

Relationships Among Goals and Flirting:

A Recall Study

by

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## ABSTRACT

The relationships between goals and specific flirting behaviors were investigated in a college population. Research questions and hypotheses were guided by Dillard's (1990) Goals-Plans-Action (GPA) model of interpersonal influence, which states that goals lead to planning processes, which, in turn, produce behavior. Six hundred and eighty-five undergraduates at a large southwestern university participated in an online survey assessing their behaviors in their most recent flirting interactions, their goals for that interaction, as well as measures designed to assess planning, the importance of the goal, and the number of goals present for the interaction. Results indicate that goals relate to the use of some, but not all behaviors, and that a flirting script may exist. Furthermore, planning, importance, and number of goals were all found to relate to the reporting of specific flirting behaviors. Sex differences were found as well, such that men reported using more forward and direct behaviors, while women reported using more facial expressions, self-touch, and laughing; men also reported flirting for sexual reasons more than women, and women reported flirting for more fun reasons than men. Overall, this study confirms the utility of the GPA framework for understanding the relationship between goals and flirting behavior, and suggests several avenues for future research.

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## CHAPTER 1

### RATIONALE

All relational forms, from the often alcohol-fueled one-night stand to the committed and exclusive romantic relationship, have a starting point. Communication in many of these starting points, in turn, contains some form of signaling of sexual and/or romantic interest, also known as flirtation. The subject of much research attention for over five decades (for a review see Moore, 2010), scholars have learned much about the *language of love*. Although taxonomies of flirting behaviors are consistently refined (Greer & Buss, 1994), developments in other important aspects of the flirting process lag. To more fully understand this sometimes-subtle message system, other aspects of the process should be investigated.

Definitions of flirting burgeoned beginning in the 1960s. Social anthropologists (e.g., Birdwhistell, 1970; Givens, 1978; Schlefen, 1965) initially linked flirting to the cultural practice of courtship, stating that flirting was the way by which two people started down the pathway to institutionally recognized forms of romantic relationships (e.g., marriage). Not all definitions, however, equate flirting with courtship. Flirting that was *not* designed result in marriage, however, is frequently relegated to the term “*quasi-courtship*,” or merely *playing* at love (Schlefen, 1965). Other definitions that separated flirting from courtship equated flirting with one of many forms of other-oriented, affiliative, interest-signaling behavior (e.g., Abrahams, 1994; Silver, 1994). Despite the definitional variation surrounding flirting, few efforts have been made to consolidate and put forth a more useful, covering definition of flirting. This project initially attempts to



remedy that limitation.

Although considerable research indicates *how* people flirt (e.g., Moore, 2010 and *why* they flirt (e.g., D. D. Henningsen, 2004), scant scholarly attention has been paid to the confluence of these ideas. The primary aim of this research project, therefore, is to interrogate and investigate the intersection of goals and flirting behavior. Specifically, using Dillard's (1990) Goals-Plans-Action (GPA) theoretical framework, this project seeks to increase understanding of how goals for flirting relates to the flirting behaviors people employ. Considerable information exists concerning how goals affect and modify both the planning and enactment of social behaviors (Berger, 1997; Dillard, 1990; Miller, Galanter, & Pribram, 1960), yet no research to date has sought to uncover the extent to which such covariation exist in the realm of sexual and romantic interest signaling.

Toward that end, definitions and taxonomies of flirting behaviors will be reviewed, followed by an examination of the GPA framework generally, and how it applies to flirtation specifically. Several research questions and hypotheses aimed at understanding if goals related to the enactment of flirting behavior, as well as other relevant variables (e.g., sex differences) are proposed. To begin, the vast definitional work related to flirting is reviewed, followed by a definition that synthesizes this work, with the intention of improving conceptual and operational clarity.

### **Flirting Defined**

Supreme Court Justice Potter Stewart famously declared that despite an inability to define pornography, "I know it when I see it" (*Jacobellis v. Ohio*, 1964). Flirting is viewed similarly, with sexual communication scholars providing varying definitions,

both operational and conceptual. Underlying their writing is the assumption that the audience may not necessarily need an explicit definition, but that in fact, the audience will *know it when they see it*. Variation among definitions does exist and has not been resolved. This leaves the study of flirtation with an unstable foundation from which to work.

Most important, definitions of flirtation vary in terms of how explicitly the concept of *courtship* is featured. Some purport that flirting only serves a courtship function, that is, moving people toward close romantic relationships. Other definitions, however, only vaguely hint at the role courtship plays, and prefer to center on how flirting is more a general set of messages for signaling interest, romantic or otherwise. This continuum will now be explored, starting at the explicit courtship pole.

Courtship is a process by which actors pursue romantic (often sexual) relationships (Givens, 1978). Early work on general courtship processes - and more specifically how humans begin to signal romantic interest - represents foundational work in flirting definitions. Because many scholars conducting this early research were *ethologists*, their focus was on observing naturally-occurring human behavior, and this methodological choice had implications for how flirting was framed and defined. Work by Birdwhistell (1970), some of the first to explore human courtship, did not use the word *flirting* at all, opting instead to use the term “courtship dance” (p. 303; see also Moore & Butler, 1998). Scholarly use of the term “flirting” did not appear until 1965, when Albert Schlefen noted the prevalence of *quasi-courtship behaviors* during group psychotherapy sessions. Specifically, Schlefen reasoned that because psychotherapists

and patients could not, and should not, engage in romantic entanglements, the romantic signaling behaviors he observed represented quasi-courtship behaviors, because their enactment occurs without the intention of relationship formation. Schlefen contrasted courtship from flirting behaviors by claiming that only the former characterized real courtship, differentiating the two only by context.

Schlefen (1965) and Birdwhistell (1970) paved the way for other scholars by suggesting that there might be a consistent set of behaviors that humans use to signal their interest in courtship, dating, and mating. For example, Givens (1978) noted that quasi-courtship behaviors are primarily nonverbal, follow a predictable set of stages, and, consistent with Schlefen's (1965) observations, are “coy and less serious” (p. 346) than true courtship behaviors. In all, courtship-based definitions of flirting focus on how humans signal interest in beginning a relationship (whether serious or not) with another. Variations of the definition include: “conveying interest in dating” (Meuhlenhard, Koralewski, Andrews, & Burdick, 1986); “early courtship behavior” (Moore, 2010); “courtship behaviors” (Lockard & Adams, 1980); and “initial courtship” (Trost & Alberts, 1998). All these definitions claim that courtship (i.e., beginning a romantic relationship) is *the* reason for flirting.

In addition, courtship-based definitions of flirting often have evolutionary perspectives laid over them. Specifically, these perspectives state that heterosexual men and women have differing goals in sexual interaction and, as a consequence, each sex focuses on, and displays, different sets of behavioral signals. The definitions of flirting produced from evolutionary perspectives also conflate *signaling of romantic interest* with

the *signaling of sexual interest*, as successful sexual relations represent human's primary motivator (i.e., raising offspring to sexual maturity). Although the term flirting is not used explicitly in all cases, many authors tacitly reference courtship and romantic signals, but place them in a biologically-driven evolutionary paradigm (e.g., Clark, Shaver, & Abrahams, 1999; Cunningham, 1989; Grammer, 1990; Grammer, Kruck, Juette, & Fink, 2000; Greer & Buss, 1994; Kenrick, Sadalla, Groth & Trost, 1990; Moore, 1985, 1995; Trost & Alberts, 1998). That is, men and women each use sex-specific signals relevant to mating, sexual fitness, or sexual health. From such a perspective, women signal health to interest a male using their beauty or particular body parts (e.g., breasts or legs). Conversely, men demonstrate resources and dominance by signaling status with clothing or possessions (e.g., luxury automobiles) and dominance with aggressive tones and mannerisms (e.g., patting other men on the back or not cowering when patted by other men). In all, this end of the flirting definitional spectrum explicitly equates flirting and courtship and often utilizes evolutionary theory as a framework; courtship is *the* reason for flirting, according to these definitions.

Not all definitions of flirting, however, feature courtship so explicitly. At the other end of the continuum, flirting is defined as a set of messages designed to signal interest, focusing more on interaction and intentions. As a group, these are called *non-courtship definitions* of flirting. Specifically, these definitions resituate flirting from a by-product of courtship to a message type intended to signal some other form of interest in another. These various definitions foreground different terms related to flirting: sexual communication, immediacy, and affiliation.

Non-courtship definitions of flirting, first equate flirting and sexual interest. For example, flirting is a “form of nascent sexual communication” (Metts & Spitzberg, 1996, p. 53) intended to signal general sexual interest or generate a shared meaning of sexual interest between partners (LaFrance, D. D. Henningsen, Oates, & Shaw, 2009). Although flirting does not always lead directly to sex, it is commonly associated with sex (Metts & Spitzberg, 1996). Sexual (or social-sexual) communication is defined as “messages that convey interest of a sexual or romantic nature” (LaFrance et al., 2009, p. 264). Notice that there is no *explicit* mention of courtship (i.e., relational development) or cultural dating processes, merely sexual interest. Along similar lines, flirting is also defined as a tactic to convey *proceptivity*, or “behavior patterns performed by a female to solicit [a] male sexually” (Perper & Weis, 1987, p. 456) as well as a general means to facilitate sexual intercourse (McCormick, 1979). Here, sex is highlighted and *could* lead to a relationship, but is not the only stated goal.

Second, non-courtship definitions of flirting, define it as a “subset of the larger domain of immediacy behaviors” (Egland, Spitzberg, & Zormeier, 1996, p. 105). From this perspective, the goal of flirting is to “initiate, instigate, negotiate, as well as de-escalate intimacy” (Silver, 1994, p. 5). Although Egland, et al. (1996) and Silver (1994) use different terms (i.e., *immediacy* and *intimacy*), they relate flirting to a sexual and/or romantic type of approach behavior. Immediacy behaviors are those designed to produce closeness between two people, and intimacy is a state of closeness, both psychologically and communicatively in relationships (J. F. Andersen, P. A. Andersen, & Jensen, 1979). Similarly, D. D. Henningsen (2004) states that flirting is a way to “promote contact with

a cross-sex target” (p. 481), again equating flirting with a more basic and general approach behavior. Like approach and immediacy behaviors, flirting is also defined as attempting to generate a general sense of attraction between two people (Silver & Spitzberg, 1992). Silver and Spitzberg (1992) state that flirting is the set of messages, both verbal and nonverbal, used by individuals to “gain another person's attention and interest, and which simultaneously function to signify attraction” to another (p. 5). Given this view, flirting is a *more* general phenomenon than that described in courtship views, as it serves to communicate closeness, warmth, and interest in another. The underlying motivations for expressing interest are back-grounded and the ways such interest is communicated is fore-grounded. In such definitions, explicit mention of courtship as a motivation appears relatively infrequently.

Finally, a third category of non-courtship definitions likens flirting to another approach-related construct: affiliation. Affiliation relates to the amount of liking, trust, equality, affection, and solidarity felt between two people (Dillard, Solomon, & Palmer, 1999; Dillard, Solomon, & Samp, 1996). Abrahams (1994) explains that flirting “reveals an affiliative desire” (p. 238), but that that desire can be used to communicate a multitude of goals, such as sexual proceptivity or romantic intimacy. Flirting is once again defined in a similar way (i.e., signaling interest for a multitude of possible relational outcomes), but the word “affiliation” is used in place of “sexual,” “immediate,” or “intimacy.” Though the distinctions between *affiliation* and *immediacy* might not be apparent from the reviews presented here, because scholars used different terms specifically merited their separate review. This also helps in summarizing how flirting has been defined and

will, shortly, help support this project's contention that flirting's definition is not as transparent as it could be.

Although non-courtship definitions vary, they all point to flirting as a form of other-oriented, approach behavior aimed at signaling and assessing interest in another, sexual, or otherwise. The focus is less on the relation of flirting to other processes such as courtship or dating (although see Abrahams, 1994), and more on characteristics that result in intimate, affiliative, immediate, and sexual messages.

In summary, definitions of flirting span a wide gamut, from explicit and unequivocal patterns of courtship to affiliative and other-oriented behavior. Although such definitional diversity reflects scholars' interest in the concept of flirting, *more* (and more diverse) is not always better if one's goal is to fully and clearly understand a phenomenon. What follows is an attempt to provide a more cogent, complete, and fully considered definition of flirting that will clarify much of the prior contention and opaque terminology.

### **A More Transparent Definition of Flirting**

A new definition of flirting is offered for two reasons. First, this definition will serve as the conceptual underpinning for the operational definitions used in the present study. Second, it is hoped that this definition will be viewed as useful by other researchers and scholars interested in how humans signal interest. For this study, flirting is defined as *a strategic message system that varies in ambiguity and is intentionally sent in order to signal romantic and/or sexual interest in another*. This definition contains four key elements: (a) intentional; (b) strategic; (c) signaling interest; and (d) variation in

ambiguity. Each element will be reviewed, and its implications for the definition explained.

**Intentional.** The present definition's first key element is that flirting is an intentional act. *Flirting* can only occur when one intentionally engages in such behavior. Such a distinction clearly considers flirting from a *source orientation*. The notion of intent, and the attempts at establishing it, represents foundational work in interpersonal communication generally (e.g., Miller & Steinberg, 1975) and flirting more specifically (e.g., England et al., 1996).

Miller (1966) stated that all communication is, at its core, is intentional. Motley (1990) provides a succinct elaboration of what *intention* means: In order for a communication act of any kind to occur, a sender must deliberately encode a message “to influence, affect, be interpreted by, be 'received' by, or have 'meaning' for others” (pp. 5-6). Thus, in order for communication to occur, there must be a decision on the sender's part to act. Said another way, in order for communication to occur, it must possess some form of *other directedness* (Miller, 1966).

Motley (1990) and Miller's (1966) view is consistent with the present definition of flirting as a specific message set designed to signal romantic and/or sexual interest in another. Flirting can only occur when a sender encodes a message specifically *for* another person and, typically, designed to produce a particular outcome. The intentional requirement suggests that flirting that is *missed* by a receiver, or not interpreted as communicating interest, would still count as flirting because such a message was intentionally encoded and transmitted by a sender.



The source, or intentional, aspect of the present flirting definition stands in contrast to what Abrahams' (1994) description of flirtatious behavior. It is very possible that Mark could be interacting Monica, and she perceived that he was flirting with her, even though that wasn't his intent (Jenkins, 2010). Abbey's (1982, 1987) work on men's tendency to misperceive women's friendly behavior as sexually- and romantically-motivated would be a good example of this alternative view. If women are *not* in fact flirting with the men, but are perceived to be doing so, it would fit Abraham's view of flirtatious behavior, but not the present view of flirting. In the present view, the sender must knowingly encode a message intended to signal interest in order for flirting to occur.

One inevitable complication is that there can be disagreement on intent (Miller & Steinberg, 1975). Imagine that Mark casually observes a couple chatting at a cafe table. While Mark watches, one member of the couple hums a few bars of a tune. The tune has no specific meaning to Mark and, as a naive observer, he thinks nothing of it. The tune being hummed, however, might hold special meaning to the couple such that the behavior intentionally signals sexual or romantic interest. Although Mark might not have realized it, flirting might have indeed occurred. Miller and Steinberg (1975) argue that communicators at the interpersonal level can often communicate in such a way as to hide their true intentions from outsiders.

Therefore, in order for a message system to be labeled as flirting, a sender must knowingly and intentionally (in the sense of directing one's messages toward another), encode the message. In addition, intentionality implies a desired outcome reached by

modifying another's behavior. As such, a variety of potentially desired outcomes underlie flirting and in this way, flirting is strategic (Miller & Steinberg, 1975).

**Strategic.** Each and every definition of flirting highlighted above makes some reference, in one way or another, to flirting as a strategic behavior. The term *strategic* is meant to convey the goal-related nature of flirting, but also to allow some conceptual room for spontaneity, which is likely another large part of the flirting process. Therefore, the terms *strategic* and *goal-related* are meant to describe a similar characteristic of flirting, which will be elucidated shortly. The consistency with what previous research (see above) mentions goals or strategy in its definitions suggests the importance of goals to the flirting concept. Given that flirting is an intentional message system, so too must it be a strategic one as well. All conscious, intentional behaviors require some goal that serves as its catalyst (Miller, Galanter, & Pribram, 1960). Unintentional behavior, by contrast and definition, is not motivated or preceded by any goal (Motely, 1990).

As reviewed above, there exist two camps of flirting definitions: those that highlight courtship as a necessary condition for flirting (*courtship-related*; e.g., Schlefen, 1965; Birdwhistell, 1970; Givens, 1978), and those that place flirting within the larger umbrella of interest-signaling behaviors (*noncourtship-related*; e.g., LaFrance et al., 2009; Metts & Spitzberg, 1996; Perper & Weiss, 1987). The motivations or goals driving the courtship-related definitional camp are straightforward: a romantic and sexual relationships desired. The noncourtship-related, however, could be motivated by any number of goals: improving one's self-worth, having fun, or obtaining some resource (D. D. Henningsen, 2004). Conceptually, the most immediate and important goal of flirting is

to signal interest in another; once that has been achieved (e.g., through the sending of just one message), other goals can be pursued. Although *all* flirting involves signaling interest, the nature of that interest can and does vary quite widely (D. D. Henningsen, 2004).

**Signaling interest.** Although the specific nature of the goal underlying flirting is unsettled, the least-debated aspect of flirting definitions is the presence of interest in the target. That is, flirting is message system that signals interest in another and usually, this interest is sexual and/or romantic. Inconsistency arises when definitions attempt to describe interest in *what* comes to the fore. The nature of the *interest* is imperative to defining flirting, as it identifies flirting as a specific type of immediacy, involvement, or affiliative behavior. Flirting can and does mimic each of these three qualities of interpersonal communication, but with flirting, the romantic or sexual interest of the sender in the target likely becomes salient (Jenkins, 2010).

Flirting can be an “approach behavior [that] increases sensory stimulation and produces interpersonal closeness” like immediacy (J. F. Andersen et al., 1979, p. 153). Flirting also employs behaviors that might signal a sender is engaged in the “topic, relationship, and/or situation” with another, mimicking conversational involvement (Coker & Burgoon, 1987, p. 463). Finally, flirting can convey liking, trust, equality, and affection, like affiliation (Dillard, Solomon, & Palmer, 1999; Dillard, Solomon, & Samp, 1996). In *addition* to all of these outcomes, however, and maybe most salient among them all, flirting can signal romantic or sexual interest in another. In this way, flirting can be an immediate, involved, affiliative behavior, but takes a step further toward romantic

and/or sexual intentions.

It is important to note, especially given the goal-driven aspect of flirting, that interest can serve many masters. Although flirting might involve communication of romantic and/or sexual interest in another, what is important to note is that romantic or sexual involvement need not be the *driving* goal for the enactment of flirting behavior. For example, assume that a student's goal is to get a better grade on an exam. The student might enact flirtatious behavior in order to achieve this goal. The student's behavior in this instance might make it *appear* as though he or she actually desired a romantic and/or sexual relationship with the instructor even though no such motivation exists. Put another way, "flirtation may serve many manipulative ends aside from sex, but nevertheless uses sex as the attributed 'bait' underlying the influence process" (Metts & Spitzberg, 1996, p. 53). Whatever the goal, in order for a behavior to constitute flirting, that behavior *must* signal some form of romantic or sexual interest, even if such interest is feigned.

**Ambiguity.** In addition to flirting being an intentional, strategic message system wherein a sender signals romantic and/or sexual interest to another person, flirting also varies in ambiguity. This final aspect is more fluid than the previous three, insofar as ambiguity is more a dimension along which flirting differs rather than an inherent characteristic. In other words, some flirting will be very ambiguous, while other messages deemed flirting could be quite *unambiguous* and even sexually explicit. Before discussion factors that affect *when* flirting might be more or less ambiguous, the distinction between flirting and sexual pursuit must be addressed.

If a flirter can be unambiguous and even explicit with the signaling of romantic

and/or sexual interest, why differentiate sexual pursuit and seduction from flirting? Two aspects of a flirting interaction are important to consider when comparing flirting to sexual pursuit. The first aspect is playfulness. Jenkins (2010) summarizes the difference quite succinctly: “What matters... for distinguishing flirtations from these other actions [i.e., seduction] is the fact that in any genuine flirtation there should be an element of *playfulness*” (p. 16; emphasis retained). Flirting – even when direct, forward, and unambiguous – is playful. The target or receiver of the flirting messages *must* get a sense of that playfulness from the flirter, lest it be sexual pursuit or, as Jenkins terms it, seduction. The second aspect relates to the ambiguity of intentions, less so the behaviors themselves. In order for flirting to occur, a flirter’s intentions must be masked from her/his target. This characteristic of flirting relates to plausible deniability, or the flirter’s ability to say, “I wasn’t flirting with you!” if called on by the target and still be *reasonably* believable. When a flirter’s true intentions are made clear to the target, the veil of flirting is removed, and such an interaction shifts to focus exclusively on the pursuit of the source for something from the receiver, be it sex, personal resources, or the like. For example, if a source says, “I want you to come over here and have sex with me” to a receiver, it does not matter the level of panache that source places on her/his words, that is an example of sexual pursuit. S/he has *no* plausible deniability, and the receiver is made fully aware of the source’s intentions. Work comparing flirting to seduction indicates a level of control or moderation in flirting, such that the behaviors employed are not as overt: flirter sit *moderately* close instead of very close to one another; smiles are *coy and subtle*, not wide; and gaze is *fleeting* instead of steady and fixed (Koeppel,

Montagne-Miller, & Cody, 1993). In all, flirting is *not* the same as sexual pursuit; the level of playfulness in the messages and the explicitness of intentions combine to distinguish the two.

The level of ambiguity present in a flirting interaction can vary dramatically. One of the inherent difficulties with understanding the role of ambiguity in flirting is that the nature of ambiguity, defining and understanding it, is itself subjective. Within the context of flirting, ambiguity can be affected by two factors: The relationship between the interactants and the particular *style* a flirter possesses when communicating typically.

***Relationship between people.*** The relationship between two people can affect the amount of ambiguity used while flirting. The lion's share of research on flirting to date has examined flirting between strangers, and this has implications for how flirting has been defined. When one signals to a stranger that s/he *is* romantically or sexually interested (even if that is not the true nature of the goal), flirting tends to be ambiguous. Put another way, this *initial* flirting produces a face threat for both the sender and the target. People desire and strive to be viewed by others in a positive manner, and anything that might threaten such a positive view is a face threat (Brown & Levinson, 1987; Goffman, 1959). The most salient face threat to a source in a flirting interaction is the threat of outright rejection of the overtures by the receiver, which is an example of a positive face threat, or harm coming to one's public image. To avoid immediate and blatant rejection or refusal of the romantic or sexual overture, flirter tend to use strategic ambiguity to mask their true intentions, or mute them so they are less forward, apparent, and clear (at least initially; Sabini & Silver, 1982).

Given the previous discussion, it might seem that *all* flirting is ambiguous, regardless of the relationship between two people. This is certainly not the case. In fact, when two people have *some* pre-existing knowledge, either as acquaintances introduced by mutual friends or married partners, ambiguity has the potential to vary widely. Although prior knowledge about another does no *guarantee* confidence in communication with that other, it *can*. Frisby's (2008) work on flirting among married couples highlights this point. Prior to marriage, flirting was about exploring and reducing uncertainty, again highlighting the need to save one's own and the other person's face (Frisby, 2008). After marriage, however, participants noted that flirting became more overt such that a clear motivation was recognizable by both partners. Ostensibly, the more time spent with another gives one *inside information* to that person's motivations and patterns of behavior, of which would include flirting. Many couples indicated that flirting served an important purpose in the relationship, such as cheering up the other person (Frisby, 2008). Messages with explicitly sexual content, then, could still constitute flirting, if sent in a way known by the other to be joking or playful. Similarly, friends could possess a particular rapport with one another that overt sexual invitations might be viewed as flirtatious by both partners, but as sexual pursuit to outside observers. Conversely, two friends could be *more* ambiguous with one another, so as not to harm the existing relationship with unwanted injections of romantic overtures. Ambiguity in established relationships, then, largely depends on the comfort level of the flirter in interacting with the other person and, quite possibly, the desired goal of the flirting interaction.

**Communicator style.** A second factor that could affect the amount of ambiguity with which one flirts is one's communicator style. Defined by Norton (1983) as a manner in which one typically presents verbal and nonverbal messages, communicator style has recently been applied to flirting (Hall, Carter, Cody, & Albright, 2010). Hall and associates purport that applying the concept of communicator style to flirting produces five discreet ways that humans typically signal romantic and/or sexual interest: traditional, physical, sincere, playful, and polite. These five styles represent qualitatively different views of how humans *should* interact while flirting. These styles also take into account goals, motivations, and gender-role beliefs. These flirting styles can help explain why flirting varies so much in ambiguity. If one is prone to politely flirting, direct and forward signaling of romantic and/or sexual interest may be deemed too dangerous or even unthinkable. On the other hand, a physical flirt, whose conceptualization of flirting often involves achieving some form of sexual contact (Hall, et al., 2010), might be more likely to use unambiguous and clearly sexual flirting behavior. Although not directly tested in their study, it is not a large conceptual leap to imagine that these five different flirting styles could affect the ambiguity of flirting behavior.

**Definitional summary.** Taken together, four characteristics produce a cogent, clear, and helpful definition of flirting: *Flirting is a strategic message system that varies in ambiguity and is characterized by the intentional signaling of romantic or sexual interest in another.* This definition of flirting will be used for the remainder of this project, and it is hoped others will find it useful in examining signals of romantic and sexual interest. Armed with this definition, it is now necessary to explore what behaviors



constitute flirting, both verbal and nonverbal.

### **Behaviors Typically Associated With Flirting**

A bevy of behaviors are available to would-be flirts. Because of flirting's implicit "known when seen" quality, cataloging these various behaviors has often resulted in very descriptions. That is, modifiers such as *coy*, *subtle*, *darting*, or even *sexual* are used to describe everyday verbal and nonverbal behaviors, thereby pushing an otherwise innocuous smile, for example, into the realm of a flirtatious one (e.g., a coy smile). The research on flirting behaviors largely focuses on nonverbal channels (see Moore, 2010 for a review), with fewer studies investigating verbal avenues, such as opening lines or "gambits" (e.g., Cunningham, 1989). A cursory glance of any flirting behavior study indicates that nonverbal behaviors are greater in number and importance when compared with verbal behaviors; as detailed above, ambiguity is a necessary condition for flirting to occur, and often, such ambiguity is achieved via nonverbal channels. Therefore, nonverbal aspects of flirting such as facial (e.g., smiling, eye contact) and bodily (e.g., gestures, touch) behaviors will be covered first, followed by the verbal aspects (e.g., opening lines).

#### **Nonverbal Flirting Behaviors**

Most of flirting is communicated nonverbally (Moore, 2010). The face, body, and voice all come together to create coy, subtle, and indirect messages that signal romantic and/or sexual interest. Because the gamut of nonverbal behaviors is so large, the following discussion of nonverbal flirting behaviors is broken into two parts: the face and the body, with the face considered first.

**Facially-related nonverbal flirting behaviors.** Arguably, the most oft-mentioned facially-related flirting behaviors focus on the eyes, or oculusics. Specifically, the amount of time one devotes to holding another's gaze largely determines whether that eye behavior is labeled as flirtatious, with *moderate* degrees eye contact reported as typical (Coker & Burgoon, 1989; Koeppl et al., 1993). Similarly, flirtatious eye contact is described as a short and darting glance (Moore, 1985, 1995), to look, stare intently, or fixate (Fitchen, Tagalakis, Judd, Wright, & Amsel, 1992; Greer & Buss, 1994; Moore, 2002), and to exhibit *coy* gaze or glance patterns (Givens, 1978; Schiefel, 1965). The less sustained the eye contact, the more likely it is to be interpreted (by both recipients and researchers alike) as flirting.

In addition to the prevalence and length of eye contact, nuances regarding the direction of eye behavior, or where the eye is (or appears to be) focused also constitutes flirting. For example, looking someone *up and down* (Fitchen et al., 1992), looking downward (Burgoon, Buller, & Woodall, 1989; Givens, 1978), or using a *room-encompassing glance* (as if to 'check out' the surrounding environment: Moore, 1985, 1995; Moore & Butler, 1989) are also oculusic behaviors observed in flirtatious interactions. In these instances, *where* the eyes are directed is just as telling (for labeling a behavior "flirting") as is the duration of the eye contact.

Eye behavior tends not to occur without corresponding head movement. As such, some specific head motion has been observed in flirtatious interactions generally, and specifically by women who attempt to solicit flirtatious interactions with men (Moore, 1985). In these situations, women flip and present (e.g., through stroking or caressing)

their hair, subtly nod, present their necks, and *toss* their head (i.e., where the head is moved back and shaken; Grammer, 1990; Grammer et al., 2000; Moore, 1985, 1995, 2002, 2010; Moore & Butler, 1989). These specific head motions are reported as frequently as their corresponding eye behavior, suggesting that they occur in tandem (Moore, 2010).

Certain facial expressions and mouth movements are also associated with flirting. In general, the more expressive a person's face, as well as the more smiling that person performs, the more likely s/he will be perceived by others as attractive, friendly, and approachable (Coker & Burgoon, 1987; Cunningham & Barbee, 2008). As such, moderate amounts of smiling are one of the other most frequently-reported behaviors observed in flirting interactions (Egland et al., 1996; Fitchen et al., 1992; Grammer et al., 2000; McCormick & Jones, 1989; Moore, 1985, 2002; Muehlenhard et al., 1986). The *coy smile/glance*, described as “an expression combining a half-smile and lowered eyes” (Moore, 2010, p. 173), represents a multiple-mode behavior that is frequently identified as flirting (Givens, 1978; Grammer et al., 2000; Moore, 1985, 2002).

Smiling is not the only behavior available to an individual desiring to flirt using her/his mouth. Other mouth-related flirting behaviors include sucking on straws (Egland et al., 1996), lip licking (McCormick & Jones, 1989; Moore, 1985, 2002), and variations of pouting, puckering, and pursing the lips (Burgoon et al., 1989; Givens, 1978; Moore, 1985).

The final facially-related set of nonverbal flirting behavior involves use of the voice, termed paralinguistics or vocalics. For example, laughing either directly at an

interactant's joke or indirectly (i.e., in response to something in the environment), has been identified as a flirting behavior (Egland et al., 1996; Fitchen et al., 1992; Givens, 1978; Moore, 1985; Muehlenhard et al., 1986). Laughing is not a static behavior, however, and several variations have been observed and reported. Moderate amounts of laughing (Coker & Burgoon, 1987; Perper & Weis, 1987), for example, are more flirtatious than constant amounts, and softer volumes of laughter (e.g., giggling: Moore, 1985) as well as louder volumes (Givens, 1978) are both characteristic of flirtatious laughing.

In addition to laughter, modulations in vocal characteristics are also quite frequently noted as flirtatious. Warmer vocal tones (Givens, 1978), more expressivity or animation in pitch and tone (Coker & Burgoon, 1987; Muehlenhard et al., 1986) as well as softer volumes in speech, such as whispers (Moore, 1985) are also observed in flirting dyads; this warm and soft combination has been labeled, *sexy talk*, generally, as it closely mimics talk that, ostensible, occurs before sexual intercourse (Perper & Weis, 1987). Finally, the rate with which messages are exchanged tends to increase in flirting dyads, despite the intimate and close nature of the information that is often exchanged (Givens, 1978). The sheer amount of gradation in tones, volume, and rate make vocalics a particularly indicative channel for communicating one's flirtatious intent (Koeppel et al., 1993).

In summary, despite the face's small size relative to the rest of the body, it possesses the potential to communicate a wealth of flirting messages through the eyes, mouth, and voice. The rest of the human body is used quite frequently to flirt, and these

body-related flirting behaviors are explored next.

**Body-related nonverbal flirting behaviors.** The body provides a wide variety of options when it comes to flirting behavior. This set of behaviors concerns the body's placement and orientation relative to the target. In flirtatious interactions, flirting partners generally exhibit "bodily openness" relative to their partner (Grammer, 1990, p. 233). Specifically, bodily openness entails a relaxed stance with uncrossed arms and legs so the torso is clearly visible by the other; this bodily openness can be exhibited either standing or sitting down. If the legs are crossed, the foot of the raised leg is pointed toward the target (McCormick & Jones, 1989; Renninger, Wade, & Grammer, 2004). Although flirterers desire to appear relaxed, there is much physiological tightening that occurs. Posture is straight and erect without slumping, sagging in the stomach disappears, and the legs are brought together (if standing) in order to reproduce postures of athletes and/or models (Schlefen, 1965). This open and relaxed (though tightened) posture exhibited by flirterers is associated with increased interest in another (Grammer, Kruck, & Magnusson, 1998). *Palming* also occurs, wherein the hand is turned upward so the palm of the hand is clearly visible by the partner (Moore, 1985, 2010; Schlefen, 1965).

Posture and stance are only effective as signaling romantic or sexual interest if they are used with the correct position, or use of space relative to the interaction partner, a term called proxemics. When couples flirt, partners face one another either directly (e.g., head-on) or with the head turned toward the partner (when standing side-by-side; Schlefen, 1965; Givens, 1978; Moore, 1985). The positioning is strategic in that it focuses attention toward the partner's body, while concurrently closing others off from

the interaction (Schlefen, 1965; Moore, 2010). Moreover, this forward-facing position occurs slowly, with the head facing the partner first, followed by the shoulders, and at last the torso and rest of the body (Perper, 1985). Once facing the partner, distance is reduced through several body parts (e.g., the head can crane forward, the shoulders can be placed next to the target, or the entire body can be moved closer; Abbey & Melby, 1986; Coker & Burgoon, 1989; Grammer, 1990; Moore, 1985, 2010; Muehlenhard et al., 1986; Schlefen, 1965).

As posture relaxes and interpersonal distance decreases, flirting partners exhibit a mirroring of angles, body positioning, and even gestures, a phenomenon termed *nonverbal synchronization* (Givens, 1978; Grammer et al., 1998; Koeppel et al., 1993; Moore, 2010). Such synchronization is useful in reflecting and predicting the level of interest shared by the flirting dyad (Grammer et al., 1998). In all, the body is used quite often, and in various ways, when a person is flirting.

Despite major role played by the body in flirting, it is the hands generally, and touching specifically, which often communicates the clearest messages of romantic or sexual interest. Termed haptics, flirting touch is moderate in degree and frequency (Coker & Burgoon, 1987), and is found to land on many (though not all) parts of the body. Before flirter touch their partners, however, many times they touch themselves. This is done through self-grooming or preening behaviors such as smoothing one's hair, adjusting one's clothing, caressing an object such as a drink or straw, or fixing one's makeup (e.g., adaptors: Schlefen, 1965; Moore, 1985, 2010). When a flirter does decide to touch another, the hand may linger gently or the touch could be deliberate and direct

(McCormick & Jones, 1989).

In terms of the location of touches, flirter touch the shoulders, knees, thighs, forearms, neck, lower back, top of the hands, groom one another, and the partner's foot with their own foot (i.e., *footsies*; Eglund et al., 1996; Fitchen et al., 1992; Givens, 1978; Greer & Buss, 1994; Lockard & Adams, 1980; McCormick, Perper, & Jones, 1983; Moore, 1985, 2010; Muehlenhard et al., 1986; Schiefelbusch, 1965; Silver & Spitzberg, 1992). Mouth-to-mouth touch, or kissing (pecking, longer kisses, and French kissing) is also associated with flirting (Moore, 1985, 2010).

One final bodily-related nonverbal flirtation behavior worth noting is what covers the body: clothing. Flirter tend to wear flattering and/or more revealing clothes compared to non-flirter, suggesting intention to signal interest in others before the interaction even begins (Abbey, Cozzarelli, McLaughlin, & Harnish, 1987; Greer & Buss, 1994; Moore, 2010). Clearly, then, flirter employ their bodies in a multitude of ways. From open stances and postures to deliberate grazes with one's hand, the body and its appendages are instrumental to the flirtation process.

Although the vast majority of flirting is conducted nonverbally, interactants must, at some point, talk with one another. Unsurprisingly, research has uncovered several specific aspects of messages that constitute their being labeled *flirtatious*. These verbal aspects of flirtation, which includes opening lines, teasing, and compliments, are reviewed next.

### **Verbal Flirting Behaviors**

Expressing interest in another person is not entirely completed without using

words. In fact, several behaviors deemed flirtatious are verbal. Various terms such as the pick-up line, chat-up line, or opening gambit, these one-liners are intended to charm targets and break the ice with another (Cunningham & Barbee, 2008). There are three primary types of opening lines. *Direct approach* lines are a clear statement of interest mixed with self-disclosure or flattery (e.g., “You seem different, I like that.”). *Innocuous approach* lines reference something not related directly to either person (e.g., “Great band, eh?”). Finally, *cute-flippant approach* lines involve sexual humor or teasing (e.g., “Your place or mine?”). Although neither men nor women rate these opening lines types as very appropriate or effective, the direct approach lines tend to be rated most positively (Cunningham, 1989; Kleinke, Meeker, & Staneski, 1986). Although the cute-flippant lines are what many people frequently think of when they hear the phrase *opening lines*, they are consistently rated at the least effective and appropriate. Variation in effectiveness could be due to the social context and whether or not the target is a friend or stranger (Rowatt, 2001).

Weber, Goodboy, and Cayanus (2010) investigated the three primary types of gambits, but added to them *third-party introductions* (i.e., where a friend introduces the flirter to the target) and *direct introductions* (i.e., the flirter approaches and introduces her/himself to the target) as two variants on the opening-line typology. They found these two new lines to be more effective and rated as more appropriate than the original three; Weber et al. surmise that the inclusion of a known other (who is presumably liked by the target) performing the introductions aided in the effectiveness of these new lines. Finally, more recent work on opening lines indicates that teasing, minor insults, and even overtly



sexual comments can be found attractive if delivered to women possessing more sexist attitudes (e.g., women are subservient to men in a number of social and cultural arenas; Hall & Canterberry, 2011). Despite their place in popular culture, and their sheer frequency, opening lines do not seem to be a go-to flirting behavior.

Opening lines and gambits, however, are not the only means by which to flirt verbally with another. Teasing, or playful banter, has also been exemplified in flirting couples, though it depends on nonverbal aspects of the teasing message as well as the relationship between the people. Men and women often interpret teasing from the opposite sex as flirtatious (Beck et al., 2007), and young girls (ages 13-16) have been found to employ large number of teasing behaviors when signaling their interest in a boy (Moore, 1995).

Compliments are also a form of verbal flirtation. In a study of flirting perceptions, participants rated a compliment more flirtatious than asking for the time (Downey & Damhave, 1991). Compliments, however, are not always interpreted as flirtatious, and it is likely the manner in which the compliment is delivered (i.e., the nonverbal aspects), as well as the whether or not the compliment violated expectations one had regarding the sender (Davis, 2008). If teasing and compliments are sent concurrently with other flirtatious behaviors (e.g., touching, gaze, a warm tone), it is likely that they will be *seen* as flirtatious as opposed to innocuous pleasantries.

With the bevy of flirting behaviors (both nonverbal and verbal) detailed, and a more transparent definition of flirting offered, the particular theoretical frame utilized in this study is discussed next. Because the purpose of this investigation is to examine the

intersection of goals as a way to understand potential changes in flirting behavior, a theory that uses goals as its foundation was selected: Dillard's (1990) Goals-Plans-Action (GPA) model of interpersonal influence. Each of the primary tenets of this theory is reviewed below, paying specific attention to the flirting context.

### **Theoretical Framework**

Given the present definition of flirting as a strategic, goal-related behavior enacted intentionally by senders, the role and function of goals within any flirting interaction is paramount and cannot be overlooked. Although goals have been the focus of considerable scholarly work on human social interaction (Berger, 1997; Bratman, 1987; Cody, Canary, & Smith, 1994; Cody & McLaughlin, 1990; Cohen, Morgan, & Pollack, 1990; Daly & Wiemann, 1994; Galambos, Abelson, & Black, 1986; Kellermann, 1992; Miller et al., 1960; Pervin, 1989; Rule & Bisanz, 1987; Schank & Abelson, 1977), the context of flirting has remained untouched. To remedy this omission, Dillard's (1990, 2004) Goals-Plans-Action (GPA) model will be used in the present investigation. The GPA model states that the production of any influence message involves three distinct components: goals, or desired end states; plans, or cognitive representations of behavior; and actions, or the behaviors themselves (Dillard, 2004). According to the GPA model, the creation (or realization) of a goal leads to planning, which then culminates in the enactment of the plan through action or behavior (Dillard, 1990).

Each component in the GPA model serves to both illuminate flirtatious encounters and also represents an area of interrogation. Therefore, a review of the GPA model follows, with specific applications to flirting. Given its importance to message

production, the goal construct will be examined first.

## **Goals**

Defined generally, goals are “future states of affairs which an individual is committed to achieving or maintaining” (Dillard, 1990, p. 43; see also Hobbs & Evans, 1980; Klinger, 1985). Goals are vital to any influence attempt because they impart meaning to the interaction (Dillard, 1989, 1990). Flirting, it is argued, is an example of an influence attempt because, ostensibly, a flirter is attempting to change how another person views or feels about him/herself. Specifically, a flirter attempts to influence another to feel attraction and interest. Goals impart meaning because it is assumed that humans possess agency and are therefore volitional beings (i.e., they are aware of and can control, their actions). The control that humans exercise over their behavior has important implications for why the behavior is even performed at all (Dillard, 1990, 2004). In other words, if humans are aware of their behaviors, even just minimally, during influence attempts then they too should be aware of how the end states they are trying to reach are motivating the behaviors.

Within the GPA model, there are two distinct, though related, types of goals: *primary* and *secondary* goals. Each are goal type is described the following sections.

**Primary goals.** In the GPA model, primary (or *influence*) goals actually provide the impetus for action and give meaning to an interaction (Dillard, 2004). In other words, they are the end states that individuals attempt to reach and motivate the initiation of the influence interaction. For example, if one wants to flirt with another for sex, engaging in sexual activity would be the primary goal. When there is a discrepancy between the

current state of affairs and the desired state of affairs, a primary goal takes shape (Dillard, 1990).

There are three features that help to explicate the primary goal construct. First, primary goals serve to motivate interaction; they serve as “potential realities” that we strive to construct (Dillard, 2004, p. 187). Second, primary goals segment an interaction into meaningful units, such that an actor knows when the influence attempt begins and when it ends (von Cranach, Machler, & Steiner, 1985). Finally, primary goals serve to determine which aspects of an interaction are important, as well as which behaviors are consciously encoded and decoded (Dillard, 2004). Primary goals are very important to the GPA model; without them, the entire production process ceases to begin.

***Types of primary goals.*** Given the variety of desired end states humans could possess, there could be an equally large number of primary goals in interpersonal contexts (Dillard, 1989, 2004). Counter to this assumption, however, work by Cody et al. (1994), Dillard (1989), and Rule, Bisanz, and Kohn (1985) all uncovered similar sets of primary goals motivating various interpersonal influence situations. Some of these typical influence goals include giving assistance (e.g., asking to borrow a friend’s car), giving advice (e.g., helping a loved one make a decision), and change a relationship (e.g., ask a person to be *more than friends*). Dillard (1990) notes that such typologies are not built simply to create more lists, but instead speak to the cultural similarity (at least in the Western cultures from which these samples were drawn) in how individuals identify influence attempts.

***Primary goals and action.*** Although the GPA model presumes that primary goals

lead to planning, which, in turn, lead to behavioral enactment, Dillard (1989) investigated how varying primary goals might influence behavioral production. Although participants do not skip planning altogether, Dillard predicted that even without assessing planning directly, participants would produce varied message behaviors based only on differences in primary goal. Participants received one of six primary goals (i.e., give lifestyle advice, gain assistance, share activity, change political stance, give health advice, and change relationship), and then described the specific messages they would employ to reach that outcome. Three judges rated each response on three criteria: *directness* (i.e., the degree to which a message is explicit in stating the desired change); *positivity* (i.e., the degree to which positive outcomes are associated with compliance, and negative outcomes are associated with noncompliance); and *logic* (i.e., the degree to which a message contains evidence and reason).

Dillard (1989) reported variation in message characteristics depending on participants' primary goal. Goals such as *Change Political Stance* and *Gain Assistance* resulted in participants reporting lowered use of directness, positivity, and logic, while *Change Relationship* and *Give Health Advice* resulted in participants reporting greater use of these same message factors. Therefore, Dillard concluded that enacted influence behavior differed depending on primary goals and that more work needed to be conducted to better understand the relationships between primary goals and specific communication behaviors.

**Secondary goals.** Although primary goals are central to defining a particular influence attempt, but they do not exclusively drive planning and action (Dillard, 2004;

Dillard, Segrin, & Harden, 1989). Primary goals drive and give shape to an influence attempt, but secondary goals function to restrict and counterbalance message production. Although a person who desires to acquire more money might be motivated to rob a bank, it is a set of secondary goals that usually inhibits such behavior. Dillard et al. (1989) describe secondary goals as “function[ing] to shape, and typically constrain... behavior” (p. 21). In other words, not every primary goal can be achieved in its purest form (that is, without other considerations). This is because social interactions generally, and influence attempts specifically, do not occur in a vacuum, and situational constraints, above and beyond the primary goal (e.g., the actor’s relationship with the target), must be considered. Primary goals in a particular situation cannot occur alone, as they stimulate the formulation and consideration of secondary goals. In other words, all primary goals have considerations manifested in the form of secondary goals and it is important to note the potential roles secondary goals play in influence attempts. For example, the primary goal of becoming rich is not solved by merely acquiring piles of money. There are a multitude of other aspects to take into account when pursuing such a primary goal, and these other aspects represent secondary goals. Like primary goals, there exists a recurring and consistent set of secondary goals; these types of secondary goals are reviewed next.

***Types of secondary goals.*** Primary goals do not exist alone, but can be joined by secondary goals, which help to shape the message structures compiled to meet the primary goal. Dillard (2004) notes several ways secondary goals play a role in an influence attempt. First, any one, or a combination of secondary goals could become more important than the primary goal itself. In some cases, then, the influence attempt is

aborted before much planning or action can occur. If a secondary goal (or a set of secondary goals) is reasoned by a source to be more important, or if consideration of those secondary goals makes pursuit of the primary goal too risky, the influence attempt will be abandoned (Dillard, 1990, 2004). Second, these goals could also function as additional motivators, propelling actors *into* the influence attempt, above and beyond what the primary goal could achieve alone. This exemplifies the variety of roles secondary goals can play.

Dillard (2004) and Dillard et al. (1989) explicate five secondary goals *Identity* goals focus on standards of moral and personal behavior and tend to arise from a person's conceptualization of self. These goals often have to do with ethical standards (e.g., flirting with a friend's former romantic partner). *Conversation management* goals focus on issues related to politeness theory (e.g., Brown & Levinson, 1987) such as face and impression management. This type of goal might consider the target of the influence as much as one's self (e.g., a desire to not offend the target of one's flirting). *Relational resource* goals focus entirely on managing the relationship, whatever the level or type, with the target of the influence attempt. Simply put, this goal deals with people's desire to maintain or improve their existing relationships (e.g., consideration of the effect flirting would have on an existing friendship). *Personal resource* goals reflect the source's material and/or physical concerns. These goals might be manifested through "physical well-being, temporal resources, finances, and material possessions" (Dillard, 2004, p. 189; e.g., would flirting with a target cause bodily injury should s/he have a nearby romantic partner). Finally, *affect management* goals state that people desire to

maintain a preferred affective state; in other words, people tend to prefer positive emotions to negative ones (e.g., considering how much emotional discomfort might result from a flirting interaction).

Primary and secondary goals work together to produce planning and action during an influence attempt: primary goals drive and define the interaction, while secondary goals shape and refine the message production. For example, a male may desire to flirt with a woman for fun, but do so very carefully (e.g., not being too forward or direct) if he notices other men around her. The specific combination of primary and secondary goals constitutes a *goal structure*, an important part of the progression from goals to planning and finally, action (Schrader & Dillard, 1998).

**Goal structures.** Although the presence of a primary goal promotes the consideration of a secondary goal (Schrader & Dillard, 1998), the relationship between the two goal types is not straightforward. At least one primary goal *is* necessary for the GPA sequence to begin, but not all secondary goals may be in play across primary goals and contexts. Dillard (2004) explains that there are three possibilities regarding the combination of primary and secondary goals. First, the two goals could be at odds with one another and are, therefore, incompatible. For example, the primary goal of starting a relationship could be incompatible with the secondary identity goal to remain faithful to a *current* partner. Second, the secondary goal could be irrelevant given the primary goal and, therefore, not warrant consideration. For example, affect management secondary goals rarely present themselves when asking a friend over to watch TV (because, ostensibly, one has asked this question many times before and it therefore poses little



affective consequence). Finally, the primary and secondary goals could align and are, therefore, compatible with one another. For example, the primary goal of changing a relationship could align with the secondary goal of conversation management through the norm of reciprocity. These three possibilities highlight how “the GPA model does not presume that all [secondary goals] are considered in every interaction” (Schrader & Dillard, 1998, p. 279). Moreover, given humans’ limited cognitive capacities, it would be unrealistic to expect such simultaneous consideration of all goals.

Within the GPA model, goal structures can and do vary their complexity (Schrader & Dillard, 1998). The number of secondary goals that a source must consider concurrently determines that particular situation’s goal structure complexity. More complex goal structures have a larger number of relevant secondary goals contending for attention. Conversely, less complex goal structures involve only one or no secondary goals.

***Goal structure complexity and action.*** Not only does the complexity of goal structures affect the decision to act or not, but it also affects message production, or the specific behaviors actors use to influence their targets. Schrader and Dillard (1998) sought to investigate whether primary goals are associated with specific secondary goals, and whether or not such combinations had any effect on message production behavior. They generated 15 primary goals from Cody et al. (1994), asked participants to reflect on a similar influence episode from their own lives, and report the particular behaviors they used to achieve the goal. Independent coders rated the responses for secondary goal presence and salience. Participants’ ratings of the importance of all secondary goals were

subjected to a cluster analysis that produced a four-cluster solution, that varied in complexity of goal structure, as the clusters differed in the number of secondary goals they contained (Schrader & Dillard, 1998). For example, the *Maintenance Episodes* cluster contained common influence attempts such as persuading parents. In this cluster, few secondary goals were considered important to participants' achievement of the primary goal (i.e., only relational resource goals were rated above the mid-point of a scale; Schrader & Dillard, 1998). The most complex cluster was *High Stakes*, were much different in terms of secondary goal consideration because almost all of the secondary goals were activated, with affect and conversation management receiving highest mean scores.

As the importance of the primary goal increases, the number of secondary goals (both in amount and degree) that become salient also increases (Schrader & Dillard, 1998). Given secondary goals' influence on message production (e.g., effort, positivity, logic; Dillard et al., 1989;), the more complex an influence goal structure (and therefore the more secondary goals involved), the more likely a person will modify the actions undertaken to achieve that goal (Schrader & Dillard, 1998). Dillard et al. (1989) found that more complex influence structures produced increased levels of how direct, positive, and logical influence messages were.

Further evidence supporting a link between goals and communication behaviors comes from work by Wilson, Kunkel, Roboson, Olufowote, and Soliz (2009). In their examination of politeness theory and goals of redefining a relationship (i.e., initiating, intensifying, and disengaging), they found that participants specific message behaviors

changed as a function of their particular goal. Samp and Solomon (1990) also found evidence of a primary goal's ability to shift and alter behavior. Participants were asked to leave voice messages on an imagined partner's answering machine expressing concern over a particular scenario. Samp and Solomon found that message characteristics such as extensiveness, supplemental comments, and accounts all varied as a function of whether a person's goal was relationship maintenance or impression management. In all, goals have been found to alter, modify, or predict a host of communication behaviors (for a review see Caughlin, 2010). Goals, then, both primary and secondary, can influence other aspects of the GPA sequence.

### **Flirting Goals**

Given this study's focus, however, it is necessary to review research on goals within flirting interactions specifically as well as how specific flirting goals might alter other characteristics of the interaction. Most definitions of flirting clearly place it within the bounds of goal-related interaction. D. D. Henningsen (2004) and D. D. Henningsen, Braz, and Davies (2008) examined the specific goals that underlie flirting. They reported six primary goals or motivations for flirting. *Sex* refers simply to the desire to engage in sexual relations with another person. *Relational* has to do with intensifying an existing relationship (e.g., shifting a cross-sex friendship to a romantic relationship). The *Exploring* motivation refers to ascertaining how willing another person is to interact with another, or assessing conversational interest (though, as will be reviewed shortly, this motivation is rather vaguely defined). *Fun* represents the pure pleasure and enjoyment of flirting, without any relational implications. Flirting to build up one's own self-esteem or

measure of self-worth is considered *Esteem*. And finally, the *Instrumental* motivation represents the desire to obtain some assistance or reward from the target (e.g., to obtain a free drink; D. D. Henningsen, 2004). These motivations are relevant and salient for both college and non-college populations (D. D. Henningsen et al., 2008).

Similar to Schrader and Dillard's (1998) concept of goal structure complexity, wherein primary goals mix with various secondary goals, D. D. Henningsen (2004) found that although some participants were able to recall a single goal that motivated flirting, most participants reported multiple goals, such as relational and exploring, or sex and relational. Given the conceptual similarity between many of D. D. Henningsen's flirting motivations, this result is not surprising. For example, flirting motivated by sex might also have instrumental motives (e.g., with no relationship desired), relational motives (e.g., *with* a relationship desired) or even exploring motives (e.g., *could* a relationship be possible) concurrently. The method by which D. D. Henningsen conducted his analyses also highlights the complex goal structure of a single flirting interaction. Namely, he had participants describe *each behavior* they reported for an interaction, which they were able to do without fail, further indicating the ecological validity of multiple goals in flirting interactions.

D. D. Henningsen (2004) concludes his report by noting that "flirting interactions can be quite complex, often involving a variety of different goals" (p. 488) and that this complexity often produces motivational blends worthy of future study. Closer examination of D. D. Henningsen's motivations, however, it appears that the *Exploring* goal is rather vague. D. D. Henningsen himself waffles over whether one is exploring for

relational reasons, sexual reasons, or a combination of the two. Therefore, it might be helpful to bifurcate exploring motivations. The first, *Testing the Relational Waters* goal, would encompass those flirts interested in starting a relationship of some kind with another person, but who is unsure as to whether or not that person feels the same way. Similarly, *Testing the Sexual Waters*, suggests flirting to investigate the partner's interest in sexual interactions, ranging from kissing to intercourse. The addition of these two motivations to D. D. Henningsen's existing typology may represent a more comprehensive primary goal structure.

### **Flirting Goals and Action**

With a useful conceptualization of primary flirting goals offered by D. D. Henningsen (2004), one important question becomes the extent to which these primary goals relate to the specific flirting behaviors that are used to reach them. Despite asking his participants to indicate which behaviors they reported were associated with each of the six motivations, D. D. Henningsen did not describe these data. Therefore, the fundamental goal of the current study is to investigate, given Dillard and colleagues' GPA model, how primary flirting goals relate to flirting behaviors. Put another way, how might a specific flirting goal be related to a particular set of flirting behaviors (e.g., a sexual goal leads to more eye contact, touching, and intimate conversation)?

Although the current flirting literature presents both a large inventory of behaviors and multiple goals for these interactions, no work has, as yet, examined the extent to which these concepts interrelate. Dillard's (1990, 2004) GPA model allows for the organization of flirting motivations and flirting behaviors. Other scholars, notably

Caughlin (2010) have made similar calls for scholars to employ the effect of goals on behavior. Caughlin underscores how imbuing multiple goal perspectives, like Dillard's (1990) GPA model, into research programs "can enrich both relationship and message production scholarship" (p. 824). Flirting is clearly a message-based communicative phenomenon, as defined within this discussion, and always occurs within some degree of relationship, stranger-to-stranger or with a married couple. In this way, this study can begin to answer the call posed by Caughlin. Toward that end, therefore, the following research question is proposed:

*RQ<sub>1</sub>: Are flirting goals related to specific flirting behaviors?*

Having reviewed goals' potential to modify behavior, the second stage of the GPA sequence, plans, will be reviewed. Plans represent the instantiation of goals into ordered action sequences (Berger, 1997). In other words, plans are the cognitive sibling of a goal; it is how the goal is to be carried out. Like goals, plans also have the ability to modify behavior. Therefore, an examination of plans and their features will be examined, paying specific attention to the context of flirting interactions.

### **Plans**

After developing a primary goal and considering secondary goals, a source moves to the second phase of Dillard's (1990) GPA sequence: the creation and selection of a plan. Like goals, plans are a well-established feature of interpersonal communication research (Miller et al., 1960), especially as they relate to goal-directed influence behavior (Berger, 1997).

**Definitions and characteristics of plans.** A plan is a blueprint of action that is

developed based on general information regarding one's goals and describes the behaviors necessary to achieve those ends (Berger, 1988a; Miller et al., 1960; Schank & Abelson, 1977). Overall, a plan is a cognitive representation of action sequences (or sequences of behavior) that are aimed at achieving or fulfilling some pre-designated goal (Berger, 1997). Importantly, a plan resides completely within the planner's cognitions; plans are cognitive schemes or representations of behavior that one *might* use to pursue a particular goal.

Plans vary along three dimensions: *hierarchy*, *complexity*, and *completeness* (Berger, 1997; Dillard, 2004). Hierarchy refers to the level of abstraction the plan occupies. Berger (1997) explains that because humans are limited cognitive processors, goals tend to be arranged into superordinate and subordinate categories. The plan "flirt to start a relationship with Jenny" might have subordinate goals of "have fun with Jenny" and "initiate sexual contact with Jenny." A plan exists at each level across a single goal hierarchy. Thus, plans vary in abstraction according to its placement on the goal hierarchy. Plans associated with subordinate (i.e., more specific) goals possess less abstraction than plans associated with goals higher up on the hierarchy, which are more abstract (Berger, 1997). "Abstract," here means that a plan possess multiple possibilities for interpretation (Berger, 1997).

Plan complexity encompasses two dimensions. The first is the plan's level of detail. Plans could include simple steps (e.g., "Get him to like me") or very detailed behavioral descriptions (e.g., "Tell him that I like his glasses"). Berger (1997) notes that some planners go so far as to rehearse the exact words s/he will say, and the order in

which to say them. For example, a flirter might practice an opening line, looking away at just the right time, and then offering to buy the target a drink. (This example indicates how flirting plans could include *both* verbal and nonverbal behaviors.) The second aspect of plan complexity is the number of contingencies, or back-up plans that are generated. A complex plan includes responses to many factors that might interfere with successful goal achievement (Berger, 1997). In this way, plans can be complex both horizontally (e.g., multiple communicative options for each turn) and vertically (i.e., a detailed description of communicative behavior enacted at each turn).

A plan is complete to the extent that it specifies not only a variety of behaviors, but that those behaviors, when executed in the order planned, will result in the attainment of the goal (Berger, 1997). Moreover, a complete plan considers all necessary steps for goal completion, not just the most straightforward and direct. For example, a complete plan for buying a new home specifies the details of how to handle realtor negotiations, closing costs, and moving expenses; not just the locating and purchasing of the new home itself.

Finally, while a plan represents the cognitive entity that is created, *planning* is the process by which such cognitive entities are developed (Berger, 1997). According to Berger (1997), moving from primary and secondary goals to plans actually involves another two-step process: plan generation and plan selection. Each of these aspects will be considered in turn.

***Plan generation and selection.*** Planning involves, first, the conception of one or more plans. Berger (1997) explains that because of the complexities inherent to influence



attempts, there are two primary generation routes. The first route involves using a previously rehearsed or developed plan, which has been used several times before, and is stored in long-term memory (Berger, 1997). These *canned* or *boilerplate* plans (Dillard, 1990) do not require much cognitive effort or energy to develop. This is important because these cognitive elements are in short supply during many influence interactions. Canned plans are more likely to be produced in familiar (when compare with novel) situations (Berger, 1997).

The second planning route is to create a new plan to reach a set of primary and secondary goals in a particular influence situation. Using canned plans is preferred to creating a new plan because of the time and energy necessary to build a new plan. Development of a new plan is frequently required while a source is already interacting with another person. This makes developing a new plan all the more taxing and challenging (Berger, 1997). For example, if, while flirting, the target makes an offensive remark that makes one want to terminate the interaction, the change in goal (from flirting to conversational termination) necessitates the development of a new (i.e., disengagement plan).

Compared to plan generation, plan selection, or deciding that one plan is better than the alternatives in terms of goal attainment, is a more straightforward process. Berger (1997) claims that plan selection is a matter of matching one's plan to the goal(s) at hand. Specifically, one must evaluate the sequence of behaviors offered by the plan in comparison to that for which the situation calls, paying attention to whether or not the proposed plan obtains the goal, accounts for contingencies (if present), and is efficacious

(Berger, 1997). Although individual differences might drive the selection of a single plan from multiple options (if options are available), it is likely that the combination of primary and secondary goals that will dictate which, if any, plan is selected for the influence attempt (Dillard, 1990, 2004). The cognitive process of evaluating available plans to reach goals is based on previous experience, the source's perceived self-efficacy to enact the plan, and the cognitive effort to complete the plan (Berger, 1997).

***Goal structure complexity and planning.*** The combination of primary and secondary goals, or goal complexity, has the potential to affect the planning process. Berger's (1997) discussion of goal hierarchies, or the level of abstraction at which a goal resides (e.g., Being a good person vs. loaning a friend \$100), closely reflects Schrader and Dillard's (1998) discussion of goal structure complexity. Berger explains that multiple goals representing multiple levels of abstraction within a single hierarchy may be present for any one persuasive interaction. As goals increase in complexity, greater cognitive effort is likely necessary for the planning process to occur. A persuasive interaction with only one goal, then, should require, all other things being equal, less planning than a persuasive interaction with five goals. For example, flirting to obtain a free drink is likely less cognitively taxing than flirting to obtain a free drink *and* assess a person's interest in sexual contact later that evening. Therefore, the following hypothesis is proposed:

*H<sub>1</sub>: To the extent that a flirting goal structure is complex, a participant will report more planning.*

***Goal importance and amount of planning.*** Goal importance, or the consequences

it has for the actor, affects the planning process (Berger, 1997; Dillard, 1990; Schrader & Dillard, 1998). In general, the more important a goal, the more complex, complete, and thorough planning becomes (Berger, 1997). Brand (1984) claims that “as the desire to reach a social goal increases, the complexity with which plans are formulated also tend to increase” (p. 29). Indirect support of this proposition comes from Berger (1988b), where participants were asked to rate their position on a social issue and create a plan to persuade another person on it. Berger (1988b) found that the more extreme the participant’s position (i.e., positive or negative distance from the mid-point), the more complex the plans they generated. This finding is similar to the work of Schrader and Dillard (1998) and Dillard et al. (1989), wherein secondary goal consideration grew in complexity in relation to the importance of the primary influence goal. Berger (1997) explains that as goal importance increases, plans will contain more contingencies.

Berger and Bell (1988) investigated the plans students created for two different goals: ask a liked other out on a date and ingratiate a new roommate. Participants rated the date request goal as much more important than the roommate ingratiation goal. Moreover, plans for date requests were more likely to include the source’s specific behaviors, how the source would respond to the target’s specific behaviors, and show persistence in effort. Furthermore, plans for date requests were, on average, much longer and more detailed than plans for roommate ingratiation. Goal importance for the date request task seemed to motivate participants to engage in deeper, more thoughtful, planning, thereby producing more complex and complete plans..

Primary flirting goals likely vary in importance (e.g., starting a relationship with a

liked other or obtaining a free drink). Moreover, given that no research explores the relationship between a flirting goal importance and either the amount of planning or enacted flirting behaviors, the following research questions are posed:

*H<sub>2</sub>: To the extent that a reported goal is more important, a participant will report more planning.*

*RQ<sub>2</sub>: Does goal importance relate to the types of flirting behaviors enacted?*

The planning process has not escaped the attention of interpersonal communication researchers. Now that definitions and characteristics of plans have been elucidated, and a research question on goal complexity proposed, research investigating the presence and role of plans within the specific context of sexual communication will be reviewed, paying close attention to the interplay between goals, plans, and observed behaviors.

**The ability of goals to affect plans.** Within the GPA theoretical framework, Dillard (1990) notes that across influence situations, primary goals will affect and shape the particular plans generated and selected (and, thereby, the action taken) by sources. Miller, Boster, Roloff, and Seibold (1977) noted that different influence goals changed the types of plans participants generated, and that these varying plans produced varied reports of behavior. Berger (1997) notes that Miller et al.'s (1977) work represents one of the few studies that examined the ability of specific goals to alter specific plan generation. Waldron (1990) similarly found that characteristics of an influence attempt, notably goal complexity and priority (or what Berger [1997] would have termed *importance*), resulted in more creative and novel planning by participants. Therefore,

goals have the ability to affect plans and the planning process. Does this same effect carry over to the realm of flirting and flirtatious interactions, such that flirting goals will alter and change the amount of planning undertaken by individuals? This was the basis of the following research question:

*RQ<sub>3</sub>: Are flirting goals related to planning?*

**The relationship between planning and behavior.** The final step or hypothesized sequence in the GPA framework is that planning will produce the behavior utilized in support of the primary influence goal (Dillard, 1990). Although a very important part of the GPA sequence, this plan-action link has received scant attention from researchers (Hullett, 2004). Despite this, research unrelated to the GPA model suggests that plans play an integral part in the generation and delivery of communicative action. When planning conversations, people tend to use fewer than half of the planned clauses and ideas they wrote down prior to the interaction (Hjelmquist, 1991). Hjelmquist (1991) found that participants planned much more than they actually utilized while interacting, and hypothesized memory lapses (i.e., the human brain simply has a difficult time retaining previously-planning action sequences) is one potential reason for the discrepancy; the other could very well be the consideration of contingencies (Berger, 1997). Moreover, planning seems to produce much more specificity than the conversations that follow them (Hjelmquist & Gidlund, 1984). In other words, the actions produced in one's mind are very often more complex and thorough than what one does when enacting the plan.

Planning has been shown to affect certain aspects of communication behavior.

Waldron (1990) investigated how constraining goal priority might alter the amount of planning and, in turn, the resulting communication behavior for a conflict situation. When planning was constrained, participants enacted less creative communicative behavior aimed at reducing a conflict. In such cases, behavior was simple, direct, and forward. Similar results were found when goal complexity was increased, again reducing planning time and quality; the more complex the goal, the less time participants felt they had to plan, ostensibly because of the difficulty that such a complex goal presents. Berger and his colleagues (Berger & Jordan, 1992; Berger, Karol, & Jordan, 1989; Berger, Knowlton, & Abrahams, 1996) have demonstrated that more complex a developed plan (i.e., more behavioral units, more contingencies) results in more verbal disfluencies in the enactment of the plan. Specifically, the more complex the plan, the more participants engage in pausing (both vocalized and nonvocalized), false starts, and disfluencies (Berger, 1997). More complex planning was even shown to produce less cogent and complete arguments when debating a topic (Berger, Karol et al., 1989). Here again, planning appears to possess the ability to affect communicative behavior at the specific utterance and fluency level.

Planning is not *always* a detriment of enacted communication behavior, however. Those who plan before a conversation tend to produce more quality statements with fewer utterance pauses (Allen & Edwards, 1991; Green, 1984). Planning also appears to help those attempting to deceive another; compared to those who do not plan. Deceivers who prepare for their deception respond more quickly to questions, use fewer uncontrollable body movements (e.g., foot taps and leg shifts), and possess fewer

latencies, all of which improve the chances of having a lie believed (Cody, Marson, & Foster, 1984; Green, O’Hair, Cody, & Yen, 1985). Planning in the context of relationship initiation also seems to affect communication behavior. Specifically, planning significantly predicts the explicitness of a relationship initiation message as well as the specific constellation of verbal and nonverbal behaviors used (M. L. M. Henningsen, Valde, Mongeau, Serewicz, & McWorthy, 2013). In all, it should be expected that planning would affect the use of specific flirting behavior in some way, but given that no previous analysis has undertaken this issue, the following research question is proposed:

*RQ<sub>4</sub>: Is planning related to specific flirting behavior?*

### **The Role of Biological Sex in Flirting**

Although the investigation of sex differences in social scientific research has been criticized for frivolity, as well as based more on habit than actual intellectual inquiry (Canary & Hause, 1993), biological sex differences in the realm of sexual and romantic relationships are fruitful and illuminating (Canary, Emmers-Sommer, & Faulkner, 1997; Dindia & Canary, 2006). Men and women approach and enact sexual communication differently, because of differing cultural and evolutionary pressures (Petersen & Hyde, 2010; Wells & Twenge, 2005). The sex differences that are reported are thought to exist because of the evolutionary interests impinging on each sex, and how those interests affect many relationship-seeking behaviors and cognitions (e.g., Buss & Schmitt, 1993). Men, because of their relatively low investment in the nurturing of offspring to sexual maturing relative to women (i.e., a nine-month gestational period vs. a single act of copulation), tend to prefer short-term sexual relationships (e.g., casual sex hookups

and/or one-night stands) to long-term ones (e.g., romantic relationships; Buss, 1994; Buss & Schmitt, 1993; Trivers, 1972). This difference in investment explains not only men's interest in having more lifetime sexual partners relative to women, but also the characteristics that both sexes find attractive in a potential mate (Kenrick et al., 1990; Trost & Alberts, 1998). Given this research, the potential for biological sex differences in matters of romantic and sexual relationships abound.

Biological sex differences are ubiquitous in flirting and relationship initiation research. Abbey (1982, 1987; Abbey & Melby, 1986) indicates that men interpret women's friendly behavior as more flirtatious and sexual than women perceive men's behaviors to be (see also Frisby, Dillow, Gaughan, & Nurdlund, 2011). Meta-analyses indicate that men, overall, perceive both men *and* women to be more flirtatious, promiscuous, and seductive during observed interactions; these effects are statistically strong (e.g., average  $r = .36$ ; La France et al., 2009). When pursuing a short-term casual sex relationship (such as a one-night stand), men have lower standards than do women when it comes to a potential partner's intelligence. Women's minimum standards were consistently high (Kenrick et al., 1990).

**Sex differences in flirting behaviors.** Women and men differ in their ability and skill at performing flirting behaviors. Women, for their part, are consistently more accurate than men at encoding and decoding nonverbal behavior (the channel that comprises most flirting communication; Buck, 1984; Hall, 1987; Noller, 1986). Women tend to possess greater ability in the expression of their emotions and feelings relative to men (Hall, 1984), and have a better command of the visual nonverbal channel, through



which most flirting passes, at least initially (Drag & Shaw, 1967; Trost & Alberts, 1998). Biological sex differences in nonverbal ability are useful for understanding observational research on cross-sex dyads, which indicates that women not only possess a wider repertoire of flirting behaviors compared to men, but that they are also more active participants and initiators of flirting interactions (Clark et al., 1999; Greer & Buss, 1994; McCormick & Jones, 1989; Trost & Alberts, 1998). Therefore, the following hypothesis is proposed:

*RQ5: Do specific flirting behaviors differ between men and women?*

**Flirting goals.** Biological sex is not related flirting behavior alone, but might also be related to the types of goals men and women cite as reasons *for* flirting in the first place. Research on first date goals offers evidence that this might be the case. A series of investigations conducted by Mongeau and colleagues (Mongeau & Johnson, 1995; Mongeau, Serewicz, & Therrien, 2004; Morr & Mongeau, 2004; Mongeau, Jacobsen, & Donnerstein, 2007) into the goals people express for their first dates consistently show biological sex differences. Specifically, men tend to report possessing more sexual goals for their first dates, while women tend to report possessing more goals related to friendship and fun.

Biological sex differences in first date goals are not surprising given the evolutionary theories reviewed above; men, it is argued in these theories, are constantly (though subconsciously) evaluating targets for sexual and reproductive potential, and therefore would be more likely to report having sexual goals for first dates. Women, for their part, must be more cautious when evaluating potential mates, as a poorly selected

sexual or romantic entanglement carries greater negative consequences for women than men (Trost & Alberts, 1998). Therefore, it is also not surprising that women would report relational and fun (i.e., just “seeing how it [the relationship] goes”) goals.

Given that flirting is often a part of first dates, will the sex differences for first date goals carry over to the flirting context? D. D. Henningsen (2004) investigated this question, and found that men were more likely to flirt for sexual reasons compared to women, and women were more likely to flirt for relational and fun reasons compared to men. Given that the current study utilizes a modified version of D. D. Henningsen’s (2004) original flirting motivations typology, the following research question is proposed:

*RQ<sub>6</sub>: Do specific flirting goals differ between men and women?*

## CHAPTER 2

### METHOD

This project sought to use the Goals-Plans-Action (GPA) model (Dillard, 1991) to investigate the relationship goals might have on flirting behavior. Both flirting goals and behavior were measured in two ways. Institutional Review Board approval was obtained for the administration of a survey to human subjects (see Appendix A). Goals were assessed using a single-item measure and seven, Likert-type items. Behaviors were assessed using both an open- (i.e., participant provided the behaviors) and closed-ended (i.e., participant responded to scale items; Egland et al., 1996) formats. The dual-measurement of both goals and behavior was performed to more completely and clearly answer the study question. This chapter will describe the participants, measurement, and procedures undertaken in this project.

#### **Participants**

Participants included 658 undergraduate students recruited from lower- and upper-division communication courses at a large Southwestern university. Because flirting behavior was the primary dependent variable of interest, and was measured two ways, two subsamples (labeled the *open-ended sample* and *closed-ended sample*, or *OE* and *CE* for short) were created by differing sets inclusion and exclusion criteria. It is worth noting that the larger closed-ended sample was utilized for *all* aspects of this project. On the other hand, the open-ended sample was *only* used as an additional means of answering research questions one through four, each of which focus on identification of flirting behavior as a dependent variable.

**Closed-ended sample.** From the initial sample of 658 undergraduates, 110 participants were removed for not completing most (i.e., at least 75%) of the behavioral measure; two were removed for not completing most (again, at least 75%) of seven items measuring goals; and one was removed for indicating that s/he was under the age of 18 (an inclusion requirement as stipulated by the institutional review).

Given the exclusion criteria, the final closed-ended sample size included 545 participants (82.8% of the larger sample). In the closed-ended sample, 319 participants were women (59%), 222 were men (41%), with four participants not reporting a sex. Ages ranged from 18 to 37 years ( $M = 20.96$ ,  $SD = 2.75$ ). The sample was overwhelmingly heterosexual ( $n = 494$ , 91.8%) with only 23 participants (4.3%) indicating that they were homosexual and 21 participants (3.9%) indicating that they were bisexual, and seven participants providing no sexual orientation response. Class standing was relatively equally represented across freshmen (25.9%), sophomores (22.7%), juniors (26.2%), and seniors (25.1%). A variety of ethnicities were present; participants reported being Caucasian/European (63.2%), Latino/a/Hispanic (12.9%), Asian/Asian American (9.1%), African/African American (6.1%), Bi-Racial (6.1%), Arab/Middle Eastern (1.3%), Pacific Islander (.7%), and Native American (.6%). Finally, most participants reported being single (51%), followed by committed dating (27.5%), casually dating (15.5%), being engaged or married (4.6%), and other (e.g., “Complicated;” 1.3%).

**Open-ended sample.** From the initial sample ( $n = 658$ ), 282 were removed for one of the following four reasons. First, 211 participants were removed for not reporting

at *least* four behaviors in the open-ended behavior section. Second, 31 participants were removed for not describe an instance of face-to-face flirting in open-ended response. Such responses described flirting via computer-mediated communication (e.g., “I texted him/her a winky face.”), the *effect* flirting might have on their relationship with the other person (e.g., “I don’t know, flirting just helps us stay close.”), or what behaviors that might have better qualified as sexual pursuit (e.g., “He/she took of my clothes, we started touching, it led to sex.”). Finally, 40 participants were eliminated for not completing most (i.e., at least 75%) of seven goals items. These criteria were *not* the same for the closed-ended sample, whose participants were removed exclusively for the reasons detailed above.

Pruning the original sample using these criteria generated a final CE sub-sample size of 376. In this reduced sample, 234 participants were women (62.4%) and 141 were men (37.6%) ranging in age from 18 to 37 years ( $M = 20.99$ ,  $SD = 2.77$ ). The sample was overwhelmingly heterosexual (93%) with only 16 participants (4.3%) indicating that they were homosexual and 10 participants (2.7%) indicating that they were bisexual. Class standing was relatively equally represented across freshman (25.1%), sophomores (21.3%), juniors (25.9%), and were seniors (27.7%). A variety of ethnicities were also present; participants reported being Caucasian/European (65.5%), Latino/a/Hispanic (12.5%), African/African American (7.5%), Bi-Racial (7.2%), Asian/Asian American (5.3%), Arab/Middle Eastern (.8%), Pacific Islander (.8%), and Native American (.5%). Finally, most participants reported being single (50.1%), followed by committed dating (26.9%), casually dating (16.8%), being engaged or married (4.5%), and other (e.g.,

“Complicated;” 4.5%).

## Measures

**Flirting behavior (closed-ended).** A modified version of the Eglund et al., (1996) *Flirtation Behavior Scale* (adapted from Silver & Spitzberg, 1992) represented the closed-ended flirting behavior measure. This modified scale contained 54 items, each describing a different flirting behavior (e.g., “Complimented his/her appearance,” “Laughed frequently,” and “Maintain a conversation”). Eglund et al. (1996) original scale contained 60 items that collapsed into four factors that accounted for 55.1% of total variation: *Display*, which involved overt displays of affection; *Attentiveness*, which involved a participant’s actively focusing on the other; *Stereotypical*, which involved culturally-recognizable flirting behaviors; and *Conversational*, which involved verbal exchanges with the target. Of the original 60 items, three were excluded from this study because they were deemed unlikely to be utilized (i.e., would be perceived by participants as anachronistic) by a college-student population (*Ask the person’s sign, Give him/her a business card, Whistle at him/her*). Four other items, representing specific pickup lines (e.g., Used the line ‘I’ve seen you before’) were collapsed into a single *Used a pickup line* item for the current study. A five-interval response scale accompanied each item with options ranging from *Never Used This Behavior* to *Always Used This Behavior*.

Parallel analysis (O’Connor, 2000) was used to estimate the number of factors to retain. Examination of the scree plot and raw-data eigenvalues from the parallel analysis indicated that between five and eight factors provided optimal results. Four separate principal-axis factor analyses with promax rotation were then conducted, specifying

eight, seven, six, or five factors respectively. Results from each factor analysis were inspected and compared on both conceptual and statistical grounds. Specifically, triangulation between the parallel analysis, initial solution eigenvalues of greater than 1.00, and examination of the scree plot were utilized for determining the number of factors to retain.

In assigning items to factors, primary and secondary loading cutoff points were not specified, as the values used in such decisions are often arbitrary and can separate conceptually-relevant items from factors (Fabrigar, MacCallum, Wegener, & Strahan, 1999; Preacher & MacCallum, 2003). The pattern matrix from each analysis was inspected as it typically produced a clearer view of which items to place into factors (should the items factor at all). For the most part, primary loadings were typically larger than .30 (and most were considerably larger than that). When relative large cross loading did occur, the primary factor was compared with the cross-loaded factor(s) for conceptual relevance. In this way, items were placed into the factor in which it made the greatest conceptual sense.

Upon inspecting factor-analytic results, a six-factor solution, including all 53 items, was deemed most appropriate. The solution produced a Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of .93, indicating more than acceptable sample size and inter-item correlations (Dziuban & Shirkey, 1974). Together, the six factors accounted for 54.8% of the total variance. Each factor will be discussed in turn.

The first factor, containing 13 items, appears to tap *Immediacy* (both verbal and nonverbal) because items appear to tap behaviors typically considered to reflect

conversational warmth and involvement (e.g., Burgoon & La Poire, 1999). These behaviors included initiating and maintaining a conversation, complimenting the other person, and being engaged with what the other person had to say. Items that loaded on this factor included both verbal and nonverbal behaviors, giving further support for a label of “immediacy,” as that construct has been demonstrated to comprise both channels (e.g., Andersen, J. A., et al., 1979; Rocca & McCroskey, 1999). Thirteen items were placed into this factor, which exhibited strong reliability ( $\alpha = .89$ ,  $M = 3.76$ ,  $SD = .73$ ).

All the items in the second factor focused on contact between partners (e.g., rubbing or stroking). Therefore, the factor was labeled *Touch*. Items reflected a variety of touches, both intimate and casual. This factor contained 10 items and exhibited strong reliability ( $\alpha = .92$ ,  $M = 2.56$ ,  $SD = 1.03$ ).

The third factor contained behaviors indicating that the participant was clearly focusing on the target (whom s/he is flirting with). Thus, this factor was labeled *Attentive*. This factor contained behaviors such as gaze, posture, and orientation (e.g., facing the person). As such, this factor likely represents a form of altercentrism (e.g., Cegala, 1981; Rubin & Martin, 1994), which is defined by showing interest in others, what they say, how they say it, being responsive to their thoughts, and adaptation during a conversation (Rubin & Martin, 1994). This factor, which contained ten items, showed strong reliability ( $\alpha = .85$ ,  $M = 3.90$ ,  $SD = .71$ ).

The fourth factor comprised culturally recognizable, even scripted, courtship cues (i.e., clearly letting another know that one is interested in a relationship of some form or kind) and behaviors. *Overt Behaviors* such as buying drinks, directly complimenting the



other person, and asking him/her a date were part of this factor. The overt label is appropriate as items clearly reflect the flirter's interest, and are relatively unambiguous regarding the flirter's intention(s). These behaviors are used when a flirter *wants* the other to become aware of his/her interest. The overt factor contained eight items and exhibited acceptable reliability ( $\alpha = .82$ ,  $M = 2.45$ ,  $SD = .88$ ).

In some ways, the fifth, or *Indirect* factor, is the conceptual opposite of the *Overt* factor. Items in this factor seemed to describe indirect and coy hints at interest. If the overt factor comprises clarity or explicitness, the indirect factor appears to reflect the opposite perspective. With the indirect factor, a person flirting without giving too much away, making the other person work to infer and recognize that one is flirting. Behaviors such as looking down and sucking a straw loaded on this factor. The six items in this factor exhibited acceptable reliability ( $\alpha = .79$ ,  $M = 2.20$ ,  $SD = .90$ ).

Finally, items in the sixth exclusively reflected aspects of the conversation (i.e., talk) between partners. Therefore, this factor was labeled *Conversational*. Items in the conversational factor all focus on the talk between partners. All the items in this factor are related to having a smooth, flowing, interaction (e.g., Avoiding silences and compared interests). The conversation factor stands in contrast to the *Immediacy* factor, which contained both verbal and nonverbal behaviors and focused to *how* one engages. The six items in this final factor showed strong reliability ( $\alpha = .81$ ,  $M = 3.82$ ,  $SD = .75$ ). Factor loadings for all items and factors are provided in Table B1 in Appendix B, and interfactor correlations are provided in Table 1.

**Flirting behavior (open-ended).** Participants also completed an open-ended

flirting behavior measure *before* completing the closed-ended items. Participants were instructed: “Now please list *all* the behaviors, *both* verbal and nonverbal, that you used while flirting with the other person.” Participants were instructed to type behaviors in a single text box, provide only a single behavior on each line, list behaviors in the order in which they were enacted, and to be as detailed as possible.

The first task in developing behavioral sets from these open-ended data was to unitize responses that were not already separated. Roughly 10% of the open-ended sample failed to unitize their behavioral responses. For cases where responses were not separated by lines, unitization by two coders was needed, and results were nearly identical across the two coders.

Following unitization, responses were used to develop initial behavioral categories using the constant comparison method (Dye, Schatz, Rosenberg, & Cole, 2000). In this analysis, each unit was first placed into a single category. If no category existed for a unit, a new category was created. This categorization scheme was guided by previous observational flirting research (e.g., Moore, 1985), and primarily generated a macro-level behaviorally-based typology (e.g., eye contact, body movement, touch, gestures). Categories were generated in this way until responses did not produce suggest the creation of new behavioral categories.

Responses were included only if they described the participant’s own face-to-face behavior. In other words, behaviors enacted by the partner were not categorized. In addition, any response describing flirting via CMC or deemed as not describing flirting (e.g., sexual pursuit) was eliminated.

Following the generation of behavioral category scheme, the research assistant and I independently coded the same 40 responses. After comparing response sets, categories were shifted, altered, and deleted, until all disagreements had been resolved. A second set of 40 respondents was then coded using the revised typology. This process continued through five iterations, with revisions being made to the category scheme each time. This process helped to sharpen both the category scheme and the decision rules (upon which categories were eliminated, combined, and/or created). This process was repeated until disagreements were all but eliminated.

After the final behavioral categorization typology was developed, a separate set of 40 responses was given both to the research assistant and myself for the purposes of establishing intercoder reliability. Cohen's Kappa, ( $\kappa$ ) was employed so as to remove random agreement. Intercoder agreement was very strong (88%) as was the intercoder reliability coefficient of  $\kappa = .88$ . Once an acceptable Kappa was achieved, the complete set of responses was evenly divided and coded using the final categorization typology.

One concern with multiple coders is coder drift, or coders' implicit definitions and coding rules changing as the coding continues. If differential drift occurs, reliability at the end of the coding process might be unacceptable even though it was acceptable initially. To test this notion, at the conclusion of coding, intercoder reliability was reassessed with 10% of the data (or 40 cases), and again was acceptable,  $\kappa = .85$  (85% agreement).

The final open-ended typology included 35 behaviors (see Table B2 in Appendix B for descriptions, category codes, and examples) that were further collapsed into ten

behavioral sets to facilitate statistical analyses and conceptual clarity. Labeling of the ten behavioral sets was used to describe the common element of the individual behaviors. *Eye behavior* included both eye contact and eye movements such as winking or batting of one's eyelashes. *Verbal* contained any verbal exchange, from the playful or affectionate to the "mundane" (e.g., "How was your day?"). *Self-Touch* included a single item describing any behavior such as hair-playing. *Other-Touch* encompassed all other forms of touch: hand-to-body, object (e.g., a bottle), or mutual touch (e.g., hand holding). *Kinesics* highlighted any and all aspects of movement, from posture of one's body to the orientation (e.g., side-by-side or face-to-face) of two people. *Laughing* encompassed any form of laughter, (e.g., giggling or chuckling). *Vocalic* described behaviors wherein the voice was modulated (e.g., volume and pitch). *Facial Expressions* comprised any facial movement that was *not* eye-related, behaviors such as pouting or making a funny face. *Kissing* contained both mutual and single (e.g., kissing another's body) variations. Finally, an *Other* category contained behaviors such as presentation of self, wherein one attempts to act or be interpreted a certain way (e.g., trying to "be cool"), games or activities, and behaviors that could not fit into any other category.

On average, participants reported 6.84 ( $SD = 3.35$ ) behaviors in their open-ended responses (minimum = 4 maximum = 38). As a consequence, for each participant, counts of one or zero were common for most behaviors. As a consequence, each behavioral set were created by summing the frequencies of all individual behaviors. For example, the eye behavior label was created by summing values for both eye behavior and other eye behaviors (e.g., eyelash batting or winking). The resulting ten behavioral sets are used in

analyzing the open-ended flirting data. Given that the data represented frequencies and the variables exhibit strong positive skew, a square root transformation was applied to each open-ended item before being computed into the larger categories (McDonald, 2009).

**Flirting goals.** Measurement of participants' goals for their most recent flirting interaction began by considering D. D. Henningsen's (2004) six flirting motivations: sex, relational, exploring, fun, esteem, and instrumental. This typology was modified slightly by dividing exploring, which D. D. Henningsen defined as "testing whether another is interested in starting a romantic relationship" (p. 482), into separate testing relational waters and testing sexual waters goals. This modification resulted in seven total flirting goals. Each goal and its description are presented in Table 2. These descriptions represent the goal items themselves, but were called "reasons for flirting" within the survey.

Participants' goals for the flirting interaction were measured in two different ways. First, respondents separately rated each goal for its relevance to the described flirting interaction. A five-interval scale accompanied each goal item, with responses ranging from *Was Not At All A Reason* to *Was Very Much A Reason*. An eighth, *Other* category was provided with an accompanying textbox for elaboration by the participant. Second, a single item was developed to measure respondents' *primary* goal. The instructions for that question read: "Which of these reasons best describes the primary reason you started flirting with the other person. Think of this reason as the most important or *main* reason. Please choose only one." A list of all eight goals (the seven D. Henningsen-based goals plus an Other goal) was then provided as responses.

**Goal importance.** The importance of a participant's primary or *main* flirting goal was assessed with items modified from Dillard et al. (1989) to fit a flirting interaction. Specifically, in four of Dillard et al. original five items that described "the persuasive interaction" were modified to read "for flirting." The items were: (a) "The reason I had for flirting was important to me;" (b) "I was very concerned about getting what I wanted in this flirting interaction;" (c) "The outcomes of this flirting interaction had importance personal consequences for me;" (d) "I really didn't care that much whether the other person wanted what I did or not" and; (e) "The reason I flirted with the other person was not that important to me." The final two items were reverse-coded such that higher numbers indicated a more important goal. A five-interval Likert scale ranging from *Strongly Disagree* to *Strongly Agree* accompanied each item. A goal important score was created for each participant by computing the mean of the individual items.

Principal axis factor analysis was utilized to assess the dimensionality of the goal importance items. The five items showed an acceptable KMO Measure of Sampling Adequacy score of .73. Examination of both the scree plot and the component matrix indicated that, in fact, the five items did comprise a single factor, explaining 50.96% of the total variance. The goal importance scale showed acceptable reliability ( $\alpha = .75$ ).

**Goal complexity.** The more goals under consideration during a persuasive interaction, the more complex the goal structure is said to be (Schrader & Dillard, 1998). An average goal complexity score was computed, placing the scale on the same 1 (i.e., none of the goals represented a reason for flirting) to 5 scale (all goals were very much a reason for the interaction) as other study variables.

**Planning.** The amount of planning participants reported for the flirting interaction was assessed with six items, which included the single item from Dillard et al. (1989) and five items generated for this study. Items include: (a) “I put a lot of thought into figuring out what was the best way to flirt” (the original Dillard et al. item) (b) “I had a plan for how I was going to flirt” (reverse coded), (c) “I visualized in my mind what I would say/do before I actually did it;” (d) “If the other person didn’t reciprocate my flirting, I had a back-up plan;” (e) “I chose the way I flirted from other possible options that I thought of” and; (f) “I came up with a course of action before I started flirting.” Each item was accompanied by a five-interval scale ranging from *Strongly Disagree* to *Strongly Agree*.

Principal axis factor analysis was performed to assess the dimensionality of importance items. The six items showed an acceptable KMO Measure of Sampling Adequacy score of .87, and examination of both the scree plot and the component matrix indicated that, in fact, the six items did comprise a single factor, explaining 65.33% of the total variance. The planning scale showed strong reliability ( $\alpha = .89$ ).

Given the scale’s unidimensionality, the amount of planning variable was created by computing the mean of the planning items. In this way, the scores for goal importance ranged from one to five. All items were, however, centered by subtracting that item’s mean from it prior to variable creation.

### **Flirting Scale Validation**

Because this project employed two separate measures of participants’ perceptions of flirting behavior, it was important to determine the extent to which they were related to

one another. Examining this potential relationship allows for construct validity to be assessed. Essentially, the question becomes; do these measures, which ostensibly tap the same communication phenomenon, relate to one another in meaningful ways? This test of validity was conducted utilizing bivariate correlations. Specifically, two correlational analyses were performed: one that included the closed-ended factors and open-ended behavioral sets (see Table 3), and another that included the closed-ended factors and the most frequently reported open-ended items (see Table 4). Each of these will be discussed in turn.

First, correlations between the six closed-ended factors (i.e., immediacy, touch, attentive, overt, indirect, and conversational) and the ten open-ended behavior sets (i.e., eye behavior, verbal, self-touch, other touch, kinesics, laughing, vocalic, facial expression, kissing, and other) were performed. To the extent that these are related to one another, it was expected that like factors would correlate positively (e.g., the closed-ended touch factors and open-ended other touch set).

Results indicated that the two measures were, in fact, assessing related perceptions (see Table 3). Many of the open-ended behavioral sets were significantly and predictably correlated with closed-ended factors. The open-ended behavioral set of other touch, for example, correlated significantly and positively with the closed-ended factors of involvement, touch, overt, verbal, and attentive. Similarly, the open-ended behavioral set of kissing correlated significantly and positively with the closed-ended factors of touch, overt, indirect (negatively), and attentive.

**Closed-ended factors and most-used open-ended items.** Another way of



assessing the relationship between the two measures of flirting behavior was to consider how individual open-ended items mentioned by at least 15% of participants correlated with the closed-ended factors, which could be considered the *most-used* open-ended behavioral items. Fourteen open-ended items were included (i.e., unspecified eye contact, sustained eye contact, unspecified verbal, mundane verbal, playful verbal, affectionate verbal, unspecified touch, mutual touch, hand-to-body touch, proxemics, movement, laughing, unspecified smiling, and mutual kissing). These 14 items correlated with the six closed-ended factors (see Table 4).

The results were similar to correlations between the open-ended behavior sets and closed-ended flirting factors. Some significant correlations were between conceptually similar behaviors. In other cases, the correlation was not between related behaviors. Most of the touch-related open-ended items significantly and positively correlated with the closed-ended touch factors. The eye contact items did not, surprisingly, correlate significantly with the involvement or attentive closed-ended factors, both of which contain eye contact-related items.

Although neither correlational analysis unequivocally demonstrated the construct validity of the two sets of flirting measures, there were sufficient significant results to proceed confidently with the closed-ended factors as a reliable and valid assessment of participants' perceptions of flirting behavior. In addition to these psychometric assessments, the fact that the participants completed the closed-ended items *after* typing their open-ended response might have served a priming function for the participants, allowing them to more confidently respond to closed-ended items.

## **Procedure**

All procedures were approved by the institutional review board prior to data collection (see Appendix A). Instructors offered extra credit in return for participation in this study. Course instructors solicited students' participation via an e-mail message that contained a description of the study and a link to the online survey. Upon clicking the survey link, participants were delivered to a page that provided instructions and informed consent information (see Appendix C). Participants consented by clicking the *Next* button on that page. Participants then completed questions about their most recent flirting encounter, the behaviors they used during that encounter, their goals for the encounter (and their importance), the amount of planning in which they engaged, and finally demographic information. At the survey's conclusion, the participants were redirected to a separate survey, whereupon they completed personal information (i.e., first and last name, instructor name, and course number) for extra credit purposes. Finally, participants were then thanked for their time and participation. See Appendix D for the complete study questionnaire.

## CHAPTER 3

### RESULTS

#### **Data Analysis Strategy**

Several characteristics of the data and their analyses need to be mentioned at the outset. First, the planning and goal importance items were centered (i.e., the mean of each item was subtracted from the item score). All analyses using these scales utilized the centered versions, but reports of means and standard deviations use the original (un-centered) scores. Second, open-ended flirting behaviors set items were transformed using a square-root transformation (i.e., the square root of each item was taken). Again, any analysis that includes the open-ended flirting behavior sets used the transformed version, but the reporting of means and standard deviations is again, the un-transformed version, for sake of interpretability.

Third, given the nature of RQ<sub>1</sub>, or the relationships between goals and flirting behavior, multiple analyses (both one-way analysis of variance and multiple regression) were necessary. Specifically, separate analyses were required for each of the six closed-ended flirting factors or nine open-ended flirting behavior sets. Multiple tests raise the specter of inflating the family-wise Type-I error rate. To balance concerns with making both Type-I and Type-II errors, an effort was made to avoid being *overly* conservative with an alpha correction. A revised alpha level was selected as the midpoint between the alpha for a Bonferroni correction (i.e.,  $.05/6$  for closed =  $.008$ , or  $.05/9$  for open =  $.005$ ) and the initial family-wise alpha level (i.e.,  $.05$ ). Specifically,  $.03$  will be used as the revised alpha level for all omnibus *F*-tests and multiple regression prediction equations

reported herein.

Finally, homogeneity of variance was not assumed for any group difference test. Unequal group sizes across levels of the independent variables (e.g., primary flirting goal or participant sex), as well as examination of the raw variances, suggested that homogeneity of variance across groups was likely untenable. Therefore, the Welch procedure, which controls for this violation (Tomarken & Serlin, 1986), was employed for all omnibus ANOVAs, and corrected  $df$  and  $p$ -values are reported for all  $t$ -tests. Furthermore, a Dunnett's T3 post-hoc test was employed to examine all pairwise comparisons, should a significant omnibus test be obtained. The Dunnett's T3 does not assume equal variances across levels of the independent variable and, therefore, allows for more accurate interpretation of the data (Ruxton & Beauchamp, 2008).

### **Descriptive Statistics**

Before considering research questions and hypotheses, psychometric properties such as the means, standard deviations, and skewness/kurtosis values of all variables were examined. Overall, the average amount of planning reported by participants was slightly below the scale midpoint ( $M = 2.52$ ,  $SD = .89$ ), and their primary flirting goal was somewhat important (i.e., hovered around the scale's mid-point;  $M = 3.28$ ,  $SD = .73$ ). Participants' overall reported goal structure was relatively complex ( $M = 4.47$ ,  $SD = 1.17$ ), indicating that most of these participants engaged multiple primary goals simultaneously. In terms of the single primary goal item, 38.2% of participants reported that fun was their primary goal, followed by relational (22.8%), sex (13.1%), test relational waters (12.1%) test sexual waters (4.2%), esteem (3.9%), and instrumental

(2.4%). Eighteen individuals (3.3%) selected *Other* as their primary flirting goal. Finally, participants reported on a flirting interaction that had occurred an average of 40.18 ( $SD = 71.68$ ; range: 0-330) days before the data collection, and lasted for an average of 41.22 ( $SD = 68.00$ ) minutes. For a description of the psychometric properties (i.e., mean, standard deviation, skewness and kurtosis) of all study variables, see Table B3 in Appendix B.

### **RQ<sub>1</sub>: Flirting Goals and Flirting Behavior**

Research question one asked if goals for flirting related to reported flirting behavior. Flirting goals were measured in two different ways. First, participants completed a separate Likert-type item for each goal. Second, students indicated a single, primary or *main* goal that generated the flirting interaction. Additionally, flirting behavior was measured two ways: with both a closed and an open-ended measure. Variety in the measures of goals and behaviors necessitates multiple analytical choices. Specifically, separate one-way analyses of variance (ANOVA) will be performed on the primary goal data and multiple regressions will be used to analyze open- and closed-ended flirting behavior data using the separate measures of each goal. These approaches allow for a comprehensive and nuanced answer to the research question.

**Closed-ended one-way ANOVA.** The first procedure used one-way analyses of variance (ANOVA) where the independent variable, primary flirting goal (i.e., the single goal that participants indicated defined their interaction; i.e., esteem, fun, instrumental, relational, sex, testing relational waters, and testing sexual waters) and each flirting factor (i.e., involvement, touch, attentive, overt, indirect, and conversational) as separate

dependent variables.

**Involvement.** The one-way ANOVA for the involvement (i.e., immediate and engaged in the interaction with the other person) factor indicated that the variation in involvement means was statistically significant across the primary goal groups,  $F(6, 72.39) = 3.22, p = .005, \eta^2_{\text{Partial}} = .05$ . Follow-up tests indicated greater use of involvement behaviors when participants reported flirting for relational reasons when compared to both fun and sex reasons (see Table 5).

**Touch.** The one-way ANOVA for the touch factor indicated that that touch means differed statistically across the primary goal groups,  $F(6, 80.37) = 3.75, p = .001, \eta^2_{\text{Partial}} = .05$ . Follow-up tests indicated higher touch means when participants reported flirting for relational or sex reasons when compared to fun, test relational waters, or esteem reasons (see Table 5).

**Attentive.** The one-way ANOVA for the attentive factor (i.e., paying attention to, and focusing on the target) indicated that the variation in attentive means was not statistically significant across the primary goal groups,  $F(6, 77.00) = 0.83, p = .57, \eta^2_{\text{Partial}} = .01$  (see Table 5).

**Overt.** The one-way ANOVA on the overt factor (i.e., stereotypical courtship behaviors designed to move a relationship in a relational or sexual direction) indicated that the variation in overt means was statistically significant across the primary goal groups,  $F(6, 78.04) = 4.26, p < .001, \eta^2_{\text{Partial}} = .06$ . Follow-up tests indicated less use of the behaviors associated with the overt factor when participants reported flirting for fun reasons when compared to both the relational and sex goals (see Table 5).

**Indirect.** The one-way ANOVA for the indirect factor (i.e., coy, indirect, and playful flirting behaviors) indicated that the variation in indirect means was statistically significant across the primary goal groups,  $F(6, 81.09) = 2.59, p = .02, \eta^2_{\text{Partial}} = .05$ . Follow-up tests indicated more indirect behaviors when participants reported flirting for esteem reasons when compared to all other reasons with the exception of instrumental (see Table 5).

**Conversational.** The one-way ANOVA for the conversational factor (i.e., exclusively verbal behaviors that start, or add to, a conversation) indicated that the variation in conversational means did not differ significant across the primary goal groups,  $F(6, 82.61) = 1.63, p = .14, \eta^2_{\text{Partial}} = .02$ . For complete goal means and standard deviations, see Table 5.

**Open-ended one-way ANOVA.** The one-way ANOVAs performed for the closed-ended flirting factors were replicated for the open-ended behavioral sets. Again, the independent variable was the primary flirting goal item (with seven levels), however, the dependent variables were each of the ten open-ended flirting behavior sets (i.e., eye behavior, verbal, self-touch, other-touch, kinesic, laughing, vocalic, kissing, and facial expressions). Results indicated that means differed statistically across the primary goal groups for two sets: self-touch and vocalic. Variation in means across the other behavior sets (eye behavior, verbal, other touch, kinesic, laughing, facial expression, and kissing) were not statistically significant across the primary goal groups.

**Self-touch.** The one-way ANOVA for the self-touch behavior set indicated that the variation in indirect means was statistically significant across the primary goal

groups,  $F(6, 363) = 3.00, p = .01, \eta^2_{\text{Partial}} = .05$ . Follow-up tests indicated that participants reported more self-touch behavior when flirting for fun when compared to flirting for relational, instrumental, or testing relational water goals (see Tables 6 and 7).

**Vocalic.** The one-way ANOVA for the vocalic behavior see indicated that the variation in indirect means was statistically significant across the primary goal groups,  $F(6, 363) = 2.39, p = .03, \eta^2_{\text{Partial}} = .04$ . Follow-up tests for the vocalic behavioral set showed that participants use this behavior more when their goal is fun when compared to esteem (see Tables 6 and 7).

**Closed-ended multiple linear regression.** The second procedure performed to answer RQ<sub>1</sub> was a multiple linear regression, where predictor variables were the six closed-ended flirting factors (i.e., involvement, touch, attentive, overt, indirect, and conversational) and the criterion variable was one of the seven continuous Likert-type flirting goal items. Multiple regression, which is a correlational technique and therefore does not describe causality, is useful in understanding the relationship between goals and behavior. Although according to the GPA theoretical framework, goals precede plans and actions, the present analyses attempt to answer the question of which flirting factors predict flirting goals; which is certainly consistent with the current study's driving question. For bivariate correlations between flirting goals and closed-ended flirting factors, see Table 8.

**Esteem goal.** The linear combination of flirting factors was a significant predictor of the esteem flirting goal,  $F(6, 447) = 4.66, p < .001, \text{Adjusted } R^2 = .05$ . Of the six predictors, both the indirect and involvement scales made unique contributions relative to



the other factors in predicting the esteem goal (see Table 9)

**Fun goal.** The linear combination of flirting factors was a significant predictor of the fun flirting goal,  $F(6, 448) = 2.81, p = .01$ , Adjusted  $R^2 = .02$ . Of the six predictors, only the attentive factor made a unique contribution relative to the other factors in predicting the fun goal (see Table 10).

**Instrumental goal.** The linear combination of flirting factors was a significant predictor of the instrumental flirting goal,  $F(6, 449) = 4.40, p < .001$ , Adjusted  $R^2 = .04$ . Of the six predictors, only the indirect factor made a unique contribution relative to the other factors in predicting the instrumental goal (see Table 11).

**Relational goal.** The linear combination of flirting factors was a significant predictor of the relational flirting goal,  $F(6, 448) = 11.66, p < .001$ , Adjusted  $R^2 = .13$ . Of the six predictors, both the involvement and the overt factors made unique contributions relative to the other factors in predicting the relational goal (see Table 12).

**Sex goal.** The linear combination of flirting factors was a significant predictor of the sex flirting goal,  $F(6, 449) = 11.76, p < .001$ , Adjusted  $R^2 = .13$ . Of the six predictors, the touch and overt factors made unique contributions relative to the other factors in predicting the sex goal (see Table 13)

**Test relational waters goal.** The linear combination of flirting factors was a significant predictor of the test relational waters flirting goal,  $F(6, 450) = 9.75, p < .001$ , Adjusted  $R^2 = .10$ . Of the six predictors, the involvement and overt factors made unique contributions relative to the other factors in predicting the test relational waters goal (see Table 14).

***Test sexual waters goal.*** The linear combination of flirting factors was a significant predictor of the test sexual waters flirting goal,  $F(6, 450) = 11.15, p < .001$ , Adjusted  $R^2 = .12$ . Of the six predictors, the involvement (negatively), touch, and overt factors (both positively) made unique contributions relative to the other factors in predicting the test sexual waters goal (see Table 15).

**Open-ended multiple linear regression.** Multiple linear regression was used again with the ten open-ended flirting behavior sets as predictors and the seven interval-level flirting goals as separate criterion variables. For correlations between flirting goals and open-ended flirting behavior sets, see Table 16.

***Esteem.*** The linear combination of flirting behavior sets was a significant predictor of the esteem flirting goal,  $F(9, 349) = 2.14, p = .02$ , Adjusted  $R^2 = .03$ . Of the ten flirting predictors, only self-touch made unique contributions relative to the other sets in predicting the esteem goal (see Table 17).

***Fun.*** The linear combination of flirting behavior sets was a significant predictor of the fun flirting goal,  $F(9, 3350) = 3.00, p = .001$ , Adjusted  $R^2 = .05$ . Of the ten predictors, laughing, facial expressions, and kissing made unique contributions relative to the other sets in predicting the fun goal (see Table 18).

***Instrumental.*** The linear combination of flirting behavior sets was not a significant predictor of the instrumental goal,  $F(9, 351) = 1.68, p = .08$ , Adjusted  $R^2 = .02$ .

***Relational.*** The linear combination of flirting behavior sets was not a significant predictor of the relational flirting goal,  $F(9, 350) = 1.42, p = .17$ , Adjusted  $R^2 = .01$ .

**Sex.** The linear combination of flirting behavior sets was not a significant predictor of the sex goal,  $F(9, 351) = 1.27, p = .24, \text{Adjusted } R^2 = .01$ .

**Test relational waters.** The linear combination of flirting behavior sets was not a significant predictor of the testing relational waters flirting goal,  $F(9, 351) = .89, p = .54, \text{Adjusted } R^2 = -.01$ .

**Test sexual waters.** The linear combination of flirting behavior sets was not a significant predictor of the test sexual waters flirting goal,  $F(9, 352) = .93, p = .51, \text{Adjusted } R^2 = -.01$ .

### **RQ<sub>2</sub>: Flirting Goals and Planning**

Research question two asked the extent to which the amount of planning differed across flirting goals. A one-way ANOVA was performed to assess this question. The independent variable was the primary goal, which contained seven levels (i.e., esteem, fun, instrumental, relational, sex, test relational waters, and test sexual waters). The dependent variable was the planning scale. The one-way ANOVA indicated that the variation in planning means was statistically significant across the primary goal groups,  $F(6, 72.75) = 6.61, p < .001, \eta^2_{\text{Partial}} = .07$ . Dunnett T3 follow-up tests indicated that planning for a fun primary goal ( $M = 2.27, SD = .91$ ) was significantly lower than planning for a relational ( $M = 2.79, SD = .90$ ), sex ( $M = 2.75, SD = .86$ ), or test sexual waters ( $M = 2.75, SD = .62$ ) goal. No other pairwise comparisons were significant.

### **RQ<sub>3</sub>: Planning and Flirting Behavior**

**Closed-ended.** Research question three focused on the relationship between the amount of planning reported by a participant and reported flirting behavior. Bivariate

correlations between planning and the six closed-ended flirting factors were used to assess this relationship. In all cases but one, the correlations were statistically significant ( $p < .01$ , two-tailed). For all flirting factors, except conversational, the more planning a participant reported enacting, the more they reported using flirting behaviors. In particular, it appeared that planning had the strongest effect on overt and indirect flirting behaviors (see Table 19).

**Open-ended.** Research question two can also be tested using open-ended flirting behavioral sets. A second set of bivariate correlations between planning and the ten open-ended flirting behavioral sets were used to answer the research question. No correlations were statistically significant (see Table 20).

#### **RQ4: Goal Importance and Flirting Behavior**

**Closed-ended.** Research question four focused on the relationship between the importance of a participant's primary or *main* goal and his/her reported flirting behavior. This question is tested first with the closed-ended flirting factors. Bivariate correlations between the goal importance scale and the six closed-ended flirting factors were again used to assess this relationship. Significant (i.e.,  $p < .01$ , two-tailed) correlations resulted between goal importance and all six flirting behavior factors, indicating that participants reported using *a greater variety of* flirting behaviors as the importance of their reported primary or main goal increased. In particular, goal importance had the strongest effect on the involvement factors (see Table 21).

**Open-ended.** Research question two focused on the relationship between the amount of planning reported by a participant and the ten open-ended flirting behavior

sets. Another set of bivariate correlations between goal importance and the ten open-ended flirting behavior sets were used to assess this relationship. No correlations were statistically significant (see Table 22).

### **RQ<sub>5</sub>: Sex Differences and Flirting Behavior**

**Closed-ended.** The influence of participant sex differences on reported flirting behaviors was the focus of RQ<sub>5</sub>. Independent-samples *t*-tests were used to evaluate this question; participant sex (with levels *Male* and *Female*) was the independent or grouping variable, and the six closed-ended flirting factors (i.e., involvement, touch, attentive, overt, indirect, and conversational) were the dependent variables. The only factor to generate a significant result was overt flirting behaviors,  $t(469.21) = -6.42, p < .001, \eta^2_{\text{Partial}} = .08$ . For the overt category, men reported using more of these behaviors than women see Table 23 for means, standard deviations, *t*, and *p*-values, and  $\eta^2_{\text{Partial}}$  for each test).

**Open-ended.** Participant sex differences on flirting behavior can also be tested with the open-ended behavioral sets. Therefore, independent-samples *t*-tests evaluated this question; participant sex (with levels *Male* and *Female*) was the independent or grouping variable, and the ten open-ended flirting behavioral sets (i.e., eye behavior, verbal, self-touch, other touch, kinesic, laughing, vocalic, kissing, facial expression, and other) were the dependent variables. Four behaviors produced significant differences. Specifically, women reported greater use of facial expression, self-touch, and laughing. On the other hand, men reported more verbal flirting. See Table 24 for means, standard deviations, *t*, *p*-values, and  $\eta^2_{\text{Partial}}$  of each *t*-test).

**Sex-by-goal interactions.** Two-way ANOVAs were utilized to assess the potential interaction between participant sex and primary flirting goal on reported flirting behavior. A corrected alpha level of .03 was used for both closed- and open-ended flirting behavior, consistent with alpha correction throughout this project. For each of the six two-way ANOVAs with the closed-ended flirting factors as dependent variables, no significant interactions effects were obtained (see Table 25).

The analysis was repeated with the ten open-ended flirting behavior sets, and also produced non-significant interaction effect results (see Table 26).

#### **RQ<sub>6</sub>: Sex Differences and Flirting Goals**

Research Question six centered on the role of participant sex differences on flirting goals. Independent-samples *t*-tests were used to evaluate this question; participant sex (with levels *Male* and *Female*) as the independent or grouping variable, and the seven flirting goals (i.e., esteem, fun, instrumental, relational, sex, test relational waters, and test sexual waters) as the dependent variables. Significant *t*-tests indicated that women reported the fun goal more than did men. On the other hand, men reported more of the sex goal and the testing sexual waters goal (see Table 27 for means, standard deviations, *t*, *p*-value, and  $\eta^2_{\text{Partial}}$  of each *t*-test).

#### **H<sub>1</sub>: Goal Complexity and Planning**

Hypothesis one stated that the more complex a reported flirting goal structure, the more reported planning. A bivariate correlation was utilized to evaluate this relationship (with the goal complexity measured as the summated score of all seven flirting goal items). A significant positive correlation,  $r(521) = .34, p < .001$ , indicated support for H<sub>1</sub>.

## **H<sub>2</sub>: Goal Importance and Planning**

Hypothesis two asserted that a more important a reported flirting goal would result in more reported planning. A bivariate correlation tested this prediction. The correlation was significant,  $r(507) = .30, p = .000$ , which indicated support for H<sub>2</sub>.

## CHAPTER 4

### DISCUSSION

Flirting is a set of messages purposefully sent to signal interest in another person (Moore, 2010). Definitions of flirting tend to fall into one of two camps. The first states that flirting occurs exclusively within the bounds of courtship, or the steps humans take on the road to developing close, personal, romantic relationships (Cate & Lloyd, 1992). These *Courtship Initiation* definitions of flirting revolve around the use of flirting as an initiator or catalyst to start romantic relationships (e.g., Lockard & Adams, 1980; Moore, 2002; Muhlenhard et al., 1986; Trost & Alberts, 1998). The link to courtship in this camp is so strong that scholars refer to flirting as *quasi-courtship* (Schlefen, 1965). The second camp, labeled *non-courtship* definitions, focus on flirting as routine communicative phenomena with the purpose of signaling interest (LaFrance et al., 2009). This interest *could* be, but is not necessarily, sexual and/or romantic; the interest only needs to *appear* sexual and/ or romantic.

Given that the motivations for flirting are varied, it should come as no surprise that the behaviors used to flirt are also varied. Observational studies have detailed a number of verbal and nonverbal behaviors that are typical of flirting (see Moore, 2010 for a review). These include, but are not limited to, darting glances (Moore, 1985), neck cranes (Grammer, 1990), sustained smiling (Coker & Burgoon, 1987), lip licking (McCormick & Jones, 1989), laughing (Perper & Weis, 1987), a “tight” or erect posture (Schlefen, 1965), directly facing the other person (Givens, 1978), any number of touch-related behaviors (Greer & Buss, 1994), and pick-up lines (Kleinke et al., 1986). The



behaviors available to a would-be flirter are diverse and numerous (Greer & Buss, 1994; Moore, 2010).

Regardless of the definitional camp or its specific enactment, flirting has the ability to serve multiple simultaneous functions (D. D. Henningsen, 2004). Flirting can be used to initiate, escalate, or maintain close personal relationships or initiate sexual contact, but could also be performed to obtain rewards, boost one's self-esteem, or have fun (D. D. Henningsen, 2004). The initial expectation of this project was that regardless of the function served by flirting, the *act* of flirting would appear to be the same to an observer. That is, flirting is always a set of messages aimed at signaling some form of interest; behavior enacted will always reflect sexual and/or relational desire, regardless of whether or not such a desire is perceived by third-party observers.

Given these various functions that flirting can serve, it is clearly a goal-driven communicative behavior. In other words, flirting is used to achieve one or more end states (Dillard, 1990). Goals have been implicated as playing a vital role in several communicative arenas, such as organizational (Waldron, 1991), health (Hack, Degner, & Parker, 2005), risk (Rowan, 1991), personal relationships (Caughlin, 2010), and everyday discourse (Tracy & Coupland, 1990). Furthermore, goals have been used as the cornerstone of several communication theories: Relational Goal Pursuit Theory (Cupach, Spitzberg, Bolingbroke, & Tellitocci, 2011), Interpersonal Adaptation Theory (Toma, 2014), The Theory of Trying (Bay & Daniel, 2003), and Goal Detection Theory (Palomares, 2008), to name only a few.

Although research has investigated flirting behaviors and the motivation(s) that underlie them, no project to date has investigated the intersection of these concepts. Therefore, the primary motivation of this investigation was to provide a theoretical investigation of the role of goals and how they influence use of flirting behaviors. To optimally elucidate the role of goals to affect the flirting process, Dillard's (1990) Goals-Plans-Action (GPA) model of interpersonal influence was employed as a theoretical frame. The GPA model stipulates that goals, or desired outcomes, drive the production of message behaviors (i.e., action) as well as the cognitive effort aimed at producing and selecting those message behaviors (i.e., plans). Flirting is defined as being a goal-driven message process, and the GPA model situates goals as *the* variable responsible for controlling and affecting behavior in influence situations. Because this study was primarily concerned with how goals might relate to flirting behaviors, the GPA model was an appropriate choice.

In this dissertation, participants completed a questionnaire that asked them to reflect on their most recent flirting interaction, describe their reasons (i.e., goals) for the interaction, and to describe all the behaviors they used to flirt with the other person. Goals for the flirting interaction and the flirting behavior reported were measured two ways. Goals were, first, measured with a single-item assessing participants' main or primary goal. In addition Likert-type items measured the extent to which participants had each D. D. Henningsen's (2004) (slightly modified) flirting motivations: Esteem, Fun, Instrumental, Relational, Sex, Test Relational Waters, and Test Sexual Waters. Flirting behavior was assessed, first, via open-ended responses where participants typed all the

behaviors they used to flirt and in the order in which they used them. In addition, participants completed a modified version of the England et al. (1996) *Flirting Behavior* scale. Finally, participants reported the importance of the goal and the amount of planning prior to the interaction.

This study's results indicated that goals were related to specific flirting behaviors reported by participants and that some flirting behaviors were present regardless of goal, suggesting support for a flirting script. The use of other behaviors, however, differed substantially across goals. Furthermore, the importance of a goal and the amount of planning both had significant and substantive effects on the use of flirting behaviors, lending support for the use of the GPA model as a theoretical frame.

### **How Do Goals Relate to Behaviors?**

The primary thrust of this study was to investigate the extent to which goals related to specific flirting behavior. Dillard's (1990) GPA model suggests that differing goals should produce different sets of behaviors. Overall, goals *did* relate to flirting behavior, with some goals relating to flirting behavior more than others. There are several aspects of this goal-flirting link that merit discussion: The results for how behaviors differed by primary goal, the ability for combinations of flirting behaviors to predict a single goal, and finally whether or not the some flirting behaviors might constitute a flirting script. Because of this study's use of a *closed-ended* and *open-ended* dataset, the closed-ended is considered first.

**Closed-ended responses.** For the closed-ended responses, the first method to assess the extent to which goals related to flirting behavior was through one-way

ANOVAs. Several differences were uncovered from these analyses. First, four factors showed significant differences across levels of the primary flirting goal variable. First, more involvement behaviors (e.g., disclosing personal information, laughing, making jokes, compliments) were reported when participants flirted to start a relationship than when they flirted to have sex or just to have fun. Second, when participants indicated that they flirted to have sex or start a relationship with another person, they reported using more touch behaviors than if they were flirting to feel better about themselves, have fun, or test whether or not the other person wanted a relationship. Third, forward flirting behaviors such as using pick-up lines, buying drinks, and asking a person on a date (i.e., the *Overt* category) were found to be used more when participants reported flirting to have sexual contact or start a relationship than if they were just flirting to have fun. Finally, coy, shy, and indirect flirting behaviors (e.g., looking down, facing away, touching one's self) were most prevalent when participants reported flirting to feel better about themselves compared to all other reasons.

The results for the involvement, touch, and overt behavior factors are consistent with the research on communication behavior in personal relationships. First, acting interested and talking about one's self are likely functional behaviors if the individual wants to start a relationship with the target. People tend to exchange information about the self when starting a relationship (Altman & Taylor, 1973; Berger & Calabrese, 1975). For example elements of uncertainty reduction and social penetration theories (e.g., disclosing personal information and asking questions about the other person) are present in the involvement flirting behavior factor.

Second, touch behaviors were particularly salient when participants had a sex goal. This result is consistent with considerable research indicating that touch (and increasingly intimate touch) is particularly important to the development of sexual involvement between partners (Alksnis & Desmarais, 1996; La France, 2010; Seal & Ehrhardt, 2003). Such a result appears to be consistent with a more general sexual script (McCormick, 2010). On the other hand, if a flirter is only concerned with sexual contact, exchanging personal information and learning about the target appears to be a lower priority. Therefore, sexual contact-focused flirting goal might generate more direct, unambiguous behaviors aimed that facilitate sex interaction. Research on casual sex scripts is consistent with the notion that when sex is the most important goal, less effort is exerted on learning about the other person (Epstein, Calzo, Smiler, & Ward, 2009).

That indirect flirting behaviors (i.e., acting coy, shy, looking or facing away, touching one's self) were most likely to be reported by participants flirting to increase self-esteem is curious. Many behaviors in the *Indirect* flirting factor likely compel the other person to initiate and sustain the interaction. These behaviors might, therefore, be associated with the goal of feeling better about one's self because their use would solicit attention from the other person, which might make the flirter feel important, special, and worthy of another's time. These behaviors might bring about compliments and positive messages from the target of the indirect flirting behavior, which have been shown to increase one's sense of self-esteem and self-worth (Colman & Olver, 1978; Fea & Brannon, 2006; Marigold, Holmes, & Ross, 2007). Furthermore, the *Indirect* factor might also be conceptualized as a set of flirting behavior employed by those who are shyer and

less likely to use the forward, direct, and unambiguous flirting behaviors that are described in other flirting factors (e.g., overt or immediacy). Alternatively, a person might merely *act* shy in order to bait the target into putting in more effort toward the interaction, thereby showing a flirter that s/he is genuinely interested.

**Behavioral profiles of goals.** The second method of assessing the relationship among goals and flirting behavior used multiple linear regression, with flirting behaviors as predictors and the individual flirting goals as criterion variables. Two aspects of these analyses are worth noting. First, these analyses used evaluations of all seven goals, each of which was possessed a 1-5 (“Not at all a reason” to “Very much a reason”) scale. The single, primary goal item was not used in these analyses. This choice met the requirements of a multiple linear regression procedure; that all variables be continuously measured. Second, at first glance, the choice of behaviors as the predictors might appear backward, as Dillard’s (1990) GPA sequence posits that goals *precede* actions. This choice, however, is informative because these analyses provide the specific combinations of *behaviors* associated with each goal. Linear regression is a correlational, not causal, statistical technique, and, as such, results are relevant to, but do not directly test, Dillard’s (1990) GPA frame. The use of regression more directly answers this study’s driving question: in what ways, and to what extent, do goals relate to of behavioral sets?

Various combinations of the six closed-ended flirting factors (i.e., involvement, indirect, attentive, overt, touch, and conversational) significantly predicted each of the seven flirting goals (i.e., esteem, fun, instrumental, relational, sex, test relational waters, and test sexual waters). Some of the regression results corroborated results from the one-

way ANOVAs. Goals focusing on sexual contact (i.e., sex and test sexual waters) or starting a relationship (i.e., relational and test relational waters) were all significantly predicted by some combination of involvement, overt, and touch behaviors. Involvement specifically was a significant predictor of all four of these types of goals *except* sex (which was significantly predicted by only touch and overt behaviors). These results indicate that being involved in the interaction, engaging in touch, and exhibiting forward flirting behaviors (e.g., asking for a phone number or using a pickup line) are almost always involved in relationship- and sex-related goals, all behaviors that reflect previous conceptualizations of flirting behavior (Moore, 2010). In fact, given the behaviors found to predict these goals, the label “courtship goals” to describe both relational and sex goals might be justified (Cate & Lloyd, 1992). Participants seeking to achieve a courtship goal likely rely more on behaviors like touching, being immediate, and being direct with one’s behaviors might better serve a courtship frame of flirting than a non-courtship frame. Mongeau and Wiedmaier (2011) postulated that the college population specifically might place more importance on sexual compatibility as a precursor to relational development (see also Allison & Risman, in press). Because a similar population was sampled for this study, the finding that similar behaviors are used for relational *and* sexual goals might be further support of this contention.

These same multiple linear regression analyses were repeated with the open-ended flirting behavior sets as predictors. Only two of the flirting goals were significantly predicted by behavioral sets. First, self-touch significantly predicted the esteem goal, which is consistent with another result related to the esteem goal, namely, that *self-touch*

is one of the behaviors that comprises the indirect closed-ended factor). Second, both laughing and kissing behaviors significantly predicted the fun flirting goal. Laughing and kissing behaviors align with the playfulness that likely undergirds flirting in these sorts of interactions (Grammer, 1990). No other behavioral sets were significant predictors, possibly due in part to limitations of the open-ended data in quantitative analyses.

Overall, goals and behaviors correlate in predictable ways, as when one is flirting for a relational- or sexual-related reason. On the other hand, some behaviors – such as involvement, conversational, and attentive – appear to be cornerstones of flirting across goals. The consistency of these behaviors to appear across goals suggests a flirting script, or a predictable sequence of flirting behaviors.

**Flirting as scripted.** Despite this study's focus on the potential for goals to *relate* to behavior, it was also how some goals did *not* differentially that proved quite illuminating. The consistency of some behaviors across goals emerged in two ways. First, the closed-ended involvement, attentive, and conversational factors all had large means (3.80- 3.90 on a five-point scale). On the other hand, mean scores for the touch, overt, and indirect factors (around 2.40 on the same five-point scale) were much smaller. In addition, one-way ANOVAs indicated that mean levels of attentive and conversational flirting factors did not differ across the seven goals and mean differences in the involvement factor were significant across goals, but were quite small). These results suggest that behaviors designed to indicate general interest in the target are commonly enacted in most all flirting no matter the goals. Behaviors reflecting more specific courtship goals were reported considerably less frequently by participants. This is likely



due to behaviors like touch (a feature of the sex goal) or acting coy (a feature of the esteem goal) are not salient to noncourtship flirting contexts.

Such a pattern of results suggests that regardless of a participant's reported goal for the flirting interaction, s/he reported being involved (i.e., adding to the interaction via asking questions, providing reinforcements, and disclosing personal information), attentive (i.e., showing one's partner that one is focused on the interaction via sustained eye contact and decreased proximity), and conversational (i.e., acting engaged through what one says specifically, like small talk and comparing interest) with her/his interactional partner. This is not surprising given the definition of flirting used this study: i.e., a set of goal-directed messages used to *signal interest* in another that vary in ambiguity. Being involved, attentive, and conversational are all ways that people show interest; these factors are comprised of more specific behaviors such as making sustained eye contact, asking follow-up questions, and adding to the conversation, all behaviors found to signal interest in another.

That involved and immediate behaviors were relatively unchanged across flirting goals is consistent with the corpus of research on immediacy. The concept of immediacy is very often used when describing the concept of flirting as well as how people engage in flirting behavior (e.g., Egland et al., 1996; Weber et al., 2010). In fact, a side-by-side comparison of *immediacy behaviors* and *flirting behaviors* reveals few differences. Koeppel et al. (1993) conducted such a comparison, examining the factors that observers consider shift a *friendly* behavior to a *flirting* behavior. In their analysis, the difference between *friendly* and *flirting* was often just the amount of the behavior. For example, a

small amount of smiling is friendly, while a medium amount of smiling is flirtatious. Most conceptualizations of *immediacy* define it as a way of showing openness, friendliness, and warmth during an interaction (J. F. Andersen et al., 1979; P. A. Andersen, Guerrero, Buller, & Jorgensen, 1998; Coker & Burgoon, 1987). In this way, being immediate might be perceived as flirting by an observer, merely because the behaviors both reflect interest in the partner.

Finally, attributions of flirting are likely influenced by the context in which the interaction occurs (e.g., at bars or nightclubs). Immediacy behaviors used by teachers in the classroom has consistently been found to be a motivator for student learning (e.g., Allen, Witt, & Wheelless, 2006; Frymier & Houser, 2000; Rodriguez, Plax, & Kearney, 1996), yet few would argue that such immediacy is flirting. When immediacy behaviors take place in bars or nightclubs, however, they are very often perceived as flirtatious (e.g., Lannutti & Camero, 2007; Saal, Johnson, & Weber, 1989).

The lack of variation in some behaviors across goals not only reinforces the role of immediacy behaviors in signaling interest in another, but also suggests that, in some ways, flirting might represent a scripted behavior sequence. A script is, most basically, a “standard event sequence” (Schank & Abelson, 1977, p. 208). In other words, a script is an organizing schemata or cognitive structure that specifies the performance, and order, of behaviors for a specific context (Abelson, 1981). Scripts help organize a person’s understanding of a situation and help guide that person’s actions to be in accordance for the expectations of that interaction (Gisburg, 1988). Schank and Abelson (1977) state that a script is derived from “knowledge about the world [humans] live in” (p. 207), or what

we observe and live each day.

As it specifically pertains to flirting, many people just “know” how to flirt, because flirting is an important part of the larger cultural script known as courtship (Bailey, 1989; Cate & Lloyd, 1992). Although flirting itself is known as an *activating* sequence, that is, prompting larger courtship and dating scripts, looking more closely at flirting reveals that it too “consists of a common and recognizable routine” (Metts & Spitzberg, 1996, p. 53). This routine has been identified through observational studies of courtship patterns in a variety of contexts. Early observational research on flirting (e.g., Givens, 1978; Schlefen, 1965) suggested that flirting (then called *quasi-courtship behavior*) progressed through a series of sequential stages. Flirters noticed, signaled, met physically, conversed, and finally engaged in some form of sexual interaction. Each stage is comprised by particular behaviors employed in specific degrees that function to generate the next step. Such stage models have been recently revived and revised (e.g., Cunningham & Barbee, 2008; Metts & Spitzberg, 1996), although the sequence of behaviors remains unchanged.

The present results seem to corroborate the existence of a flirting script, and has contributed to the ability to identify those behaviors that appear to be common to most all scripted interactions, no matter the underlying goal(s), at least initially. This flirting script would likely unfold quite similarly to the stages described above: one would identify a suitable target, await messages that it is safe to approach or send signals that it is safe to approach, and then begin conversing. It is when the conversation begins that the present results become particularly illuminating. A conversation would likely begin, with the

flirter paying attention to the target, asking questions, and making eye contact (all aspects of the *Immediacy* factor). After some time, and evaluation as to the interest level of the target, some form of touch would begin (depending on the particular flirting goal).

Furthermore, and depending on the context, more overt flirting behaviors such as the buying of drinks or direct compliments would be used. It is at this point that goals come *back* into play. Depending on the particular goal possessed by the flirter, s/he might begin touching *more* or engaging in *more* overt behavior (for relational or sexual goals) or more joking, immediate behavior and less touch (for fun or instrumental goals).

Alternatively, a noncourtship goal such as have fun might morph into a courtship goal like relational or sex. Berger (1997) details in great lengths the ability of goals to shift over the course of an interaction. Similarly, Dillard (1990) explains that goals might shift in an interaction due to information gleaned from the receiver. In this case, mutual interest communicated by a target might shift a flirter's goal from fun to relational or sex. The goal, then, still plays a vital role in determining the sequence of behaviors employed by a flirter. The potential changes in the flirting script affected by one's specific goal represent a fruitful next step in this line of research.

That some flirting behaviors might be part of a larger flirting script is consistent, in part, with the theoretical framework applied here, specifically, the nature of plans. When a source begins the planning process (i.e., plan generation), limited cognitive processing capacity and the real-time requirements of interpersonal interaction often necessitate the retrieval of a *canned* or *boilerplate* plan (i.e., Berger, 1997; Dillard, 1990). Many canned plans are the result of trial-and-error, as well as observations made of

others seeking similar goals (Berger, 1997). Therefore, in certain situations, the plans that interactants develop largely from scripts. Both scripts and canned plans are built from previous experiences and the knowledge gained when a sequence of action facilitates or impedes goal attainment (Berger, 1997). Berger and Bell (1988) claim that: “scripts represent more rigid action sequences that have evolved from plans through repeated use” (pp. 218-219).

The closed-ended data suggest the existence of a flirting script, as some factors did not vary across goals while others did. Given the nature of the measurement, however, identification of the *specific* behaviors involved in the flirting script cannot be gleaned from the closed-ended flirting factors, but might be identified in the open-ended behavioral sets. Although not a primary question driving the current study, the use of the open-ended behavioral data was revealing in terms of understanding the *types* of behaviors that are typically associated with flirting, and how best to assess those behaviors.

### **Reconsidering Flirting Behaviors**

The decision to measure flirting behavior in two ways, one using a closed-ended scale and the other, an open-ended long-form written question, produced some interesting insights into both the types of behavior considered underneath the *flirting* umbrella, as well as how scholars can and should assess such behavior. The open-ended form is considered first.

**Open-ended flirting behavior sets.** Despite the fact that many of the significant and illuminating results of this study come from the closed-ended flirting factors, the

implications of the open-ended flirting behavior sets still merits acknowledgement and discussion. One of the valuable aspects of this study was that it employed multiple ways of both considering goals and measuring flirting behavior. The decision to measure flirting behavior in two ways was made to aid in developing a more complete picture of how goals relate to such behavior. At first blush, it might seem that the open-ended data provided less useable data. This conclusion, however, would be shortsighted. Frankly, the open-ended data, which asked participants to write, in their own words, the behaviors they used during their flirting interaction, was simply not utilized in the best possible way.

The open-ended data were qualitative, but were analyzed quantitatively. Because the open-ended items were count data, many of the sets created to represent dimensions of flirting behavior (e.g., verbal, eye behavior, other touch) possessed attenuated ranges and relatively little variation (which was reduced further by the square root transformation applied to the open-ended data), hindering their ability to provide significant results in the quantitative analyses (e.g., multiple regressions, ANOVAs, and correlations). A function and a goal are conceptually close, which could explain many of the significant results. That something functions for a particular reason is another way of describing that behavior's service of a goal. Furthermore, thinking about the closed-ended flirting factors as, in part at least, *function-based* and the open-ended data as *behavior-based* is worthwhile, and represents a more basic future direction for scholars of flirting. Specifically, several of the closed-ended factors represented functions performed by different behaviors. For example, making eye contact, disclosing personal

information, and laughing are dissimilar behaviors on face value, however, are employed in *order to be* immediate. The grouping of behaviors in the open-ended data, conversely, does not possess such a functional basis. The set *Eye Behavior*, for example, might serve several functions: being attentive, indirect, or immediate. The open-ended data merely compiled similar behaviors together, regardless of intended (or unintended) function. One set, *Hybrid*, likely came the closest to this functional approach, where participants described multiple concurrent behaviors (e.g., touching while laughing). Ostensibly, a single function was served by several behaviors simultaneously.

Much of the benefits offered by the open-ended data (i.e., the rich descriptions crafted in the language of the participants' lived experiences) were lost when individual behavioral items were summed together to create the conceptually-similar behavior sets. Although it might be statistically impractical to conduct multivariate analyses with 35 dependent variables (the number of open-ended behaviors), the precision of each behavioral item allows for the development of a more descriptive picture of the flirting process. Specifically, the open-ended data likely represents one way to examine the flirting script, as participants responded to not only the specific flirting behaviors they performed, but also the specific *order* in which they employed them. Therefore, methods similar to those utilized in work on the construction of first date scripts (e.g., Laner & Ventrone, 2000; Rose & Frieze, 1993; Serewicz & Gale, 2008) could be applied to the open-ended flirting data. In this way, a blueprint of how to flirt generally, and even how to flirt when one has a specific goal, could be created. Such scripts could not be constructed from the closed-ended data, as participants only indicated the extent to which

they used a particular flirting behavior, not the order in which they used the behavior.

Participants completed the open-ended measure prior to responding to the closed-ended items. Thus, the open-ended responses likely had a priming effect on participants, allowing them to more effectively and accurately answer the more specific closed-ended items. Specifically, completing the open-ended measure may have the details surrounding the flirting interaction (including the behaviors they performed) more salient when participants completed the closed-ended scale. Methodologically, then, the decision to include an open-ended measure of flirting behavior appears to be a constructive one

**Closed-ended factor structure.** Given that the closed-ended flirting measure, based on a modified form of Egland et al.'s (1996) *Flirtation Behavior Scale*, produced much of the significant results reported here, its factor structure is worthy of mention. Egland et al.'s original analysis produced four factors: *Display* (overt display of affection for the other), *Attentiveness* (an effort to focus on the other), *Stereotypical* (culturally-assigned courtship cues like asking someone's sign or giving a business card), and *Conversational* (general verbal statements conveying interest such as exchanging personal information). The factor structure produced for the current study largely improves upon the original, not merely because of the addition of two factors. Three of Egland et al.'s original factors were reproduced here; overt (direct, unambiguous, and culturally-assigned courtship cues), conversational (aspects of direct verbal exchanges between individuals), and attentive (focusing on the other and one's interaction with that person) from this study closely reflect stereotypical, conversational, and display from the original. Although the Egland et al. factors were not exactly reproduced, new



combinations of items made for a more reliable and conceptually sensible factor structure used here. These combinations are described next.

The original stereotypical factor, for instance, was not very well defined and was only labeled as such by England et al. (1996) because of the items *Give them a business card* and *Ask what their sign is* from the original item pool. Both of these items were removed for the current study because they were deemed anachronistic for the college sample used, and consequently, a more coherent conceptually consistent group of items representing or overt flirting behaviors emerged. The present *Overt* factor described unambiguous and direct flirting; it is similar to the original stereotypical factor in conceptual spirit, but improves upon it as it has a larger number of items. Many of the telltale items in the overt factor in this study (e.g., asked for a date, used a pickup line, bought a drink) loaded onto the other three factors in England et al.'s analysis. In all, the overt factor contains a more coherent set of items to describe and explain its namesake (e.g., using a pickup line, asking for a date, buying a drink). No item was used to name the factor; instead, the items *together* created the factor label, thereby creating a more complete conceptualization of what it meant to flirt unambiguously and directly.

Similarly, the original *display* factor from England et al. (1996) appeared to break up into two separate factors in the current study: immediacy (i.e., being engaged and involved in the interaction) and touch (i.e., any and all form of touch behavior). Again, the original display factor contained items from both of these new factors, which potentially eliminated some of the conceptual uniqueness in terms of behaviors that the two separate factors from this study held. Having, essentially, a *verbal* and *touch* display

factor allowed this project more nuance and specificity with analyzing specific flirting behaviors, the primary goal of the study. Put another way, although immediacy behaviors are performed most of the time while flirting, touch behaviors are performed only some of the time. The current study's separate immediacy and touch factors allow for that to be more fully assessed.

The addition of the present study's indirect factor, comprised of items that loaded onto Eglund et al.'s (1996) stereotypical factor, is another example of how the present analyses provide a more conceptually nuanced and clear measure of flirting behavior. The indirect factor highlighted that not *all* flirting is forward and direct; some participants, it seems, flirt much more subtly and coy, opting to let the *other* person make the first, second, and even third "moves" in the flirting interaction. This inclusion is not necessarily a novel addition to existing flirting research (as this project's own definition of flirting encompasses a message that ranges in ambiguity), but is valuable insofar as it highlights, statistically, the true variation in possible flirting behavior.

Having discussed the results in terms of flirting *behavior*, a discussion of how the results illuminate issues related to flirting *goals* is now necessary. Goals represents the other half of this project's primary interests, and results were telling about how goals function in college students' most recent flirting interactions (if at all). These results are reviewed next.

### **Reconsidering Flirting Goals**

This study utilized a modified version of D. D. Henningsen's (2004) six motivations for flirting. In particular, D. D. Henningsen's *Exploring* was deemed too

general, and split into two versions: *Test Relational Waters* (e.g., “I want to ascertain if this person wants to start a relationship with me”) and *Test Sexual Waters* (e.g., “I want to ascertain if this person wants to engage in sexual contact with me”). That split produced seven total flirting goals for this study: The two *Test* variants, plus *Sex* (e.g., “I want to have sexual contact with this person”), *Relational* (e.g., “I want to start a relationship with this person”), *Esteem* (e.g., “I want to feel better about myself”), *Instrumental* (e.g., “I want to get some reward or tangible item”), and *Fun* (e.g., “I just want to enjoy myself”). Another result of this study was a look into the typical goals of a college student population, which revealed the typical flirting motivations of college students and speaks the value of D. D. Henningsen’s original typology. Each of these issues is now considered.

One aspect of flirting goals gleaned from this study was what was *most* typically reported. The goals reported most by participants (via the single-item, primary flirting goal item) were *Fun* (38.3%), *Relational* (22.8%), *Sex* (13.1%), and *Test Relational Waters* (12.2%). The difference between these four and the other three goals was dramatic, as the next most reported goal, *Test Sexual Waters*, was only indicated by only 4.2% of participants as the primary reason for their most recent flirtatious interaction. These percentages are important for a number of reasons, not the least of which is that many of the significant results reported herein relate to the most-reported goals. One of the avenues for future research would be to experimentally assign participants equally across the flirting goals and reassess flirting behavior. The lack of results for the instrumental and esteem goals, in particular, could have been due to underpowered tests

from a small number of participants selecting these goals specifically.

In addition to explaining some of the reasons for particular results, or lack thereof, examination of the primary goal item allows for a window into the reasons for which this college sample *typically* flirts. That *Fun*, *Relational*, and *Sex* were the top three reported goals is supported by research on casual sex relationships (e.g., Bogle, 2008; Fantasia, 2011; Parsons, Halkitis, Bimbi, & Borkowski, 2000; Paul, McManus, & Hayes, 2000; Paul, Wenzel, & Harvey, 2008) and binge drinking norms (e.g., Allison & Rismer, in press; Baer, 1994; Borsari & Carey, 2003; Carey, Borsari, Carey, & Maisto, 2006; Cooper, 2002; Larimer, Turner, Mallet, & Geisner, 2004) on U.S. college campuses. These studies all suggest a campus cultural wherein fun and sexual exploration take precedent in student interactions, which sometimes leads to risky health decisions in the realms of sexual relations and drinking habits. The data from this study would support the contention that students are out to have fun, and pursue relationships with one another, sometime with the hopes of engaging in sexual contact.

As stated earlier, this study split D. D. Henningsen's (2004) *Exploring* flirting motivation into *Test Relational Waters* (TRW) and *Test Sexual Waters* (TSW). The results of this study would suggest that such a split did not dramatically add to the understanding of the reasons for flirting. This conclusion was reached several ways. First, as highlighted above, TRW and TSW goals were not noted as being the primary driver of many participants' most recent flirting interaction, while *Relational* and *Sex* goals were. This however, cannot be the sole criterion for the removal of a goal, as *Instrumental* and *Esteem* would also need to be removed, creating a typology with very little breadth.

Second, there were two pieces of evidence that suggested participants might not have been able to distinguish between the two “testing” goals and their “non-testing” counterparts. The first was the seven Likert-type items that were used in addition to the single flirting goal item. These seven items asked participants to rate the extent to which each of the goals was a reason for their most recent flirting interaction. Examination of the frequency tables for each of these seven items revealed similar distributions between *Relational* and TRW and *Sex* and TSW. This similarity could be due to the participants’ inability to discern whether or not they were pursuing a relationship or sex, or merely *testing* for it. The second piece of evidence was a factor analysis that was run using the seven Likert-type flirting goal items. The pattern matrix of the principal axis factoring results seemed to indicate three factors: a *sex* factor, loading the two sex goals; a *relational* factor, loading the two relational goals; and an *other* factor, loading the esteem and fun goals. The instrumental goal, interestingly, did not strongly load on any one factor.

Given all of the aforementioned evidence, D. D. Henningsen (2004) might have had it right the first time. That is, with a single *Exploring* motivation encompassing any flirting interaction designed to test interest, be it for sexual, romantic, or other reasons. The descriptions of the TSW and TRW goals might have also too closely resembled those of the sex and relational goals, respectively, confusing participants. When a significant result was obtained for either the TSW or TRW goal, it often closely matched its non-testing counterpart. Bringing back the *Exploring* goal might allow researchers to better assess the extent to which it exists, while concurrently obtaining a better picture of the

*Relational* and *Sex* goals.

### **Biological Sex Differences**

This study examined two aspects related to biological sex and flirting: the particular flirting behavior and the goals for flirting interactions. This examination found a few differences consistent with previous literature. Each of these sets of differences is now considered.

**Flirting behaviors.** First, men reported utilizing more *Overt* behaviors compared to women. Buying a drink for another, asking a person to dance, and asking someone for a date all fall under the *Overt* category. Several researchers (Moore & Bulter, 1989; Renninger et al., 2004; Trost & Alberts, 1998) have noted that men typically advance through the stages of flirting and are often expected to begin the interaction. In addition, men also reported using more verbal behaviors than did women in this study. This could also stem from the expectation of men to overtly take the lead in heterosexual flirting interactions. Uttering the first words, or *breaking the ice* can be thought of as within the purview of men.

In addition, the present data indicated that women, for their part, reported using more facial expressions, self-touch, and laughter compared to men. Interestingly, all of these results were derived from the more behavior-specific open-ended set data. Prior research might help explain why this result was found. First, women are consistently more accurate than men at encoding and decoding nonverbal behavior, the channel that comprises most flirting communication (Buck, 1984; Hall, 1987; Noller, 1986). Women are more adept in the expression of emotions and feelings relative to men (Hall, 1984),

and have a better command of the visual nonverbal channel, through which most flirting passes, at least initially (Drag & Shaw, 1967; Trost & Alberts, 1998). These differences in ability are useful for understanding observational work of cross-sex dyads, which indicates that women not only possess a wider repertoire of flirting behaviors compared to men, but that they are also more active participants and initiators of flirting interactions (Clark et al., 1999; Greer & Buss, 1994; McCormick & Jones, 1989; Trost & Alberts, 1998).

Furthermore, it is well documented that in heterosexual interactions, women tend to play a gatekeeping role. That is, women tend to control when, how, and if sexual interaction will occur (Clark & Hatfield, 1989; Grauerholtz & Serpe, 1985; Lott, 1987; Seal & Ehrhardt, 2003). The use of facial expressions, touch (in general) and laughter are all indicators of interest in interactions (Cunningham & Barbee, 2008; Grammer, 1990; Moore, 2010), and might support women's gatekeeping function. Touching, laughing, and using facial expressions could signal to men that it is safe to approach, converse, and even move an interaction toward sexual interaction of some kind.

**Flirting goals.** D. D. Henningsen's (2004) original work on flirting motivations reported sex differences on the *Sex* and *Fun* categories, such that men report more of the former and women, more of the latter. The results reported in the current investigation replicate those exactly. Furthermore, the result was *still* replicated (i.e., men reporting more sex goals compared to women), despite the inclusion of a second sex-related motivation: The *Test Sexual Waters*. Women reported flirting more for fun reasons compared to men. These were the only sex differences found across primary flirting goal.

That men would be more likely to *report* flirting for sexual reasons follows a well-established line of research positing a socio-evolutionary explanation for the sex differences (e.g., Clark et al., 1999; Cunningham, 1989; Grammer, 1990; Grammer et al., 2000; Greer & Buss, 1994; Kenrick et al., 1990; Moore, 1985, 1995; Trost & Alberts, 1998). Specifically, it is a man's biological drive to be sexually invested in interactions with women, as he must propagate widely to increase his fitness level, or his chance of continuing his genetic legacy in the greater pool through offspring raised to sexual maturity.

Women's proclivity to report flirting for fun reasons is less clear. Despite being the sex who typically moves a dyad through the stages or sequences of flirting behaviors, it is women who usually control when, and if the interaction will begin at all (Moore, 1985; 2010). This is accomplished via signaling to an interested male that it is or is not safe to approach (McCormick & Jones, 1989). Renninger et al. (2004) investigated the extent to this effect, and found that men will engage in a number of solicitation behaviors (e.g., pacing around, making one's body appear larger) in hopes to *get the female glance* as they phrase it. Wielding such power to beckon a man with just a glance could very well be fun for the young women sampled for this study as well as those sampled for D. Henningsen (2004). Furthermore, women's magazines such as *Cosmopolitan*, feature articles such as "How to Flirt Like Crazy" (Miller, 2012) and quizzes like "What Kind of Flirt are You?" (2013), detailing *both* the power and the fun a young woman can have with a few flirty moves. Culturally, flirting for women can be an enjoyable experience that has the added benefits of relational implications and/or sexual entanglements with



heterosexual men.

### **Theoretical Implications**

Consideration of the results from this study's hypotheses and research questions can aid in assessing the utility of Dillard's (1990) Goals-Plans-Action (GPA) model of interpersonal influence. In this model, a persuader first identifies and organizes his/her goals, develops a plan for obtaining those goals, and then engages in behavior based upon the plan. Flirting, because of its goal-directed nature aimed at changing an attitude or the behavior of another toward reciprocation of interest and liking, is clearly influence behavior. This study reviewed at great length the relationships among goals and behavior in influence situations. Several results from the current study offer support for use of the GPA model within the context of flirting behavior.

Dillard (1990) proposes a causal model with his GPA sequence; goals are developed *first*, then plans, and then action. Although the current study did not employ modeling techniques aimed at testing this causal model, several links in the GPA chain *were* successfully examined.

First, research question two investigated the goals-plans link, and found significant differences in planning across levels of the primary flirting goal variable. Specifically, participants reported significantly less planning in the fun goal when compared to the relational, sex, and testing sexual waters goals. The interactions on which participants reported could have been, ostensible, of little consequence; this contention is supported by the *Fun* goal's largest percentage among all primary flirting goals. This playing at love (or quasi-courtship in the Schlegel [1965] sense), could even

represent the stereotypical and culturally-recognizable canned flirting plan. In addition, the target's response might play a limited role in flirting for *fun*. On the other hand, flirting to start a relationship, engage in sexual contact, or determine another's level of interest in engaging in sexual contact, are all goals that require more consideration of the other's position (literally and figuratively) in the interaction. In these cases, flirting has implications for both the immediate interaction as well as interactions that follow. Moreover, the target's response to flirting behavior represents an important determinant of whether or not (or when) the flirter can reach his/her goals. One can have fun whether or not the partner reciprocates. If the partner does not *want* to engage in sexual activity or begin a relationship, on the other hand, the flirter likely would not reach those goals.

In Dillard's (1990) GPA terms, the test sexual waters, sex, and relational goals likely have more *secondary goal* considerations. Schrader and Dillard (1998) postulated that when more secondary goals (e.g., face threats, identity concerns) are present within a goal structure, the more planning would take place. Berger (1997) too hypothesized that a more abstract or complex goal would result in more planning. The present data are generally consistent with these contentions generally, and in the context of flirting specifically.

This result should also be considered in terms of facework and face management theory (Goffman, 1959). Specifically, secondary goals represent face threats, or instances where one's public image or one's perception among others is harmed. Flirting goals such as relational and test relational waters inherently possess more face considerations for both flirter and target and therefore necessitate more planning on the part of the flirter.

These considerations have the possibility to be compounded should the target be a known other, as the implications for threatening the face of a friend, for example, might be more costly than threatening the face of a stranger (Brown & Levinson, 1987; Wilson et al., 2009).

Other aspects of the goals-plans link were investigated through two hypotheses: one predicting that as the single driving goal increased in importance, so too would the reported amount of planning performed; and another predicting that a more complex goal structure (operationalized as more goals reported as being “a reason” for an interaction concurrently) would result in a greater amount of reported planning. In both cases, data were consistent with these hypotheses. Moreover, in both cases, correlations were moderate in magnitude (i.e.,  $r = .34$  for complexity-planning;  $r = .30$  for importance-planning). These findings are important in validating the GPA sequence as a useful frame for flirting behavior. Although Dillard et al. (1989) and Schrader and Dillard (1998) uncovered changes in behavior due to more complex and more important goals, neither fully investigated the role of planning in the process, a misstep in social influence research highlighted extensively by Berger (1997). These results, then, lend support to the cognitive role that planning plays between the identification of goals and the enactment of action. Dillard et al. and Schrader and Dillard both assume that more planning must be occurring, and that that might explain the increased variety and complexity of influence behaviors found in their research, yet they do not test such an explanation directly. Again, the results reported here are not causal, but the moderate strength of correlations between complexity, importance, and planning do offer support

for the goals-planning sequence as purported by the GPA frame.

In addition to the goals-planning link, support was also found for the most underexplored link in the GPA sequence: the planning-action link. Research question three sought to ascertain if changes in the reported amount of planning might affect the specific flirting behaviors that participants reported, as operationalized via the six closed-ended factors. Correlations between planning and behavioral factors were significant in all cases, but one (i.e., the conversational factor). Examination of the specific correlation coefficients offers particularly interesting insights into the planning-action link within the context of flirting. The overt (i.e., stereotypical courtship cues like buying another a drink or using a pickup line) and indirect (i.e., coy and subtle behaviors like looking down or away) correlations were twice as large in magnitude than those for the involvement, touch, and attentive factors. Why might this be the case? As discussed earlier, some flirting behaviors appear to be part of a larger flirting script, and therefore require less cognitive effort to employ, similar to Berger's (1997) "boilerplate" plan concept, which are plans that are ready-made and require little energy to recall and enact. Involvement and attentive factors were both less likely to differ across goals, indicating that being involved and attentive are just part of flirting, regardless of the goal (and would thereby suggest a script or boilerplate plan).

On the other hand, flirting behaviors that might deviate from a generic or typical flirting script (like overt and indirect behaviors) require *more* planning because cognitive effort must be made to place them into a flirting interaction. Again, cognitive facework such as planning to engage in the behavior *as well* as noting the target's response might

be another way to understand why more planning was present for overt and indirect flirting behaviors than any other. These behaviors carry the potential of having greater relational implications, such as upsetting one's partner and also requiring greater communication competence (Spitzberg, 1983) to carry out effectively.

Furthermore, the finding that behaviors differ in the amount of planning required relates to the conceptualization of courtship vs. non-courtship definitions of flirting, and their effects on how participants come to understand, and engage in, flirting. Specifically, if flirting is defined as merely signaling conversational interest (i.e., non-courtship definitions), then small correlations between involvement and attentive dimensions of flirting and planning are to be expected; that is just *how* one flirts. Engaging in touch behavior, looking away, or buying a drink, (which related to relational, esteem, and sex goals, respectively) conversely, might fall under the courtship definitions of flirting and therefore require one to go *above and beyond* signaling general interest and navigate a more specific goal that requires cooperation by the partner. These behaviors are not a part of the prototypical flirting script and require greater cognitive work because of facework threats.

In summary, at the macro level, Dillard's (GPA) sequence appears to be a concise and appropriate theoretical frame from which to examine the communication phenomenon of flirting. Links between each step: goals-to-plans, and plans-to-actions, were evident in these data.

### **Limitation and Directions for Future Research**

Despite this study's many contributions to the flirting literature, it did possess

several limitations. Many of these limitations offer avenues for future scholarship.

First, like much research in the field of communication studies, the sample was quite narrow relative to the population it was intended to represent. Namely, this sample was primarily Caucasian, heterosexual, 18-24 year-old college students. It is self-evident that this group is *not* the only group engaged in flirtatious interactions (e.g., Frisby, 2009; Papaharitou, Nakapolou, Kirana, Giaglis, Moraitou, & Hatzichristou, 2008), and therefore much of the flirting population was excluded by the choice to employ a convenience sample. Future research should strive to include a wider swath of the general population; this would help in ascertaining the extent to which a flirting script *does* exist, whether or not flirting behaviors differ by age, as well as whether or not the flirting goals utilized here are as relevant for a non-college population.

Second, with the rise of dating website such as Match.com and eHarmony.com, as well as applications geared toward bringing people together, people are dating, mating and, most certainly flirting with one another through mediated, in addition to face-to-face, contents (e.g., Ortutay, 2014). The rise in mediated dating pools not only highlights the vast breadth of daters, but also that more flirting is likely occurring via these computer-mediated channels. Despite the field of communication's embrace of computer-mediated communication (CMC) as a legitimate, fruitful, and timely area of scholarship (see Walther, 2010 for a review), online or "cyber flirting" has received scant academic attention (for exceptions, see Whitty, 2003a, 2003b). With over 90% of American adults now owning and regularly using a cell phone – the primary mode by which people access these new dating apps and sites (Pew Research Internet Project, 2014), the next logical

step would be to investigate how people signal interest with only words on a screen. Several participants were excluded from this study for describing CMC-based flirting, indicating experience with CMC-flirting among this sample. When nonverbal aspects are stripped from a message, how might interactants be subtle, coy, or hint at expressing interest? Work on emoticons as imbuing nonverbal communication into text-based message exchanges (e.g., Derks, Bos, & von Grumbkow, 2008; Ko, 2008; Rezabek & Cochenour, 1998; Walther & D'Addario, 2001) might be a fruitful first step toward unlocking the secrets of online flirting

Third, flirting behaviors were obtained using recall methods, which have validity and reliability problems (e.g., Hassan, 2005; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Raphael, 1987). Such methodological limitations raises the question of how confident scholars can be in participants' recall. The average length of time between a participant's most recent flirting interaction and the data collection occurred was about 40 days, this is more than enough time to have some details fall through the cognitive cracks. Future examinations of flirting behavior should obtain information via direct observation, similar too much of the early flirting research (e.g., Givens, 1978; Moore, 1985; Schiefel, 1965). Alternatively, participants could flirt in a lab under experimental conditions. Such a method would allow researchers to more closely obtain a person's *true* flirting behaviors. Self-presentation biases, such as appearing confident, competent, and *normal*, and the ecological validity of such lab experiments, are both aspects that would need to be considered and accounted for. For example, would participants who, after being asked to flirt with a stranger, engage in the same sort of flirting behavior that they

would enact under less constrained circumstances? Clearly each method of investigating any social communicative act, especially flirting, which is completely reliant on a live other to progress, possesses advantages and disadvantages. Weighing each with the researcher's goal will be necessary to approach a more accurate picture of human flirting.

Fourth, related to the self-report limitation, is that only one side of the flirting interaction *story* was obtained. Flirting, by definition, requires two people; it cannot be accomplished alone (Jenkins, 2010), and therefore the goals, plans, and actions of the *target* person is likely to be critical to the interaction. Dillard (1990, 2004) argues that the Goals-Plans-Action (GPA) sequence is *not* limited to the sender alone. A receiver of an influence attempt (e.g., flirting) can also possess a constellation of primary and secondary goals, plans for enacting those goals, and behaviors. Furthermore, Berger (1997) postulates several planning-related hypotheses that relate directly to how planning changes and shifts in the face of *thwarting*, or perceived threats to plan (and, therefore, goal) success. As a consequence, future research would be served by collecting and analyzing flirting data dyadically, a practice that has grown in precision and usage over the past decade (e.g., Kashy & Kenny, 2000; Kenny, 1996; Kenny, Kashy, & Cook, 2006). Dyadic data analysis would allow for both senders' and receivers' goals, plans, and actions to be examined simultaneously, thereby painting a more complete (albeit more complex) picture of flirting. After all, flirting is most likely a nuanced set of interactions that can only be fully accounted for by collecting data from *both* participants (whose roles as flirter and target likely revert continuously).



Fifth, although it was not included in the current study, future research on flirting generally and the role of goals in the flirting process specifically should look to integrate the concept of communicator style into future research. Two examples of the style concept appear relevant: flirting style and love style. First, Hall (2013; Hall, Carter, Cody, & Albright, 2010) contends that humans have a stable set of ways in which they prefer to flirt, regardless of the source, goal, or environment. Playful flirthers, for example, will always flirt with jokes, humor, and jovial messages; physical flirthers, on the other hand, will rely on touch and physical contact to signal interest. Such claims, namely, that behaviors will be *static* in the face of shifting goals and targets, is both inconsistent with the position advocated (and, perhaps, the data reported) in this document and worthy of closer examination. The results reported here seem to indicate that goals *do* relate to how people flirt, making consistent flirting styles less likely. Considering Hall's contentions within the context of varying goal structures would be enlightening for a number of reasons.

Finally, as was alluded to in the theoretical implications section above, although this study closely followed Dillard's (1990) GPA theoretical frame, it could be argued that it did not *directly* test its predictions. A statistical bromide is that correlation does not equal causation. Therefore the interrelations between goals, plans, and actions presented in this report are correlational in nature. In order to more fully test develop a full test of the GPA model in a flirting context, future research should employ structural equation modeling techniques, which are better suited for testing causal relationships between and among factors and variables. In this way, the ability of goals to *result* in planning, which,

in turn, affects the production of action, could be assessed. As Popper (1963) opined, the only *real* way to test a theory and therefore progress in any science is for all attempts at falsification to be attempted. Future research should take up this mantra as it pertains to the GPA model and flirting.

## **Conclusion**

This study extends our knowledge about flirting beyond mere typologies of behaviors by uncovering an important factor that appears to relate to specific flirting behavior use: goals. The results indicate that goals relate to the specific flirting behaviors individuals report using. It appears that some flirting behaviors, like being immediate, attentive, and conversational, are present regardless of the goal. The consistency of these behaviors might suggest that a flirting script exists. Other behaviors, however, like touching, acting very direct or forward, and being shy, are very dependent on the goal. Furthermore, the reported amount of planning, the importance of the goal, and the amount of goals for a single interaction all had an effect on the reported use of various flirting behaviors, lending support for the use of Dillard's (1990) Goals-Plans-Action theoretical model as a frame. In all, this study provides more questions than answers regarding the complex relationship between goals and flirting behavior. Future researchers should strive to do less cataloging of communicative behavior, and instead examine the ways such behavior is brought about. Admittedly, this is a more difficult set of questions, but one that will bear more fruit.

Table 1

*Correlations Among CE Flirting Behavior Factors*

Variable	1	2	3	4	5	6
1. Immediacy	—					
2. Touch	.43	—				
3. Attention	.63	.48	—			
4. Overt	.42	.65	.35	—		
5. Indirect	.42	.51	.39	.50	—	
6. Conversational	.67	.24	.52	.32	.29	—

*Note.* All correlations are significant ( $p < .01$ ; two-tailed).  $N = 528$ .

Table 2

*Flirting Goals and Descriptions*

Goal Name	Description Given to Participant
Esteem	I flirted to feel good about myself.
Fun	I flirted to have fun.
Instrumental	I flirted to get something I wanted (e.g., a drink or a ride) from the other person.
Relational	I flirted to start a romantic relationship with the other person.
Sex	I flirted to have sexual contact with the other person.
Test Relational Waters	I flirted to see if the other person wanted to start a romantic relationship.
Test Sexual Waters	I flirted to see if the other person wanted to have sexual contact.

Table 3

*Correlations Between OE Sets and CE Factors*

Variable	EB	VB	ST	OT	KCS	L	V	FE	K	O
Immediacy	-.03	.02	.07	.15**	-.06	.16**	.03	.05	.05	.01
Touch	-.11*	-.22*	-.03	.38**	-.06	-.03	-.00	-.15**	.41**	-.01
Attentive	.13*	-.11*	.07	.21*	.08	.06	.00	.05	.18*	.02
Overt	-.01	-.09	-.01	.10*	.02	-.12*	.00	-.13*	.17**	.04
Indirect	.04	-.12*	.17*	.06	.04	.04	-.02	.04	.11*	.04
Conversational	-.12*	-.01	.02	.14**	-.06	.02	.01	-.06	.09	-.02

*Note.* \*  $p < .05$ . \*\*  $p < .01$ . EB = Eye Behavior; VB = Verbal; ST = Self-Touch; OT = Other Touch; KCS = Kinesic; L = Laughing; V = Vocalic; FE = Facial Expression; K = Kissing; O = Other.

Table 4

*Correlations Between Frequent OE Items and CE Factors*

Variable	UEC	SEC	UV	MV	PV	AV	UT	MT	HBT	P	M	L	US	MK
Immediacy	-.04	-.01	-.04	-.05	.07	.01	.03	.06	.16**	.03	-.02	.16**	.05	.07
Touch	-.05	-.12*	-.04	-.23**	-.10*	-.03	.24**	.21**	.16**	.00	-.03	-.03	-.14**	.40**
Attentive	.07	.07	-.07	-.06	-.06	-.03	.14**	.10	.12**	.08	.05	.06	.02	.17**
Overt	-.05	.00	-.05	-.06	-.08	.01	.13*	.07	.05	-.02	.08	-.12*	-.14**	.17**
Indirect	.02	-.01	-.09	-.13*	.05	-.08	.10*	-.03	.08	-.01	.02	.04	.00	.14**
Conversational	-.11*	-.02	-.12*	-.04	.04	.06	.02	.09	.07	-.00	-.03	.02	-.08	.12*

*Note.* \*  $p < .05$ . \*\*  $p < .01$ . UEC = Unspecified Eye Contact; SEC = Sustained Eye Contact; UV = Unspecified Verbal; MV = Mundane Verbal; PV = Playful Verbal; AV = Affectionate Verbal; UT = Unspecified Touch; MT = Mutual Touch; HBT = Hand-to-Body Touch; P = Proxemics; M = Movement; L = Laughing; US = Unspecified Smiling; MK = Mutual Kissing.

Table 5

*Goal Differences Across Six CE Factors*

Goal	Involvement		Touch		Attentive		Overt		Indirect		Conversational	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Esteem	3.76	.57	2.14 <sub>a</sub>	.90	3.91	.53	2.15	.90	2.60 <sub>abc</sub>	1.11	3.80	.59
Fun	3.68 <sub>a</sub>	.71	2.42 <sub>bc</sub>	.97	3.88	.65	2.26 <sub>ab</sub>	.97	2.09 <sub>ade</sub>	.84	3.75	.77
Instrumental	3.58	.68	2.51	1.13	3.84	.76	2.36	1.13	2.17	.78	3.63	.95
Relational	4.02 <sub>ab</sub>	.70	2.80 <sub>bd</sub>	1.08	4.04	.76	2.68 <sub>a</sub>	1.08	2.37 <sub>df</sub>	.98	3.97	.72
Sex	3.64 <sub>b</sub>	.77	2.95 <sub>ace</sub>	1.06	3.84	.84	2.79 <sub>b</sub>	1.06	2.40 <sub>eg</sub>	1.05	3.86	.83
Test Rel. Waters	3.85	.66	2.32 <sub>de</sub>	.94	3.85	.70	2.39	.94	2.03 <sub>bfg</sub>	.74	3.87	.66
Test Sex. Waters	3.57	.70	2.53	.97	3.77	.54	2.58	.97	2.01 <sub>c</sub>	.72	3.86	.56

*Note.* Within each column, shared subscripts indicate a significant mean difference ( $p < .05$ ). Means lacking a subscript do not differ from any other mean.

Table 6

*One-Way ANOVA Results for OE Sets*

Variable	<i>df</i>	<i>F</i>	<i>p</i>	$\eta^2_{\text{Partial}}$
Eye Behavior	7, 47.73	.48	.84	.01
Verbal	7, 47.44	.87	.54	.02
Self-Touch	7, 368	2.56	.01	.05
Other Touch	7, 48.09	1.14	.36	.02
Kinesic	7, 47.35	2.07	.07	.03
Laughing	7, 49.99	1.31	.27	.03
Vocalic	7, 368	3.18	.00	.06
Kissing	7, 47.43	1.31	.27	.03
Facial Expression	7, 46.58	1.49	.20	.03



Table 7

*Goal Difference Across OE Sets*

Goal	EB		VB		ST		OT		KCS		L		V		FE		K	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
E	.43	.76	2.64	2.02	.14	.36	.86	.86	.92	1.33	.50	.65	.00 <sub>a</sub>	.00	1.07	1.33	.14	.36
F	.62	.62	2.00	1.88	.12 <sub>abc</sub>	.35	1.19	1.39	.79	1.32	.50	.60	.06 <sub>a</sub>	.24	.73	.67	.18	.52
I	.83	.41	2.83	1.94	.00 <sub>a</sub>	.00	1.00	.89	.83	.75	.50	.55	.33	.52	1.00	1.10	.33	.52
R	.67	.67	2.16	1.82	.01 <sub>b</sub>	.11	1.31	1.09	.68	1.00	.32	.50	.04	.19	.60	.74	.32	.58
S	.61	.80	2.35	1.85	.04	.21	1.07	.95	.74	.85	.30	.63	.13	.40	.50	.62	.26	.44
TRW	.70	.81	2.43	1.78	.00 <sub>c</sub>	.00	1.24	.90	.33	.70	.52	.75	.02	.15	.54	.72	.09	.35
TSW	.82	.81	1.88	1.17	.18	.27	1.00	1.22	1.35	2.14	.53	.80	.18	.53	.59	.62	.24	.56

*Note.* Shared subscripts indicate a significant mean difference ( $p < .05$ ). Means lacking a subscript do not differ from any other mean. E = Esteem; F = Fun; I = Instrumental; R = Relational; S = Sex; TRW = Test Relational Waters; TSW = Test Sexual Waters; EB = Eye Behavior; VB = Verbal; ST = Self-Touch; OT = Other Touch; KCS = Kinesic; L = Laughing; V = Vocalic; FE Facial Expression; K = Kissing.

Table 8

*Correlations Between Flirting Goals and CE Factors*

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Involvement	—											
2. Touch	.43**	—										
3. Attentive	.63**	.48**	—									
4. Overt	.42**	.64**	.35**	—								
5. Indirect	.42**	.50**	.39**	.50**	—							
6. Conversational	.66**	.23**	.52**	.31**	.29**	—						
7. Esteem Goal	.05	.07	.09**	.10*	.24**	.05	—					
8. Fun Goal	.12**	.12**	.16**	.03	.11**	.11*	.38**	—				
9. Instrumental Goal	.08	.19**	.06	.20**	.22**	.02	.29**	.17**	—			
10. Relational Goal	.32**	.23**	.22**	.31**	.22**	.22**	.03	-.09*	.11*	—		
11. Sex Goal	.16**	.36**	.21**	.32**	.22**	.13**	.22**	.22**	.34**	.31**	—	
12. Test Relational Waters Goal	.27**	.14**	.12**	.23**	.18**	.18**	.04	-.07	.08	.77**	.28**	—
13. Test Sexual Waters Goal	.15**	.32**	.19**	.32**	.24**	.15**	.24**	.20**	.32**	.30**	.86**	.35**

Note. \*  $p < .05$ . \*\*  $p < .01$ ; two-tailed.

Table 9

*CE Predictors of Esteem Flirting Goal*

Predictor	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>r</i>	<i>r</i> <sub>partial</sub>
Involvement	-.28	.06	-.16	-2.27*	.01	-.11
Touch	-.03	.12	-.03	-.42	.10	-.02
Attentive	.18	.08	.10	1.56	.10	.07
Overt	.07	.11	.05	.72	.11	.03
Indirect	.31	.09	.23	3.98***	.21	.17
Conversational	.03	.11	.02	.27	.03	.01

Note. *N* = 448. \**p* < .05. \*\*\**p* < .001.

Table 10

*CE Predictors of Fun Flirting Goal*

Predictor	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>r</i>	<i>r<sub>partial</sub></i>
Involvement	-.01	.11	-.01	-.08	.09	-.01
Touch	.13	.07	.12	1.02	.12	.09
Attentive	.20	.10	.13	2.05*	.16	.10
Overt	-.15	.08	-.12	-1.91	.02	-.09
Indirect	.06	.07	.05	.80	.09	.04
Conversational	-.02	.09	-.02	-.25	.06	-.01

Note. *N* = 449. \**p* < .05.

Table 11

*CE Predictors of Instrumental Flirting Goal*

Predictor	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>r</i>	<i>r<sub>partial</sub></i>
Involvement	.01	.14	.01	.06	.06	.01
Touch	.12	.10	.08	1.23	.17	.06
Attentive	-.14	.13	-.07	-1.07	.04	-.05
Overt	.14	.11	.08	1.28	.18	.06
Indirect	.26	.09	.16	2.74**	.21	.13
Conversational	-.12	.13	-.06	-.95	.01	-.05

Note. *N* = 450. \*\**p* < .01.

Table 12

*CE Predictors of Relational Flirting Goal*

Predictor	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>r</i>	<i>r<sub>partial</sub></i>
Involvement	.52	.13	.27	4.00***	.32	.18
Touch	-.06	.09	-.05	-.72	.21	-.03
Attentive	-.01	.12	-.01	-.06	.21	-.01
Overt	.31	.10	.20	3.23***	.29	.15
Indirect	.09	.09	.06	1.04	.23	.05
Conversational	-.10	.12	-.05	-.88	.19	-.04

Note. *N* = 449. \*\*\* *p* < .001.

Table 13

*CE Predictors of Sex Flirting Goal*

Predictor	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>r</i>	<i>r<sub>partial</sub></i>
Involvement	-.27	.14	-.13	-1.95	.12	-.09
Touch	.35	.09	.24	3.81***	.34	.18
Attentive	.15	.13	.07	1.18	.19	.06
Overt	.28	.10	.16	2.66**	.31	.13
Indirect	-.01	.09	-.01	-.10	.19	-.01
Conversational	.12	.12	.06	.97	.12	.05

Note. *N* = 449. \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Table 14

*CE Predictors of Test Relational Waters Flirting Goal*

Predictor	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>r</i>	<i>r<sub>partial</sub></i>
Involvement	.53	.14	.27	3.88***	.29	.18
Touch	-.17	.09	-.12	-1.88	.14	-.10
Attentive	.05	.13	.02	.39	.19	.02
Overt	.30	.10	.18	2.90**	.23	.14
Indirect	.11	.09	.07	1.23	.20	.06
Conversational	-.12	.12	-.06	-1.01	.17	-.05

Note. *N* = 451. \*\*  $p < .01$ . \*\*\*  $p < .001$ .



Table 15

*CE Predictors of Test Sexual Waters Flirting Goal*

Predictor	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>r</i>	<i>r<sub>partial</sub></i>
Involvement	-.27	.14	-.12	-2.01*	.12	-.10
Touch	.20	.09	.14	2.22*	.30	.11
Attentive	.07	.13	.03	.56	.17	.03
Overt	.34	.10	.21	3.36***	.32	.16
Indirect	.13	.09	.08	1.51	.24	.07
Conversational	.18	.12	.09	1.48	.14	.07

Note. *N* = 451. \**p* < .05. \*\*\**p* < .001.

Table 16

*OE Predictors of Esteem Goal*

Predictor	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>r</i> <sub>partial</sub>
Eye Behavior	.14	.11	.07	1.30	.07
Verbal	-.03	.06	-.03	-.48	-.03
Self-Touch	.72	.26	.15	2.74**	.15
Other Touch	-.03	.08	-.02	-.39	-.02
Kinesic	.07	.08	.05	.94	.05
Laughing	.20	.13	.08	1.53	.08
Vocalic	-.36	.27	-.07	-1.34	-.07
Facial Expression	.09	.11	.04	.82	.04
Kissing	.01	.17	.01	.05	.01
Other	-.15	.09	-.08	-1.63	-.09

Note. *N* = 359. \*\**p* < .01.

Table 17

*Correlations Between Flirting Goals and OE Sets*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. EB	—															
2. VB	-.02	—														
3. ST	.04	-.09	—													
4. OT	.00	-.10	.11*	—												
5. KCS	.15**	.12*	.05	-.05	—											
6. L	-.02	-.03	.17**	.06	-.04	—										
7. V	.03	-.13*	.06	-.12*	.04	.02	—									
8. FE	.12*	-.09	.10	-.12*	.02	.19**	.04	—								
9. K	-.16**	-.14**	-.08	.41**	-.01	-.08	-.05	-.13*	—							
10. O	.03	.05	-.02	-.06	.19**	-.08	-.01	.05	.02	—						
11. E	.06	-.01	.16**	-.02	.03	.11**	-.03	.07	-.04	-.06	—					
12. F	-.02	-.09	.09	-.01	.06	.14**	-.02	.13**	.11*	.05	.41**	—				
13. I	.02	-.09	.05	.03	-.01	.01	.07	.07	.10	-.07	.33**	.20**	—			
14. R	-.04	.03	-.07	.10	-.07	.01	-.05	-.10*	.04	-.10	.02	-.12*	.10*	—		
15. S	.03	-.08	.01	.09	-.04	-.03	.03	-.07	.12**	-.00	.22**	.21**	.34**	.26**	—	
16. TRW	-.02	.07	-.06	.03	-.04	.00	-.07	-.11*	-.01	-.06	.03	-.09	.07	.80**	.24**	—
17. TSW	.03	-.04	-.04	.08	-.01	-.07	.02	-.07	.11*	.02	.22**	.19**	.31**	.26**	.87**	.30**

Note. \*  $p < .05$ . \*\*  $p < .01$ ; both are two-tailed. EB = Eye Behavior; VB = Verbal; ST = Self-Touch; OT = Other Touch; KCS = Kinesic; L = Laughing; V = Vocalic; FE Facial Expression; K = Kissing; O = Other; E = Esteem Goal; F = Fun Goal; I = Instrumental Goal; R = Relational Goal; S = Sex Goal; TRW = Test Relational Waters Goal; TSW = Test Sexual Waters Goal.

Table 18

*OE Predictors of Fun Goal*

Predictor	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>r</i> <sub>partial</sub>
Eye Behavior	.02	.08	.01	.20	.01
Verbal	-.08	.05	-.10	-1.80	-.10
Self-Touch	.19	.20	.05	.97	.05
Other Touch	-.10	.06	-.10	-1.66	-.09
Kinesic	.08	.06	.07	1.39	.07
Laughing	.26	.10	.14	2.59**	.14
Vocalic	-.04	.21	-.01	-.17	-.10
Facial Expression	.19	.08	.12	2.31*	.12
Kissing	.36	.13	.16	2.68**	.14
Other	.01	.07	.01	.09	.01

*Note.* *N* = 360. \**p* < .05. \*\**p* < .01.

Table 19

*Correlations Between Planning and CE Factors*

Variable		Involvement	Touch	Attentive	Overt	Indirect	Conversational
Planning	<i>r</i>	.14**	.15**	.10**	.36**	.30**	.08
	<i>N</i>	497	505	502	505	507	523

*Note.* \*\*  $p < .01$ .

Table 20

*Correlations Between Planning and OE Sets*

Variable	EB	VB	ST	OT	KN	L	V	FE	K	O
Planning	-.01	.04	.02	-.05	-.06	-.03	-.05	-.03	-.00	-.05

*Note.*  $N = 372$ . EB = Eye Behavior; VB = Verbal; ST = Self-Touch; OT = Other Touch; KN = Kinesic; L = Laughing; V = Vocalic; FE = Facial Expression; K = Kissing; O = Other.

Table 21

*Correlations Between Goal Importance and CE Factors*

Variable		Involvement	Touch	Attentive	Overt	Indirect	Conversational
Goal Importance	<i>r</i>	.29	.20	.22	.19	.22	.16
	<i>N</i>	502	511	507	508	513	528

*Note.* All correlations are significant at  $p < .01$ .

Table 22

*Correlations Between Goal Importance and OE Sets*

Variable	EB	VB	ST	OT	KN	L	V	FE	K	O
Planning	-.01	-.02	-.02	.08	-.04	-.02	.01	-.04	.08	-.02

*Note.*  $N = 366$ . EB = Eye Behavior; VB = Verbal; ST = Self-Touch; OT = Other Touch; KN = Kinesic; L = Laughing; V = Vocalic; FE = Facial Expression; K = Kissing; O = Other.



Table 23

*Sex Differences Across CE Factors*

Flirting Scale	<i>t</i>	<i>df</i>	<i>p</i>	Male		Female	
				<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Involvement	-.09	460.98	.93	3.77	.70	3.77	.74
Touch	-.39	465.64	.70	2.58	1.01	2.55	1.05
Attention	1.64	458	.10	3.85	.69	3.95	.71
Overt	-6.42	469.21	.00	2.77	.83	2.26	.85
Indirect	1.01	499.55	.31	2.16	.83	2.24	.95
Conversational	-1.05	465.98	.29	3.87	.76	3.80	.74

Table 24

*Sex Differences Across OE Sets*

Behavior Set	<i>t</i>	<i>df</i>	<i>p</i>	$\eta^2_{\text{Partial}}$	Male		Female	
					<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Eye behavior	-1.73	279.39	.09	.01	.74	.74	.60	.66
Verbal	-3.55	298.63	.00	.04	2.61	1.93	1.89	1.69
Self-Touch	2.41	372.67	.02	.02	.04	.19	.10	.31
Other Touch	.59	303.77	.55	.00	1.16	1.21	1.19	1.23
Kinesic	-.85	250.85	.40	.00	.83	1.46	.66	.97
Laughing	3.32	313	.00	.03	.33	.61	.51	.62
Vocalic	.85	343.79	.40	.00	.06	.23	.09	.34
Facial Exp.	2.00	304.21	.05	.01	.57	.68	.74	.78
Kissing	1.59	308.08	.11	.01	.17	.52	.24	.49
Other	-.80	259.40	.43	.00	.74	1.27	.59	.85

Table 25

*Sex X Primary Goal Interaction Effect for CE Factors*

Variable	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2_{\text{Partial}}$
Immediacy	6, 480	.33	.68	.67	.01
Touch	6, 489	1.68	1.66	.13	.02
Attentive	6, 486	.41	.84	.54	.01
Overt	6, 487	.63	.92	.48	.01
Indirect	6, 492	.79	.98	.44	.01
Conversational	6, 508	.59	1.11	.36	.01

Table 26

*Sex X Primary Goal Interaction Effect for OE Sets*

Variable	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2_{\text{Partial}}$
Eye behavior	7, 359	.80	1.84	.08	.04
Verbal	7, 359	1.88	1.48	.17	.03
Self-Touch	7, 359	.13	1.05	.05	.04
Other Touch	7, 359	.48	.48	.85	.01
Kinesics	7, 359	.45	.54	.80	.01
Laughing	7, 359	.08	.28	.96	.01
Vocalic	7, 359	.13	1.91	.07	.04
Facial Expression	7, 359	.71	1.75	.10	.03
Kissing	7, 359	.15	.81	.58	.02
Other	7, 359	1.43	2.52	.04	.05

Table 27

*Sex Differences Across Flirting Goals*

Flirting Goal	<i>t</i>	<i>df</i>	<i>p</i>	$\eta^2_{\text{Partial}}$	Male		Female	
					<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Esteem	-.90	485.86	.37	.00	2.85	1.21	2.75	1.28
Fun	1.98	464.73	.05	.01	3.88	1.12	4.07	1.09
Instrumental	.30	487.78	.77	.00	2.48	1.43	2.52	1.50
Relational	-.43	491.31	.67	.00	3.47	1.34	3.41	1.43
Sex	-4.61	500.42	.00	.04	3.61	1.37	3.03	1.51
Test Rel. Waters	-.91	479.16	.37	.00	3.32	1.40	3.21	1.44
Test Sexual Waters	-5.81	513.52	.00	.06	3.68	1.29	2.97	1.49

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APPENDIX A  
INSTITUTIONAL REVIEW BOARD APPROVAL

EXEMPTION GRANTED

Paul Mongeau  
Human Communication, Hugh Downs School of  
480/965-3773  
Paul.Mongeau@asu.edu

Dear Paul Mongeau:

On 4/3/2014 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Flirting Goals & Behavior
Investigator:	Paul Mongeau
IRB ID:	STUDY00000897
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	<ul style="list-style-type: none"> <li>• Informed Consent Document, Category: Consent Form;</li> <li>• Protocol Document, Category: IRB Protocol;</li> <li>• Flirting Goals &amp; Behavior Survey, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);</li> <li>• Survey Screenshot.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);</li> <li>• Instructor Recruitment Script, Category: Recruitment Materials;</li> <li>• Participant Recruitment Script, Category: Recruitment Materials;</li> </ul>

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 4/3/2014.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

APPENDIX B

TABLES LONGER THAN ONE PAGE

Table B1

*Loadings for Principal Axis Factoring With Promax Rotation of Flirting Behaviors*

Item	Factors						<i>M</i>
	I	T	A	O	S	C	
Told jokes/humorous stories.	<b>.79</b>	.01	-.06	-.01	-.03	-.03	4.06
Asked about him/herself.	<b>.78</b>	-.08	-.02	.08	-.06	.06	4.07
Asked questions about his/her day.	<b>.77</b>	-.02	-.11	.11	.01	-.01	3.89
Maintained a conversation	<b>.74</b>	-.03	.10	-.01	-.18	.05	4.29
Complimented his/her character.	<b>.66</b>	.07	-.07	.22	-.03	-.09	3.63
Initiated conversation.	<b>.63</b>	.01	.05	.13	-.17	-.02	3.94
Disclosed personal information.	<b>.63</b>	.21	-.15	-.08	.17	-.06	3.48
Laughed frequently.	<b>.53</b>	.05	.24	-.20	.06	.04	4.17
Added to his/her conversation.	<b>.46</b>	-.08	.37	-.02	-.11	.15	4.20
Provided reinforcements.	<b>.44</b>	.21	.18	-.18	.04	.05	3.69
Used an animated/expressive voice.	<b>.40</b>	.01	.20	-.22	.21	.04	3.77
Waved.	<b>.38</b>	-.15	.11	.15	.29	-.06	3.33
Told him/her your life story.	<b>.36</b>	.10	-.29	.18	.34	.10	2.36
Grabbed and kissed him/her.	.01	<b>.91</b>	-.08	-.15	.01	.03	2.41
Rubbed his/her neck.	.01	<b>.85</b>	-.12	-.03	.06	-.01	2.24
Touched his/her cheek, neck, shoulder.	.06	<b>.83</b>	.09	-.16	-.01	-.09	3.08
Grabbed his/her hand and pulled it toward you.	-.04	<b>.76</b>	.14	.06	-.02	-.03	2.72
Put your arm around him/her.	.02	<b>.68</b>	.06	.13	-.10	.01	3.00
Nibbled on his/her ear.	-.07	<b>.65</b>	-.11	.08	.18	.07	1.81
Touched him/her occasionally.	.32	<b>.48</b>	.27	-.14	-.03	-.08	3.69
Played “footsies” with him/her.	-.02	<b>.48</b>	-.02	.18	.17	.04	1.98
Whispered into his/her ear.	-.12	<b>.38</b>	.19	.33	.07	.07	2.46
Engaged in extended eye contact.	-.05	-.11	<b>.78</b>	.09	.11	.04	4.02
Gazed into his/her eyes.	-.23	.36	<b>.60</b>	.08	-.05	.12	3.76
Appeared attentive.	.16	-.10	<b>.60</b>	.02	-.01	.18	4.20
Leaned close toward him/her.	.06	.35	<b>.55</b>	.02	-.04	.03	3.82

Smiled.	.25	-.05	<b>.52</b>	-.16	.07	-.03	4.51
Wore attractive clothing.	.03	-.12	<b>.46</b>	.23	.09	.09	3.78
Looked him/her up and down.	-.18	-.03	<b>.46</b>	.40	.19	-.11	3.09
Went out of your way to be close.	.07	.35	<b>.43</b>	.11	-.09	-.02	3.79
Nodded head in response.	.29	-.12	<b>.43</b>	-.16	.21	.10	3.99
Use hand gestures.	.36	-.06	<b>.37</b>	-.11	.25	-.01	3.98
Asked for his/her phone number.	-.02	-.17	.08	<b>.66</b>	-.02	.13	2.64
Told him/her how attractive he/she was.	.23	.25	.07	<b>.59</b>	-.15	-.17	3.14
Complimented him/her on his/her appearance.	.41	-.04	.24	<b>.58</b>	-.15	-.16	3.65
Asked him/her for a date.	.09	.24	-.15	<b>.52</b>	-.12	.07	2.28
Used a pickup line.	-.02	.01	-.07	<b>.51</b>	.26	-.09	1.88
Asked to dance with him/her.	-.15	.22	.13	<b>.44</b>	-.02	.14	2.11
Blew him/her a kiss.	-.12	.26	-.21	<b>.39</b>	.23	.03	1.83
Bought him/her a drink.	-.05	.13	-.07	<b>.36</b>	.23	.08	2.13
Crossed legs toward another person.	-.04	-.01	.07	-.01	<b>.65</b>	-.03	2.02
Occasionally glances downward.	.02	-.07	.26	-.04	<b>.63</b>	-.11	2.69
Mouthed "hello" from a distance.	-.07	-.03	.03	.19	<b>.62</b>	-.01	1.94
Touched yourself.	-.10	.16	.16	-.04	<b>.61</b>	-.07	2.07
Sucked on a straw.	.01	.13	.02	-.06	<b>.53</b>	-.04	1.93
Mentioned your good points.	.21	.07	-.16	.27	<b>.31</b>	.12	2.56
Avoided interrupting.	.02	-.12	.22	.06	-.06	<b>.57</b>	3.77
Compared interests.	.34	.05	-.08	.11	-.03	<b>.56</b>	3.86
Found similarities both shared.	.44	-.03	-.05	.08	-.05	<b>.49</b>	3.97
Acted very relaxed and composed.	.06	.16	.27	-.11	-.14	<b>.48</b>	4.07
Avoided silences/awkward pauses.	.10	-.02	.19	.18	-.01	<b>.34</b>	3.47
Engaged in small talk.	.29	-.14	.15	.02	.08	<b>.32</b>	3.84

*Note.* I = Immediacy; T = Touch; A = Attentive; O = Overt; S = Indirect; C = Conversational.

Table B2

*Open-Ended Flirting Behavior Categorization Guide*

Supra Category	Specific Category	Description	Example
Eyes	Unspecified Eye Contact	Participant describes eye contact, but without any modifiers or qualifiers.	Made eye contact.
	Sustained Eye Contact	Participant describes eye contact that is held for some period of time.	Gave focused eye contact.
	Eye Behavior	Participant describes some movement of the eye, eyelash, eyelid, or combination.	Batted my eyelashes.
	Momentary Eye Contact	Participant describes eye contact that is quick, short, or fleeting in duration.	Lots of short glances.
Verbal	Unspecified Verbal	Participant describes talking with the other person, but does not describe the nature, tone, or specific messages exchanged.	Had a conversation.
	Mundane Verbal	Participant describes engaging in mundane, typical conversations.	Asked him how his day was going.
	Playful Verbal	Participant describes exchanging messages that are lighthearted or humorous in nature.	I teased her.
	Affectionate Verbal	Participant describes exchanging messages expressing overt interest.	Complimented her on her dress.
Touch	Unspecified Touch	Participant describes touching the other person, but gives no other information.	There was touching.
	Mutual Touch	Participant describes touch that is engaged and sustained by both parties.	We held hands.
	Self-Touch	Participant describes touching him or herself on his/her body specifically.	I played with my hair.
	Play Touch	Participant describes touch behavior that is child-like or playful in nature.	I pushed him in a, joking way.
	Object Touch	Participant describes touching an object on	I played with my

		her/his body or from the environment.	necklace.
	Intimate Touch	Participant describes touching a sexual body part or touching <i>with</i> these parts.	I touched his butt.
	Hand-to-Body Touch	Participant describes touching with her/his hand to any non-intimate part of the body.	I touched her back.
	Body-to-Body Touch	Participant describes touch with something <i>other</i> than his/her hand anywhere on the other person's body.	I snuggled into him.
Body	Proxemic	Participant describes increasing/decreasing the physical space between him/her and the other person or a couple from another group.	I moved closer to her.
	Unspecified Body Language	Participant describes engaging simply in "body language," but does not offer anything further.	I used lots of body language.
	Body Posture	Participant describes characteristics of her/his body and its particular posture.	I tried to sit up tall and straight.
	Orientation	Participant describes how s/he is situated or oriented relative to the other person.	I moved so I was facing her head-on.
	Movement	The participant describes some form of bodily movement; can be mutual or solo.	We danced.
	Gestures	The participant describes using some gesticulation.	I waved to him.
	Head Movement	The participant describes moving or shifting her/his head in some fashion.	I looked over my shoulder.
Vocal	Laughing	The participant describes laughing in any form, type, or variety.	I was giggling a lot.
	Vocalics	The participant describes any vocal modulation: rate, pitch, volume, tone.	I was talking pretty loudly.
Face	Unspecified Smiling	The participant describes smiling without any modifiers or qualifiers.	I smiled.
	Specific	The participant describes smiling, but with a	I gave a big

	Smiling	modifier or qualifier attached.	smile to him.
	Mutual Kissing	The participant describes that s/he and his/her partner kissed; “we” form.	We kissed.
	Singular Kissing	The participant describes kissing the other person; “I” form.	I kissed his shoulder.
	Facial Movement	The participant describes some movement of the face specifically; lips, nose, ears, etc.	I was licking my lips.
Other	Joint Activities	The participant describes in some mutual activity with the other person.	We played a drinking game.
	Social Gesture	The participant describes doing something for the other person.	I bought her a drink.
	Hybrid	The participant describes two or more behaviors occurring simultaneously, such that splitting up the behaviors would not allow the behavior to make sense.	I leaned in close as I touched his arm.
	Presentation of Self	The participant describes some way that s/he was acting in general.	I tried to look super cute.
	Other	Any behavior that does not coincide with the aforementioned categories.	I blushed.



Table B3

*Psychometric Properties of Major Study Variables*

Variable <sup>†</sup>	<i>n</i>	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
Flirting Scales (Closed; <i>n</i> = 545)					
Attentive	522	3.90	.71	-.73	.70
Conversational	545	3.82	.75	-.56	.31
Involvement	515	3.76	.73	-.60	.65
Overt	524	2.45	.88	.31	-.51
Indirect	528	2.20	.90	.91	.76
Touch	525	2.56	1.03	.36	-.68
Flirting Sets (Open; <i>n</i> = 376)					
Eye Behavior	376	.65	.70	.89	.63
Verbal	376	2.15	1.82	1.16	1.51
Self-Touch	376	.07	.27	3.64	13.03
Other-Touch	376	1.18	1.22	1.74	5.24
Kinesic	376	.73	1.18	3.02	12.41
Laughing	376	.44	.62	1.34	1.98
Vocalic	376	.08	.30	4.25	19.03
Kissing	376	.21	.50	3.11	13.52
Facial Expression	376	.68	.75	1.22	2.77
Other	376	.65	1.03	2.87	14.15
Flirting Goals					
Esteem	522	2.80	1.24	.01	-1.04
Fun	523	4.02	1.08	-1.11	.67

Instrumental	522	2.52	1.47	.40	-1.28
Relational	523	3.45	1.38	-.49	-1.00
Sex	523	3.29	1.48	-.35	-1.28
Test Rel. Waters	522	3.28	1.42	-.37	-1.14
Test Sexual Waters	525	3.29	1.45	-.34	-1.24
Goal Importance	528	3.28	.74	-.12	-.14
Goal Complexity	545	4.47	1.17	-.20	-.54
Planning	523	2.52	.89	.31	-.68

*Note.* †All variables had a possible range of 1-5.

APPENDIX C  
INFORMED CONSENT DOCUMENT

## FLIRTING GOALS & BEHAVIOR STUDY

### Consent to Act as a Research Subject

You are being asked to participate in a research study. Before you give your consent to volunteer, it is important that you read the following information so as to be sure you understand what you will be asked to do.

#### Investigators

- Benjamin Wiedmaier, Doctoral Candidate, The Hugh Downs School of Human Communication
- Dr. Paul Mongeau, Professor, The Hugh Downs School of Human Communication

#### Study Purpose

The purpose of this study is to investigate how goals affect the ways in which people flirt with one another. Toward that end, we are surveying college student about their most recent flirting interaction, and asking them about the reasons they had for that interaction.

#### Study Requirements

This study has only one requirement: that you must be at least 18 years of age to participate. If you do not meet this requirement or do not wish to participate in this research, please e-mail Benjamin Wiedmaier (bwiedmaier@asu.edu) and you will be provided with an alternative survey, which will not be used for research purposes, but will allow you the opportunity to receive the same amount of extra credit as if you had completed the primary survey.

#### Study Description

Your participation in this study is completely voluntary. Should you chose to participate, you will be asked a series of questions related to your most recent flirting interaction, and the reasons you had for that interaction. You can skip questions at any time without penalty. It is anticipated that this survey should take no longer than 20 minutes to complete. Again, you may stop at any time during your taking of this survey without penalty.

#### Risks or Discomforts

Although there are no foreseeable risks or discomforts to your participation in this study, although please be aware, this survey will ask you to describe a potentially romantic and/or sexual interaction that you have recently had. If at any time you feel uncomfortable answering any of the questions, you may choose to skip a question or quit the survey altogether, both without penalty to you. To protect against such discomfort, please consider taking the survey in a private place and by yourself.

#### Benefits

Although there are no direct benefits to you, your participation will aid in a more complete understanding of the flirting process, and what drives and changes the behavior of humans.

#### Anonymity & Confidentiality

Your participation in this study is completely anonymous. In no way will your name be linked with your responses. Moreover, your questionnaire responses will be kept confidential and in no way will it be viewed by anyone other than the investigator(s) in this study. The data itself when downloaded will not contain any identifiable information unique to the respondent. If on-site, the data will be kept in a covered, secured box that will only be accessible to the two primary researchers and only when they are off-site and in a private, secure location. The data will be kept in a locked file within Dr. Mongeau's office for three years after completion of this study. The results of this study may be used in reports, presentations, or publications but your name will never be known.

#### Incentive to Participate

If your instructor has elected to award you extra credit for this study, you will click a link at the end of the survey that will take you to a separate survey wherein you can provide your name and the class in which you desire to receive the extra credit. Because this is a separate survey, the researchers will have no idea which set of responses is yours.

#### Questions or Concerns

If you have questions, concerns, or complaints, please e-mail Benjamin Wiedmaier (bwiedmaier@asu.edu) or Paul Mongeau (pmongeau@asu.edu). This research has been reviewed and approved by the Social Behavioral IRB. You may talk to them at (480) 965-6788 or by email at research.integrity@asu.edu if:

- Your questions, concerns, or complaints are not being answered by the researchers.
- You cannot reach the researchers.
- You want to talk to someone besides the researchers.
- You have questions about your rights as a research participant.
- You want to get information or provide input about this research.

*By clicking on the arrow button below you indicate that you have read the information in this document and have had a chance to ask any questions you have about the study. It also indicates that you agree to be in the study and have been told that you can change your mind and withdraw your consent to participate at any time. Finally, by clicking on the arrow button below you are only giving your consent to participate and not giving up any of your legal rights. You can save or print out a copy of this consent form from your computer or take this copy with you*

APPENDIX D  
STUDY QUESTIONNAIRE

## INSTRUCTIONS – PAGE ONE

Think of the most recent time you flirted or attempted to flirt with someone in-person (that is, without the help of technology like a cell phone or a site like Facebook).

Keep this same flirting interaction in mind as you answer all the questions in this survey.

Importantly, please do not use your own name, or the name of the person with whom you flirted. Use “the person I flirted with” or “my friend” or something like that. Do NOT use your name or the name of the other person when completing this survey.

1. Roughly how long ago did this flirting interaction occur? (Complete all that apply.)
  - Days
  - Months
  - Years
2. Please describe the nature of your relationship with the other person at that time. How well had you known the other person? Please provide as much detail as you can remember.
3. How long had you known the other person? (Complete all that apply.)
  - Days
  - Months
  - Years
4. Please describe the environment in which you flirted. Where were you? How many people were around? What was going on? Please provide as much detail as you can remember.
5. How long (in minutes) would you estimate the flirting interaction lasted?
6. Now please list all the behaviors, both verbal and nonverbal, that you used while flirting with the other person.
  - Be sure to list the behaviors in the order that you performed them.
  - List each behavior on a new line (hit 'Enter/Return' on your keyboard).
  - Please be as detailed as possible.

INSTRUCTIONS – PAGE TWO

Keeping in mind the same flirting interaction from the last page, please indicate the degree to which you used the following behaviors while flirting with the other person:

	Never Used This Behavior	Rarely Used This Behavior	Sometimes Used This Behavior	Often Used This Behavior	Always Used This Behavior
Grabbed and kissed him/her.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Touched his/her cheek, neck, shoulder.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rubbed his/her neck.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked him/her for a date.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rubbed his/her shoulders.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nibbled on his/her ear.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gazed into his/her eyes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Went out of your way to be close.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Put your arm around him/her.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grabbed his/her hand and pulled it toward you.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Played "footsies" with him/her.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Told him/her how attractive he/she was.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blew him/her a kiss.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Looked him/her up and down.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked to dance with him/her.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whispered into his/her ear.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leaned close/toward him/her.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Complimented on his/her appearance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked for his/her phone number.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used a pickup line.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wore attractive clothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engaged in extended eye	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



contact.					
Appeared attentive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Added to his/her conversation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nodded head in response.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used an animated/expressive voice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laughed frequently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provided reinforcements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Initiated conversation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Complimented his/her character.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked questions about his/her day.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked about him/herself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintained a conversation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Told jokes/humorous stories.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Touched them occasionally.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disclosed personal information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smiled.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used hand gestures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sucked on a straw.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Touched yourself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Occasionally glanced downward.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mouthed "hello" from a distance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Crossed legs toward another person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bought them a drink.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mentioned your good points.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Told them your life story.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avoided silence/awkward pauses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engaged in small talk.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Found similarities both shared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Avoided interrupting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acted very relaxed and composed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared interests.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### INSTRUCTIONS – PAGE THREE

Research indicates that people tend to flirt for one or more of the following reasons. Please read each reason carefully and indicate the extent to which it was a reason you flirted in your most recent flirting interaction. Your answer can be anywhere in-between the word pairs.

1. Esteem - I flirted to feel good about myself.
  - Was Not At All A Reason
  - 
  - 
  - 
  - Was Very Much A Reason

*(Response scale repeated for each goal item.)*
2. Fun - I flirted to have fun.
3. Instrumental - I flirted to get something I wanted (e.g., a drink or a ride) from the other person.
4. Relational - I flirted to start a romantic relationship with the other person.
5. Sex - I flirted to have sexual contact with the other person.
6. Test Relational Waters - I flirted to see if the other person wanted to start a romantic relationship.
7. Test Sexual Waters - I flirted to see if the other person wanted to have sexual contact.
8. Other - Please use the space below to describe your reason for flirting if none of the others fit your interaction.
9. Which of these reasons best describes the primary reason you started flirted with the other person. Think of this reason as the most important or the “main” reason. Please choose only one.
  - Esteem - To feel good about myself.
  - Fun - To have fun.
  - Instrumental - To get something.
  - Relational - To start a relationship.
  - Sex - To have sexual contact.
  - Test Relational Waters - See if other person wanted a relationship.
  - Test Sexual Waters - See if other person wanted sexual contact.
  - Other (please specify) \_\_\_\_\_

With that primary or main reason in mind, please respond to the following statements:

10. The reason I had for flirting was important to me.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

*(Response scale repeated for each item.)*

11. I was very concerned about getting what I wanted in this flirting interaction.

12. The outcome of this flirting interaction had important personal consequences for me.

13. I really didn't care that much whether the other person wanted what I did or not.

14. The reason I flirted with the other person were not that important to me.

15. OK, so what was your reason for flirting at the end of the interaction?

- Esteem - To feel good about myself.
- Fun - To have fun.
- Instrumental - To get something.
- Relational - To start a relationship.
- Sex - To have sexual contact.
- Test Relational Waters - See if other person wanted a relationship.
- Test Sexual Waters - See if other person wanted sexual contact.
- Other (please specify) \_\_\_\_\_

16. If this main or primary reason was different than the one you started with, please explain why or what about the interaction changed your reason.

### INSTRUCTIONS – PAGE FOUR

Please think about the time leading up to that same flirting interaction as you answer the following:

1. I put a lot of thought into figuring out what was the best way to flirt.
  - Strongly Disagree
  - Disagree
  - Neutral
  - Agree
  - Strongly Agree

*(Response scale repeated for each item.)*

2. I had a plan for how I was going to flirt.
3. I visualized in my mind what I would say/do to flirt before I actually did it.
4. If the other person didn't reciprocate my flirting, I had a back-up plan ready.
5. I chose the way I flirted from other possible options that I thought of.
6. I came up with a course of action before I started flirting.
7. A lot of my flirting behaviors were spontaneous.
8. I went with the flow while flirting.

INSTRUCTIONS – PAGE FIVE

Lastly, please answer a few questions about yourself:

1. What is your age? Please use a number (e.g., 21).
2. Please indicate the sex of the person with whom you flirted.
  - Female
  - Male
3. Which of the following best describes your current relationship status?
  - Single
  - Casually Dating
  - Committed Dating
  - Engaged/Married
  - Divorced
  - Other (please specify) \_\_\_\_\_
4. What is your current class standing?
  - Freshman
  - Sophomore
  - Junior
  - Senior
  - Graduate Student
5. Which ethnicity best describes you?
  - African/African American
  - Arab/Middle Eastern
  - Asian/Asian American
  - Bi-Racial
  - Caucasian/European
  - Latino/a/Hispanic
  - Native American
  - Pacific Islander
  - Other (please specify) \_\_\_\_\_

6. Locate yourself on the following scale, keeping in mind that you can be in-between.
- Homosexual
  - 
  - 
  - 
  - Bisexual
  - 
  - 
  - 
  - Heterosexual
7. Please indicate the sex with which you most closely identify.
- Female
  - Male