–101. <https://doi.org/10.1037/0033-2909.115.1.74>
- Crick, N. R., & Dodge, K. A. (1996). Social information processing mechanisms in reactive and proactive aggression. *Child Development, 67*(3), 993–1002. <https://doi.org/10.2307/1131875>
- Crystal, D. (2008). *Txtng: The Gr8 Db8*. Oxford University Press.
- Daniel, T. A., & Camp, A. L. (2020). Emojis affect processing fluency on social media. *Psychology of Popular Media, 9*(2), 208–213. <https://doi.org/10.1037/ppm0000219>
- Dempsey, A. E., O'Brien, K. D., Tiamiyu, M. F., & Elhai, J. D. (2019). Fear of missing out (FoMO) and rumination mediate relations between social anxiety and problematic Facebook use. *Addictive Behaviors Reports, 9*, Article e100150. <https://doi.org/10.1016/j.abrep.2018.100150>
- Derks, D., Fischer, A. H., & Bos, A. E. R. (2008). The role of emotion in computer-mediated communication: A review. *Computers in Human Behavior, 24*(3), 766–785. <https://doi.org/10.1016/j.chb.2007.04.004>
- Dodge, K. A., Lansford, J. E., Burks, V. S., Bates, J. E., Pettit, G. S., Fontaine, R., & Price, J. M. (2003). Peer rejection and social information-processing factors in the development of aggressive behavior problems in children. *Child Development, 74*(2), 374–393. <https://doi.org/10.1111/1467-8624.7402004>

Dooley, J. J., Pyżalski, J., & Cross, D. (2009). Cyberbullying versus face-to-face bullying: A theoretical and conceptual review. *Journal of Psychology*, 217(4), 182–188.

<https://doi.org/10.1027/0044-3409.217.4.182>

Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology*, 70(6), 1327–1343.

<https://doi.org/10.1037/0022-3514.70.6.1327>

Downey, G., Freitas, A. L., Michaelis, B., & Khouri, H. (1998). The self-fulfilling prophecy in close relationships: Rejection sensitivity and rejection by romantic partners. *Journal of Personality and Social Psychology*, 75(2), 545–560. <https://doi.org/10.1037/0022-3514.75.2.545>

Downey, G., Mougios, V., Ayduk, O., London, B. E., & Shoda, Y. (2004). Rejection sensitivity and the defensive motivational system: Insights from the startle response to rejection cues. *Psychological Science*, 15(10), 668–673. <https://doi.org/10.1111/j.0956-7976.2004.00738.x>

Dresner, E., & Herring, S. C. (2010). Functions of the nonverbal in CMC: Emoticons and illocutionary force. *Communication Theory*, 20(3), 249–268.

<https://doi.org/10.1111/j.1468-2885.2010.01362.x>

Dynel, M. (2008). No aggression, only teasing: The pragmatics of teasing and banter. *Lodz Papers in Pragmatics*, 4(2), 241–261. <https://doi.org/10.2478/v10016-008-0001-7>

Eckert, J., Winkler, S. L., & Cartmill, E. A. (2020). Just kidding: The evolutionary roots of playful teasing. *Biology Letters*, 16(9), Article e20200370.

<https://doi.org/10.1098/rsbl.2020.0370>

- Edwards, K. R., Martin, R. A., & Dozois, D. J. (2010). The fear of being laughed at, social anxiety, and memories of being teased during childhood. *Psychological Test and Assessment Modeling*, 52(1), 94–107.
- Edwards, R., Bybee, B. T., Frost, J. K., Harvey, A. J., & Navarro, M. (2016). That's not what I meant: How misunderstanding is related to channel and perspective-taking. *Journal of Language and Social Psychology*, 36(2), 188–210.
<https://doi.org/10.1177/0261927X16662968>
- Erle, T. M., Schmid, K., Goslar, S. H., & Martin, J. D. (2021). Emojis as social information in digital communication. *Emotion*. Advance online publication.
<https://doi.org/10.1037/emo0000992>
- Fallows, D. (2005). How women and men use the internet. Pew Research Center.
<https://www.pewresearch.org/internet/2005/12/28/how-women-and-men-use-the-internet/>
- Fang, A., Asnaani, A., Gutner, C., Cook, C., Wilhelm, S., & Hofmann, S. (2011). Rejection sensitivity mediates the relationship between social anxiety and body dysmorphic concerns. *Journal of Anxiety Disorders*, 25(7), 946–949.
<https://doi.org/10.1016/j.janxdis.2011.06.001>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191. <https://doi.org/10.3758/BF03193146>
- Feldman, S., & Downey, G. (1994). Rejection sensitivity as a mediator of the impact of childhood exposure to family violence on adult attachment behavior. *Development and Psychopathology*, 6(1), 231–247. <https://doi.org/10.1017/S0954579400005976>

- Fiadotava, A. (2021). "If we don't quarrel, we joke": Emic perspectives on Belarusian families' humorous folklore. *HUMOUR*, 34(1), 1–20. <https://doi.org/10.1515/humor-2019-0052>
- Filik, R., Turcan, A., Thompson, D., Harvey, N., Davies, H., & Turner, A. (2016). Sarcasm and emoticons: Comprehension and emotional impact. *The Quarterly Journal of Experimental Psychology*, 69(11), 2130–2146. <https://doi.org/10.1080/17470218.2015.1106566>
- Fiske, Susan., & Taylor, S. E. (2017). *Social cognition: From brains to culture* (3rd ed.). SAGE Publications.
- Forbes, F.-J. M., & Buchanan, E. M. (2019). "Textisms": The comfort of the recipient. *Psychology of Popular Media Culture*, 8(4), 358–364. <https://doi.org/10.1037/ppm0000194>
- Fox, J., & McEwan, B. (2017). Distinguishing technologies for social interaction: The perceived social affordances of communication channels scale. *Communication Monographs*, 84(3), 298–318. <https://doi.org/10.1080/03637751.2017.1332418>
- Gao, S., Assink, M., Cipriani, A., & Lin, K. (2017). Associations between rejection sensitivity and mental health outcomes: A meta-analytic review. *Clinical Psychology Review*, 57, 59–74. <https://doi.org/10.1016/j.cpr.2017.08.007>
- Gliklich, E., Guo, R., MS, & Bergmark, R. W. (2016). Texting while driving: A study of 1211 U.S. adults with the Distracted Driving Survey. *Preventive Medicine Reports*, 4, 486–489. <https://doi.org/10.1016/j.pmedr.2016.09.003>
- Glikson, E., Cheshin, A., & van Kleef, G. A. (2018). The dark side of a smiley: Effects of smiling emoticons on virtual first impressions. *Social Psychological & Personality Science*, 9(5), 614–625. <https://doi.org/10.1177/1948550617720269>

Gorman, G., & Jordan, C. H. (2015). "I know you're kidding": Relationship closeness enhances positive perceptions of teasing. *Personal Relationships*, 22(2), 173–187.

<https://doi.org/10.1111/pere.12071>

Hancock. (2004). Verbal irony use in face-to-face and computer-mediated conversations.

Journal of Language and Social Psychology, 23(4), 447–463.

<https://doi.org/10.1177/0261927X04269587>

Harrison, M. A., Bealing, C. E., & Salley, J. M. (2015). 2 TXT or not 2 TXT: College students' reports of when text messaging is social breach. *The Social Science Journal*, 52(2), 188–194. <https://doi.org/10.1016/j.soscij.2015.02.005>

Harrison, M. A., & Gilmore, A. L. (2012). U txt WHEN? College students' social contexts of text messaging. *The Social Science Journal*, 49(4), 513–518.

<https://doi.org/10.1016/j.soscij.2012.05.003>

Haugh, M. (2016). "Just kidding": Teasing and claims to non-serious intent. *Journal of Pragmatics*, 95, 120–136. <https://doi.org/10.1016/j.pragma.2015.12.004>

Haugh, M., & Pillet-Shore, D. (2018). Getting to know you: Teasing as an invitation to intimacy in initial interactions. *Discourse Studies*, 20(2), 246–269.

<https://doi.org/10.1177/1461445617734936>

Herring, S., & Dainas, A. (2020). Gender and age influences on interpretation of emoji functions. *ACM Transactions on Social Computing*, 3(2), 1–26. <https://doi.org/10.1145/3375629>

Hertlein, K. M., & Chan, D. (2020). The rationale behind texting, videoconferencing, and mobile phones in couple relationships. *Marriage & Family Review*, 56(8), 739–763.

<https://doi.org/10.1080/01494929.2020.1737624>

- Hilvert-Bruce, Z., & Neill, J. T. (2020). I'm just trolling: The role of normative beliefs in aggressive behaviour in online gaming. *Computers in Human Behavior*, 102, 303–311.
<https://doi.org/10.1016/j.chb.2019.09.003>
- Holmes, J. G. (2000). Social relationships: The nature and function of relational schemas. *European Journal of Social Psychology*, 30(4), 447–495. [https://doi.org/10.1002/1099-0992\(200007/08\)30:4<447::AID-EJSP10>3.0.CO;2-Q](https://doi.org/10.1002/1099-0992(200007/08)30:4<447::AID-EJSP10>3.0.CO;2-Q)
- Holtgraves, T. (2011). Text messaging, personality, and the social context. *Journal of Research in Personality*, 45(1), 92–99. <https://doi.org/10.1016/j.jrp.2010.11.015>
- Houser, M. L., Fleuriet, C., & Estrada, D. (2012). The cyber factor: An analysis of relational maintenance through the use of computer-mediated communication. *Communication Research Reports*, 29(1), 34–43. <https://doi.org/10.1080/08824096.2011.639911>
- Hsieh, S. H., & Tseng, T. H. (2017). Playfulness in mobile instant messaging: Examining the influence of emoticons and text messaging on social interaction. *Computers in Human Behavior*, 69, 405–414. <https://doi.org/10.1016/j.chb.2016.12.052>
- Huesmann, L. R. (1998). The role of social information processing and cognitive schema in the acquisition and maintenance of habitual aggressive behavior. In R.G. Geen & E. Donnerstein (Eds.), *Human aggression: Theories, research, and implications for social policy* (pp. 73-109). Academic Press.
<https://doi.org/10.1016/B978-012278805-5/50005-5>
- Jacobson, D. (2007). Interpreting instant messaging: Context and meaning in computer-mediated communication. *Journal of Anthropological Research*, 63(3), 359–381.
<https://doi.org/10.3998/jar.0521004.0063.303>

Jaeger, S. R., Roigard, C. M., Jin, D., Vidal, L., & Ares, G. (2019). Valence, arousal and sentiment meanings of 33 facial emoji: Insights for the use of emoji in consumer research. *Food Research International*, 119, 895–907.

<https://doi.org/10.1016/j.foodres.2018.10.074>

Jin, B. (2013). Hurtful texting in friendships: Satisfaction buffers the distancing effects of intention. *Communication Research Reports*, 30(2), 148–156.

<https://doi.org/10.1080/08824096.2012.763026>

Jones, D. C., Newman, J. B., & Bautista, S. (2005). A three-factor model of teasing: The influence of friendship, gender, and topic on expected emotional reactions to teasing during early adolescence. *Social Development*, 14(3), 421–439.

<https://doi.org/10.1111/j.1467-9507.2005.00309.x>

Jones, L. L., Wurm, L. H., Norville, G. A., & Mullins, K. L. (2020). Sex differences in emoji use, familiarity, and valence. *Computers in Human Behavior*, 108, Article e106305.

<https://doi.org/10.1016/j.chb.2020.106305>

Juvonen, J., Schacter, H. L., & Lessard, L. M. (2021). Connecting electronically with friends to cope with isolation during COVID-19 pandemic. *Journal of Social and Personal Relationships*, 38(6), 1782–1799. <https://doi.org/10.1177/0265407521998459>

Kaye, L. K., Wall, H. J., & Malone, S. A. (2016). “Turn that frown upside-down”: A contextual account of emoticon usage on different virtual platforms. *Computers in Human Behavior*, 60, 463–467. <https://doi.org/10.1016/j.chb.2016.02.088>

Kejriwal, M., Wang, Q., Li, H., & Wang, L. (2021). An empirical study of emoji usage on Twitter in linguistic and national contexts. *Online Social Networks and Media*, 24, Article e100149. <https://doi.org/10.1016/j.osnem.2021.100149>

Kelly, L., Keaten, J. A., Becker, B., Cole, J., Littleford, L., & Rothe, B. (2012). "It's the American lifestyle!": An investigation of text messaging by college students. *Qualitative Research Reports in Communication*, 13(1), 1–9.

<https://doi.org/10.1080/17459435.2012.719203>

Kelly, L., & Miller-Ott, A. E. (2018). Perceived miscommunication in friends' and romantic partners' texted conversations. *Southern Communication Journal*, 83(4), 267–280.

<https://doi.org/10.1080/1041794X.2018.1488271>

Keltner, D., Capps, L., Kring, A. M., Young, R. C., & Heerey, E. A. (2001). Just teasing: A conceptual analysis and empirical review. *Psychological Bulletin*, 127(2), 229–248.

<https://doi.org/10.1037/0033-2909.127.2.229>

Keltner, D., Young, R. C., Heerey, E. A., Oemig, C., & Monarch, N. D. (1998). Teasing in hierarchical and intimate relations. *Journal of Personality and Social Psychology*, 75(5), 1231–1247. <https://doi.org/10.1037/0022-3514.75.5.1231>

Kesharwani, A. (2020). Do (how) digital natives adopt a new technology differently than digital immigrants? A longitudinal study. *Information & Management*, 57(2), Article e103170.

<https://doi.org/10.1016/j.im.2019.103170>

Kimbrough, A. M., Guadagno, R. E., Muscanell, N. L., & Dill, J. (2013). Gender differences in mediated communication: Women connect more than do men. *Computers in Human Behavior*, 29(3), 896–900. <https://doi.org/10.1016/j.chb.2012.12.005>

Kingsbury, M. (2014). "r u mad @ me?" Social anxiety and interpretation bias in computer-mediated contexts. [Doctoral dissertation, Carleton University]. Carleton University Research Virtual Environment. <https://doi.org/10.22215/etd/2014-10508>

- Kingsbury, M., & Coplan, R. J. (2016). RU mad @ me? Social anxiety and interpretation of ambiguous text messages. *Computers in Human Behavior*, 54, 368–379.
<https://doi.org/10.1016/j.chb.2015.08.032>
- Klages, S. V., & Wirth, J. H. (2014). Excluded by laughter: Laughing until it hurts someone else. *The Journal of Social Psychology*, 154(1), 8–13.
<https://doi.org/10.1080/00224545.2013.843502>
- Knapp, T. J. (1986). The emergence of cognitive psychology in the latter half of the twentieth century. In T.J. Knapp & L.C. Robertson (Eds.), *Approaches to cognition: contrasts and controversies* (pp. 13–35). Routledge. <https://doi.org/10.4324/9781315630816>
- Kowalski, R. M. (2000). “I was only kidding!”: Victims’ and perpetrators’ perceptions of teasing. *Personality & Social Psychology Bulletin*, 26(2), 231–241.
<https://doi.org/10.1177/0146167200264009>
- Kowalski, R. M. (2004). Proneness to, perceptions of, and responses to teasing: The influence of both intrapersonal and interpersonal factors. *European Journal of Personality*, 18(4), 331–349. <https://doi.org/10.1002/per.522>
- Krueger, R. A. (2002). *Designing and conducting focus group interviews*. University of Minnesota. <https://www.eiu.edu/ihec/Krueger-FocusGroupInterviews.pdf>
- Kruger, J., Gordon, C. L., & Kuban, J. (2006). Intentions in teasing: When “just kidding” just isn’t good enough. *Journal of Personality and Social Psychology*, 90(3), 412–425.
<https://doi.org/10.1037/0022-3514.90.3.412>

Ledley, D. R., Storch, E. A., Coles, M. E., Heimberg, R. G., Moser, J., & Bravata, E. A. (2006).

The relationship between childhood teasing and later interpersonal functioning. *Journal of Psychopathology and Behavioral Assessment*, 28(1), 33–40.

<https://doi.org/10.1007/s10862-006-4539-9>

Lemerise, E. A., & Arsenio, W. F. (2000). An integrated model of emotion processes and cognition in social information processing. *Child Development*, 71(1), 107–118.

<https://doi.org/10.1111/1467-8624.00124>

Lenhart, A. (2012). Teens, smartphones, and texting. Pew Research Center.

<https://www.pewresearch.org/internet/2012/03/19/teens-smartphones-texting/>

Levy, S. R., Ayduk, O., & Downey, G. (2001). The role of rejection sensitivity in people's relationships with significant others and valued social groups. In M. R. Leary (Ed.), *Interpersonal rejection* (pp. 251–282). Oxford University Press.

Li, L., & Yang, Y. (2018). Pragmatic functions of emoji in internet-based communication -- a corpus-based study. *Asian-Pacific Journal of Second and Foreign Language Education*, 3(1), Article e16. <https://doi.org/10.1186/s40862-018-0057-z>

Liang, Y. (Jake), & Walther, J. B. (2015). Computer-mediated communication. In J.D. Wright (Ed.), *International encyclopedia of the social and behavioral sciences* (pp. 504–509).

Elsevier. <https://doi.org/10.1016/B978-0-08-097086-8.95090-6>

Lo, S.-K. (2008). The nonverbal communication functions of emoticons in computer-mediated communication. *CyberPsychology & Behavior*, 11(5), 595–597.

[https://doi.org/10.1089/cpb.2007.0132.](https://doi.org/10.1089/cpb.2007.0132)

- London, B., Downey, G., Bonica, C., & Paltin, I. (2007). Social causes and consequences of rejection sensitivity. *Journal of Research on Adolescence*, 17(3), 481–506.
<https://doi.org/10.1111/j.1532-7795.2007.00531.x>
- Machackova, H., Dedkova, L., Sevcikova, A., & Cerna, A. (2018). Bystanders' supportive and passive responses to cyberaggression. *Journal of School Violence*, 17(1), 99–110.
<https://doi.org/10.1080/15388220.2016.1222499>
- Madlock, P. E., & Westerman, D. (2011). Hurtful cyber-teasing and violence: Who's laughing out loud? *Journal of Interpersonal Violence*, 26(17), 3542–3560.
<https://doi.org/10.1177/0886260511403749>
- Manganari, E. (2021). Emoji use in computer-mediated communication. *The International Technology Management Review*, 10(1), 1–11. <https://doi.org/10.2991/itmrv.k.210105.001>
- Marston, E. G., Hare, A., & Allen, J. P. (2010). Rejection sensitivity in late adolescence: Social and emotional sequelae. *Journal of Research on Adolescence*, 20(4), 959–982.
<https://doi.org/10.1111/j.1532-7795.2010.00675.x>
- Matthews, C. M., Thierry, S. M., & Mondloch, C. J. (2020). Recognizing, discriminating, and labeling emotional expressions in a free-sorting task: A developmental story. *Emotion*. Advance online publication. <https://doi.org/10.1037/emo0000851>
- McSweeney, M. A. (2018). *The pragmatics of text messaging: Making meaning in messages* (1st ed.). Routledge. <https://doi.org/10.4324/9781315142340>
- Meehan, K. B., Cain, N. M., Roche, M. J., Clarkin, J. F., & De Panfilis, C. (2018). Rejection sensitivity and interpersonal behavior in daily life. *Personality and Individual Differences*, 126, 109–115. <https://doi.org/10.1016/j.paid.2018.01.029>

- Mills, C. B. (2018). Child's play or risky business? The development of teasing functions and relational implications in school-aged children. *Journal of Social and Personal Relationships*, 35(3), 287–306. <https://doi.org/10.1177/0265407516683557>
- Mills, C. B., & Carwile, A. M. (2009). The good, the bad, and the borderline: Separating teasing from bullying. *Communication Education*, 58(2), 276–301. <https://doi.org/10.1080/03634520902783666>
- Mishna, F., Regehr, C., Lacombe-Duncan, A., Daciuk, J., Fearing, G., & Van Wert, M. (2018). Social media, cyber-aggression and student mental health on a university campus. *Journal of Mental Health*, 27(3), 222–229. <https://doi.org/10.1080/09638237.2018.1437607>
- Newell, A., & Simon, H. A. (1965). Simulation of human processing of information. *The American Mathematical Monthly*, 72(2), 111–118. <https://doi.org/10.1080/00029890.1965.11970705>
- Nguyen, M. H., Gruber, J., Fuchs, J., Marler, W., Hunsaker, A., & Hargittai, E. (2020). Changes in digital communication during the COVID-19 global pandemic: Implications for digital inequality and future research. *Social Media + Society*, 6(3), Article e2056305120948255. <https://doi.org/10.1177/2056305120948255>
- Nowakowski, M. E., & Antony, M. M. (2013). Reactions to teasing in social anxiety. *Cognitive Therapy and Research*, 37(6), 1091–1100. <https://doi.org/10.1007/s10608-013-9551-2>
- Orue, I., Calvete, E., & Padilla, P. (2014). Brooding rumination as a mediator in the relation between early maladaptive schemas and symptoms of depression and social anxiety in adolescents. *Journal of Adolescence*, 37(8), 1281–1291. <https://doi.org/10.1016/j.adolescence.2014.09.004>

Oswald, D., Clark, E., & Kelly, C. (2004). Friendship maintenance: An analysis of individual and dyad behaviors. *Journal of Social and Clinical Psychology*, 23(3), 413–441.

<https://doi.org/10.1521/jscp.23.3.413.35460>

Oxford University Press. (n.d.). LOL. In *OED Online*. Retrieved November 7, 2020, from www.oed.com/view/Entry/291168

Palfrey, J., & Gasser, U. (2008). *Born digital: Understanding the first generation of digital natives*. Basic Books.

Papousek, I., Aydin, N., Lackner, H. K., Weiss, E. M., Bühner, M., Schulter, G., Charlesworth, C., & Freudenthaler, H. H. (2014). Laughter as a social rejection cue: Gelotophobia and transient cardiac responses to other persons' laughter and insult. *Psychophysiology*, 51(11), 1112–1121. <https://doi.org/10.1111/psyp.12259>

Park, J., Baek, Y. M., & Cha, M. (2014). Cross-cultural comparison of nonverbal cues in emoticons on Twitter: Evidence from big data analysis. *Journal of Communication*, 64(2), 333–354. <https://doi.org/10.1111/jcom.12086>

Patterson, L. J., Allan, A., & Cross, D. (2017). Adolescent bystander behavior in the school and online environments and the implications for interventions targeting cyberbullying. *Journal of School Violence*, 16(4), 361–375.

<https://doi.org/10.1080/15388220.2016.1143835>

Paullet, K. L., Pinchot, J. L., Douglas, D., & Rota, D. R. (2011). Mobile technology: Plugged in and always on. *Issues in Information Systems*, 12(1), 141–150.

Pawluk, C. J. (1989). Social construction of teasing. *Journal for the Theory of Social Behaviour*, 19(2), 145–167. <https://doi.org/10.1111/j.1468-5914.1989.tb00142.x>

- Pettigrew, J. (2009). Text messaging and connectedness within close interpersonal relationships. *Marriage & Family Review, 45*(6–8), 697–716.
<https://doi.org/10.1080/01494920903224269>
- Pietrzak, J., Downey, G., & Ayduk, O. (2005). Rejection sensitivity as an interpersonal vulnerability. In M. W. Baldwin (Ed.), *Interpersonal cognition* (pp. 62–84). Guilford Press.
- Platt, T. (2008). Emotional responses to ridicule and teasing: Should gelotophobes react differently? *HUMOR, 21*(2), 105–128. <https://doi.org/10.1515/HUMOR.2008.005>
- Plester, B., Wood, C., & Joshi, P. (2009). Exploring the relationship between children's knowledge of text message abbreviations and school literacy outcomes. *British Journal of Developmental Psychology, 27*(1), 145–161. <https://doi.org/10.1348/026151008X320507>
- Powell, R. A., & Single, H. M. (1996). Focus groups. *International Journal for Quality in Health Care, 8*(5), 499–504. <https://doi.org/10.1093/intqhc/8.5.499>
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon, 9*(5), 1–6.
<https://doi.org/10.1108/10748120110424816>
- Rawlins, W.K. (1982). Cross-sex friendship and the communicative management of sex-role expectations. *Communication Quarterly, 30*(4), 343–352.
<https://doi.org/10.1080/01463378209369470>
- Reddy, V., & Mireault, G. (2015). Teasing and clowning in infancy. *Current Biology, 25*(1), 20–23. <https://doi.org/10.1016/j.cub.2014.09.021>
- Reid, F. J. M., & Reid, D. J. (2010). The expressive and conversational affordances of mobile messaging. *Behaviour & Information Technology, 29*(1), 3–22.
<https://doi.org/10.1080/01449290701497079>

- Rettie, R. (2009). Mobile phone communication: Extending Goffman to mediated interaction. *Sociology*, 43(3), 421–438. <https://doi.org/10.1177/0038038509103197>
- Riordan, M. A. (2017). The communicative role of non-face emojis: Affect and disambiguation. *Computers in Human Behavior*, 76, 75–86. <https://doi.org/10.1016/j.chb.2017.07.009>
- Riordan, M. A., & Glikson, E. (2020). On the hazards of the technology age: How using emojis affects perceptions of leaders. *International Journal of Business Communication*. Advance online publication. <https://doi.org/10.1177/2329488420971690>
- Riordan, M. A., & Kreuz, R. J. (2010). Cues in computer-mediated communication: A corpus analysis. *Computers in Human Behavior*, 26(6), 1806–1817. <https://doi.org/10.1016/j.chb.2010.07.008>
- Riordan, M. A., Kreuz, R. J., & Blair, A. N. (2018). The digital divide: Conveying subtlety in online communication. *Journal of Computers in Education*, 5(1), 49–66. <https://doi.org/10.1007/s40692-018-0100-6>
- Ritter, J., Brück, C., Jacob, H., Wildgruber, D., & Kreifelts, B. (2015). Laughter perception in social anxiety. *Journal of Psychiatric Research*, 60, 178–184. <https://doi.org/10.1016/j.jpsychires.2014.09.021>
- Rodrigues, D., Prada, M., Gaspar, R., Garrido, M. V., & Lopes, D. (2018). Lisbon Emoji and Emoticon Database (LEED): Norms for emoji and emoticons in seven evaluative dimensions. *Behavior Research Methods*, 50(1), 392–405. <https://doi.org/10.3758/s13428-017-0878-6>
- Romero-Canyas, R., Downey, G., Berenson, K., Ayduk, O., & Kang, N. J. (2010). Rejection sensitivity and the rejection–hostility link in romantic relationships. *Journal of Personality*, 78(1), 119–148. <https://doi.org/10.1111/j.1467-6494.2009.00611.x>

- Rose, A.J., & Rudolph, K. D. (2006). A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin, 132*(1), 98–131. <https://doi.org/10.1037/0033-2909.132.1.98>
- Ruch, W. (2009). Fearing humor? Gelotophobia: The fear of being laughed at: Introduction and overview. *HUMOR, 22*(1–2), 1–25. <https://doi.org/10.1515/HUMR.2009.001>
- Ruch, W., Altfreder, O., & Proyer, R. T. (2009). How do gelotophobes interpret laughter in ambiguous situations? An experimental validation of the concept. *HUMOR, 22*(1–2), 63–89. <https://doi.org/10.1515/HUMR.2009.004>
- Ruch, W., Hofmann, J., Platt, T., & Proyer, R. (2014). The state-of-the art in gelotophobia research: A review and some theoretical extensions. *HUMOR, 27*(1), 23–45. <https://doi.org/10.1515/humor-2013-0046>
- Ruch, W., & Proyer, R. T. (2008). The fear of being laughed at: Individual and group differences in gelotophobia. *HUMOR, 21*(1), 47–67. <https://doi.org/10.1515/HUMOR.2008.002>
- Runions, K., Shapka, J. D., Dooley, J., & Modecki, K. (2013). Cyber-aggression and victimization and social information processing: Integrating the medium and the message. *Psychology of Violence, 3*(1), 9–26. <https://doi.org/10.1037/a0030511>
- Salmivalli, C., Ojanen, T., Haanpää, J., & Peets, K. (2005). "I'm OK but you're not" and other peer-relational schemas: Explaining individual differences in children's social goals. *Developmental Psychology, 41*(2), 363–375. <http://doi.org/10.1037/0012-1649.41.2.363>
- Sampietro, A. (2020). Use and interpretation of emoji in electronic-mediated communication: A survey. *Visual Communication Quarterly, 27*(1), 27–39. <https://doi.org/10.1080/15551393.2019.1707086>

- Sarkar, T., Shetty, N., & Humstoe, M. K. (2014). Emoticons & emotions: Contextual interpretation in text messages & consensus of meaning. *The Learning Curve*, 3, 24–33.
- Schrock, A. R. (2015). Communicative affordances of mobile media: portability, availability, locatability, and multimediality. *International Journal of Communication*, 9, 1229–1246.
- Shapiro, J. P., Baumeister, R. F., & Kessler, J. W. (1991). A three-component model of children's teasing: Aggression, humor, and ambiguity. *Journal of Social and Clinical Psychology*, 10(4), 459–472. <https://doi.org/10.1521/jscp.1991.10.4.459>
- Shariff, S. (2014). *Sexting and Cyberbullying: Defining the Line for Digitally Empowered Kids* (pp. 1–35). Cambridge University Press.
<https://doi.org/10.1017/CBO9781139095891.002>
- Skierkowski, D., & Wood, R. M. (2012). To text or not to text? The importance of text messaging among college-aged youth. *Computers in Human Behavior*, 28(2), 744–756.
<https://doi.org/10.1016/j.chb.2011.11.023>
- Skovholt, K., Grønning, A., & Kankaanranta, A. (2014). The communicative functions of emoticons in workplace e-mails. *Journal of Computer-Mediated Communication*, 19(4), 780–797. <https://doi.org/10.1111/jcc4.12063>
- Sperling, S. J. (1953). On the psychodynamics of teasing. *Journal of the American Psychoanalytic Association*, 1(3), 458–483.
<https://doi.org/10.1177/000306515300100304>
- Srivastava, L. (2005). Mobile phones and the evolution of social behaviour. *Behaviour & Information Technology*, 24(2), 111–129.
<https://doi.org/10.1080/01449290512331321910>

- Statistics Canada (2018). Table 22-10-0115-01 Smartphone use and smartphone habits by gender and age group, inactive. <https://doi.org/10.25318/2210011501-eng>
- Steer, O. L., Betts, L. R., Baguley, T., & Binder, J. F. (2020). "I feel like everyone does it"-adolescents' perceptions and awareness of the association between humour, banter, and cyberbullying. *Computers in Human Behavior*, 108, Article e106297.
<https://doi.org/10.1016/j.chb.2020.106297>
- Stopa, L., & Clark, D. M. (2000). Social phobia and interpretation of social events. *Behaviour Research and Therapy*, 38(3), 273–283. [https://doi.org/10.1016/S0005-7967\(99\)00043-1](https://doi.org/10.1016/S0005-7967(99)00043-1)
- Striano, T., & Vaish, A. (2006). Seven- to 9-month-old infants use facial expressions to interpret others' actions. *British Journal of Developmental Psychology*, 24(4), 753–760.
<https://doi.org/10.1348/026151005X70319>
- Subramanian J., Sridharan V., Shu K., & Liu H. (2019) Exploiting emojis for sarcasm detection. In R. Thomson, H. Bisgin, C. Dancy, & A. Hyder (Eds.), *Lecture notes in computer science: Vol 11549. Social, cultural, and behavioral modeling* (pp. 70-80). Springer.
https://doi.org/10.1007/978-3-030-21741-9_8
- Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & Behavior*, 7(3), 321–326.
<https://doi.org/10.1089/1094931041291295>
- Taylor, K., & Silver, L. (2019). Smartphone ownership is growing rapidly around the world, but not always equally. Pew Research Center.
<https://www.pewresearch.org/global/2019/02/05/smartphone-ownership-is-growing-rapidly-around-the-world-but-not-always-equally/>
- Tagliamonte, S. A. (2016). So sick or so cool? The language of youth on the internet. *Language in Society*, 45(1), 1–32. <https://doi.org/10.1017/S0047404515000780>

- Thompson, D., & Filik, R. (2016). Sarcasm in written communication: Emoticons are efficient markers of intention. *Journal of Computer-Mediated Communication*, 21(2), 105–120.
<https://doi.org/10.1111/jcc4.12156>
- Thompson, L., & Cupples, J. (2008). Seen and not heard? Text messaging and digital sociality. *Social & Cultural Geography*, 9(1), 95–108. <https://doi.org/10.1080/14649360701789634>
- Thurlow, C., & Brown, A. (2003). Generation Txt? The sociolinguistics of young people's text-messaging. *Discourse Analysis Online*, 1, 30.
- Thurlow, C., Lengel, L. B., & Tomic, A. (2004). *Computer mediated communication: Social interaction and the Internet*. SAGE Publications.
- Thurlow, C., & Poff, M. (2013). Text messaging. In S. Herring, D. Stein, & T. Virtanen (Eds.), *Pragmatics of Computer-Mediated Communication* (pp. 163–190). De Gruyter Mouton.
<https://doi.org/10.1515/9783110214468.163>
- Trosby, F., Holley, K., & Harris, I. (2010). Short message service (SMS): The creation of personal global text messaging (F. Hillebrand, Ed.; 2nd ed.). Wiley.
<https://doi.org/10.1002/9780470689899>
- Vodanovich, S., Sundaram, D., & Myers, M. (2010). Research commentary - Digital natives and ubiquitous information systems. *Information Systems Research*, 21(4), 711–723.
<https://doi.org/10.1287/isre.1100.0324>
- Völker, J., & Mannheim, C. (2021). Tuned in on senders' self-revelation: Emojis and emotional intelligence influence interpretation of WhatsApp messages. *Computers in Human Behavior Reports*, 3, Article e100062. <https://doi.org/10.1016/j.chbr.2021.100062>

- Vorderer, P., Krömer, N., & Schneider, F. M. (2016). Permanently online - Permanently connected: Explorations into university students' use of social media and mobile smart devices. *Computers in Human Behavior*, 63, 694–703.
<https://doi.org/10.1016/j.chb.2016.05.085>
- Waite, P., Codd, J., & Creswell, C. (2015). Interpretation of ambiguity: Differences between children and adolescents with and without an anxiety disorder. *Journal of Affective Disorders*, 188, 194–201. <https://doi.org/10.1016/j.jad.2015.08.022>
- Walther, J. B. (1992). Interpersonal effects in computer-mediated interaction: A relational perspective. *Communication Research*, 19(1), 52–90.
<https://doi.org/10.1177/009365092019001003>
- Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. *Communication Research*, 23(1), 3–43.
<https://doi.org/10.1177/009365096023001001>
- Walther, J. B. (2011). Theories of computer-mediated communication and interpersonal relations. In M.L. Knapp & J.A. Daly (Eds.), *The SAGE Handbook of Interpersonal Communication* (4th ed., pp. 443-479). SAGE Publications.
- Wang, W., Zhao, Y., Qiu, L., & Zhu, Y. (2014). Effects of emoticons on the acceptance of negative feedback in computer-mediated communication. *Journal of the Association for Information Systems*, 15(8), 454–483. <https://doi.org/10.17705/1jais.00370>
- Weissman, B., & Tanner, D. (2018). A strong wink between verbal and emoji-based irony: How the brain processes ironic emojis during language comprehension. *PLoS ONE*, 13(8), Article e0201727. <https://doi.org/10.1371/journal.pone.0201727>

- Wood, A., & Niedenthal, P. (2018). Developing a social functional account of laughter. *Social and Personality Psychology Compass*, 12(4). <https://doi.org/10.1111/spc3.12383>
- Wright, M. O., Crawford, E., & Del Castillo, D. (2009). Childhood emotional maltreatment and later psychological distress among college students: The mediating role of maladaptive schemas. *Child Abuse & Neglect*, 33(1), 59–68.
<https://doi.org/10.1016/j.chabu.2008.12.007>
- Zimmer-Gembeck, M. J., Nesdale, D., Webb, H. J., Khatibi, M., & Downey, G. (2016). A longitudinal rejection sensitivity model of depression and aggression: Unique roles of anxiety, anger, blame, withdrawal and retribution. *Journal of Abnormal Child Psychology*, 44(7), 1291–1307. <https://doi.org/10.1007/s10802-016-0127-y>

Appendix A: Certificate of Ethics Approval

File Number: H08-16-15

Date (mm/dd/yyyy): 12/13/2016



Université d'Ottawa
Bureau d'éthique et d'intégrité de la recherche

University of Ottawa
Office of Research Ethics and Integrity

Certificate of Ethics Approval Health Sciences and Science REB

Principal Investigator / Supervisor / Co-investigator(s) / Student(s)

<u>First Name</u>	<u>Last Name</u>	<u>Affiliation</u>	<u>Role</u>
Alastair	Younger	Social Sciences / Psychology	Principal Investigator/Supervisor
Kristen	Keane	Social Sciences / Psychology	Student Researcher

File Number: H08-16-15

Type of Project: Professor and PhD Thesis

Title: Teasing Interpretation in Computer-Mediated Communication

Approval Date (mm/dd/yyyy)

12/13/2016

Expiry Date (mm/dd/yyyy)

12/12/2017

Special Conditions / Comments:

N/A

1

550, rue Cumberland 550 Cumberland Street
 Ottawa (Ontario) K1N 6N5 Canada Ottawa, Ontario K1N 6N5 Canada
 (613) 562-5387 • Téléc./Fax (613) 562-5338
<http://www.recherche.uottawa.ca/deontologie/> <http://www.research.uottawa.ca/ethics/index.html>

File Number: H08-16-15

Date (mm/dd/yyyy): 12/13/2016



Université d'Ottawa
Bureau d'éthique et d'intégrité de la recherche

University of Ottawa
Office of Research Ethics and Integrity

This is to confirm that the University of Ottawa Research Ethics Board identified above, which operates in accordance with the Tri-Council Policy Statement and other applicable laws and regulations in Ontario, has examined and approved the application for ethical approval for the above named research project as of the Ethics Approval Date indicated for the period above and subject to the conditions listed the section above entitled "Special Conditions / Comments".

During the course of the study the protocol may not be modified without prior written approval from the REB except when necessary to remove participants from immediate endangerment or when the modification(s) pertain to only administrative or logistical components of the study (e.g. change of telephone number). Investigators must also promptly alert the REB of any changes which increase the risk to participant(s), any changes which considerably affect the conduct of the project, all unanticipated and harmful events that occur, and new information that may negatively affect the conduct of the project and safety of the participant(s). Modifications to the project, information/consent documentation, and/or recruitment documentation, should be submitted to this office for approval using the "Modification to research project" form available at: <http://research.uottawa.ca/ethics/submissions-and-reviews>.

Please submit an annual status report to the Protocol Officer 4 weeks before the above-referenced expiry date to either close the file or request a renewal of ethics approval. This document can be found at: <http://research.uottawa.ca/ethics/submissions-and-reviews>.

If you have any questions, please do not hesitate to contact the Ethics Office at extension 5387 or by e-mail at: ethics@uOttawa.ca.

Germain Zongo
Protocol Officer for Ethics in Research
For Daniel Lagarec, Chair of the Sciences and Health Sciences REB

2

550, rue Cumberland 550 Cumberland Street
 Ottawa (Ontario) K1N 6N5 Canada Ottawa, Ontario K1N 6N5 Canada
 (613) 562-5387 • Téléc./Fax (613) 562-5338
<http://www.recherche.uottawa.ca/deontologie/> <http://www.research.uottawa.ca/ethics/index.html>



Université d'Ottawa University of Ottawa

Bureau d'éthique et d'intégrité de la recherche Office of Research Ethics and Integrity

Health Sciences and Science Research Ethics Board

APPROVAL OF MODIFICATIONS

May 26, 2017

Alastair Younger
 School of Psychology
 Faculty of Social Sciences
 University of Ottawa
 136 Jean-Jacques Lussier
 Ottawa, ON K1N 6N5

Kristen Keane

RE: Teasing Interpretation in Computer-Mediated Communication (H 08-16-15)

Dear Professor Younger and Ms. Keane,

The Health Sciences and Science Research Ethics Board has examined your request for ethics approval of the following modifications to your research project:

- The procedure will involve the manipulation of the stimuli to evaluate the role of non-verbal cues as well as relationship closeness. Participants will be presented the same ambiguous text messages piloted in the previous phase, but will be randomly assigned an equal number of original messages and manipulated messages.
- Participants will be administered the measure of Rejection Sensitivity after the presentation of the text message stimuli to reduce possible response contamination.

Your request has been accepted. The certificate of ethics approval granted on December 13, 2016 and valid until December 12, 2017 covers these modifications.

During the course of the study, any further modifications to the protocol or forms may not be initiated without prior written approval from the REB. You must also promptly notify the REB of any adverse events that may occur.

If you have any questions, please do not hesitate to contact me at extension 5387.

Sincerely yours,

Germain Zongo
 Protocol Officer for Research Ethics
 For Daniel Lagarec, Chair of the Health Sciences and Sciences REB

Appendix B: Consent Forms

LETTER OF CONSENT TO PARTICIPATE IN RESEARCH

Focus Group Teasing Via Text Messaging

INVESTIGATORS

This research study is being conducted by Kristen Keane, a doctoral student of the Clinical Psychology program from the School of Psychology at the University of Ottawa. The research is part of Kristen Keane's doctoral thesis under the supervision of Dr. Alastair Younger.

If you have any questions or concerns about the research, please feel free to contact:

Dr. Alastair Younger, PhD
School of Psychology
University of Ottawa, Ottawa, Canada
Phone: +1 (613) 562-5905

Kristen Keane
School of Psychology
University of Ottawa, Ottawa, Canada

PURPOSE OF THE STUDY

You are invited to take part in a focus group about teasing that occurs through technological media. The purpose of the group is to try and understand how individuals tease one another and interpret teasing when using technology such as text messaging. We are hoping to gather examples of teasing messages that could be interpreted as either playful or hurtful. We are also hoping to learn about the most common ways people communicate to others that they are joking such as through the use of emoticons or abbreviations. The information gathered in the focus group will be used to create hypothetical teasing text messages to be used to explore this concept in a future study.

DESCRIPTION OF THE STUDY AND YOUR PARTICIPATION

If you volunteer to participate in this study, you will be asked to do the following things:

Upon arrival you will be asked to fill out a brief questionnaire about your demographics (e.g., age, education, cell phone use). You will be in a group with 9 other undergraduate students in which the topic of teasing through technology will be discussed. We would like to brainstorm as many examples of teasing that take place through technology and the factors that influence the interpretation of these messages. You can choose whether or not to participate in the group and you can stop at any time. There are no right or wrong answers to the questions being asked. Different people will have different experiences and perspectives and we hope you can be honest even when your answers might be different from those of others. The focus group will last no longer than 90 minutes and will take place at the University of Ottawa. If at any point you wish to end your participation in the focus group, you may do so without penalty.

POTENTIAL RISKS & DISCOMFORTS

The risks of participating in this focus group are very low. As teasing can be experienced in both positive and negative ways, you may start to think about experiences you have had with teasing in the past. You may feel uncomfortable sharing your experiences or worry about how others will react to what you say. You do not need to answer questions that you do not want to answer or that make you feel uncomfortable. Below is a description of the steps that will be taken to protect your privacy. If you feel any distress following your participation, please reach out to one of the available on-campus or off-campus services outlined on the list provided. We encourage you to contact Kristen Keane or Dr. Younger should you have any questions regarding your participation in the study or if you wish to discuss any discomfort you have experienced during or following the focus group.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Your participation in this study will provide you with knowledge about research conducted in psychology. You are welcome to ask the moderator, Kristen Keane, specific project or more general research questions. You may also develop an awareness of both personal and general experiences of teasing that takes place through technology. You may also learn about different ways teasing messages may be interpreted when sent through text messaging. Overall, we hope this research will shed light on a form of social communication that has become complex with technological advancement. We hope to develop a better understanding of how individuals interpret teasing that takes place through technology and the potential impact of cues that are sometimes used to facilitate interpretation.

COMPENSATION FOR PARTICIPATION

All ISPR students will receive 2 marks towards their final mark in an undergraduate psychology course following their participation in the focus group.

CONFIDENTIALITY

Every effort will be made to protect your confidentiality and privacy. Although the focus group will be audio recorded, your responses will remain anonymous and no names will be used at any time. During the focus group, pseudonyms will be used to protect your identity. We will ask the other members of the focus group to keep what you say confidential, but we cannot guarantee that they will do so. All records will be secured within an encrypted file on a secure computer in a locked office at the University of Ottawa. All paper documents will be secured within a locked file cabinet in a locked office. Only the two investigators will have access to these records. The information gathered during this focus group may be used for a graduate student's dissertation thesis, published in scholarly publications, or be used during public presentations. In all cases your identity will remain confidential. All data will be kept for five years following the completion of the study and then securely deleted or shredded.

VOLUNTARY PARTICIPATION AND WITHDRAWAL

Participation in this study is voluntary. It is your choice to be a participant in this study or not. If you do not want to answer all of the questions during the focus group you do not have to and you can still be part of the study. You can stop your participation in the focus group at any time, for any reason, even after signing the consent form. There will be no consequence to you if you choose to withdraw from the study. If you choose to leave the focus group for any reason you will still obtain the allotted compensation for your participation. Given that the data are being collected by way of group discussion, in the event that you do withdraw from the study, it is important to note that we will be unable to remove your data. Your participation will not influence your future relations with the University of Ottawa.

INFORMATION ABOUT STUDY RESULTS

Once the study is completed the research findings can be made available to participants by contacting Dr. Younger or Kristen Keane.

QUESTIONS ABOUT THE STUDY:

If you have questions or need more information about the study itself, please contact:

Kristen Keane

This study has been reviewed by the University of Ottawa Research Ethics Board. If you have questions regarding your rights as a research participant in this study, please contact:

Office of Research Ethics and Integrity

Tabaret Hall
550 Cumberland St
Room 154
Ottawa, ON, Canada
K1N 6N5
Tel.: (613) 562-5387
Fax.: (613) 562-5338
ethics@uottawa.ca

CONSENT

- I have read the information presented in the information letter about a study being conducted by Kristen Keane and Dr. Alastair Younger of the University of Ottawa.
- I have had the opportunity to ask questions about my involvement in this study and to receive additional details that I requested.
- I agree to be audio recorded.
- I will keep the information shared by others in the focus group confidential.
- I understand that if I agree to participate in this study, I may withdraw from the study at any time.
- I have been given a copy of this form.
- I agree to participate in the study.

Name of Participant (Printed): _____

Signature: _____ Date: _____

Researcher's Signature: _____ Date: _____

Letter of Consent for the Online Pilot Study and Main Studies

WELCOME TO THE STUDY

Although it is possible to complete this survey on a mobile phone, it is highly recommended that you use a computer/laptop due to the graphics and formatting.

*Please provide your 6-digit ISPR code before proceeding.

LETTER OF CONSENT TO PARTICIPATE IN RESEARCH

Teasing Interpretation in Computer-Mediated Communication

You are being invited to participate in an online study. Before proceeding to the questionnaire, please read this Consent Form so that you understand what your participation will involve. Please ask any questions necessary (via email to Kristen Keane) before consenting to your participation in the study.

INVESTIGATORS

This research study is being conducted by Kristen Keane, a doctoral student of the Clinical Psychology program from the School of Psychology at the University of Ottawa. The research is part of Kristen Keane's doctoral thesis under the supervision of Dr. Alastair Younger.

If you have any questions or concerns about the research, please feel free to contact:

Alastair Younger, PhD
School of Psychology
Vanier Hall Building (Room 6017)
University of Ottawa, Ottawa, Canada

Kristen Keane
School of Psychology
University of Ottawa, Ottawa, Canada

PURPOSE OF THE STUDY

You are invited to take part in an online study about teasing that occurs through technological media. The purpose of the study is to try and understand how individuals interpret teasing when using technology such as text messaging.

DESCRIPTION OF THE STUDY AND YOUR PARTICIPATION

If you volunteer to participate in this study, you will be asked to do the following things:
Once you agree to participate in this study, you will be asked to fill out a brief questionnaire about your demographics (e.g., age, cell phone use). You will then be presented with a series of hypothetical teasing text messages and will be asked for your interpretation of the message. Lastly, you will be asked to complete a questionnaire that has you answer questions regarding your predicted feelings and expectations in imagined interpersonal situations. There are no right or wrong answers to the questions being asked. The online questionnaire should take no longer than 60 minutes to complete. If at any point you wish to withdraw your participation, you may do so without penalty.

POTENTIAL RISKS & DISCOMFORTS

The risks of participating in this online study are very low. As teasing can be experienced in both positive and negative ways, you may start to think about experiences you have had with teasing in the past. You do not need to answer questions that make you feel uncomfortable. Below is a description of the steps that will be taken to protect your privacy. If you feel any distress following your participation, please reach out to one of the available on-campus or off-campus services outlined on the list provided ([Mental Health Resources](#)). We encourage you to contact Kristen Keane or Dr. Younger should you have any questions regarding your participation in the study or if you wish to discuss any discomfort you have experienced during or following the online questionnaire.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Your participation in this study will provide you with knowledge about research conducted in psychology. You are welcome to ask Kristen Keane specific project or more general research questions. You may also develop an awareness of both personal and general experiences of teasing that take place through technology. You may also learn about different ways teasing messages may be interpreted when sent through text messaging. Overall, we hope this research will shed light on a form of social communication that has become complex with technological advancement. We hope to develop a better understanding of how individuals interpret teasing that takes place through technology.

COMPENSATION FOR PARTICIPATION

All ISPR students will receive 1 mark towards their final mark in an undergraduate psychology course following their participation in the online study.

CONFIDENTIALITY

Every effort will be made to protect your confidentiality and privacy. No personal identifying information will be asked for during the study and only your ISPR code will be used as an identifier to assign course credit. In order to ensure the protection of the collected data, the website used for the online survey (i.e., Qualtrics) is password protected with the data stored on their server behind a firewall. Qualtrics is an American based software and therefore all data collected as a part of this study are subject to the US Patriot Act. Once downloaded, all the records will be secured within an encrypted file on a secure computer in a locked office at the University of Ottawa. Any paper documents will be secured within a locked file cabinet in a locked office. Only the two investigators will have access to these records. The information gathered during this study may be used for a graduate student's dissertation thesis, published in scholarly publications, or be used during public presentations. In all cases your identity will remain confidential. All data will be kept for five years following the completion of the study and then securely deleted or shredded.

VOLUNTARY PARTICIPATION AND WITHDRAWAL

Participation in this study is voluntary. It is your choice to be a participant in this study or not. If you do not want to answer all of the questions you do not have to, and you can still be part of the study. You can stop your participation in the study at any time, for any reason, even after consenting to participate. There will be no consequence to you if you choose to withdraw from the study. If you choose to stop your participation during the questionnaire for any reason you will still obtain the allotted compensation. Your data will be destroyed, unless you indicate that we have your permission to use it. Your participation will not influence your future relations with the University of Ottawa.

INFORMATION ABOUT STUDY RESULTS

Once the study is completed the research findings can be made available to participants by contacting Dr. Younger or Kristen Keane.

QUESTIONS ABOUT THE STUDY:

If you have questions or need more information about the study itself, please contact:

Kristen Keane

This study has been reviewed by the University of Ottawa Research Ethics Board. If you have questions regarding your rights as a research participant in this study, please contact:

Office of Research Ethics and Integrity

Tabaret Hall
550 Cumberland St
Room 154
Ottawa, ON, Canada
K1N 6N5
Tel.: (613) 562-5387
Fax.: (613) 562-5338
ethics@uottawa.ca

SIGNATURE OF RESEARCH PARTICIPANT

By clicking on the “YES” button, you indicate that you have read the information in this agreement and have had a chance to ask any questions you have about the study “**Teasing Interpretation in Computer-Mediated Communication**” as described herein. Your questions have been answered to your satisfaction and you agree to participate in this study. If you would like to download a copy of the consent form for your records, please click on the attached file ([ConsentForm](#)).

Mental Health Resources

If you are experiencing any distress following your participation in this study, we urge you to reach out to one of the many resources at your disposal. Both on-campus and external resources are available to help with whatever your particular needs may be.



If you have immediate safety concerns for yourself or others, call **911**, or (if on campus) Protection Services at **613-564-5411**.

On-Campus Support

Student Academic Success Service (SASS): Counselling and Coaching Service

To make an appointment: Phone 613-562-5200 or in person at 100 Marie-Curie, 4th floor

Hours of operation: September 1-May 31, Monday-Friday, 9 am to 4:30 pm (shorter summer hours)

University of Ottawa Health Services (UOHS)

Mental Health Services

Provides counselling services to registered UOHS patients. Phone number: 613-564-3950

Walk-in Clinic

The Walk-in clinic (100 Marie Curie, Ottawa) provides medical services without an appointment. It is not specially for mental health issues, but can help you if in need of quick assistance.

Hours of Operation: Weekdays 8am-8pm, Weekends/Holidays 10am-2pm

(The clinic is closed Sundays from June-August, December 25th-26th, and January 1st)

Student Federation of the University of Ottawa (SFUO): Peer Help Centre

The Peer Help Centre offers active listening for students who wish to talk to someone. (Drop-in or appointment)

Hours of Operation: Monday-Thursday 10:30-4pm, Friday 10:30-3pm (211D-85 University Private)

Support help line after regular hours (August to June, Monday to Friday, 7 pm to 1 am) by calling: 613-562-5604.

Off-Campus Resources

For a detailed list of services please visit: sass.uottawa.ca/en/personal/services/mental-health-wellness/get-help

The eMentalHealth directory (<http://www.ementalhealth.ca/>) is another great website to help you find services near you including walk-in counselling clinics, helplines and mental health professionals.

Crisis Support

Crisis Line Ottawa: 613-722-6914 or 1-866-996-0991

Ottawa Mental Health Crisis Line (24h): 613-722-6914

Ottawa Distress Centre (24h): 613-238-3311

Good2talk, the post-secondary student helpline - 24/7 (bilingual): 1-866-925-5454

Assaulted Women's Helpline (24h): 1-866-863-0511

Sexual Assault Support Centre of Ottawa (24h): 613-234-2266

YSB Crisis Line (24h): 613-260-2360

Fem'aide - ligne de soutien: 1-877-336-2433 (French only)

Tel-aide Outaouais (8am-Midnight): 613-741-6433 / 819-775-3223 (French only)

Appendix C: Focus Group Facilitator Guide

TEASING VIA TEXT MESSAGING FOCUS GROUP INTERVIEW GUIDE Researcher: Kristen Keane

NOTE: TEXT WRITTEN IN **BOLD CAPITAL LETTERS CONSTITUTES ADDITIONAL REMINDERS MEANT TO GUIDE THE FOCUS GROUP FACILITATOR.**

BEFORE PARTICIPANTS ARRIVE, DISTRIBUTE SCRAP PAPER, PENS, & CONSENT FORMS

THE COMPLETION OF THE INTRODUCTORY SECTION OF THE FOCUS GROUP SHOULD TAKE APPROXIMATELY 10-15 MINUTES

I. INTRODUCTION AND INSTRUCTIONS:

Hello, my name is [your name]. Thank you for agreeing to be a part of this focus group. We really appreciate your willingness to participate.

POINT OUT REFRESHMENTS & ENSURE EVERYONE HAS A NAME TAG

Before we get started, let me take a moment to outline how tonight will proceed. In a minute I will walk you through the consent form you have in front of you and set the ground rules for the evening. Then we will spend a few moments introducing ourselves – pseudonyms only – and spend a little time breaking the ice. Then I will start tonight's discussion by posing a few questions to the group. There are no right or wrong answers to the questions. This evening is about getting your perspective and feedback. After the discussion, I will invite you to fill in an anonymous “information sheet” to help us generally describe the kind of people who were part of the group today. You can expect this discussion group to last about 90 minutes.

REVIEW INFORMED CONSENT FORM AND ANSWER ANY QUESTIONS. COLLECT SIGNED CONSENT FORMS AND ENSURE THAT PARTICIPANTS HAVE A COPY TO TAKE WITH THEM.

Confidentiality: Before we begin our discussion, I want to spend a few moments talking about confidentiality and to go over some basic ground rules for our focus group discussion today:

- Everyone's views are welcomed and important.
⇒ There are no right or wrong answers. Every person's experiences and opinions are important. Speak up whether you agree or disagree. We want to hear a wide range of opinions.

- What is said in the room...stays in the room.
 - ⇒ We want everyone to feel comfortable sharing. The information that we will collect today will be only *associated* with you as a group. We will not identify quotes or ideas with any single person in this group.
 - ⇒ It is important that what you hear from other members of the group stays confidential; that includes not sharing stories or the perspectives of others once you leave this room. Even though we have made these requests, you know that we cannot guarantee that the request will be honoured by everyone in the room.
 - ⇒ With this in mind, we ask that you only share comments that you would be comfortable making in a public setting and hold back making comments that you would not say publicly.

- My role as the facilitator:
 - ⇒ We want to make sure everyone's opinion is heard; therefore, I will moderate the discussion ensuring that not too many people are speaking at once and that everyone gets a chance to contribute.
 - ⇒ If I feel that the conversation is straying off track, I may step in and re-focus the group onto the topic.
 - ⇒ I may also use a "flip chart"/take notes to keep track of key points during the discussion.

Use of Tape Recorder:

- This focus group will be audio recorded to increase accuracy and to reduce the chance of misinterpreting what anyone has said.
- All the digital files and transcripts will be kept secure. Electronic passwords will be used for digital files and all paper records will be kept in a locked cabinet.
- No names will be used in these files and codes will be used instead.
- For transcription purposes, I might ask you to say your "name", your pseudonym, the first few times you speak. This will help us correctly code each person's answers.

AT THIS POINT, GROUP MEMBERS CAN QUICKLY INTRODUCE THEMSELVES
(remind them that it is 'pseudonyms only')

II. INTERVIEW:

Icebreaker Activity [ALL FOCUS GROUPS]:

PLACE QUESTIONS IN CUP AND HAVE PARTICIPANTS PULL ONE AT A TIME.

[E.g., Which of Snow White's seven dwarfs (Doc, Happy, Bashful, Sleepy, Sneezy, Grumpy, Dopey) describe you best and why? If you could go only to one restaurant for the next five years, which one would it be?]

FOCUS GROUP 1:

Discussion Starters

- When I bring up the topic of teasing, what types of acts or behaviours come to mind? (If only negative examples are being referenced, ask: Are there examples of teasing that can be positive?)
- Now I want you to think about your experiences with technology. Reflect on your personal experience (or that of others). What are examples of teasing that happen through technological media (i.e., through Facebook messages or text messages rather than in person)?
- Are there examples you can think of when it is hard to tell whether someone is teasing/joking or being serious/hurtful?

[GENERATE AS MANY EXAMPLES AS POSSIBLE AS A GROUP]

- What are the different ways we could interpret these messages?

[GENERATE INTERPRETATIONS (POSITIVE & NEGATIVE) FOR THE ABOVE EXAMPLES]

- Think about situations when you have either sent a teasing message or been the recipient; how did you know it was intended to be a joke/playful/friendly?

FOCUS GROUP 2:

Introduction:

- Teasing is a behaviour that most of us have engaged in since we were children. It is often used in play, but it can also sting and be hurtful. In person we have many ways to communicate to others our intention, but even then, it can sometimes be hard to know if someone is truly "just kidding". Technology has created new ways of communicating and many of us spend a great deal of our time interacting with others online or through text messaging. Have you ever wondered if a message was supposed to be taken seriously or as a joke? Have you ever tried to playfully tease someone but were not sure if they understood that you were only kidding? Although technology has facilitated our communication with others, it has also complicated our interactions. In person we may sometimes struggle to figure out someone's tone or intention and now this is even more challenging when communicating through technology.

- In collaboration with undergraduate students, a series of hypothetical teasing messages that might be sent through text messaging were created. These messages are meant to be ambiguous, meaning that it is hard to tell whether they are intended to be funny or hurtful.

Workbook:

HAND OUT TEASING MESSAGES WORKBOOKS & PROVIDE INSTRUCTIONS

- Instruct participants to write a positive and negative interpretation that comes to their mind for each of the messages.
- Instruct participants to rate/improve the realism of the text messages (i.e., How realistic do you find this message? Are there any changes you would make to the wording of the text message in order to make it more realistic?)
- Encourage participants to write additional examples of teasing text messages and interpretations in the extra space provided.
- Instruct participants to select the emoji and initialism that is the most used to signal playful teasing intent in text messaging.

Group Discussion:

- Discuss the different types of cues that are used to help us interpret/decode/figure out the intention. (E.g., In person we might smile/nudge the person we are teasing to let them know it is a joke. What type of digital cues do we use?)
- Discuss participants thoughts regarding the workbook text messages and the interpretations developed.
- Brainstorm additional examples as a group: Are there other examples you can think of when it is hard to tell whether someone is teasing/joking or being serious/hurtful through text messaging?

Wrap-Up [ALL FOCUS GROUPS]:

- Is there anything we have forgotten or something important that we should know?
- Hand out and introduce the anonymous “information sheet” (i.e., demographic/texting questionnaire).
- Remind participants that “what is said in the room should stay in the room”.
- Thank the participants!

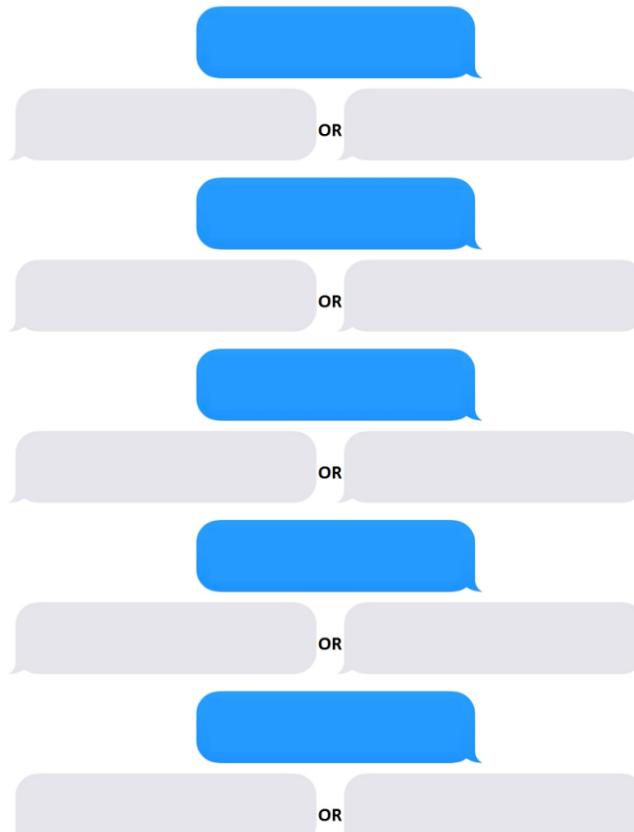
TIPS FOR FACILITATOR

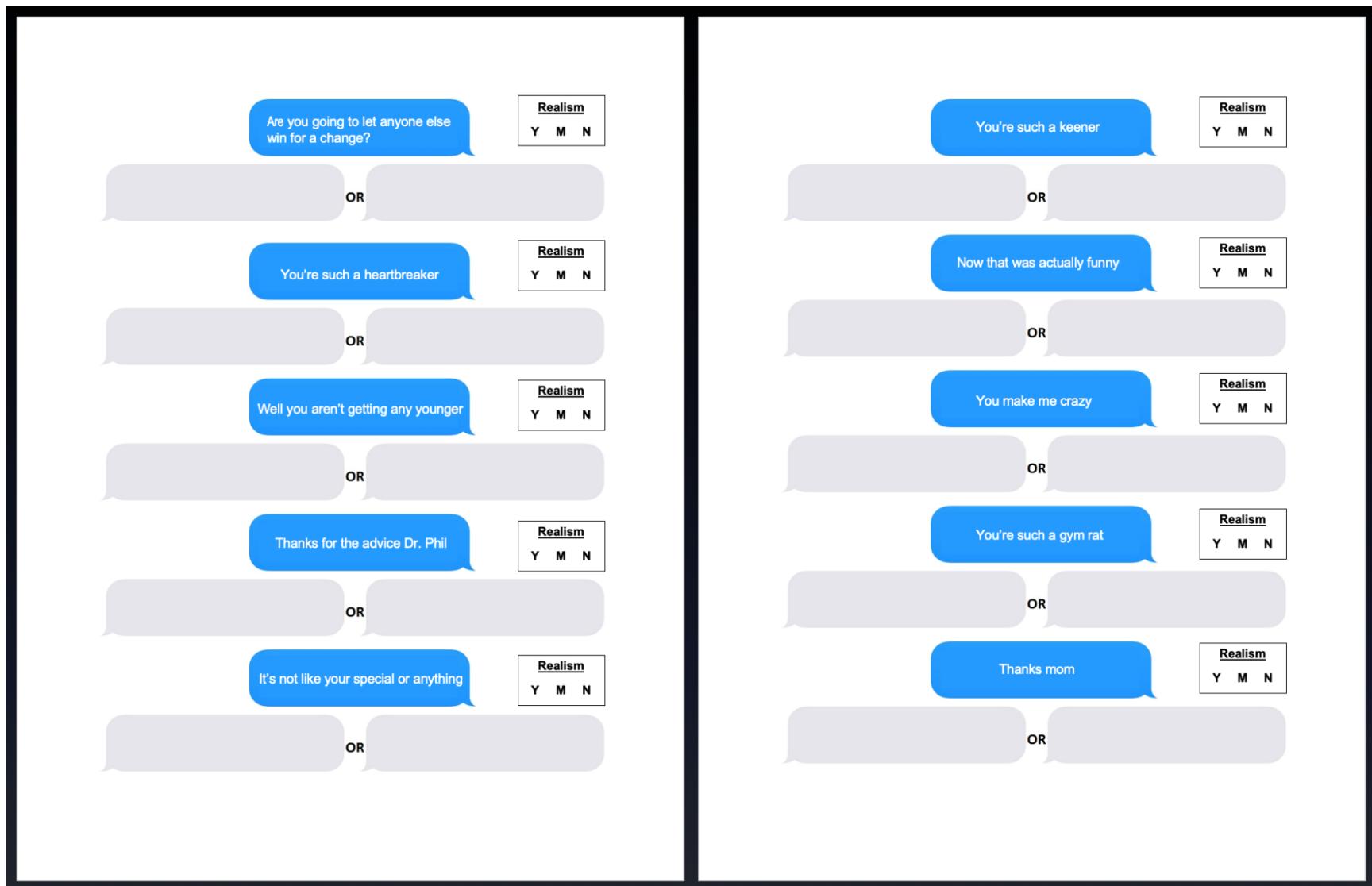
Helpful probes include: “*Can you talk about that more?*”, “*Help me understand what you mean*”, “*Can you give an example?*”

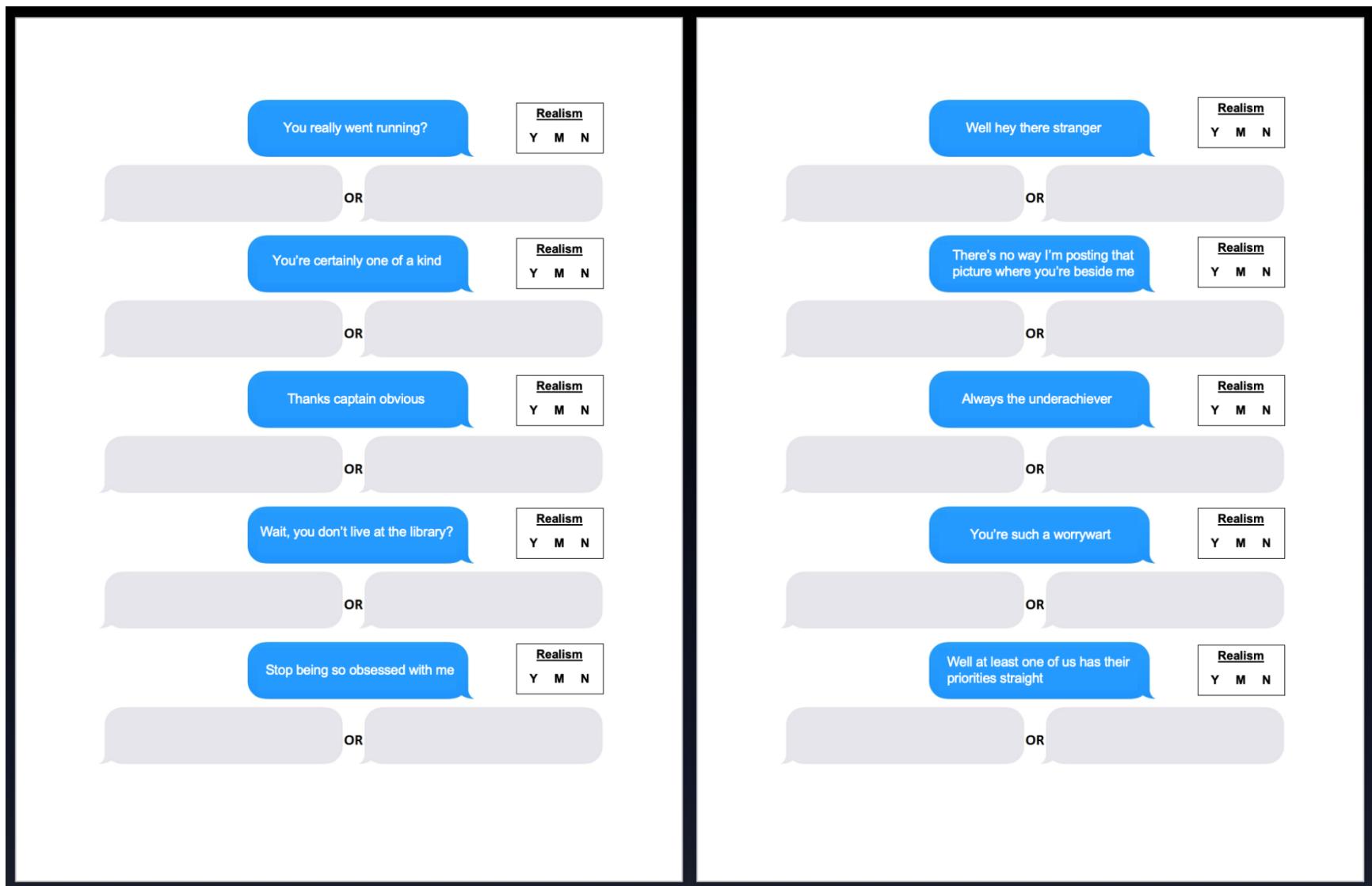
Use active listening: Paraphrase/summarize long, complex, or ambiguous comments.

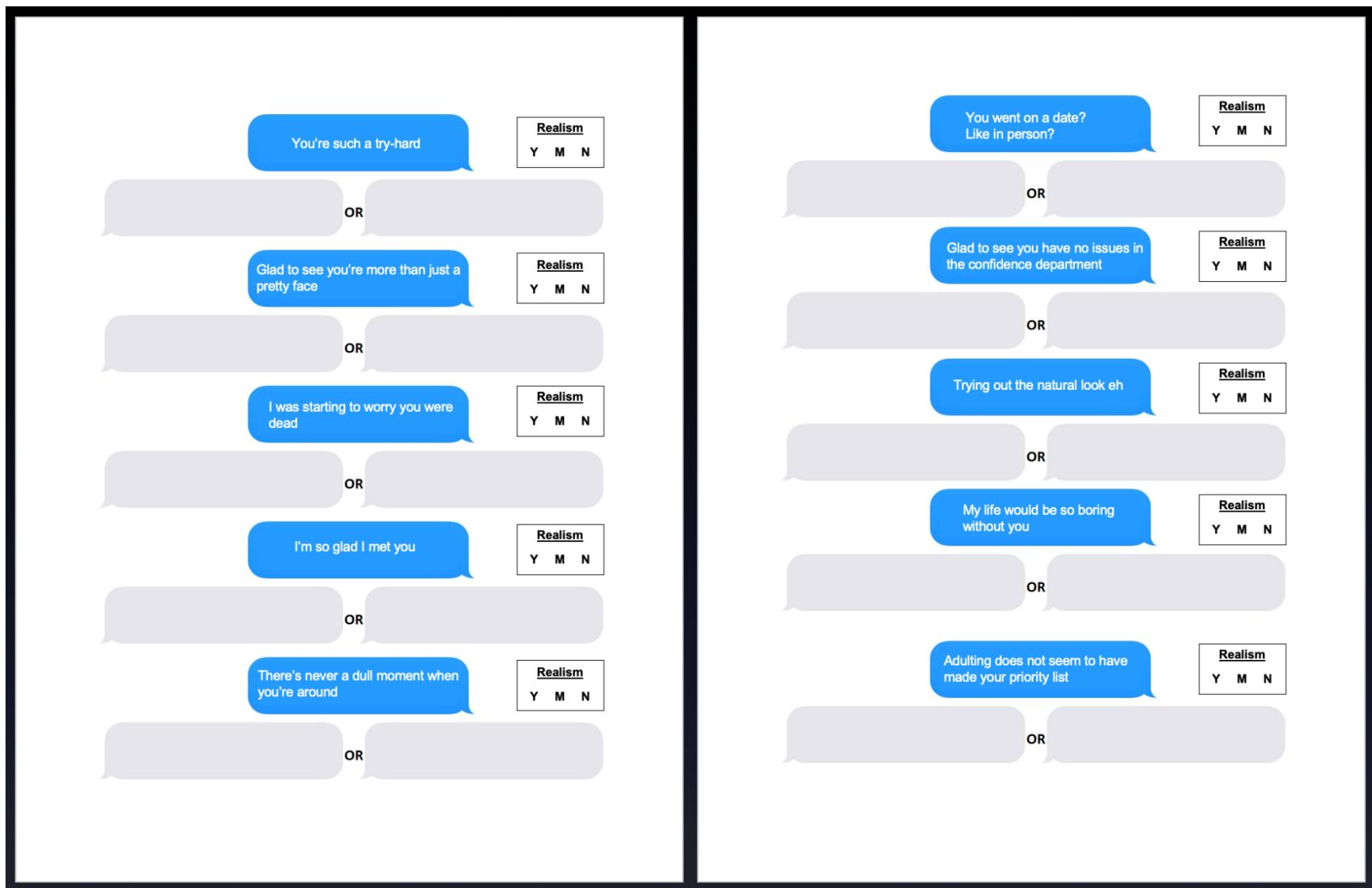
Remain neutral: Refrain from nodding/raising eyebrows, agreeing/disagreeing, or praising/denigrating any comment.

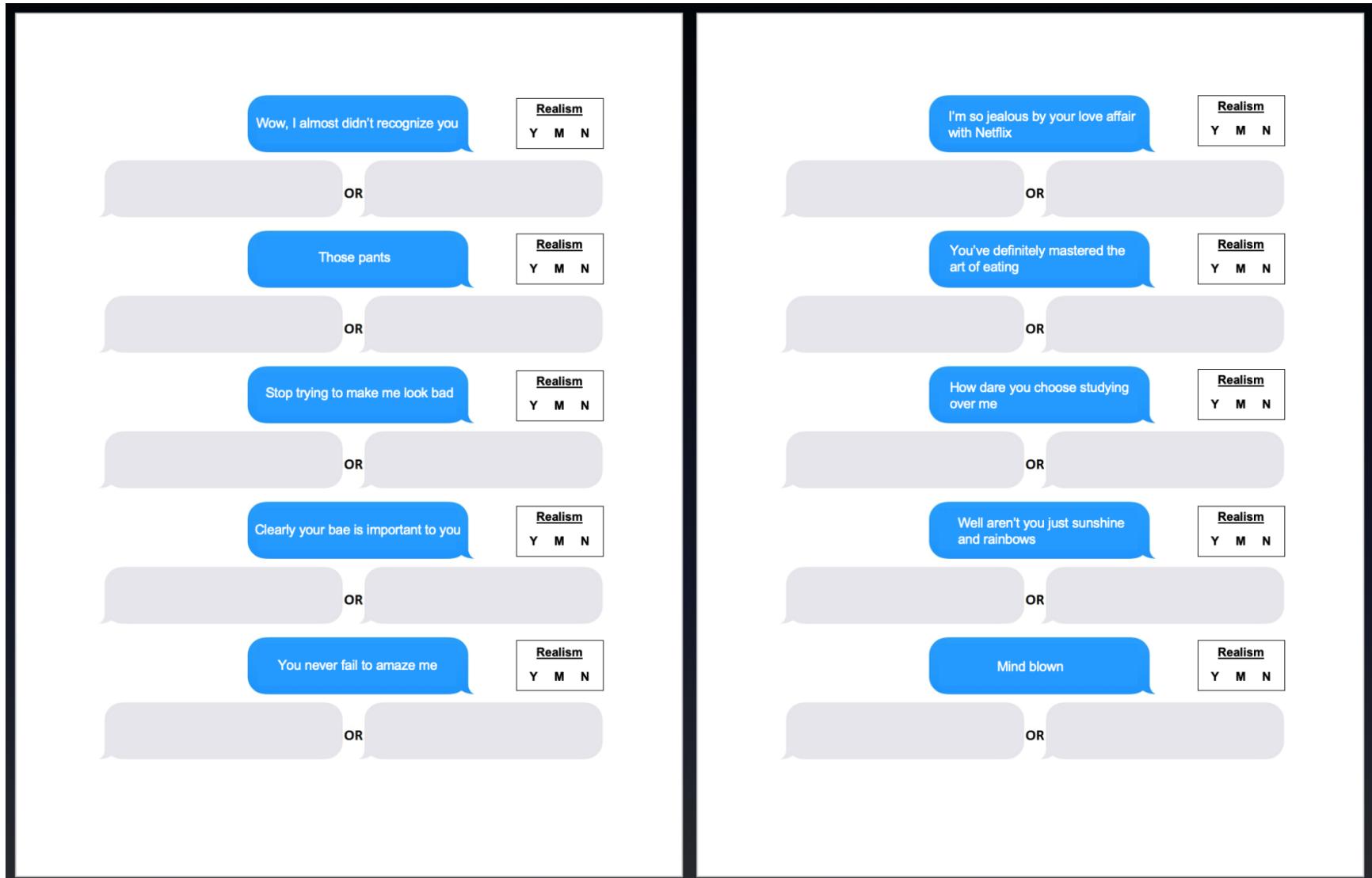
Appendix D: Focus Group Workbook

<p><u>Instructions</u></p> <p>For each “text message” ...</p> <ol style="list-style-type: none">1) Write the <u>negative/hurtful</u> interpretation that comes to mind in the left text bubble.2) Write the <u>positive/playful</u> interpretation that comes to mind in the right text bubble.3) If there are any changes to <u>wording</u> you might suggest please do so.4) <u>Rate</u> how realistic the text message is by circling one of the following: Y – Yes. I think it is realistic/possible. M – Maybe. I think it is somewhat realistic/possible. No – No. I don’t think it is realistic/possible at all. <p>Please write additional examples that you have in the blank “text messages” provided. If you run out of room you can use the back of this page to do so.</p> <p>Please circle which emoji you think is most used when teasing/joking via text messaging?</p> <p>    Other: _____</p> <p>Please circle which abbreviation you think is most used when teasing/joking through text messaging?</p> <p>jk JK lol LOL Other: _____</p>	 <p>The right column contains a template for writing text messages. It features two blue speech bubbles at the top, followed by a grey speech bubble containing the word "OR". This pattern repeats four more times, creating a vertical stack of alternating blue and grey bubbles, each ending with an "OR" in the grey bubble.</p>
---	---









Appendix E: Demographic and Texting Questionnaire

Please provide us with the following basic background information about you.

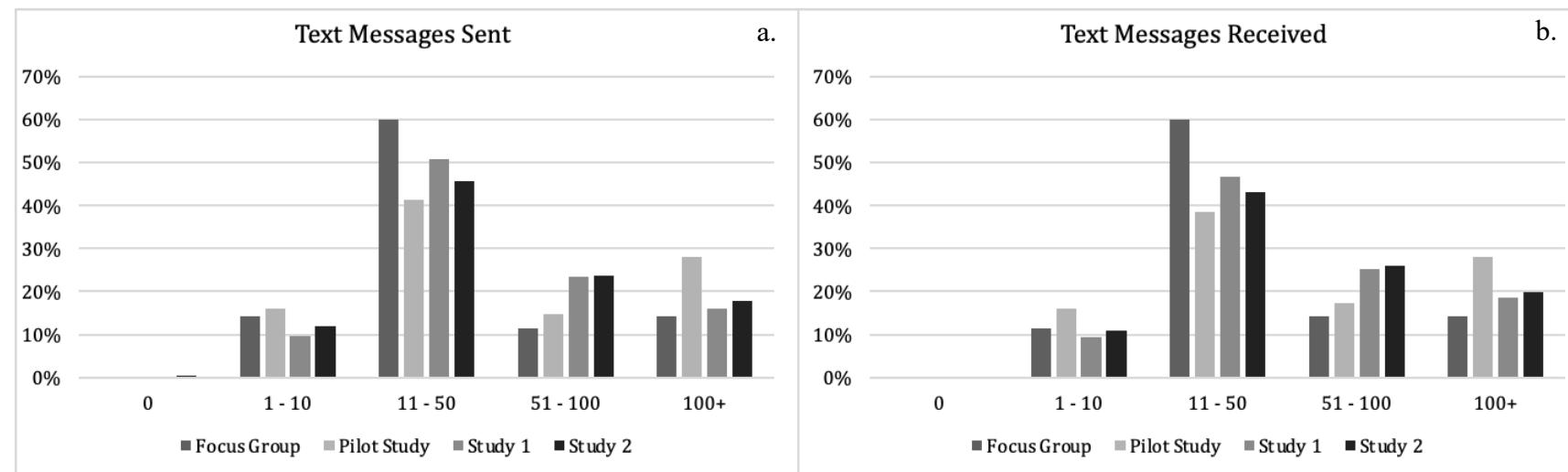
1. Please indicate your gender.
 - male
 - female
 - other
2. Please indicate your age.
3. Do you own a cell phone?
 - yes
 - no
4. On average, with approximately how many people do you text message on a given day?
 - 0
 - 1 – 3
 - 4 – 6
 - 7 – 10
 - 11+
5. With whom do you text message? Please rank from most frequent (#1) to least frequent (#6) how often you text these people. [online version: “drag your responses into order”]
 - family
 - friends
 - romantic partner
 - classmates
 - acquaintances
 - other
6. On average, approximately how many text messages do you send on a given day?
7. On average, approximately how many text messages do you receive on a given day?

Appendix F: Supplemental Descriptive Results from the Texting Questionnaire

The following descriptive statistics provide a snapshot of participants' daily texting practices (self-report estimates).

Figure F1

Participants' Average Number of Texts Sent and Received Daily



Note. Figure F1 depicts participants' estimated number of text messages sent and received daily (illustrated results are broken down by research phase). The majority of the sample provided estimates ranging between 11 and 50 text messages sent (a) and received (b) per day. Of the combined sample ($N = 988$), less than 0.5% of participants reported not sending or receiving any messages. Self-report estimates may not reflect the exact number of text messages sent or received by participants.

Table F1

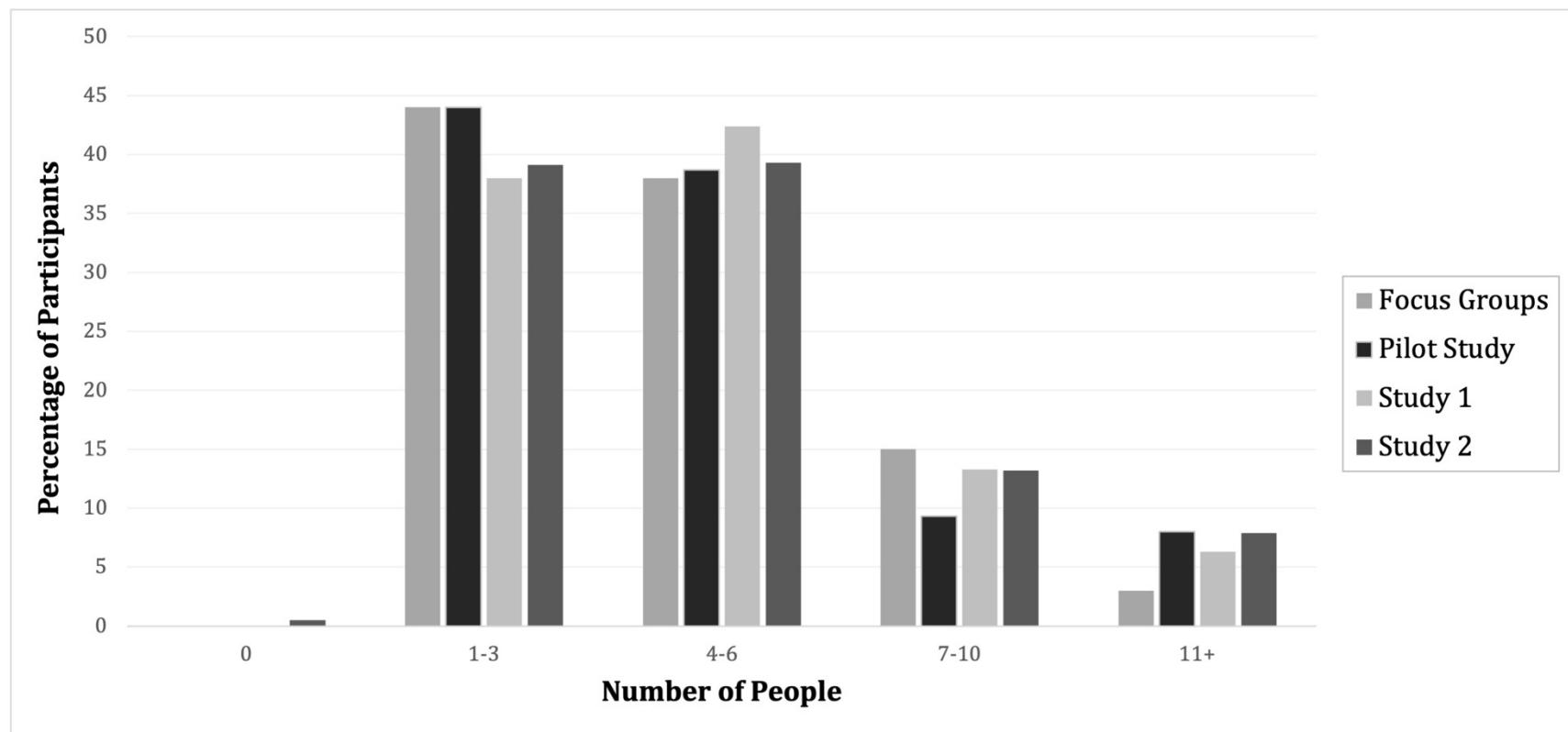
Descriptive Statistics of Participants' Average Number of Texts Sent and Received Daily

	Sent				Received			
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	Range	<i>M</i>	<i>SD</i>	<i>Mdn</i>	Range
Development Phase								
Focus groups	74.89	117.38	30	5 - 500	79.69	121.04	40	5 - 500
Piloting study	123.00	188.70	50	1 - 1000	139.57	208.06	50	3 - 1000
Main Studies								
Study 1	98.29	223.18	50	2 - 4000	117	374	50	2 - 6000
Study 2	103.02	169.69	50	0 - 1000	107.73	169.16	50	0 - 1000

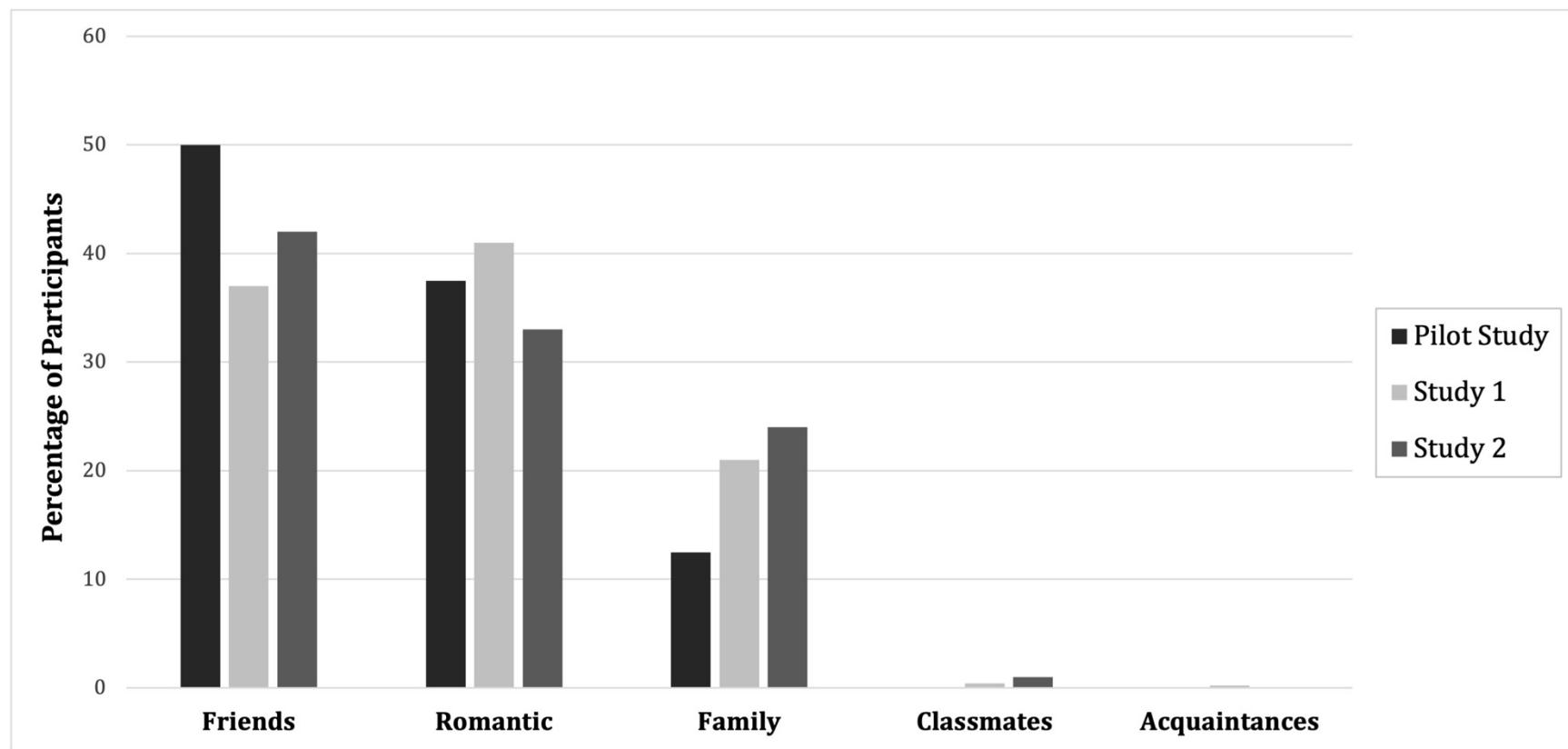
Note. In each phase/study a small proportion of participants (ranging between 4% – 12%) endorsed exchanging 500 or more text messages per day.

Figure F2

Average Number of People with Whom Participants Text Daily



Note. Figure F2 illustrates the average number of people with whom participants estimated texting per day. In each phase/study, the vast majority of participants (between 78 – 83%) endorsed texting with between 1 and 6 people daily (a similar number of participants reported texting with between 1 and 3 or between 4 and 6 people per day).

Figure F3*Participants' Most Frequent Text Messaging Contact*

Note. Figure F3 depicts participants' most frequent texting contact. Friends and romantic partners were the top-rated responses followed by family members. Focus group results were not included due to significant missing data.

Appendix G: Pilot Text Message Stimuli Items

Instructions:

You will now be presented with examples of text messages. Below each text message are two different thoughts that a person might have after receiving the message. Please take a moment to read the text message and think about how you might interpret the text if you received it. Using the scale provided, indicate which thought is more likely to come to your mind. Don't worry if neither of the thoughts are exactly what you might think.

Sample Item:

I'm so jealous of your love affair with Netflix³

They think I'm spending too much time watching Netflix.			They are envious that I have free time to chill.		
1 DEFINITELY comes to mind	2 MODERATELY comes to mind	3 SLIGHTLY comes to mind	4 SLIGHTLY comes to mind	5 MODERATELY comes to mind	6 DEFINITELY comes to mind

Pilot Text Messages Items:

- 1. Are you going to let anyone else win for a change**
 - a) They think I'm a show-off.
 - b) They think I'm really good at this.
- 2. Wait, you don't live at the library?**
 - a) They think I spend way too much time at the library.
 - b) They think I'm a hard-working student.
- 3. You are certainly one of a kind**
 - a) They think I'm weird.
 - b) They think I'm a special person.
- 4. You went for a run?**
 - a) They are surprised because they think I'm lazy.
 - b) They think it's great that I'm being active.
- 5. Well aren't you just sunshine and rainbows**
 - a) They think that I'm grumpy.
 - b) They think I'm happy.

³ Items were displayed as screen captures, each followed by the interpretation rating scale and realism rating scale (i.e., yes, maybe, no).

6. There's never a dull moment when you're around

- a) They think that I do stupid things.
- b) They think that I am fun to be around.

7. You're such a gym rat

- a) They think I spend too much time at the gym.
- b) They think I'm fit.

8. Thanks mom

- a) They don't want me telling them what to do.
- b) They are thanking me for looking out for them.

9. Stop being so obsessed with me

- a) They are suggesting they want me to leave them alone.
- b) They like the attention I give them.

10. Well hey there stranger

- a) They are upset that I've been out of touch.
- b) They are glad we are back in touch.

11. Always the underachiever

- a) They don't think I try hard enough.
- b) They are acknowledging my accomplishments.

12. There's no way I'm posting that where you're beside me

- a) They think I look ugly in that photo.
- b) They think I look really good in that photo.

13. Well you aren't getting any younger

- a) They think I need to take life more seriously.
- b) They are happy that I'm having fun while I can.

14. Thanks for the advice Dr. Phil

- a) They did not appreciate my advice.
- b) They are thankful for my help.

15. You're such a heartbreaker

- a) They think I'm careless with other's feelings.
- b) They think I'm an attractive person.

16. You're such a keener

- a) They think I try too hard.
- b) They think I'm a hard worker.

17. It's not like you're special or anything

- a) They are implying that I think that I'm better than other people.
- b) They really do think I'm special to them.

18. You make me crazy

- a) They are suggesting I'm annoying.
- b) They are suggesting they are crazy about me.

19. Now that was actually funny

- a) They don't think I'm usually funny.
- b) They really think what I said was funny.

20. Well at least one of us has their priorities straight

- a) They think I don't have my priorities in order.
- b) They think I have my life together.

21. You're such a worrywart

- a) They think I worry way too much.
- b) They appreciate that I care.

22. Glad to see you're more than just a pretty face

- a) Their first impression was that I was dumb.
- b) They think I'm the whole package.

23. I was starting to worry you were dead

- a) They're upset because they think I've been ignoring them.
- b) They've been worried about me.

24. You went on a date?

- a) They didn't think I could actually get a date.
- b) They are excited for me that I went on a date.

25. No issues in the confidence department eh

- a) They think I'm full of myself.
- b) They are complimenting my self-confidence.

26. Adulting does not seem to have made your priority list

- a) They think I'm immature.
- b) They think it's great I'm having fun.

27. Stop trying to make me look bad

- a) They think I'm intentionally trying to show them up.
- b) They are complimenting what I'm doing.

28. My life would be so boring without you

- a) They don't enjoy the drama I bring to their life.
- b) They enjoy the excitement I bring to their life.

29. Clearly your bae is important to you

- a) They don't think I make time for anyone else.
- b) They think that I am a good boyfriend/girlfriend.

30. Those pants

- a) They think my pants are ugly.
- b) They think my pants are awesome.

31. Wow I almost didn't recognize you

- a) They are suggesting that I look awful.
- b) They are complimenting how good I look.

32. Mind blown

- a) They think what I said was stupid.
- b) They are amazed by what I said.

33. You never fail to amaze me

- a) They think I'm constantly doing stupid things.
- b) They are constantly impressed by me.

34. How dare you choose studying over me

- a) They are upset that I have not prioritized time with them.
- b) They are acknowledging that I'm a good student.

35. You're so cool

- a) They think what I've said is lame.
- b) They think that I'm chill.

36. Well don't you clean up nicely

- a) They think that I usually look like a slob.
- b) They are complimenting how great I look.

37. It's like you actually know what you're talking about

- a) They are implying that I usually sound dumb.
- b) They are implying that what I said sounds intelligent.

38. Your Instagram makes you look so fun

- a) They don't think that I'm fun in reality.
- b) They think my photos capture how fun I actually am.

39. You definitely wear your heart on your sleeve

- a) They think I'm too sensitive.
- b) They think I'm a caring person.

40. It amazes me how you can study so little but do so well

- a) They think I'm a slacker.
- b) They think I'm smart.

41. Big spender eh

- a) They think that I'm cheap.
- b) They know I'm responsible with my money.

42. Your dating perseverance is super impressive

- a) They think I date too many people.
- b) They think that even though I've had some bad dates, it's great I still get out there.

43. I'd swear we were siblings if I didn't know better

- a) They are implying we have a dysfunctional relationship.
- b) They are implying we have a close relationship.

44. I'd love to know how your mind works

- a) They think my thoughts are peculiar.
- b) They think my thoughts are complex.

45. If partying were a class you'd ace it

- a) They think I party too much.
- b) They think I'm really social.

Appendix H: Study 1 and Study 2 Teasing Stimuli and Control Items

Pilot Stimulus Item	Interpretation		Study Inclusion	
	Negative	Positive	1	2
You are certainly one of a kind	They think I'm weird.	They think I'm a special person.	Y	Y
You're such a gym rat	They think I spend too much time at the gym.	They think I'm fit.	Y	Y
Thanks mom	They don't want me telling them what to do.	They are thanking me for looking out for them.	Y	Y
Stop being so obsessed with me	They are suggesting they want me to leave them alone.	They like the attention I give them.	Y	
Always the underachiever	They don't think I try hard enough.	They are acknowledging my accomplishments.	- C	- C
There's no way I'm posting that where you're beside me	They think I look ugly in that photo.	They think I look really good in that photo.	Y	Y
Well you aren't getting any younger	They think I need to take life more seriously.	They are happy that I'm having fun while I can.	Y	Y
You're such a heartbreaker	They think I'm careless with other's feelings.	They think I'm an attractive person.	Y	Y
You're such a keener	They think I try too hard.	They think I'm a hard worker.	S	S
It's not like you're special or anything	They are implying that I think that I'm better than other people.	They really do think I'm special to them.	Y	Y
Now that was actually funny	They don't think I'm usually funny.	They really think what I said was funny.	Y	Y

Well at least one of us has their priorities straight	They think I don't have my priorities in order.	They think I have my life together.	Y	Y
You're such a worrywart	They think I worry way too much.	They appreciate that I care.	- C	
Glad to see you're more than just a pretty face	Their first impression was that I was dumb.	They think I'm the whole package.	Y	Y
I was starting to worry you were dead	They're upset because they think I've been ignoring them.	They've been worried about me.	Y	Y
You went on a date?	They didn't think I could actually get a date.	They are excited for me that I went on a date.	Y	Y
Adulting does not seem to have made your priority list	They think I'm immature.	They think it's great I'm having fun.	- C	- C
Stop trying to make me look bad	They think I'm intentionally trying to show them up.	They are complimenting what I'm doing.	Y	Y
My life would be so boring without you	They don't enjoy the drama I bring to their life.	They enjoy the excitement I bring to their life.	+ C	+ C
Clearly your bae is important to you	They don't think I make time for anyone else.	They think that I am a good boyfriend / girlfriend.	Y	Y
Wow, I almost didn't recognize you	They are suggesting that I look awful.	They are complimenting how good I look.	+ C	
You never fail to amaze me	They think I'm constantly doing stupid things.	They are constantly impressed by me.	Y	Y
How dare you choose studying over me	They are upset that I have not prioritized time with them.	They are acknowledging that I'm a good student.	Y	Y
You're so cool	They think what I've said is lame.	They think that I'm chill.	Y	Y
It's like you actually know what you're talking about	They are implying that I usually sound dumb.	They are implying that what I said sounds intelligent.	Y	Y

You definitely wear your heart on your sleeve	They think I'm too sensitive.	They think I'm a caring person.	Y	Y
I'd swear we were siblings if I didn't know better	They are implying we have a dysfunctional relationship.	They are implying we have a close relationship.	+ C	+ C
I'd love to know how your mind works	They think my thoughts are peculiar.	They think my thoughts are complex.	Y	Y

Note. Y = included in study; +C/-C = included as positive (+) /negative (-) non-ambiguous control item; S = included as sample item

Appendix I: Rejection Sensitivity Questionnaire

Rejection Sensitivity Questionnaire – Personal (RSQ - 18 item)

Downey, G. & Feldman, S. I. (1996)

Each of the items below describes things college students sometimes ask of other people. Please imagine that you are in each situation. You will be asked to answer the following questions:

- 1) How concerned or anxious would you be about how the other person would respond?
 - 2) How do you think the other person would be likely to respond?

1. You ask someone in class if you can borrow his/her notes.

How concerned or anxious would you be over whether or not the person would want to lend you his/her notes?

I would expect that the person would willingly give me his/her notes. Very Unlikely 1 2 3 4 5 6 Very Likely

2. You ask your boyfriend/girlfriend to move in with you.

How concerned or anxious would you be over whether or not the person would want to move in with you? Very Unconcerned Very Concerned
 1 2 3 4 5 6

3. You ask your parents for help in deciding what programs to apply to.

4. You ask someone you don't know well out on a date.

5. Your boyfriend/girlfriend has plans to go out with friends tonight, but you really want to spend the evening with him/her, and you tell him/her so.

How concerned or anxious would you be over whether or not your boyfriend/girlfriend would decide to stay in?

I would expect that the person would willingly choose to stay in.

Very Unlikely	1	2	3	4	5	Very Likely
	6					

6. You ask your parents for extra money to cover living expenses.

How concerned or anxious would you be over whether or not your parents would help you out?

	Very Unconcerned	
	1 2 3 4 5 6	
	Very Concerned	

I would expect that my parents would not mind helping me out.

	Very Unlikely	
	1 2 3 4 5 6	
	Very Likely	

7. After class, you tell your professor that you have been having some trouble with a section of the course and ask if he/she can give you some extra help.

How concerned or anxious would you be over whether or not your professor would want to help you out?

	Very Unconcerned	
	1 2 3 4 5 6	
	Very Concerned	

I would expect that my professor would want to help me out.

	Very Unlikely	
	1 2 3 4 5 6	
	Very Likely	

8. You approach a close friend to talk after doing or saying something that seriously upset him/her.

How concerned or anxious would you be over whether or not your friend would want to talk with you?

	Very Unconcerned	
	1 2 3 4 5 6	
	Very Concerned	

I would expect that he/she would want to talk with me to try to work things out.

	Very Unlikely	
	1 2 3 4 5 6	
	Very Likely	

9. You ask someone in one of your classes to coffee.

How concerned or anxious would you be over whether or not the person would want to go?

	Very Unconcerned	
	1 2 3 4 5 6	
	Very Concerned	

I would expect that the person would want to go with me.

	Very Unlikely	
	1 2 3 4 5 6	
	Very Likely	

10. After graduation, you can't find a job and ask your parents if you can live at home for a while.

How concerned or anxious would you be over whether or not your parents would want you to come home?

	Very Unconcerned	
	1 2 3 4 5 6	
	Very Concerned	

I would expect I would be welcome at home.

	Very Unlikely	
	1 2 3 4 5 6	
	Very Likely	

11. You ask your friend to go on a vacation with you over Spring Break.

How concerned or anxious would you be over whether or not your friend would want to go with you?

	Very Unconcerned	
	1 2 3 4 5 6	
	Very Concerned	

I would expect that he/she would want to go with me.

	Very Unlikely	
	1 2 3 4 5 6	
	Very Likely	

12. You call your boyfriend/girlfriend after a bitter argument and tell him/her you want to see him/her.

How concerned or anxious would you be over whether or not your boyfriend/girlfriend would want to see you?

	Very Unconcerned	
	1 2 3 4 5 6	
	Very Concerned	

I would expect that he/she would want to see me.

	Very Unlikely	
	1 2 3 4 5 6	
	Very Likely	

13. You ask a friend if you can borrow something of his/hers.

How concerned or anxious would you be over whether or not your friend would want to loan it to you?

Very Unconcerned	Very Concerned
1 2 3 4	5 6

I would expect that he/she would willingly loan me it.

Very Unlikely	Very Likely
1 2 3 4	5 6

14. You ask your parents to come to an occasion important to you.

How concerned or anxious would you be over whether or not your parents would want to come?

Very Unconcerned	Very Concerned
1 2 3 4	5 6

I would expect that my parents would want to come.

Very Unlikely	Very Likely
1 2 3 4	5 6

15. You ask a friend to do you a big favor.

How concerned or anxious would you be over whether or not your friend would do this favor?

Very Unconcerned	Very Concerned
1 2 3 4	5 6

I would expect that he/she would willingly do this favor for me.

Very Unlikely	Very Likely
1 2 3 4	5 6

16. You ask your boyfriend/girlfriend if he/she really loves you.

How concerned or anxious would you be over whether or not your boyfriend/girlfriend would say yes?

Very Unconcerned	Very Concerned
1 2 3 4	5 6

I would expect that he/she would answer yes sincerely.

Very Unlikely	Very Likely
1 2 3 4	5 6

17. You go to a party and notice someone on the other side of the room and then you ask them to dance.

How concerned or anxious would you be over whether or not the person would want to dance with you?

Very Unconcerned	Very Concerned
1 2 3 4	5 6

I would expect that he/she would want to dance with me.

Very Unlikely	Very Likely
1 2 3 4	5 6

18. You ask your boyfriend/girlfriend to come home to meet your parents.

How concerned or anxious would you be over whether or not your boyfriend/girlfriend would want to meet your parents?

Very Unconcerned	Very Concerned
1 2 3 4	5 6

I would expect that he/she would want to meet my parents.

Very Unlikely	Very Likely
1 2 3 4	5 6

Appendix J: Follow-Up Reflection Questions

STUDY 1

Reflect about the text messages you just read. Did you notice that your interpretation of the tone/meaning of the text messages differed when cues (i.e., lol or 😊) were used?

- yes
- no

If yes, ...

Do you believe that your interpretations were generally more positive when the text messages were... [forced choice]

- just text
- with the 😊 emoji
- with “lol”

Do you believe that your interpretations were generally more negative when the text messages were... [forced choice]

- just text
- with the 😞 emoji
- with “lol”

In your personal texting experiences, have you noticed differences when interpreting the tone/meaning of messages when cues are used (i.e., lol or an emoji)? [forced choice]

- often
- sometimes
- never

STUDY 2

Reflect about the text messages you just read. While reading the messages, were you able to keep the two different senders (i.e., your "Acquaintance" or your "Close Friend") in mind?

- MOST of the time
- SOME of the time
- NONE of the time

Upon reflection, did you notice any difference in how you interpreted the tone/meaning of the message when the texts were sent from your "Acquaintance" versus "Close Friend"?

- yes
- no

If yes, ...

When sent from your "**Acquaintance**" were your interpretations generally more ...

- positive
- negative

When sent from your "**Close Friend**" were your interpretations generally more ...

- positive
- negative

In your personal texting experiences, have you noticed differences when interpreting the tone/meaning of messages sent from your close friends compared to others with whom you are less close?

- often
- sometimes
- never