(I Think) You Are Pretty: a Behavior Analytic Conceptualization of Flirtation

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Abstract Much research in flirtation has been approached from a socio-cognitive perspective and has overemphasized subjective self-reports rather than overt behavior. Existing work pertinent to flirtation is reviewed here in addition to proposing a behavior-analytic perspective on the topic with a conception that includes both rule-governed and contingency-shaped behavior. Of particular interest within a verbal behavior conception of flirtation is the importance of autoclitics—features of a verbal response that affect the listener’s reaction to the rest of the verbal response. Applications of a behavior analytic conception of flirtation and future directions relevant to research on interpersonal relationships are discussed.

Keywords Autoclitics · Interpersonal relationships · Rule-governed behavior · Contingency-shaped behavior · Flirtation

Navigating the Waters: an Introduction to the Study of Flirtation

Behavior analysis as an approach for the study of flirtation is distinctive because of its emphasis upon the function rather than the form of social interactions. It emphasizes observed consequences as opposed to a priori or inferred intentions. It is useful both for identifying an exchange as flirtatious as well as for interpreting it. In addition, *how* something is said as opposed to simply *what* is said is integral to the effectiveness of a flirtatious act. This is the domain of autoclitics. A discussion of flirtation as both rule-governed and contingency-shaped behavior

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will be presented below. First, it is important to review existing conceptions of flirtation.

Flirtation: Existing Conceptions

In common everyday usage, “flirtation” refers to behavior that entails conversation, body language, or physical contact that potentially establishes or maintains a romantic or sexual relationship between two people. However, this characterization is ambiguous as to what is qualitatively different about flirtatious conversation, body language, and physical contact in comparison to topographically similar behaviors that would not be labeled flirtatious. Also, definitions or discussions of flirtation often fail to acknowledge the function(s) of that behavior. Conceptually, an obviously relevant function is that of mate selection. In that context, flirtatious acts have received relatively little attention in the social sciences, which have instead emphasized personality traits or other characteristics. As a practical matter, identification of the characteristics of successful flirtation may be key to improving the quality and duration of an interpersonal relationship between two individuals. For example, most of the English-speaking world treats the statements, “You are pretty” and “*I think* you are pretty” as functionally equivalent; however, it is likely that these statements may produce different consequences from a listener.

In the psychological literature, Sabini and Silver (1982) characterize flirtation as an ambiguous phenomenon. They elaborate upon myriad kinds of cases, whether easily recognizable or unrecognizable, as fitting this category. They argue that successful flirtation is similar to a game of chess. Like chess, flirtation is framed by a number of rules. However, these rules are dynamic as well as implicit instead of explicit. It is difficult to predict every possible move although individual moves can be assessed within context. A move may be appropriate given the past move or in accordance with more global “rules” qualifying as flirtation. It is not uncommon to hear statements such as, “flirtation is hard to define but we know it when we see it.” Thus, *conventions* might be a better term than *rules*, but most of the implications are similar. Regardless, a general overview of potential functions served by flirtatious acts is helpful. Koeppel, Montagne-Miller, O’Hair, and Cody (1993) offer a number of refinements of the term flirtation and its varied purposes. They suggest that flirtation commonly serves one of three general functions: flirtation for “fun,” flirtation as “uncontrollable sexual urges,” and “flirtation as invitation.” Few other researchers have emphasized the function of flirtation. Here, a behavior analytic conceptualization, emphasizing flirtation’s function, will be proposed.

Attempts to Define Specific Aspects of Flirtation: Existing Research

Researchers have historically sought to understand flirtation through self-report and behavioral coding systems. For example, some researchers have used scripted interactions and then asked individuals to rate the flirtatiousness of the episode (Koeppel et al., 1993; Henningsen, 2004). These studies utilize coding systems that include smiling, touch and physical contact, distance between members of the dyad,

eye contact, laughter, fluency, and vocal tone. Additionally, researchers using scripts of flirtatious acts have found that women are more likely to report flirtation as serving the primary function of “having fun” or maintaining a relationship while men report flirtation as “sex-directed” (Henningsen, 2004). Thus, researchers have collected self-report data on whether the function of flirtation is primarily sex-oriented, for fun, or as invitation (Koeppel et al.). Additionally, Abrahams (1994) found that the initiator or initial writer of the flirtatious episode rates the flirtatious act differently from the perceiver or outside recipient of the flirtatious act. Other researchers have attempted to differentiate among flirtation subtypes (Egland, Spitzburg, & Zormeier, 1996; Muehlenhard, Koralewski, Andrews, & Burdick, 1986; Moore, 1985). For example, using a factor analysis of participant ratings of flirtation exemplars, Egland et al. (1996) have suggested that they be categorized in terms of display flirtation, conversational flirtation, stereotypical flirtation, and attentiveness. A major limitation of much of the existing research concerns the inaccuracy of peoples’ verbal reports on their own behavior. Low say-do correspondence has been supported by multiple empirical studies both within and outside of behavior analysis, meaning that what people say is not highly correlated with what they do. This is supported both by attitude-behavior consistency in empirical studies and everyday correspondence between saying and doing (Lloyd, 1994; Nisbett & Wilson, 1977).

Verbal Behavior: a Functionally Relevant Domain for Examining Flirtation

Skinner (1957) defined verbal behavior as behavior maintained by a verbal community in which the interaction of speakers and listeners established the practices of the verbal community itself. In acknowledging the importance of the audience, Skinner suggests that different audiences or listeners occasion different responses from the speaker. For example, the presence of a pretty woman will occasion a different response from a male speaker than the presence of his mother. The autoclitic is defined as verbal behavior that modifies other verbal behavior or the reaction of the listener. This unit can account for the numerous nuances in verbal behavior and the relationship between speaker and listener. The reciprocal and dynamic nature of flirtation makes it appropriate for analysis using verbal operants, mainly the autoclitic. Thus, changes in our flirtatious behavior over time to produce “what is successful” in occasioning specific behavior from a listener (flirtation in return, a first date, etc.) can be explained in terms of autoclitics or as behavior serving an autoclitic function. For example, Wade (2013) found that the omission of the qualifier “very” was more effective when comparing the statements “you are pretty” (simple tact) with “you are *very* pretty” (tact with ineffective autoclitic). Wade conducted an online dating experiment during which the researcher systematically varied pronouns pertaining to self and other and examining autoclitic function of such variations. It was found that the autoclitic function of “you and me” is more successful in prolonging the duration of a conversation and potentially securing a first date in comparison to the function of “we.” For example, “you and I should grab coffee sometime” was more successful than “we should grab coffee sometime.”

Since Skinner's (1957) initial conceptualization of verbal behavior, several additional conceptualizations are especially worthwhile in consideration of flirtation and complex verbal behavior. Zettle and Hayes' (1982) introduction of tracking and pliance as elaboration on the listener's repertoire serves as a precursor to Hayes' (1994) relational frame theory (RFT). The contemporary understanding of verbal behavior offered by RFT supports extensions of Skinner's initial conceptualization to more dynamic and complex human interactions. RFT is additionally useful in accounting for flirtation from a behavior analytic perspective. Lastly, functional analytic psychotherapy (FAP) emphasizes core behavior analytic principles such as reinforcement of speaker and listener responses. As a clinical approach, FAP emphasizes reciprocal interactions of the speaker-listener dyad in determining adaptive behavior of both members of the dyad. The current paper will return to these concepts when discussing behavior analytic conceptualizations of flirtation.

Research on Flirtation in Naturalistic Paradigms: Behavior-Oriented but Not Behavior-Analytic

Researchers have attempted to address courtship repertoires by simulating naturalistic environments and videotaping dyadic interactions between men and women in laboratory settings (Grammar, Kruck, Juette, & Fink, 2000; Ickes & Barnes, 1977; Ickes, Bissonnette, Garcia, & Stinson, 1990). Some of these studies have emphasized as many as 83 courtship behaviors coded from videotaped male-female dyadic pair strangers interacting in a laboratory waiting room (Grammar, et al.). Other researchers have differentiated between open and closed body positions by measuring the interpersonal distance between members of the dyad on videotapes (Ickes & Barnes; Ickes et al.).

Potential differences between men's and women's courtship behaviors have been the focus of a number of studies in both laboratory and naturalistic settings. Thus, Grammar et al. (2000) found that female interest in a male was positively correlated with "courtship" behaviors including coy smiles, quickly glancing at the male, touching one's own clothes without an obvious clear function (primping), and "looking through" the male. These behaviors tended to continue for more than the first few minutes when females were interested. For males, high production of speech was correlated with interest. However, researchers note the ambiguity and difficulty in assessing flirtation or interest in a mate. This is especially the case concerning female interest in males.

Moore's (1985) coding of behavior in a naturalistic setting is particularly noteworthy for its emphasis upon observable behavior across a wide variety of situations and for its inclusion of frequency counts for a wide menu of behavior exemplars commonly dubbed "flirtation." This research included observation of women's behavior in single's bars, a college university snack bar, a college library, and at college university women's center meetings. Moore labeled female gestures, facial expressions, and body gestures that proved to be correlated with a male approaching the female within 15 s of the behavior as "nonverbal courtship signals."

Callaghan introduced the Functional Analytic Psychotherapy Rating System to categorize the success of functional analytic psychotherapy (Baruch, Kanter, Busch,

Plummer, & Tsai, 2009). Although not designed for coding flirtatious behavior, the Functional Analytic Psychotherapy Rating Scale (FAPRS) may be a useful tool. At its most basic premise, it considers the dyad as the basic unit of analysis, studying both the therapist's and the client's behavior. Similarly, a flirtatious act should appropriately consider a dyad as the most basic unit of analysis, studying both the initiator and the recipient of the flirtatious act (these roles may be dynamic and held by both individuals at different points in time). A number of features of the FAPRS Coding System are especially relevant in attempting to identify flirtation or construct a checklist for future research. For example, every turn in a conversation is coded. This is particularly relevant in flirtation where what may *seem* important is in fact negligible and vice versa.

More recently, a number of researchers have used speed-dating as a naturalistic paradigm for asking questions pertinent to romantic behavior and mate selection, which of course involves flirtation. Speed-dating conventionally consists of short 5–7 min interactions or “dates” with several members of the opposite sex, looking for some form of romantic interest. These studies can be categorized as focused upon selectivity hypotheses, upon matching theories stressing the selection of persons with characteristics similar to oneself, or upon physical attraction. Kurzban and Weeden (2005) provide an overview of speed-dating and discuss how self-report from speed-dating participants can inform the body of research on mate selectivity. Additionally, Finkel and Eastwick (2008) provide a quick survey of the advantages of using speed-dating to study romantic relationships. Other researchers have proposed the use of the dyad as the most basic unit of analysis. For example, Kenny and La Voie's (1984) social relations model suggests several distinct types of reciprocity between dyadic pairs or numerous dyads. Eastwick, Finkel, Mochon, and Ariely (2007) found support for dyadic reciprocity (reciprocity of liking and choosing a single individual or very few others) as opposed to generalized reciprocity (reciprocity of liking all individuals who express liking and choosing many individuals) as a successful strategy in obtaining “yeses” from fellow participants at speed-dating events. Although such findings regarding functionally distinct types of reciprocity have not been likened to autocalitics, dyadic reciprocity is similar to a speaker's varying of autocalitics depending upon the specific audience.

Participants have also watched and rated videotaped interactions from naturalistic events in laboratory settings. For example, Place, Todd, Penke, and Asendorpf (2009) were interested in whether outside observers could, without access to conversational content, accurately assess interest between speed-daters (thus identifying speed-daters who would say “yes” to interacting with an individual again). Using the thin-slices literature as a guide (Ambady & Rosenthal, 1992), the researchers alternated the lengths of video-clips between 10 and 30 s and asked their observers to report “yes” or “no” to whether the male was interested in the female and if the female was interested in the male. For each video clip, this was compared to the “yes” or “no” decisions of the speed-daters themselves. Consistent with the thin slices literature, longer clips did not improve the accuracy of judgments. However, judgments of clips from the middle or end of the speed-dating interaction proved to be much more predictive of actual speed-dater interest (Place et al., 2009).

A Behavior Analytic Conception of Flirtation: General Features

The reconceptualization of flirtation as both verbal and non-verbal behavior is proposed here, defining such behavior through the lens of behavior analysis. Existing research has differentiated between verbal and nonverbal behavior when studying romantic relationships and flirtation. Although *verbal behavior* and *nonverbal behavior* are terms utilized within behavior analysis, the terms have quite different meanings in the world at large. Behavior-analytically, then, verbal behavior is reserved for socially mediated behavior between speakers and listeners established by verbal communities whereby the behavior of the listener reinforces the behavior of the speaker (Skinner, 1957). Nonverbal behavior is operant or respondent behavior that is not dependent upon the behavior of others. Thus, the consequences supplied by a listener reinforce a speaker's responses and responses are classified by *response class* or common functional features rather than on the basis of grammatical or syntactical similarities (Bailey & Wallander, 1999). In order to resolve the ambiguity in meaning between *verbal* and *nonverbal* when comparing research and conceptual arguments pertaining to flirtation from behavior analytic and outside perspectives, it is suggested here that a clear differentiation between rule-governed behavior and contingency-shaped behavior is a better dichotomy. Although this dichotomy is useful, both rule-governed and contingency-shaped behavior can simultaneously be operative in verbal behavior (as defined by behavior analysts) and flirtatious acts.¹

Verbal behavior is often vocal; however, gestural (termed nonverbal in other disciplines) or textual modes of verbal behavior are relevant as well. In online dating or flirtation, the textual mode is utilized. Although Skinner (1957) asserts that based upon topography alone, the mode of verbal behavior is of little relevance relative to its function, the mode may influence which flirtation strategies are likely to be successful. For example, an establishing condition of close proximity during face-to-face flirtation is likely to make gestures (wink of the eye, pursed lips, smile, and touch of the arm or hand) serve an autoclitic function in further modifying the effects of the speaker's vocal responses upon the listener. In contrast, the absence of visual observation of the person, as during conventional online chats, is likely to make other devices such as emoticons, all capital letters, or font type, serve an autoclitic function that modifies the written units themselves.

Two separate types of behavior-analytic dyadic models are suggested here for studying flirtation; the use of both models together allows multiple scales of analysis at both molar and molecular levels. The first emphasizes overarching contingencies of reinforcement, with each member of a dyad supplying consequences for the other member. This model does not negate nor necessitate the role of verbal behavior. When both members of the dyad reinforce one another's behavior, we would tend to identify this as characteristic of "successful flirtation," increasing the likeliness of future interactions between the dyadic pair, whether that is a short-term romantic encounter or a long-term romantic relationship. The second dyadic model will emphasize the role of speakers and listeners, thus emphasizing the role of verbal behavior and, in particular, the use of autoclitics in flirtation.

¹ The current account focuses upon heterosexual dyadic interactions, while acknowledging that similarities and differences in function and strategy for flirtation between heterosexual, homosexual, and other sexual orientations would be interesting as a separate paper.

It is important to acknowledge that flirtation may be verbal, contingency-shaped, or a combination of the two (since they are not mutually exclusive). Gestures that accompany other verbal behavior will be considered verbal, potentially serving an autoclitic function. For example, the difference between the tact, “You make me laugh” with and without the accompanying gesture of a woman touching the hand or shoulder of a man or pursing her lips in a fashion similar to a kiss may serve an autoclitic function in making the verbalization accompanied by gesture (as opposed to the verbalization not accompanied by gesture) more effective in establishing romantic interest (the man then asking the woman on a date, the man stating he likes her sense of humor as well, etc.). Instead of stressing the topography of gesture, the function of the gesture as modifying other verbal behavior or the consequences each member of the dyad supplies for his/her partner will be emphasized.

Flirtation as Maintained by Overarching Reinforcement Contingencies

Basic principles of operant conditioning delineate reinforcement contingencies and, thus, can account for many of the acts that tend to be dubbed “flirtation.” Here, “overarching” is used to emphasize both short-term and long-term or all-encompassing reinforcement contingencies. Behaviors such as making eye contact, leaning toward an individual, and touching an individual tend to be considered flirtatious under the *correct* circumstances. Wade (2013) found this to be the case when studying participants partaking in both traditional and online speed-dating. Motivating operations (MOs) and discriminative stimuli aid in identifying what circumstances may be deemed as *optimal* in terms of evoking or occasioning behavior labeled as *successful flirtation* for both speakers and listeners. For example, having a lack of recent opportunities to engage in sexual behavior or labeling oneself as single may serve as MOs for initiators of potential flirtatious acts; behaviors such as making eye contact with a recipient, leaning toward another individual, or physical contact are more potent reinforcers under these MOs than for individuals where these MOs are not operative (e.g., individuals who are married, individuals who are homosexual at a heterosexual dating event, etc.). Many behaviors at a singles’ mixer or speed-dating event may be more likely to be labeled as flirtation because each member of the opposite sex may serve as a discriminative stimulus where flirtatious acts are more likely to be reinforced with attention or acknowledgement than in most other contexts. On the other hand, members of the opposite sex at funerals or family reunions (at least we hope) are unlikely to serve as discriminative stimuli occasioning behavior that would be labeled flirtatious. In fact, identical behavior may be labeled flirtatious or not flirtatious, depending completely upon the context and stimulus class of individuals present (clearly single vs. individuals participating in acts commonly recognized as completely asexual or individuals who are close relatives).

For many individuals who are already in a romantic relationship, the lack of opportunity to discuss starting a family with new candidates, or many opportunities to already engage in sexual behavior make flirtation both a less frequent behavior and a less potent reinforcer. However, the possibility of frequent flirtation for some individuals already invested in a long-term relationship cannot necessarily be ruled out, thus the importance of function over a priori traditionally defined intention. A potential

function of flirtation inconsistent with mate selection is testing one's market value and whether flirtation is still likely to be met by acknowledgement or reciprocal behavior from others even when the individual is already in a relationship.

The previous examples highlight the utility of delineating likely functions of flirtation. Although flirtation is not necessarily always romantic, it will be considered here as concerning heterosexual romantic relationships as a frequent scenario during which flirtation is likely to yield reinforcing consequences. Thus, rather than defining flirtation based upon a priori intentions or goals of the participants in a flirtatious act, the function of the behavior can be established by the consequences of partaking in the behavior itself. Additionally, it is important to consider the role of flirtation in both short-term and long-term romantic interactions. While flirtation is proposed to necessitate at least two individuals in order to assess its function or success, the consequences for both members of the dyad may not be equivalent even when we identify it as successful, especially in the case of short-term romantic relationships. Each member of the dyad is supplying consequences for the other member of the dyad; simultaneously, other aspects of the environment are both operating on the dyad and each individual separately while the dyad and each individual is operating upon the environment. This is consistent with closed loop relations as suggested by Hinde (1986) where an organism acts on the environment and the environment acts on the organism. Additionally, a similar reciprocal closed loop relation is characteristic of the dyad itself in that both members of the dyad act upon one another so long as both members of the dyad continue to participate; continuation of this interaction may be a single episode, many isolated episodes over time, or a long continuation of relatively uninterrupted episodes.

Reciprocal Reinforcement Contingencies Reciprocal reinforcement has been proposed by Epstein (1994) as a formal strategy for promoting behavior change for "one another." He found that when obese children and parents provided consequences for one another such as encouraging healthy eating and exercise and discouraging unhealthy eating, weight loss was more successful than when external non-reciprocal reinforcement contingencies were in place for adults or children.

Although few studies have considered the relevance of reciprocal reinforcement contingencies where both members of a dyad supply consequences for one another, reciprocal reinforcement contingencies offer various potential theoretical and empirical applications in the domain of flirtation. One study of the reciprocal reinforcement of smiles found that such a contingency enhanced the dyadic interaction (Prepin, Ochs, & Pelachaud, 2013). Studies of "mirroring" the behavior of others are frequently seen in the social psychology literature; one excellent example is the chameleon effect where individuals mimic one another's mannerisms, postures, or expressions without necessarily being able to verbalize that they are participating in such imitation (Chartrand & Bargh, 1999). However, outright reciprocal reinforcement contingencies where consequences are well-defined are not bountiful in the experimental literature. The supplying of the reciprocal reinforcement contingency by the other member of the dyad can be used as a measure of whether function of a flirtatious act is functionally equivalent or roughly functionally equivalent. For example, "make me laugh and I'll give you my phone number" delineates a reinforcement contingency for both members of a dyad that is likely to occasion future dyadic interactions.

Verbal Behavior: Functionally Categorized and Analyzed

A specific area for elaboration within the behavior analytic conception of verbal behavior may be of special relevance to flirtation: the domain that Skinner (1957) identified as “*autoclitics*.” Autoclitics are verbal operants which modify other verbal operants or modify the listener’s likely reaction to more basic verbal operants (Skinner, 1957). Autoclitics have been categorized as secondary verbal operants (Michael, 1988), as distinguished from *mands* and *tacts* as the primary verbal operants (Skinner; Michael). Tacts can be defined as verbal units occasioned by the presence of a specific discriminative stimulus and are responses described as labeling in everyday language are often instances of tacting. Tacts tend to be maintained by general reinforcers such as acknowledgement. For example, stating “she’s pretty” in the presence of an attractive woman would be a tact. Mands are verbal units that occasion a response from a listener and are usually maintained by very specific reinforcers. Specific motivating operations are often relevant to mands. For example, stating, “will you go on a date with me?” is a mand more likely to be emitted when an individual does not have many dating prospects, and such a statement is reinforced by the specific consequence of “yes” (or a functionally equivalent response) from the listener. Autoclitics become especially important in further modifying these basic verbal operants. For example, “you are very pretty” or *By any chance, would you be interested in going on a date with me?*”

Autoclitics also bear some relations to *deixis* (Catania, 2007). Levinson (2003) discusses *deixis* as used in psychology, linguistics, and anthropology, emphasizing words whose roles change with a change of context. Rather than evaluating the effectiveness of a verbal operant through an isolated judgment of the speaker’s utterance, the listener’s response must be evaluated in determining the effectiveness and consequences of what the speaker says. Similarly, de Villiers and de Villiers (1974) suggest that “person deixis” involves the perspective of both a speaker and listener so that the “I” and “you” perspective are simultaneously important. Additionally, spatial deixis involves using speakers and listeners as reference points (e.g., *here vs there* as the locations of the speakers and listeners). Wales (1986) gives the etymology of *deixis*, stemming from “indicating or pointing” in Greek. As Wales discusses, deictic language serves the function of directing one’s attention. Myriad studies are cited by Wales that the ability of young children to use (and appropriately react) to deictic terms. In considering relevance of deixis and the success of an autoclitic, both are produced by the speaker but incorporate a perspective relevant to the listener simultaneously. The prevalence of lines “marrying” the perspective of speaker and listener are likely to be abundant in successful flirtation... “*I forgot my phone number. Can I borrow yours*” or “*I’ll cook you dinner if you cook me breakfast.*”

Zettle and Hayes’ Elaboration on the Listener Role in the Speaker-Listener Dyad

Other domains of psychology may conceptualize flirtation in terms of specified theories relevant to the domain of flirtation alone. In contrast, behavior analytic research on flirtation would bring a parsimonious perspective to the table in considering flirtation. Furthermore, it would provide a domain for systematic empirical study. Such behavior analytic studies would take a unified perspective that emphasizes the interaction between speaker and listener. Pursuant to this, the emphasis upon speaker and listener

and the alternation between speaker and listener roles for both conversational partners has been elaborated upon by Zettle and Hayes (1982). Rather than evaluating the effectiveness of a verbal operant in occasioning future behavior based upon the speaker alone, the listener's response must be evaluated in determining the effectiveness and consequences of the speaker's response. Zettle and Hayes introduced two new terms that concern a listener's reactions: tracking (listener's response to the speaker's tact) and pliance (listener's response to the speaker's mand). To examine autoclitic phrases as they might occur in flirtation, we need basic units that they operate upon. Thus, a basic tact would be, "You are wearing a beautiful blouse" while a basic mand would be "Would you be willing to date me?" We would label these as such only if the former resulted in general acknowledgement or tracking on the part of the listener and the latter resulted in pliance or "yes" from the listener.

Autoclitics in Flirtation

In introducing autoclitics as a category, Skinner (1957) discussed five different subtypes. Those of particular interest here are labeled descriptive and manipulative. Descriptive autoclitics make reference to the speaker in some way, as when an individual says, "It's my opinion that you are the most gorgeous man in the world." This can be compared with a simple tact by omitting self-reference, "You are the most gorgeous man in the world." Other descriptive autoclitics indicate self-editing where the speaker modifies the verbal unit based upon past (usually less than favorable) consequences or reference to one's own affective state. References to the self and one's own affective state can be seen as similar to self-disclosure in social psychology. Although behavior analysts do not appeal to affective states as explanatory agencies, the referencing of one's motivational or emotional state likely serves a distinct function. For example, "*I enjoy* talking to you" vs. "*I love* talking to you" vs. "*I like* talking to you" may at first appear to be a variety of tacts occasioned by the presence of a particular listener. However, the different self-referenced motivational states are consistent with Skinner's descriptive autoclitic. Increasingly more complex descriptive autoclitic examples that may vary in effectiveness include "You must hear it all the time, but I find you to be very attractive" or "I can't believe I'm telling you this but..." Manipulative autoclitics are generally statements that modify other verbal operants or change the effect that an operant has upon the listener. These autoclitics may overlap more generally with self-editing (Skinner, 1957). For example, saying "Just give me one chance to buy you dinner, and if you don't have a fantastic time, I'll never call you again" would be a successful manipulative autoclitic in comparison to "Can I buy you dinner" if it made the listener more likely to say "yes" in response to the former rather than the latter statement.

The distinguishing features of manipulative and descriptive autoclitics have not yet been supported by empirical research concerning their relations to normal language development and social interactions. Of the 60 empirical studies reviewed by Sautter and LeBlanc (2006) between 1961 and 2004, most focused upon mands and tacts. Furthermore, most were confined to populations diagnosed with developmental disorders. Although few studies on autoclitics exist, researchers have published on subcategories of the autoclitic (Sheyab, Pritchard, & Malady, 2014; Hübner, Austin, & Miguel, 2008;

Williams & Greer, 1993; Lodhi & Greer, 1989; Howard & Rice, 1988). None of these studies address manipulative and descriptive autoclitics specifically, although one study addresses self-talk (Lodhi & Greer, 1989) which shares similarities with descriptive autoclitics. The absence of research on descriptive and manipulative autoclitics poses a major problem in accepting the theoretical assumptions delineated by Skinner. Without sufficient research on all verbal operants, it can be argued that, understandably, many individuals have prematurely dismissed behavior analytic interpretations of verbal behavior. Furthermore, the role of the listener in changing how the speaker may modify the listener's subsequent reaction has received relatively little attention in spite of the fact that Skinner defines autoclitics as a distinct category in reference to such behavior. The manipulative autoclitic is particularly relevant in the speaker/listener interaction and in the consideration of the dynamics of a dyadic relation.

Relational Frame Theory: a Contemporary Verbal Behavior Approach

Relational frame theory (RFT) has been suggested as a theoretical and practical alternative to Skinner's (1957) original conception of verbal behavior (Hayes, 1994). RFT can be applied to a vast array of topics included within language and cognition by accounting for behavior through relational responding. It should be noted that there is not much research on flirtation from an RFT perspective; however, the basic RFT framework can still be applied to the study of flirtation.

In general, an advantage of a perspective incorporating RFT in the study of flirtation amounts to the ability of such a perspective to account for the complexity of the stimuli in the environment. Unlike conditional discriminations alone, RFT allows for responding that transcends basic relationships such as "sameness" or "oddity." Instead, we can consider relations between differing flirtatious or non-flirtatious exemplars in terms of sincerity, bluntness, cleverness, or novelty just to name a few relations.

In addition to accounting for the complexity of stimuli in environment, it is also essential to account to transformation in stimulus function. Dymond and Barnes (1995) found support for transformation of stimulus function with more than/less than relations by changing consequences for the participant. The concept of transformation of stimulus functions is also helpful in accounting for changes in flirtation over time based upon specific consequences. This could be applied to any number of seemingly arbitrary differences among potential flirtation recipients (recipients as discriminative stimuli changing over time). For example, in the presence of a well-dressed woman carrying a designer handbag, a male may be more likely to engage in what we label as flirtatious behavior. Perhaps this woman is described as "put together." However, if flirting with "designer" women tends to result in relationships with "gold-diggers," a male now may be more likely to flirt with a woman NOT carrying a designer handbag. Relational networks could also account for not flirting with "designer" women because certain trendy or superficial appearance has become associated with "gold-diggers" over time. Hayes, Barnes-Holmes, and Roche (2001) elaborate on how relational networks can quickly be generated given relational frames and contextual cues. Thus, "young" might occasion the selection of other words such as but not limited to "fun," "attractive" or "sexy." Research incorporating transformation of stimulus functional and relational networks could help account for changes in choices for a flirtation recipient over time.

In an example illustrating the points already made about conditional discriminations and transformation of function in addition to the incorporation of a variety of frames, let's consider a fictional male, "Jon" as part of a group of males interacting with "Andrea." Given the presence of many males likely to say generic pickup lines combined with Andrea's unique style of dress, the relationship between stimuli may occasion a very specific comment from Jon. If Jon is more specific in providing compliments to Andrea than other males, such relational framing should be more successful. For example, "You have a really interesting vintage cameo. I bet it has a story" or "I love your retro look," is more specific than, "you are good looking." Thus, relational framing between Andrea's unique look and that of other females occasions a more distinctive flirtation style for Andrea. Thus, future research on flirtation utilizing an RFT perspective might take into account the complex relationships among stimuli in contexts where individuals "choose" a temporary or longer term significant other. For example, relational framing between chosen ("yes") and alternative ("no") candidates could be studied at speed-dating events, singles mixers, or bars/clubs.

Applying the concept of stimulus-stimulus relations in the environment and conditional discriminations, "Jon" may be more sincere to Andrea with his comments (than he would be to other women) given that Andrea is sincere herself. She currently chose to frequent a down-to-earth bar rather than a pretentious club, and other males are relatively insecure, using pickup lines such as, "Do you have sunburn, or are you always this hot?" Jon's comments may be qualitatively different such as, "I enjoy talking to you. Would you want to hang out again sometime?"

Returning to the example of Jon and Andrea, let's consider Jon's past history and transformation of function in dressing style of female candidates who may serve as recipients of a flirtatious act. At one point in time, Jon was more likely to engage in flirtation with scantily clad women. However, his last two relationships ended when the woman was unfaithful, choosing to engage in sexual behavior outside of their monogamous relationship. While scantily clad women used to be a discriminative stimulus for engaging in flirtation (for Jon), he now looks for more conservatively dressed women and Andrea in her modest style dress fits this category.

Applying a Behavior Analytic Conception of Flirtation: Demonstrating the Utility of Integrating Both Verbal Behavior Dyads and Overarching Reinforcement Contingencies

Reciprocal reinforcement with respect to a flirtatious act becomes evident after *both* individuals have contributed to the interaction. Consequences of an interaction may be evaluated for each individual separately. However, consequences of the *entire* flirtatious act (or a longer continuum of acts) rely upon the relationship between both individuals and the unique context. Success of flirtation is not defined by either member of the dyad in isolation. By considering the function of a flirtatious act at multiple scales of analysis (or the operative reinforcers for each member separately), it is not essential that the consequences of the flirtatious act be exactly equivalent for both individuals. However, some degree of approximate synchronicity needs to be sustained. Thus, although *function* is a broad term, it is purposely proposed to in this model so that analysis may occur for both shorter term or slices of behavior (molecular scale of analysis) and longer term or

patterns of behavior (molar scale of analysis). For example, if the consequence of the flirtatious act is a short-term sexual encounter for both the male and female, the reciprocal reinforcement contingency operative for the act is functionally equivalent for both members of the dyad and thus can be labeled as a successful flirtatious act. This example is relatively molecular, on a shorter time scale of analysis where MOs may be likely to fluctuate. On the other hand, if the function of the act is a short-term sexual encounter for one individual and a long-term relationship leading to marriage for the second member of the dyad, the flirtatious act may be successful in the short term while failing to be successful in the long-term. The former example is represented by Fig. 1 where there is equivalence in the reciprocal reinforcement contingencies for both members of the dyad (self and other). Thus, the flirtatious act itself is likely to be successful in both the short and long term. On the other hand, when the magnitude, potency, or type of reinforcers are unbalanced in the reciprocal reinforcement contingency operative for the flirtatious act, flirtation may be successful in regards to short-term consequences. Finally, when the reciprocal reinforcement contingencies are not operative or severely unbalanced for one member of the dyad, flirtation is unsuccessful. Thus, we have the following combinations in Fig. 1, a figure that can serve as a quick reference for analyzing novel examples are successful or unsuccessful flirtation at varying time scales.

Figure 2 illustrates unsuccessful flirtation. It is a script generated by Keyton and Menzie (2007), based upon their studying and coding a variety of features of conversations identified as sexual harassment in the workplace.

Dependent upon the degree of synchronicity between supervisor and subordinate responses, the success of the interaction as “flirtatious” can be established. The supervisor’s statements have “multiple meanings” and repeat questions/rephrase certain statements. These questions and statements, which may occasion an affirmative answer from the subordinate, support the function of obtaining power over the subordinate in a fashion which extends beyond the workplace and implies a sexual or physical nature. It is not as much what the supervisor says as how the supervisor states it that simultaneously establishes the function of the subordinate’s statements (many similarities to the speaker/listener autoclitic framework in this example). Statements emitted by the supervisor such as “No, you and I need to meet privately first, if you know what I mean” prolong the supervisor’s ability to continue in a conversation which is ambiguous, contains dual-meanings, and occasions future participation in conversation (or

Fig. 1 Successful and unsuccessful flirtatious episodes are defined in regards to whether the reinforcement contingency for self (person 1) is synonymous or roughly synonymous with the reinforcement contingency for other (person 2)

Supervisor: *Pat, we need to discuss this year's goals and objectives for the department...and for you. Why don't you step into my office, so we can discuss the ways your new goals will help the department...and me.*

Subordinate: *Don't we have several weeks before those are due?*

Supervisor: *Yes, but I want the two of us to be straight on your goals and objectives first. I could have chosen anybody, but I picked you. Let's get down to business.*

Subordinate: *I think it would be better if we have everyone write them down and then the whole department can get together to discuss them.*

Supervisor: *No, you and I need to meet privately first, if you know what I mean.*

Subordinate: *I need some time to think about them. I'm not prepared to discuss them yet.*

Fig. 2 Example of unsuccessful flirtation, Keyton, J. & Menzie, K. (2007). Sexually harassing messages: Decoding workplace conversation. *Communication Studies*, 58(1), 87–103. doi: <https://doi.org/10.1080/10510970601168756>, reprinted by permission of the Central State Communication Association, www.cscanet.org

other acts) from the subordinate. The subordinate's response, "I need some time to think about them. I'm not prepared to discuss them yet" functions as a clear ending to the conversation. The subordinate's response does not reciprocally reinforce the ambiguous, sexual innuendos from the supervisor; instead, it ends the verbal interaction.

So, in summary, the supervisor's statements establish ambiguity, attempt continued interaction, and transform metaphor or dual-meaning into physical acts deemed beyond "professional responsibility" and of a sexual nature. These consequences are not compatible with the consequences of the subordinate's statements. The subordinate establishes an ending to the interaction and clear-cut boundaries in regard to workplace topics as the only conversational topics. There is an absence of language beyond the literal (removal of dual-meaning). Because reciprocal reinforcement contingencies are not operative, the episode qualifies as "unsuccessful flirtation."

Consider an additional example: Fig. 3 presents an actual email exchange between two individuals. Thus, the spelling, punctuation, spacing, and exact wording used by the online daters are preserved. The first individual, "Joe" contacted a second individual, "Sue," after reading her online profile (the designations, "Joe" and "Sue," are added here to aid in clarifying the roles in verbal exchange). Some middle portions of the exchange have been removed, as the script is particularly lengthy. Also, numeric labels such as J1 (to stand for Joe's first utterance) or S2 (to stand for Sue's second utterance) have been added to aid in referring to the exchange.

Each turn in the conversation, consisting of one alternation between speaker and listener roles (first Sue speaks while Joe listens and then Joe speaks while Sue listens or vice versa) employs the opportunity to consider the function of the conversation for the speaker, listener, and dyad as a whole. Sue's profile can be analyzed utilizing principles of self-disclosure (possessing affective qualities) from a socio-cognitive standpoint. Interestingly, a study conducted by Rosen, Cheever, Cummings, and Felt (2008)

Dating Profile Name: Jn Sue's Profile

"I am caring, compassionate, objective, funny, determined, arrogant, easy-going, giving, nostalgic, sure, positive yet realistic, loud, outgoing, interesting, mellow, basically all-around decent person and good friend to have. I try to keep it simple. I don't enjoy people who take themselves too seriously. People like that are more of a joke to me than people that hide behind humor. What I miss more than anything since moving to the area is having guy friends to call up at any moment just to chill, I miss dating, I miss the chase, the distraction that is the male species! If you can supply any of the above, there is a demand here! =)"

My (Joe's) First E-mail: J1

It's funny that you call yourself arrogant. Few if any people have the audacity, the b-lls and the honesty to say that even if it's true. I wonder if this means that you are one honest woman - not only with others but with yourself as well, which is at least as important. So... how is her majesty spending these chilly days and evenings?

Her (Sue's) Response: S1

It's funny. You like how I misspelled "arrogant" huh? haha! I jsut typed that intro on th efly. I am glad you appreciate honesty. I ma pretty much an open book. I have no shame in my flaws because everybody has theirs. I am very much into owning my sh-t! So I expect others to do the same! To tell you the truth, I read believe in the golden rule. I like to be respected. But opinions are like noses, everbody's got them! I am a very objective person, so I like to ask a lot of questions, no topic is really off limits for me past a certain point in a friendship. Sorry you didn't ask for a novel, but hey! haha!

(Partial omission of the extended script—similar in tone to the preceding interaction).

Fig. 3 Online exchange constituting a successful flirtatious episode, Practical Happiness. (2009). Revolution in Dating & Relationship Advice: actual example of meeting a woman online and first phone conversation. Retrieved March 20, 2009, from <http://www.practicalhappiness.com/meeting-woman-online-and-first-phone-conversation>, reprinted by permission of site creator

considered the effectiveness of differing levels of self-disclosure and emotionality on the resulting likeliness of the individual to be rated favorably by a potential mate.

From a socio-cognitive perspective, Sue's profile could be rated as high on self-disclosure based upon the directness of which Sue refers to her own traits, "I am..." Also, Sue frequently says, "I miss..." (an utterance much higher on self-disclosure than

“I haven’t...” or “I don’t like”). However, Skinner’s (1957) descriptive autoclitics making reference to the speaker’s own motivational state is more useful in regard to a functional analysis. Also, self-disclosure makes reference to a single individual or self but rarely makes reference to the individual in relation to another individual or listener. Not only do descriptive autoclitics provide information about the speaker’s motivational state with varying degrees of intensity such as the difference between “I like,” “I love,” and “I dislike,” but descriptive autoclitics also provide information in regard to certainty and uncertainty. For example, “I would definitely love to grab a cup of coffee some time” vs. “It would be nice to grab a cup of coffee some time” vs. “I’d potentially be interested in grabbing a cup of coffee some time.”

Finally, Sue’s concluding line of her profile is, “*If you can supply any of the above, there is a demand here! =*.” At first glance, this may seem like a straightforward tact and mand; however, introducing the behavioral contributor of self-editing the “=” (symbol for a smiley face) may moderate the effects of the statement so that it has a more likely possibility of occasioning a return response from the listener. In this sense, the smile would be an autoclitic (a unit modifying the response of the listener; defined in terms of its observable consequences).

Looking at the overarching reinforcement contingencies, the participation of both Sue and Joe and the exchanging of numbers and verbal agreement to participate in a phone call, allows the participants to continue verbal exchange in future interactions. However, Sue’s initial stating of being “aggressive” and the tendency of both individuals to allow this initial statement to afford later aggressive statements (and dynamic, changing nature of what counts as an aggressive statement) contribute to the unique nature of the dyad. The multitude of aggressive and “playful” statements is synchronous across both individuals, and thus, this synchrony in tone functions as reciprocal reinforcement and equates in successful flirtation and the opportunity of later social interactions between “Joe” and “Sue.”

Functional Analytic Psychotherapy: Applications in Flirtation from a Behavior Analytic Perspective

Functional analytic psychotherapy (FAP) offers several helpful applications for analyzing flirtatious acts. FAP is a specific type of psychotherapy that applies numerous behavioral principles in its attempt to improve human relationships (Kohlenberg, Tsai, & Kanter, 2009). It is contextual in its approach, emphasizing a functional analysis of variables. Tsai and colleagues offer an overview of FAP, “the five rules” or general guidelines of the approach to therapy, and survey various complex topics including intimacy and self-development (Tsai et al., 2009). Discriminative stimuli that occasion responses likely to be reinforced are important in addition to stimuli which may elicit respondent behavior. In considering the specific techniques used as part of FAP, the importance of clinically relevant behaviors (CRBs) will be discussed in addition to the importance of effective and problematic behavior outside of the session (Os), and behavior of the therapist (importance of differential reinforcement, eliciting CRBs and responding to CRBs, shaping new responses in the client repertoire, etc.).

Let an example help in explanation of CRBs of the client. Consider a client with excessive CRBs, or in the case of flirtation, CRBs not successful or problematic in

establishing a romantic relationship. While CRB1 is the “problematic behavior” itself, CRB2 is behavior occurring during a therapy session that could change CRB1. Last of all, CRB3 is verbal behavior that contributes to changes in CRB1 or CRB2. Thus, many dating agencies or relationship therapists could best help individuals meet new prospects by role-playing with the use of autoclitic frames as CRB3s to reduce potentially awkward or unsuccessful CRB1 behavior. For example, the male who says to a female, “I like your body” is unlikely to be successful with this tact in comparison to other compliments (I like your body as a CRB1). Teaching “I like your eyes” or “I like your smile” or any number of functionally equivalent frames as eventual CRB3s to replace unsuccessful compliments would be progression for the client.

Existing research supports FAP as a successful integrated approach to therapy in addition to supporting individual components or integrated principles utilized in FAP. Baruch and colleagues cite numerous case studies supporting the efficacy of FAP ranging from anxiety disorders to mood disorders to chronic pain (2010). A basic tenant of FAP, the importance of the therapist-client relationship, has also been found to predict the effectiveness of therapy (Baruch et al., 2009). The evoking of CRB1s during a therapy session is consistent with the psychoanalytic process of transference (Baruch et al.). Baruch and colleagues note the prevalence of empirical papers supporting that transference occurs in therapeutic contexts and in a variety of social relationships; similarly, transference accounts for evoking of CRB1s in session. Baruch et al. additionally note that differential reinforcement and shaping of the client’s statements occurs during therapeutic sessions. Contingent, natural reinforcement and the importance of contrived reinforcement in the literature have additionally been noted by Baruch et al. and supported by empirical studies and as characteristic of FAP.

The Functional Analytic Rating Scale (FAPRS) was created to track individual turns in the conversation between therapist and client (Callaghan as cited in Baruch et al., 2009). Callaghan, Follette, and Linnerooth (2008) studied the reliability of FAPRS in coding therapist and client interactions. CRBs, client focus on the therapeutic relationship, clinical problems and improvements outside the therapeutic relationship (Os), and progressions made by the client in-session were client behaviors rated by FAPRS. Therapist focus on the therapeutic relationship, therapist evoking a CRB, therapist responding appropriately to a CRB1, CRB2, and CRB3, therapist not responding to CRB1, CRB2, and CRB3, therapist response to clinical problems and improvements outside the therapeutic relationship, progressions made by the therapist in-session, and generally ineffective therapist behavior were rated by FAPRS. Applying the FAPRS coding system to a behavior analytic research paradigm studying flirtation, the researcher could role-play with the participant, simulating what are likely to be effective flirtation strategies. One researcher would play the role of “therapist” (first initiator of a potentially flirtatious episode) while the participant would play the role of “client” (recipient/s initiator of a potentially flirtatious episode). A third researcher would code the interaction. In summary, CRB1s are consistent with poor flirtation, CRB2s are consistent with improved flirtation from feedback under contrived or “therapeutic” conditions, and CRB3s are consistent with successful flirtation. Os would include flirtatious behavior of the participant outside of the role-play during researcher sponsored singles mixers or speed-dating. Video-recording these interactions would allow for coding and reliability checks. Callaghan et al. (2008) found support for four types of reliability using the FAPRS coding system. Participants displayed reliability with an

“expert rater” (creator of the FAPRS), fair to excellent reliability based on pairwise comparisons between all raters, fair to excellent interrater reliability across multiple sessions, and good reliability when monitoring reliability drift.

FAP provides a framework in addition to various behavior analytic techniques for intervention in teaching someone who does not have a skill in their repertoire (i.e., unsuccessful flirtation), and accounts for the process whereby a trained professional changes the individual’s verbal behavior to foster successful interpersonal relationships (i.e., successful flirtation). Clinical populations such as those diagnosed with Autism Spectrum Disorder, Asperger’s, or anxiety disorders in addition to garden variety individuals who struggle with interpersonal relationships would benefit from FAP as a potential intervention to teach flirtation or initial acceptable romantic interaction behavior.

Future Directions

While there have been numerous studies using speed-dating paradigms, researchers have failed to videotape and audiotape interactions. Such interactions could then be coded in terms of what verbal operants are likely to be predictive of “yeses” or ratings of another individual as “flirtatious.” Although researchers have frequently claimed that verbal behavior is not particularly relevant in mate selection at speed-dating events, relevant data have not been considered as these studies have relied mainly on self-reports of rationale for “yes” and “no” selections rather than coding the verbal behavior itself.

Again, there is a vast difference between what people say and what people do (Lloyd, 1994); therefore, verbal report on preferences for mates and the wealth of research claiming verbal variables to be of little importance may be hugely inaccurate.

The current difficulty in appropriately acknowledging the importance of verbal behavior likely involves the difficulty of *descriptive analyses* from a structuralist perspective. From psycholinguistic or anthropological perspectives, transcription of verbal behavior occurring during the speed-dating event is quite feasible. However, the *function* of the verbal behavior regardless of the individual statements is well suited for the application of verbal behavior and classification of statements as tacts, mands, intraverbals, and autoclitics. Once further research reveals systematic use of verbal operants likely to serve a flirtatious function as well as the sequence of presentation by a speaker most likely to serve a flirtatious function, the resulting data can be used in the applied world to teach people skills to more effectively interact with potential romantic others.

Research on the types of autoclitics likely to be correlated with successful flirtatious acts can be found by analyzing autoclitics correlated with “yeses” rather than “nos” at speed-dating events. For example, autoclitics may be identified as most effective in an experimental setting by assessing whether they result in longer time spent speaking and flirting with a confederate. Not only would such research benefit in understanding what we speak of as flirtation, but such research would also establish the external validity of Skinner’s (1957) conceptual categories of autoclitics. Specifically, whether the categories of descriptive autoclitics, manipulative autoclitics, quantifying autoclitics qualifying autoclitics, and relational autoclitics are all necessary needs to be addressed in

future research. From both a theoretical and applied standpoint, it may be possible to merge some autoclitic categories together. Conversely, discussion of autoclitics with less emphasis on categorical status and more emphasis on the importance of verbal behavior that changes the response of the listener may be worthwhile.

It is likely that the relationships between physical attraction and flirtation are in fact more complex than frequently acknowledged. In particular, it may be the case that for extremely attractive individuals (evaluated as such based upon consensus, dress, physical body appearance consistent with the predominant mainstream cultural norm, or a number of commonly suggested evolutionary attributes such as a symmetrical face, averaged face, large eyes, etc.), verbal behavior is not especially important in flirtation, and in particular, may not greatly affect interpersonal interest. On the other hand, for most individuals, verbal behavior may serve as a moderator of physical appearance predicting success of flirtation or interpersonal/romantic interest from a member of the opposite sex. Thus, for this sample, autoclitics are likely to play a particularly potent role in differentiating people who are similar in many ways (appearance, interests, etc.), but have differing degrees of success both in the recipient's reaction to initiated flirtatious behavior and interpersonal relationships in general. As suggested above, a logical starting point would be Skinner's (1957) descriptive autoclitic and manipulative autoclitic. Experiments using a menu of verbal units varied in terms of measurable aspects would likely provide useful information both about autoclitics in daily social interactions and successful flirtation strategies. For example, variations in the certainty of the speaker or intensity of self-referenced motivational state would be particularly feasible to manipulate. Specifically, these types of variations would be variations in descriptive autoclitics that make reference to the speaker him/herself and change the response of the listener. For example, "I am attracted to you" vs. "I am *definitely* attracted to you" differs in regard to the speaker's degree of certainty. "I *like* you" vs. "I *really like* you" differ in regards to the speaker's motivational state. Such studies would need to utilize confederates systematically varying types of statements used in addition to controlling for physical attractiveness of both the confederate and the participant.

Ultimately, as more work is conducted on what is successful in online simulations or with the use of confederates, the possibility of helping other individuals becomes feasible. Those with anxiety disorders, social impairment, or a past history where flirtation attempts have frequently been punished, comprise a population that could benefit from this line of research. Like any intervention, baseline data on duration of interactions with a recipient, frequency of interactions with a recipient, etc. could be collected before coaching individuals on how to respond given specific contexts and discriminative stimuli provided by a listener. For example, coaching an individual to lower his enthusiasm so that "like" is used more often than "I love" or "I'm obsessed with" could alter the function of his remarks to be potentially flirtatious instead of excessively intense.

Much research exists on the application of relational frame theory in clinical populations. For example, deictic relational responding has been studied in individuals diagnosed with schizophrenia (Villatte, Monestès, McHugh, Freixa i Baqué, & Loas, 2010). Other researchers found that using hierarchical framing to self-regulate behavior was an effective defusion technique, method for labeling one's own thoughts and feelings, for at-risk adolescents scoring high impulsivity on emotional subscales of the Behavior Assessment System for Children (BASC) (Carmen et al., 2011).

Additionally, researchers found that 3 concepts of RFT, deictic relational responding, empathic concern, and experiential avoidance, could predict the presence of social anhedonia (Vilardaga, Estévez, Levin, & Hayes, 2012). Considering the success of applications of RFT in clinical populations, RFT likely has valuable contributions for those struggling with romantic relationships or engaging in flirtation. In particular, implementing multiple exemplar training to establish a larger verbal repertoire of “flirtatious comments” through entailed and eventual derived responding may be particularly successful. For example, individuals diagnosed with Asperger’s or Generalized Anxiety Disorder may benefit from additional training to establish contextually appropriate verbal behavior when attempting to find a potential romantic mate.

Closing Remarks: Last Call for a Date

Hopefully, this manuscript has highlighted the utility of assimilation of multiple theoretical and applied contextual and behavior analytic conceptualizations in the approach to better understanding complex phenomena such as flirtation. Reciprocal reinforcement contingencies, RFT, FAP, Verbal Behavior, and stimulus control are just some conceptualizations that provide a well-rounded picture of the application of behavior analysis to complex phenomena. Without application, these conceptualizations fail to support their own utility. However, utility both in understanding less complex human behavior in addition to that as complex as flirtation supports the strength of a behavior analytic perspective.

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Compliance with Ethical Standards

Conflict of Interest The author declares that she has no conflict of interest.

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