

Connecting Cues: The Role of Nonverbal Cues in Perceived Responsiveness

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Abstract

Nonverbal cues powerfully shape interpersonal experiences with close others, yet there has been minimal cross-fertilization between the nonverbal behavior and close relationships literatures. Using examples of responsive nonverbal behavior conveyed across vocal, tactile, facial, and bodily channels of communication we illustrate the utility of assessing and isolating their effects to differentiate the contributions of verbal and nonverbal displays of listening and responsiveness to relationship outcomes. We offer suggestions for methodological approaches to better capture responsive behavior across verbal and nonverbal channels, and discuss theoretical and practical implications of carrying out this work to better clarify what makes people feel understood, validated, listened to, and cared for.

Keywords: facial expression, nonverbal behavior, perceived responsiveness, relationship development, touch, vocal tone

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Nonverbal cues contain vast amounts of information, and powerfully impact social exchanges. Humans' ability to effortlessly process nonverbal signals without conscious awareness facilitates rapid and efficient social judgments across social domains, and strongly shapes interpersonal experiences. Research in the fields of nonverbal behavior and close relationships has largely been carried out in parallel, but we propose that cross-fertilization between the two disciplines will enrich the understanding of how nonverbal cues contribute to relationship processes, and how relationship factors provide context for nonverbal processes. We illustrate the benefits of making this connection using nonverbal responsiveness as an exemplary mechanism.¹

Responsiveness is the process through which relationship partners listen and respond supportively to each other's needs by demonstrating understanding, validation, and care. Robust findings show that the enactment and perception of responsive behaviors are cornerstones of satisfying relationships [1]. High-quality listening is crucial to the provision of responsiveness [2], and both listening and responsiveness may be conveyed through verbal (e.g., asking questions, reflecting emotions, providing verbal encouragement) and nonverbal (e.g., facial expression, vocal inflections, eye gaze, touch) reactions to personal disclosures. However, empirical work in the field of close relationships rarely differentiates between verbal and nonverbal displays of listening and responsiveness. We argue that nonverbal cues deserve to be more prominently situated in the study of close relationship

¹ This review is about displays of responsiveness that reflect authentic desires, motivations, and efforts to be responsive. While we acknowledge that disingenuous attempts may occur, that topic warrants a separate discussion.

processes, and differentiated from responsive verbal behaviors to provide a more nuanced account of responsive relationship behavior (see Figure 1).

This integration is warranted because nonverbal cues are spontaneously generated as a function of one's implicit evaluation of a relationship partner [3] and play a crucial role in determining the interpretation of verbal statements (e.g., verbal apologies were more impactful when accompanied by kneeling or crying) [4]. Moreover, growing evidence shows that nonverbal cues are crucial to fundamental relationship processes, such as the development and maintenance of intimacy and interpersonal trust, as we describe below. We review recent findings on the contribution of responsive nonverbal cues (i.e., facial expressions, vocal cues, affectionate touch, and bodily gestures) to relationship outcomes, and then discuss how future research may advance our understanding of how responsiveness promotes positive relationship outcomes by capturing and differentiating its signals across verbal and nonverbal channels.

1.1 Responsive Nonverbal Relationship Behavior

Often, the first and primary reaction a person shows in response to a disclosure is a nonverbal one – a high-pitched squeal of delight in response to loved one's good news, or a hug at the sight of a friend's dejected face often precedes a verbal response. Nonverbal responses are inevitable in interpersonal communication, and when respondents find themselves at a loss for words (e.g., in response to disclosure about a traumatic loss), nonverbal signals may be the only ones sent. Recent findings from across four nonverbal channels – touch, vocal tone, facial expressions, and bodily gestures – showcase the relational impact of nonverbal responsiveness. Responsive nonverbal behaviors may convey attentiveness, care, understanding, and respect towards one's needs above and

beyond the content of verbal statements, and signal listening, warm feelings, and availability towards the speaker in a rapid and unmediated manner. Conversely, their absence, or the presence of nonresponsive nonverbal cues such as eyerolls, sneers, or sighs of boredom or exasperation, can convey the opposite – inattentiveness, disregard, disrespect, and unavailability.

Touch can be used to accurately communicate a variety of emotions between relationship partners, including love, happiness, and gratitude [5]. This suggests that touch is a means of self-disclosure, a vital component of the intimacy process [6,7]. Supporting evidence indicates that daily touch between romantic partners bolsters relationship quality [8] and promotes positive engagement between couples [9]. Moreover, receiving touch from a relationship partner in the context of discussing a personal stressor or an area of conflict in the relationship buffers stress for the discloser and facilitates their positive personal and relationship outcomes [10,11]. Evidence from a daily diary study differentiating provided and received touch in romantic relationships establishes important discriminant validity for touch provision by demonstrating that receiving touch promotes the recipient's perception of the provider as responsive, but touch providers do not perceive recipients as responsive [8].

Facial expressions reflect emotional states with universal interpretation in shared cultural contexts [12,13], and may even “leak” feelings the sender wishes to conceal [14]. Facial mimicry of emotion, particularly for positive emotions [15], is commonly used to signal affiliative intentions [16] and serves important functions in the development and maintenance of relationships. Information from facial expressions fosters cooperation when uncertainty is high [17], and wearing a face mask (a widespread behavior to ward off

COVID-19 transmission) compromises emotion-recognition accuracy and interferes with perceivers' ability to establish trustworthiness [18]. Accurately evaluating a romantic partner's facial expression of negative emotion buffers against destructive conflict behaviors, which in turn promotes greater relationship satisfaction [19]. Facial expressions of emotion are so fundamental to social interaction that the growth of largely verbal communication mediums (email, text, social media) was accompanied by the development of emojis – proxies that allow us to share nonverbal signals in predominantly verbal communication channels. Including emojis in support-relevant text exchanges increases perceptions of responsiveness, particularly when their use is mutual [20].²

Like facial expressions, *vocal cues* are strong indicators of emotional states [21,22]. Vocal cues are inescapable in face-to-face conversations, and help determine the meaning of lexical information [23]. They augment the emotion conveyed in a verbal message, and may play a larger role in accurate emotion perception than do verbal cues [24]. Using vocal cues alone, people are nearly as accurate at determining whether the emotional tone of a conversation is positive or negative as when they have access to verbal and vocal cues combined [25]. Additional evidence comes from a study in which Hebrew and German participants accurately identified specific emotions (anger, fear, happiness, sadness) from vocal cues despite being unable to speak or understand the language in which the message was spoken [26]. Moreover, fundamental vocal frequency (f_0), a cue akin to pitch, may be instrumental in the nonverbal communication of responsiveness because it reflects emotional arousal [27]. Although it has been identified as a harbinger of romantic failure in

² Important differences in the interpretation of in-person and computer-mediated nonverbal signals have been documented, but they are beyond the scope of this work.

research on conflict discussions [28], f_0 can also be used to signal love and affection [29,30], and warrants exploration in supportive and positive contexts.

Responsive nonverbal cues can also be manifested in *bodily reactions and gestures*. For example, head nods synchronized to a partner's disclosure convey understanding [31], placing one's hand with a flat palm in the center of the chest conveys empathy [32] and postural openness (arms and head raised) signals warmth [33]. Feeling "moved" in response to another's disclosure may be displayed through tears or moist eyes, getting choked up, or having goosebumps [34]. These spontaneous bodily reactions often occur unintentionally and reveal the listener's sensitivity [35] and the powerful impact of the disclosure, not only symbolically, but as an actual display that is visible to the discloser. Such reactions may be comprehended similarly by people of different cultures and languages [36,37], and are associated with closeness and willingness to engage in communal relationships [34]. Aside from being associated with emotional closeness, bodily gestures such as synchronized motions can even instill a sense of intimacy [38].

While the above findings highlight the importance of nonverbal responsive behaviors, it remains necessary to differentiate them (and their effects) from verbal responsive behavior. A compelling reason for this is because isolating their effects has the capacity to reveal the relative primacy of nonverbal versus verbal cues, and whether that primacy is context dependent. Some evidence suggests that when verbal and nonverbal cues diverge, nonverbal cues set the tone and determine the perception of a partner's intentions and affective state. For example, vocal information played a larger role than semantics in identifying positive and negative emotions in speech [24], and when incongruence emerged

between semantic and vocal information, listeners relied primarily on vocal tone to comprehend the emotional message [39].

Similarly, perceivers more accurately differentiated indirect responses (one meant to save face) from direct responses or lies when they relied on gestures like a palm-reveal, face shrug, or head tilt in addition to the verbal content of a response [40]. Another example comes from an ongoing study by Mizrahi and Itzhakov, in which participants share a hurtful personal story with a confederate who responded with nonverbal (e.g., eye contact, warm facial expressions) or verbal (e.g., "I can understand how it feels," "I am sorry to hear about your experience") responsiveness. Confederates who provided responsive messages that were exclusively nonverbal were perceived as more responsive and trustworthy than those who provided exclusively verbal messages.

Although these findings suggest the primacy of nonverbal cues, other research suggests the opposite. For example, the interpretation of nonverbal behavior is affected by semantic information [41,42], and it has been argued that authentic attentive listening is better conveyed verbally than nonverbally to avoid concern about deceptive intentions [43]. Moreover, verbal responses are crucial for people whose ability to process nonverbal information is compromised (e.g., people with autism, blindness, or deafness in the case of vocal cues), or in situations where nonverbal cues are limited (e.g., a telephone call). Importantly, features that distinguish nonverbal cues from verbal ones (e.g., lack of vocabulary, syntax, or precise definitions) [44] suggest that they may serve different communicative functions. Taken together, these findings lead us to propose that the contribution of responsive verbal and nonverbal cues to relationship functioning may diverge and be context dependent.

For example, if one feels obliged to provide verbal responsiveness, but has trouble figuring out “the right thing to say” (a common experience among support providers) verbal messages may not promote perceived responsiveness. In such situations, it may be easier to display feelings of sensitivity, care, and concern nonverbally. Alternatively, in other circumstances using only nonverbal responsiveness may dampen the experience of feeling understood and validated (e.g., showing nonverbal enthusiasm for a close friend's good news, but not asking any questions about it). It may be specifically intriguing to explore when communication channels conflict (e.g., paraphrasing in a way that conveys attention and understanding while scrolling on one’s phone). More research is needed to better understand the interplay between responsive verbal and nonverbal displays, and clarify the contexts in which each reigns supreme.

2.1 Future Directions and Methodological Approaches

The evidence for responsive nonverbal behavior, and the important role it plays in relationship processes that we have highlighted above, provides a compelling case for more interdisciplinary work integrating nonverbal behavior and relationship science. To fully grasp and accurately assess the influence of nonverbal cues of high-quality listening and responsiveness requires examining the unique effects of verbal and nonverbal cues and isolating the relative contributions of each. This requires multimethod approaches that incorporate the assessment of nonverbal cues across multiple channels, not to the exclusion of self-report and verbal cues, but in addition to those measures. We describe methods at our disposal for carrying out such work.

To assess and rate nonverbal behavioral cues requires that researchers audio- and video-record participants. Conversations can be recorded in laboratory sessions, or in daily

life with tools such as the Electronically Activated Recorder (EAR) [45]. Recordings accompanied by video afford researchers the opportunity to analyze multiple nonverbal channels in isolation from each other – one can rate behavior (facial expressions, gestures, and touch) with or without vocal cues, and vocal cues (i.e., voice messages) with or without access to visual information. Researchers may also contrast perceptions of responsiveness in typed text messages versus text messaged audio recordings containing the same content. In these examples, the verbal content of conversations can be transcribed and rated by independent judges for the communication of understanding, validation, and care, independent from nonverbal cues. Isolating the degree of responsive relationship behavior conveyed across each distinct communication channel will allow us to test for the unique contributions of each.

We acknowledge that these methods can be expensive, time-consuming, and labor-intensive. However, they may be crucial for identifying processes at the core interest of relationship science. For example, a recent study found that nonverbal (but not verbal) gestures of love and affection, were associated with greater positive emotions and receptiveness among highly avoidant individuals [46]. These findings provide novel insight about the dynamics of affectionate exchange among avoidant individuals that is only available through the use of nonverbal information. The accessibility of audio and video methods has drastically increased as the use of virtual meetings (e.g., via Zoom, Skype, Google Meet) became common in everyday interpersonal interactions due to the COVID-19 pandemic [47]. Although virtual meetings are limited in capturing certain nonverbal information (e.g., full body posture, touch), and there may be obstacles to intimacy (e.g.,

background noises, poor Internet connection), they may provide a handy tool to capture nonverbal communication in any lab.

3.1 Conclusions

Developing knowledge about responsive nonverbal behaviors and isolating their effects across nonverbal channels will provide a fuller and more nuanced understanding of high-quality listening and responsiveness. It can also introduce a framework for research that can begin to clarify conditions under which different kinds of responsive behavior might be most effective, and allow us to test how easily manipulated and trained nonverbal signals of listening and sensitive responding might be for those who are genuinely trying to convey it. In addition to being theoretically useful, identifying the “active ingredients” in these behaviors may have practical implications, such as in clinical training or psychoeducation practices, teaching people which communication channel is most effective in different circumstances and how to shape their nonverbal signals (with or without verbal ones) to show affection, be supportive, or otherwise convey responsiveness. Instead of looking under the lamppost for the key we lost on the other side of the dark street, we offer ideas about how to cast light on some of the darkened areas to find new answers to our questions about what makes people feel listened to, understood, validated, and cared for.

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**Papers of outstanding interest

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When nonverbal signals of kneeling or crying accompanied a public apology, the apology was perceived as more satisfying, and the apologist was perceived more positively, more remorseful and empathic, and less likely to reoffend. This highlights how nonverbal signals alter perceptions of verbal messages and showcases the importance of capturing both verbal and nonverbal cues.

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Emotions such as love, happiness, sadness, and gratitude were accurately conveyed to romantic partners and unacquainted strangers using touch alone. Communication between romantic partners was intuitive, and used to create standardized touch expressions that were taught to trained senders and accurately interpreted by unacquainted strangers. This work is important because it suggests the possibility of training responsive nonverbal behaviors using touch.

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In a daily diary study of provided and received affectionate touch with romantic partners, receiving touch was associated with receivers' perceptions of the touch givers' responsiveness, but providing touch was not associated with providers' perceptions of the touch recipients' responsiveness. This demonstrates that touch nonverbally signal responsiveness, and the pattern that receiving but not giving conveys responsiveness is an important display of discriminant validity.

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Participants showed a marked decrease in their ability to accurately identify the emotional expressions of stimuli from a normed database when the same stimuli were masked vs. unmasked. Unmasked faces expressing negative emotion were deemed more untrustworthy than were the same faces displayed wearing a face mask. This points to the detrimental interpersonal effects of being unable to access full facial expressions of emotion, which is increasingly common given the increased use of face mask to control viral spread.

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The gesture of placing a flat palm to the chest was identified by participants as conveying feelings of being moved by love, touched, or reflecting empathy and heartfelt feelings. Use of the gesture was positively associated with self-reported empathy, exemplifying how nonverbal signals may foster social connection.

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In six studies, this work demonstrated that people are more likely to express uncertainty with verbal (words like *possibly*, *maybe*, *suppose*, *I guess*) and nonverbal cues (palm-revealing gesture, face shrug, head tilt) when they are communicating indirectly (in order to save face for another) versus directly or lying. Moreover, perceivers use the nonverbal cues to more accurately distinguish indirect (face saving) responses from direct responses and lies when verbal cues are present or absent.

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Figure 1. Subdivisions of responsive relationship behavior (RRB) that convey responsiveness.

