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### Author

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Can We Discern Authenticity in Others?

By

Vanessa Kimiko Castro

A dissertation submitted in partial satisfaction of the

requirements for the degree of

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Committee in charge:

Professor Serena Chen, Chair

Professor Dacher Keltner

Professor Oliver John

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## Abstract

### Can We Discern Authenticity in Others?

By

Vanessa Kimiko Castro

Doctor of Philosophy in Psychology

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Professor Serena Chen, Chair

A burgeoning research literature has documented that authenticity has important benefits for a broad range of outcomes, among them well-being, intimate relationships, and leader effectiveness. Most past research on the construct has focused on either the consequences of experiencing subjective feelings of authenticity or being perceived as authentic. Such findings make salient the question of whether people can accurately discern others' subjective experience of authenticity – a question that has not yet been explored. In the five studies reported here, we began tackling this question by examining the accuracy of perceivers' judgments of others' felt authenticity. In Studies 1-3 we investigated correspondence between ratings of perceived and felt authenticity within acquainted dyads (romantic couples) who interacted with each other and discussed a particular set of topics. In Study 1, we examined couples in a naturalistic, daily life setting and found that members of romantic couples were able to accurately discern each other's felt authenticity. In Study 2, with a different sample of romantic couples, we introduced experimental control over couples' interactions by bringing them into the lab to discuss two topics to assess situation-specific authenticity. We found that across two different conversation topics, one self-focused and one related to the relationship, people were able to accurately discern their romantic partners' felt authenticity during the conversations. In Study 3, with yet another set of romantic couples, we tested boundary conditions to determine if there was evidence of authenticity accuracy even when couples were in an emotionally-charged, antagonistic situation (conflict). We did not find accuracy in partners' ratings of each other's felt authenticity after a conflict conversation, raising questions about possible moderating variables (e.g., nature of the social interaction in which authenticity is being judged), as well as calling for further examination of perceivers' accuracy in discerning others' authenticity. Studies 1-3 relied on authenticity manifested and judged in close relationships in which both individuals knew each other. Thus, in our final two studies, we tested whether the evidence we found in Studies 1 and 2 for accurate discernment of others' felt authenticity was limited to dyads in which members are acquainted with one another in some manner (e.g., romantic couples). Specifically, in Study 4A, and then replicated in pre-registered Study 4B, we found that outside observers could accurately judge strangers' self-reported authenticity from video clips of a social interaction. We discuss the importance of authenticity perceptions to impression formation and close relationships, and point to critical unanswered questions regarding such perceptions.

Keywords: Authenticity, Accuracy, Social perception, Close relationships.

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## Can We Discern Authenticity in Others?

"To thine own self, be true." Polonius' advice to his son (Laertes) in Shakespeare's Hamlet has become a common aphorism in Western discourse, and even a cultural ideal. It is a bit less well-known that after delivering this advice, Polonius sent a subordinate to spy on Laertes. Departing from Hamlet, suppose the spy then reported back to Polonius regarding Laertes' authenticity. Polonius might be quite pleased to hear that his son was being authentic or displeased to hear that his son was being inauthentic. But should Polonius trust the veracity of his spy's observations? Upon reflection, he might ask, "is it even possible to identify someone's authenticity by observing their behavior?"

If the preceding elaboration of Hamlet were included in the original story, perhaps there would today exist empirical evidence regarding the accuracy of authenticity judgments. Instead, extant research has focused on the consequences of judging another person to be authentic. We surmised above that Polonius would be pleased to hear that his son was being authentic and, consistent with this intuition, study participants in psychology experiments trust, like, commit to, and stay loyal to the people they judge as authentic (Bargh et al., 2002; Brunell et al., 2010; Liu & Perrewe, 2006; Reis & Patrick, 1996; Wickham, 2013). These consequences only reinforce the importance of the question posed by our hypothetical Polonius.

Authenticity has been defined as feeling in touch with one's true self. People who are in touch with their true self behave and express themselves in ways that are subjectively experienced as consistent with their own feelings, thoughts, values, and beliefs (e.g., Chen, 2019). Broadly speaking, existing studies have observed that people who are dispositionally high in authenticity, who experience felt authenticity, and/or who are judged as authentic enjoy various benefits, such as having greater personal well-being (Goldman & Kernis, 2002), being more effective leaders and positively contributing to organizational climate (Henderson & Brookhart, 1996), making better occupational decisions (Cianci et al., 2014), and having stronger personal relationships (Bargh et al., 2002; Brunell et al., 2010; Wickham et al., 2013; Wickham, 2018). The vast majority of this prior work has focused on linking such outcomes to either feeling authentic or being judged as authentic.

Given these widespread consequences, a critical question regards the relationship between feeling authentic and being judged as authentic. Specifically, can people accurately discern each other's felt authenticity? Empirical answers to this question are lacking but would have important implications. For example, evidence of accuracy would suggest that felt authenticity may confer its benefits to the individual in part *through* the (accurate) authenticity judgments of others. Moreover, evidence of accuracy would support the construct validity of felt authenticity as it would suggest that laypersons have culturally-shared representations of authenticity that are unlike their representations of the related construct of honesty/deception (for which accuracy is typically absent or low). Finally, evidence that strangers can accurately evaluate others' felt authenticity in informal interactions would suggest that feelings of authenticity are expressed via similar behaviors in different individuals. We therefore conducted five studies to evaluate the degree to which people can accurately discern others' felt authenticity.



## Feeling Authentic

Both trait and felt authenticity have been positively associated with various indices of psychological well-being such as greater life satisfaction and lower negative affect. For example, Goldman and Kernis (2002) observed that higher scores on a dispositional measure of authenticity were positively correlated with self-esteem and life satisfaction, and negatively correlated with negative affect. Sheldon et al. (1997) provided evidence that higher authenticity, as measured by subjective feelings of authenticity when in different relational roles – was related to higher satisfaction in those roles, higher self-esteem, lower levels of depression, lower perceived stress, and lower trait anxiety. In a study conducted by Sariçam (2015), dispositional authenticity, as measured by the Authenticity Scale (Wood et al., 2008), was positively related to happiness and life satisfaction in Turkish university students. Furthermore, several studies have observed trait authenticity to be linked to greater life satisfaction, positive affect, gratitude, and lower negative affect (Kernis & Goldman, 2006; Robinson et al., 2012; Toor & Ofori, 2009; Wood et al., 2008). As a final example, several studies have shown that participants higher in felt authenticity showed greater resilience in the face of stress and adversity (Wickham et al., 2016), and were more likely to put effort toward achieving their goals (Zhang et al., 2018). Overall, such studies provide evidence that trait and felt authenticity often boost individuals' mental and emotional well-being, and enable individuals to cope with adverse events.

## Perceptions of Authenticity

Just as feeling authentic can confer benefits to the individual, so too can being judged as authentic. Research by Reis and Patrick (1996) suggests that authenticity signals characteristics to interaction partners (e.g., trust, honesty) that are critical towards developing close relationships. Examples include one study (Liu & Perrewe, 2006) in which participants answered questions about a co-worker's typical authenticity, how much they liked that person, and how much they trusted them. Participants liked and trusted people who they believed were more authentic. There is also some evidence that judging one's romantic partner as authentic is positively associated with relational connection and closeness. For example, judging one's romantic partner as authentic was related to "connectedness goal orientation" (creating and maintaining a satisfying relationship), which was in turn related to higher intimacy and commitment, and weaker goals to protect oneself from abandonment or rejection (Wickham, 2013). Another study from this same research *manipulated* participants' judgments of their romantic partners' authenticity. Participants and their romantic partners separately filled out a survey with measures related to their own authenticity and their relationship (e.g., relationship satisfaction, commitment). On a separate day, participants came into the lab without their romantic partner and were shown computer print-out reports of their partners' authenticity profile based on their partners' responses from the survey ostensibly from an official testing company. These reports were manipulated and participants were randomly assigned to view reports of their partner being either moderate *or* high on facets of authenticity. Participants reviewed their romantic partners' supposed authenticity profiles and afterwards filled out questionnaires about their relationship. Participants who read reports of their partner being high on facets of authenticity showed significant increases in trust, relationship satisfaction, and need satisfaction in relationships, as compared to their pre-manipulation ratings of their relationship.

Other research suggests that being perceived as authentic could also affect occupational outcomes. For example, Cianci and colleagues (2014) had participants imagine they were working on a long-term project for a company and read attributes about a supposed supervisor. The supervisor's authenticity was manipulated to be high, neutral, or low. High-authentic leaders were described as behaving in ways consistent with their beliefs or saying what they mean, whereas low-authentic leaders were described in the opposite way. Neutral leaders were not described in terms of authenticity. Leaders described as authentic, as compared to inauthentic, had followers who were less likely to make unethical decisions in the face of temptation. As another example, Gan, Heller, and Chen (2018) ran a study in which participants were randomly assigned to read vignettes about a target person who either behaved authentically or inauthentically. Afterwards, participants made inferences about the target person's power. The researchers found that targets who were characterized as behaving authentically were seen as more powerful and were considered to possess more legitimate power in the context of leading a group of employees than inauthentic targets. More broadly, Henderson and Brookhart (1996) found that participants' judgments of leader and staff authenticity were positively correlated with judgments of the health of the organization, positive organizational climate, including supportive behavior, collegial behavior, as well as leader effectiveness. As a final example, Liu and Perrewe (2006) observed that when individuals were judged as authentic by coworkers, they had greater affective well-being, which was in turn positively correlated with their own job satisfaction. In general, being perceived as authentic has a variety of benefits to the individual, and predicts how others will behave toward and around the individual. Yet, it remains possible that people's authenticity judgments of each other are inaccurate — if so, perceivers' positive responses toward people they regard as authentic may be misplaced and lead to a variety of benefits for “undeserving” individuals. In light of the benefits that come with being perceived as authentic, it is critical to examine if these perceptions are or are not typically accurate.

### **Discerning Others' Felt Authenticity**

A great deal of previous research on authenticity has focused on trait-level authenticity, including much of the literature reviewed above on the consequences of feeling authentic and being perceived as authentic. In the current work, we examined the accuracy of judgments people make about one another's felt (state) authenticity – their momentary experiences of authenticity in particular contexts (Sedikides et al., 2017). Growing research suggests the importance of state authenticity (e.g., Chen, 2019; Schmader & Sedikides, 2018), but little to no research has examined people's judgments of others' felt (state) authenticity. A large literature, however, has examined people's ability to discern other momentary, context-specific states (e.g., emotions, mental states) in others. An often used method for doing so is through the use of thin-slice video clips, brief excerpts of expressive behavior lasting typically 30 seconds or less (Ambady et al., 2000; Ambady & Weisbuch, 2010). In some domains, thin-slices provide sufficient evidence for perceivers to accurately discern the mental states of others. For example, a meta-analysis conducted by Harrigan, Wilson, and Rosenthal (2004) found that participants were able to accurately detect both state and trait anxiety from thin-slices, with state anxiety being more accurately recognized ( $r = .39$ ) than trait anxiety ( $r = .26$ ). More generally, thin-slice video clips in which individuals naturally exhibit expressive behavior (e.g., talking, facial expressions, body language) often enable study participants to form accurate social judgments of thinly-sliced persons (e.g., extraversion; Yeagley et al., 2007) – and at rates that approach or exceed accuracy in judgments of “thick-slices” (full videos). Research using the thin-slice

paradigm suggests, then, that people are often accurate in their judgments of others' mental states. Such findings suggest that judgments of others' felt authenticity may also be accurate to some degree.

This conclusion, however, is not a foregone one. Research on thin-slice accuracy spans a wide variety of judgments, with accuracy varying across judgment type. In this literature, judgments of honesty and deception may be the closest proxy for authenticity. After all, lay perceivers may view honesty and authenticity to overlap to some degree. And yet study after study suggests that people are poor at detecting state honesty and dishonesty. For example, meta-analyses suggest that overall accuracy in discriminating lies from truths was barely above chance at 54% (Gunderson & Brinke, 2019; Bond & DePaulo, 2006). In fact, "professional" lie catchers, such as police officers and detectives, are often more confident in their judgments than are amateurs, but are *not* more accurate (Gunderson & Brinke, 2019). To the degree that laypersons regard honesty and authenticity as overlapping, research on deception detection suggests that people may not be very accurate perceivers of state authenticity. Conversely, to the degree that laypersons regard authenticity as distinct from honesty, perceivers may – as in research on judgments of other mental states, such as other people's emotions – show a considerable degree of accuracy. The present studies aimed to directly examine people's ability to accurately discern others' felt authenticity.

### The Present Research

The present studies were focused on the overriding question: do people exhibit above-chance accuracy in their perceptions of others' felt authenticity? We investigated this question across two sets of studies, the first examining the accuracy of people's perceptions of their romantic partners' felt authenticity, and the second assessing outside observers' perceptions of unacquainted targets' felt authenticity. In the first set of studies, we operationalized accuracy as the correlation between individuals' perceptions of their partners' felt authenticity and partners' self-reported felt authenticity. We will refer to this correlation as *authenticity accuracy*.<sup>1</sup> In the second set of studies, we operationalized authenticity accuracy in terms of outside observers' perceptions of the felt authenticity of unacquainted targets who were high in self-reported felt authenticity compared to their perceptions of targets who were low in self-reported felt authenticity.

#### Authenticity Accuracy in Close Relationships

We began our research examining the degree to which people were able to discern the felt authenticity of an acquainted other. We did this since much of the prior research on authenticity outcomes are based on judgments of authenticity between familiar partners (e.g., Liu & Perrewé, 2006; Wickham, 2013). Additionally, it made sense, as a first step, to examine acquainted dyads since it would seem that individuals in such dyads would be especially likely to

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<sup>1</sup> This correlational approach is common to thin-slice studies that examine accuracy for continuous variables (e.g., personality traits, anxiety; for a review, see Weisbuch & Ambady, 2011), as opposed to categorical variables (e.g., sexual orientation, categorical emotion). In the current studies, we were focused on accuracy in judgments of *felt authenticity* – a continuous variable – and therefore used a correlational technique (multilevel modeling) to evaluate such accuracy. We refer to the resulting correlation as *authenticity accuracy* only to aide presentation of results.

have developed knowledge of each other's "true self" and therefore would be likely to show some degree of accuracy in their perceptions of each other's felt authenticity.

The first three studies specifically examined individuals' ability to accurately judge their romantic partners' felt authenticity during interactions with them. The data from these studies came from existing datasets (obtained from previous, unrelated studies) that included procedures and measures that were relevant to the present investigation (Impett et al., 2012; Le et al., 2020; Gordon & Chen, 2013). Further detail about these prior studies can be found below and in the published papers that are mentioned in the relevant Method sections. In Study 1, we used daily diary data to investigate whether people can accurately discern their romantic partners' felt authenticity in relation to sacrifices they made for them in their day-to-day lives. In Study 2, with a different sample of romantic couples, we investigated whether people can accurately discern their partners' felt authenticity in a controlled setting in which they rated their own and their partners' felt authenticity during two separate conversations in the lab. This enabled us to study perceived and felt authenticity judgments directly after romantic partners engaged in discussions about multiple conversation topics – specifically, a change they wanted in their relationship and a topic of personal distress that did not involve their partner – rather than retrospective judgments of authenticity made at the end of each day, as was the case Study 1. Finally, in Study 3, we examined if authenticity accuracy effects extend to other conversation topics – namely, an area of conflict in the relationship. Specifically, with a third sample of romantic couples, we examined people's accuracy when judging their romantic partners' felt authenticity during a conflict conversation.

The primary goal of our research was to establish people's ability to accurately perceive others' felt authenticity. However, to better characterize such accuracy, we also examined potential boundary conditions (moderators) and the independence of authenticity perceptions from other perceptions. Doing so enabled us to examine whether authenticity accuracy is robust to various contextual and individual difference factors, and whether authenticity accuracy is simply an artifact or byproduct of related phenomena.

**Trait authenticity.** One potential explanation for accurate judgments of felt authenticity in Studies 1-3 could be that perceivers base their perception of their partners' felt authenticity on their partners' *trait* authenticity. In other words, instead of judging their partners' felt authenticity in a particular situation (e.g., while making a sacrifice or during a conflict conversation), perceivers might be making their judgments of their partners' felt authenticity based on how authentic their partner usually is. To examine this possibility, in Study 1 we evaluated the degree to which perceivers' accuracy in their judgment of their romantic partners' felt authenticity was independent of their romantic partners' self-reported *trait* authenticity. Alternatively, trait authenticity may serve as a moderator of the above effects, potentially providing information about boundary conditions. It could be easier for perceivers to discern the felt authenticity of partners who are higher (vs. lower) in trait authenticity because (for example) perceivers accustomed to high authenticity in their partner may be especially likely to notice inauthenticity – indeed, perceivers appear to be more perceptually sensitive to negative than positive information (Vaish et al., 2008) and inauthenticity is regarded as more negative than authenticity (Lenton et al., 2013). Thus, we also examined whether perceivers only exhibit accuracy in their judgments of their partners' felt authenticity when their partner has high (vs. low) *trait* authenticity. For Studies 2 and 3, we did not have direct measures of trait authenticity

but we had alternative ways to assess the possible influence of trait authenticity with other variables that were included in those studies (i.e., perceptions of felt authenticity across multiple conversation topics in Study 2 and trait relational authenticity in Study 3).

**Emotion Accuracy and Emotion Perception.** Another possibility we explored was whether perceivers' accurate judgments of their romantic partners' felt authenticity were based on recognizing and making judgments of their partners' self-reported emotions. For example, it is possible that authenticity accuracy is simply a product of accuracy in judging emotion. If so, we may find that perceivers' authenticity accuracy is not independent of their emotion accuracy; we test for this potential effect throughout our studies.

Regardless of a person's emotion accuracy ability, they may still use their *perception* of positive emotion to judge felt authenticity. After all, there is evidence that those who feel authentic typically experience more positive emotions (Heppner et al., 2008; Landa & English, 2021; Lenton et al., 2013). Indeed, research suggests that individuals associate the concept of authenticity being linked to a range of positive emotions and experiences (Lenton et al., 2013). So, it is possible that perceivers may assume that someone who appears to feel positively also feels authentic. For the same reason, the absence of negative emotion may signal that a person is feeling authentic. To account for these possibilities, in all three studies, we examined if perceivers' authenticity accuracy was independent of their perceptions of their partners' positive and negative emotions.

**Emotion suppression.** Although perceived partner emotion may explain authenticity accuracy, partner *emotion suppression* is a variable more closely related to the concept of authenticity insofar as "hiding" internal states is characteristic of inauthenticity. Partner emotion suppression may impact authenticity accuracy for several reasons. First, partners who suppress expressions of emotion may feel and be regarded as less authentic because of their withholding of emotions. Previous research conducted by English and John (2013) observed across three studies that interpersonal effects of emotion suppression (e.g., relationship satisfaction) were not explained by reduced expressions of positive emotion but instead were mediated by subjective feelings of inauthenticity. Such findings raise the possibility that authenticity accuracy may be explained by partner emotion suppression – in this case, authenticity accuracy would not be independent of partner emotion suppression. Second, partners who suppress expressions of emotion may be a "black box" to perceivers, as those partners may display few behavioral cues on which perceivers can base their authenticity judgments. If so, authenticity accuracy may be limited to partners with low emotion suppression – in this case, partner emotion suppression should moderate authenticity accuracy. Thus, authenticity accuracy may (a) be explained by partner emotion suppression and be regarded as less authentic and (b) perceivers' whose partners suppress behavioral expressions of emotion will be less accurate in their judgments of partner felt authenticity. Finally, we assessed these possibilities for trait emotion suppression in all three studies and for state emotion suppression in Studies 1 and 2.

**Relationship characteristics.** Trait authenticity, emotion, and emotion suppression are all individual-level variables that refer either to a perceivers' evaluations of the partner or to the partners' evaluations of themselves. However, Studies 1-3 focus on dyadic interactions between people who have known each other intimately for an extended period of time. It is thus possible that relationship characteristics play an important role in authenticity accuracy. For example,

people who have been in a relationship with their partner for a longer period of time likely have more experience identifying the signs of how authentic their partner feels, potentially making them better at discerning their partners' felt authenticity than people in newer relationships. To examine this possibility, in all three studies we tested whether relationship length moderates authenticity accuracy. Additionally, since authenticity is typically seen as being a positive quality (Lenton et al., 2013), satisfied couples may have more positive views of their partner and thus be more likely to associate their partner as being more authentic. So, individuals high (vs. low) in relationship satisfaction may give their partners higher (vs. lower) ratings of felt authenticity. Thus, in all three studies, we investigated whether relationship satisfaction moderates authenticity accuracy.

### **Authenticity Accuracy for Unacquainted Outside Observers**

Whereas Studies 1-3 focused on authenticity accuracy in close relationships, we conducted two additional studies (Studies 4A & 4B) to examine if accurate felt authenticity judgments are specific to people who know each other (e.g., romantic partners) or if it is an ability that extends to outside observers' perceptions of unacquainted others. As noted earlier, existing evidence on thin-slice judgments suggest that at least some psychological characteristics can be accurately inferred by strangers (Ambady et al., 2000; Weisbuch & Ambady, 2010; Harrigan et al., 2004). Indeed, outside observers may be *more* accurate than relationship partners. That is, relationship partners in Studies 1-3 were engaged in conversations about intimate topics such that they: had to prepare their own responses and respond to partners in real-time and may have been concerned about implications for their relationship. These and other factors (Gilbert & Osborne, 1989) are likely to limit the cognitive resources available for individuals to closely attend to their partners' behaviors, and may thus impair accuracy in authenticity judgments.

To test authenticity accuracy in perceptions of unacquainted others' felt authenticity, in Study 4A we showed thin-slice video clips of a subset of the couples from Study 3 to outside observers who were unacquainted with the individuals in the videos. Half the videos were of targets whose self-reported ratings of felt authenticity were relatively high, while the other half were of targets whose self-reported felt authenticity was relatively low. Outside observers rated the degree to which each of the targets (i.e., specific persons of focus in each couple) in the video clips felt authentic or not during their interaction with their romantic partner. We then compared observers' judgments of the felt authenticity of low-authentic targets to their ratings of the felt authenticity of high-authentic targets. Evidence for authenticity accuracy of unacquainted others would take the form of lower observer ratings of authenticity for low- compared to high-authenticity targets. In Study 4B, we pre-registered a replication of Study 4A with a larger sample of participants.

Much of the past research on authenticity has focused on the benefits of feeling authentic and being perceived as authentic. Yet, the question of whether people are accurate or not when judging others' felt authenticity remains unanswered. To begin to fill this gap, our research aims to investigate three main questions: (1) Do people exhibit above-chance accuracy when judging the felt authenticity of acquainted others in different situation-specific contexts? (2) If so, is this accuracy explained or moderated by factors related to perceptions of emotion, emotion suppression, or relationship characteristics? And (3) Is authenticity accuracy a skill that is limited only to those who know each other? Or do people display above-chance accuracy when judging

the felt authenticity of strangers? Across five studies we explored people's ability to accurately judge the felt authenticity of both familiar and unacquainted others.

### Study 1

In Study 1, we examined if people could discern the degree to which their romantic partner felt authentic after making sacrifices in their relationship. We did this by examining existing data which came from a previous, unrelated study conducted by Impett et al. (2012) that followed couples who filled out daily diary measures in regards to their relationship. Couples filled out these daily measures for a period of two weeks. Among numerous other measures, the daily diary included items tapping into felt and perceived authenticity by members of each couple following a relationship sacrifice made by either partner. We utilized these measures to examine the degree to which people were able to accurately estimate how authentic their partner felt after making a sacrifice.

#### Method

**Participants.** Eighty couples (160 individuals) were recruited from the San Francisco Bay Area by Impett et al. (2012). Couples reported over the course of a 14-day diary study if a sacrifice had been made by either themselves or their romantic partner. For this study, we analyzed a subset of the couples who agreed at some point during the diary study that a sacrifice had been made. From this subset, there were 60 couples (120 individuals) who agreed that a sacrifice had been made (on the same day). A participant was considered a sacrificer if their partner agreed that they made a sacrifice. Among those couples, there were 92 unique sacrificers – in some instances, only one member of the couple was considered a sacrificer. The sample included 56 heterosexual couples and 4 LGBTQ+ couples. Couples had been in a relationship from 6 months to 30 years (median = 14 months;  $SD = 30$  months). Participant gender distribution was made up of 62 women, 56 men, and 2 participants did not report their gender. On average, participants were 23.44 years old ( $SD = 5.84$ , range = 18 to 59). The sample was 53.3% White/European, 5.4% Asian, 6.5% Black/African American, 7.6% Hispanic/Latino, 25% bi- or multi-ethnic, and 2.2% of other ethnicities.

**Procedure.** Before the daily diary procedure, couples came into the lab to fill out a baseline survey about themselves and their relationship, which included measures of trait authenticity, relationship satisfaction, and other demographic information. Subsequently, both members of each couple completed a 10-minute online survey for 14 consecutive nights in which they made ratings about their relationship based on what happened during the day. Pertinent to the present study, participants were asked if they or their partner had made a sacrifice in the relationship that day. If a participant indicated that they had made a sacrifice, they then made ratings on how authentic they felt while making that sacrifice. If a participant indicated that their partner had made a sacrifice, they then rated how authentic they believed their partner felt during that sacrifice.

Participants were informed that in the event that they missed a diary at night, they should complete the diary the morning of the next day; however, they were also told that if they did not complete the diary by the end of the morning of the next day, they should skip that diary. Couples were told that each diary should be completed anonymously, and to not discuss their

answers with their partner during the course of the study, and that the research team would never reveal their responses to one another.

Reminders were sent via email on a nightly basis and a lottery bonus system was employed to incentivize participation. Specifically, each night around 10 p.m., a member of the research team emailed a reminder to all participants who had not yet completed the diary that evening. Participants were also instructed that for every diary they completed on time, a ticket in their name would be entered into a raffle to win an additional \$100, \$50, and \$25 cash prize. Each partner was paid \$30 for participating in the daily diary study.

## Measures

**Daily Sacrifice.** Participants answered yes or no to questions designed to assess whether or not they made a sacrifice that day: “Today, did you do anything that you did not particularly want to do for your partner? Or, did you give up something that you did want to do for the sake of your partner?” (Impett et al., 2005). Participants also answered a similar question to assess whether they believed that their partner had made a sacrifice: “Today, did your partner do anything that he/she did not particularly want to do for you? Or, did your partner give up something that he/she did want to do for your sake?” Some examples of sacrifices include: “I went to an event that I didn’t want to go to but my partner did,” “I did chores because my partner felt sick,” and “I gave up sleeping so I could take my partner to the airport.” As mentioned previously, there were 92 unique sacrificers. There were a total of 218 days in which couples had agreed that a sacrifice had been made and the average couple agreed on sacrifices 48% of the time,  $M = 3.53$ ,  $SD = 3.49$ , and range = 1 to 17.

**Felt and Perceived Authenticity.** Each time that participants reported having made a sacrifice themselves, they answered the following question on a 5-point scale (1 = Strongly disagree, 5 = Strongly agree): “I felt authentic (true to myself) while making this sacrifice.” This question has been used in previous research on sacrifice in relationships and has been demonstrated to be a valid one-item indicator of felt authenticity (e.g., Kogan et al., 2010). When a participant indicated that their partner had made a sacrifice, they then rated how authentic they believed their partner was during that sacrifice on the same 5-point scale, answering the statement, “My partner felt authentic (true to themselves) while making this sacrifice.” We compared ratings of felt and perceived authenticity from each individual day that partners agreed that a sacrifice had been made. For self-reported felt authenticity:  $M = 3.75$ ,  $SD = .93$ , and range = 1 to 5. For perception of partners’ felt authenticity:  $M = 3.82$ ,  $SD = .81$ , and range = 2 to 5. All of the subsequent studies measure felt and perceived authenticity with a similar phrasing to Study 1.

**Trait Authenticity.** In the baseline survey, participants’ trait authenticity was assessed with a five-item measure adapted from Kernis and Goldman (2006) that has been used in previous research on authenticity (e.g., Kraus et al., 2011; Zhang et al., 2019). Participants rated how much they agreed or disagreed with the following statements: “I can be myself with others,” “It is easy to express my true attitudes and feelings during interactions with others,” “My behavior is usually an expression of my true inner feelings, attitudes, and beliefs.” And with the statements, “I feel artificial in my interactions with others” and “I change myself to get along



with others” being reverse-scored. These statements were answered on a 5-point scale (1 = Strongly disagree, 5 = Strongly agree),  $M = 3.71$ ,  $SD = .60$ , range = 1.8 to 5, and  $\alpha = .77$ .

**Emotion and Emotion Accuracy.** Each night during the diary study, participants who had made a sacrifice earlier that day were asked how much they felt eight positive and seven negative emotions while making the sacrifice for their partner on a 5-point scale (1 = Not at all, 5 = A lot). This measure was adapted for use in romantic relationships from a measure of social emotions (Srivastava et al., 2009) and for studies involving romantic couples (Impett et al., 2010). The scale included eight synonymous clusters of positive emotions: amused/having fun, happy/pleased/joyful, proud/good about myself, uplifted/inspired/elevated, affectionate/loving/caring, cared about/loved/connected, compassionate/sympathetic, and grateful/appreciative/thankful,  $M = 2.61$ ,  $SD = .98$ , range = 1 to 5, and  $\alpha = .92$ . The seven negative emotion clusters included: angry/irritable/frustrated, anxious/nervous, guilty/embarrassed/ashamed, sad/depressed/down, criticized/blamed, lonely/isolated, and resentful toward my partner,  $M = 1.42$ ,  $SD = .55$ , range = 1 to 3.57, and  $\alpha = .83$ .

When participants indicated that their partner had made a sacrifice that day, these participants rated their perception of their partners’ emotion for those same positive emotions,  $M = 2.89$ ,  $SD = .930$ , range = 1 to 5, and  $\alpha = .90$ , and negative emotions,  $M = 1.28$ ,  $SD = .45$ , range = 1 to 3.57, and  $\alpha = .81$ , on the same 5-point scales.

We computed scores to index perceivers’ *emotion* accuracy. The emotion accuracy scores were calculated for each participant and each day separately by correlating all perceivers’ *perceptions* of their partners’ emotions with their partners’ self-rated emotions. To illustrate, consider a smaller dataset where participants rate anger, sadness, joy, and gratitude each day. Participant A’s day 1 accuracy would be the correlation between their perception of their partner’s anger, sadness, joy, and gratitude and their partner’s self-rated anger, sadness, joy, and gratitude. The same procedure would be used for the other days. These accuracy ratings ranged from -1 to +1, where values greater than 0 indicated some degree of correspondence between a perceiver’s perception and their partner’s self-rating, which we refer to as emotion accuracy. For the purposes of this paper, we consider both negative and non-significant correlations inaccurate. For Study 1 emotion accuracy:  $M = .49$ ,  $SD = .38$ , and range = -.67 to .96.

**Emotion Suppression.** In the baseline survey, participants’ trait emotion suppression was assessed with three items from the Emotion Regulation Questionnaire (ERQ; Gross & John, 2003). Participants rated how much they agreed or disagreed with the following statements: “I control my emotions by not expressing them,” “When I am feeling negative emotions, I make sure not to express them,” and “When I am feeling positive emotions, I am careful not to express them.” These statements were answered on a 5-point scale (1 = Strongly disagree, 5 = Strongly agree). This three-item measure was combined to assess *trait emotion suppression*,  $M = 2.39$ ,  $SD = .72$ , range = 1 to 4, and  $\alpha = .62$ .

During the daily diary study, if a participant reported that they made a sacrifice during the day, they then rated how much they were withholding their emotions during the sacrifice. This item indexed *state emotion suppression*. Specifically, we examined how much sacrificing partners withheld their negative emotions during the sacrifice by using one item from the ERQ (Gross & John, 2003; e.g., “When I was feeling negative emotions, I was careful not to express

them”). Responses were made on a 5-point scale (1 = Not at all, 5 = A lot),  $M = 2.19$ ,  $SD = 1.17$ , and range = 1 to 5. When participants indicated that their partner made a sacrifice earlier that day, they then rated how they believed their partner felt while making the sacrifice (e.g., “When my partner was feeling negative emotions, he/she was careful not to express them”) on the same 5-point scale (1 = Not at all, 5 = A lot). This item indexed *perceived state emotion suppression*,  $M = 1.88$ ,  $SD = 1.04$ , and range = 1 to 5.

**Relationship Satisfaction.** In the baseline survey, relationship satisfaction was assessed with a four-item measure. All participants rated how much they agreed or disagreed with five statements (Rusbult et al., 1998) on a 7-point scale (1 = Strongly disagree, 7 = Strongly agree). The statements included, “I feel satisfied with our relationship,” “My relationship is much better than others’ relationships,” “My relationship is close to ideal,” “Our relationship makes me very happy,” and “Our relationship does a good job of fulfilling my needs for intimacy, companionship, etc.” We combined these items to measure overall relationship satisfaction,  $M = 6.03$ ,  $SD = .84$ , range = 3.4 to 7, and  $\alpha = .89$ .

## Results

**Data Analytic Strategy.** To test our question regarding whether individuals can accurately judge the felt authenticity of their partner, we focused on days where both a participant reported a sacrifice and their partner agreed that the participant made a sacrifice. This is because the analysis required a sacrificer to self-report felt authenticity and their partner to judge the felt authenticity of the sacrificer. Both measures were only collected when both members of a couple agreed about the sacrifice.

The final dataset for our analysis included repeated measures for individuals and couples. To account for the non-independence of the data, we fit multilevel models with random intercepts for sacrificers’ felt authenticity and random slopes for partner perception of the sacrificer’s felt authenticity. These models ignore that people are in couples, treating all data as only being separate individuals. We chose this model because the model with couple random effects returned 0 variance explained by couples. The default for multilevel models when the estimated variance of a random effect is 0 or near 0 is to just proceed without the variable. For completeness, the full model results are also reported in the Appendix (see Appendix A).

The multilevel models were fit with the statistical modeling package lmerTest 3.1-3 (Kuznetsova et al., 2017) and lme4 1.1-27.1 (Bates et al., 2015) in the programming language R 4.1.2 using Restricted Maximum Likelihood (REML) estimation. The lmerTest package uses the Satterthwaite method to approximate degrees of freedom, and so degrees of freedom are decimal values that vary for each variable and from model-to-model. We rounded the degrees of freedom to the nearest whole. Finally, we provide  $\beta$  estimates by standardizing the variables prior to running the models (Ferron et al., 2008).

### Were Participants Accurate in Their Judgments of their Partners’ Felt Authenticity?

Recall that our primary question was whether or not people would exhibit accuracy in their judgments of their romantic partners’ felt authenticity. As a reminder, authenticity accuracy was operationalized as the correlation between perceivers’ perception of their partners’ felt authenticity and their partners’ self-reported felt authenticity. Specifically, we compared perceived and felt authenticity from each day that partners agreed that a sacrifice had been made. We found that perceivers’ ratings of their partners’ felt authenticity were positively and

significantly associated with their partners' self-reported felt authenticity after making a sacrifice,  $\beta = .19$ ,  $SE = .07$ ,  $t(211) = 2.95$ ,  $p = .004$ . Thus, we found that perceivers exhibited accuracy in evaluating their partners' felt authenticity during day-to-day life events.

### **Was Accuracy in Authenticity Ratings Robust to Trait Authenticity?**

As mentioned in The Present Research section, we aimed to investigate a number of potential variables that may have impacted the accuracy of felt authenticity judgments. First, we examined if perceivers based their ratings on their partners' *trait* authenticity rather than their partners' felt (*state*) authenticity during sacrifices. We found that perceivers were still accurate at judging their partners' felt authenticity even after controlling for their partners' self-reported *trait* authenticity,  $\beta = .16$ ,  $SE = .07$ ,  $t(208) = 2.47$ ,  $p = .02$ . This suggests that perceivers' authenticity accuracy was not simply in reference to their partners' *trait* authenticity but instead referenced the partners state-based felt authenticity.

We also noted earlier that partner trait authenticity may moderate authenticity accuracy. However, there was no significant interaction between perceivers' perceptions of their partners' felt (state) authenticity and their partners' trait authenticity in predicting partners' felt (state) authenticity,  $\beta = .05$ ,  $SE = .08$ ,  $t(183) = .62$ ,  $p = .53$ . In other words, perceivers' authenticity accuracy during the sacrifice events was not moderated by their partners' trait authenticity. Thus, it seems perceivers were able to discern their partners' *felt* (state) authenticity based on the sacrifice events rather than basing their judgments on how authentic their partner is in general.

### **Was Authenticity Accuracy a Byproduct of Emotion Accuracy?**

To determine if authenticity accuracy was a consequence of emotion accuracy, we examined if perceivers' *accurate* perceptions of their partners' emotions during sacrifices affected accuracy of their authenticity judgments. We found that perceivers were still significantly accurate at judging their partners' felt authenticity even after controlling for perceivers' emotion accuracy,  $\beta = .15$ ,  $SE = .06$ ,  $t(207) = 2.30$ ,  $p = .02$ . This suggests that perceivers' authenticity accuracy did not merely reflect their emotion accuracy.

### **Was Authenticity Accuracy a Byproduct of Perceptions of Emotion?**

In a similar vein, we investigated whether perceivers' authenticity accuracy was based on general, non-accuracy-related perceptions of their partners' emotions during sacrifices rather than perceptions of felt authenticity per se. When controlling for the perceivers' perception of their partners' *positive* emotions, perceivers were no longer significantly accurate at judging their partners' felt authenticity during their sacrifices,  $\beta = .12$ ,  $SE = .07$ ,  $t(205) = 1.66$ ,  $p = .10$ . However, we found that perceivers were still significantly accurate at judging their partners' felt authenticity during their sacrifices after controlling for perceivers' perception of their partners' *negative* emotions,  $\beta = .14$ ,  $SE = .07$ ,  $t(191) = 2.13$ ,  $p < .001$ . These results suggest that the significant effect of perceivers' authenticity accuracy may be independent of their perception of their partners' *negative* emotions, but not *positive* emotions during the daily diary study. For positive emotions, this result aligned with our previous concern that perception of partners' positive emotions may explain authenticity accuracy. Before drawing any firm conclusions, we waited to determine if this pattern of effects replicated in the subsequent studies.

### **Was Authenticity Accuracy Robust to Emotion Suppression?**

Perceivers' authenticity accuracy may have been informed by their partners' trait emotion suppression or by how much their partners suppressed their emotions during their sacrifices. To the extent this hypothesis is accurate, authenticity accuracy should be explained by partner emotion suppression (and thus non-significant when including emotion suppression variables as covariates). We thus included both trait emotion suppression and state emotion suppression (withholding negative emotions during the sacrifices) as covariates within our primary authenticity analyses. We found that perceivers were still significantly accurate in their judgments of their partners' felt authenticity even after controlling for their partners' *trait* emotion suppression,  $\beta = .19$ ,  $SE = .07$ ,  $t(208) = 2.94$ ,  $p = .004$ , or their partners' *state* emotion suppression during their sacrifices,  $\beta = .15$ ,  $SE = .07$ ,  $t(212) = 2.36$ ,  $p = .02$ . These findings suggest that authenticity accuracy was robust to partner emotion suppression.

We argued earlier that authenticity accuracy may be reduced for perceivers whose partners suppress their expression of emotion. In this case, we would expect emotion suppression to moderate authenticity accuracy. However, we did not observe a significant interaction between perceivers' perceptions of their partners' felt authenticity and their partners' *trait* emotion suppression,  $\beta = .03$ ,  $SE = .06$ ,  $t(204) = .42$ ,  $p = .68$ , or their partners' *state* emotion suppression during their sacrifices,  $\beta = -.01$ ,  $SE = .07$ ,  $t(198) = -.14$ ,  $p = .89$  – neither interaction term accounted for significant variance in partner's self-reported felt authenticity. Together, the results of our covariate and moderator analyses suggest that authenticity accuracy was not impacted by partner emotion suppression.

We also examined whether *perceptions* of partners' state emotion suppression during the sacrifice events may have affected perceivers' authenticity accuracy. Similar to partners' feelings of emotion suppression, we found that *perceptions* of partners' state emotion suppression did not impact perceivers' authenticity accuracy. More specifically, perceivers remained significantly accurate at judging their partners' felt authenticity even after controlling for their perception of their partners' state emotion suppression during their sacrifices,  $\beta = .18$ ,  $SE = .07$ ,  $t(198) = 2.65$ ,  $p = .01$ . Additionally, there was no significant interaction between perceivers' perceptions of their partners' felt authenticity and their perception of their partners' state emotion suppression in predicting their partners' self-reported felt authenticity,  $\beta = .01$ ,  $SE = .05$ ,  $t(164) = .22$ ,  $p = .83$ . Overall, neither trait nor state emotion suppression, nor perceptions of partner emotion suppression altered perceivers' ability to accurately judge their partners' felt authenticity. Authenticity accuracy was robust to partner emotion suppression.

### **Was Authenticity Accuracy Robust to Relationship Characteristics?**

Authenticity accuracy may potentially be strengthened by longer or more satisfying relationships. To determine if relationship aspects altered the accuracy of perceivers' judgments of their partners' felt authenticity, we investigated the moderating effects of (a) relationship length and (b) relationship satisfaction on perceivers' authenticity accuracy. No such interactions were statistically significant. Relationship length did not interact with perceptions of partners' felt authenticity in predicting partner felt authenticity,  $\beta = -.20$ ,  $SE = .16$ ,  $t(160) = -1.26$ ,  $p = .21$ . Relationship satisfaction did not interact with perceptions of partner felt authenticity in predicting partners' felt authenticity,  $\beta = -.01$ ,  $SE = .06$ ,  $t(185) = -.11$ ,  $p = .91$ . Altogether, these results suggest that neither the length of the relationship nor the satisfaction with the relationship moderate the accuracy of perceivers' judgments of their partners' felt authenticity.

### Was Authenticity Accuracy Robust to Gender?

We did not have any initial hypotheses regarding gender, but because gender is likely to be a moderator of interest to readers, we present results involving gender<sup>2</sup> here. Since our measures of felt authenticity were only analyzed when both members of a couple agreed that a sacrifice had been made, we had an uneven distribution of men and women that were either the perceiver or the sacrificer. Specifically, of the sacrificers, 44 were women, 46 were men, and 2 did not report their gender. For this reason, we tested whether perceivers' gender or the sacrificers' (i.e., their partners') gender may have been a moderating variable for authenticity accuracy. We did not find any significant interactions between perceivers' perceptions of their partners' felt authenticity and the *perceivers'* gender,  $\beta = .15$ ,  $SE = .13$ ,  $t(209) = 1.09$ ,  $p = .28$ , or the *sacrificers'* gender,  $\beta = -.14$ ,  $SE = .13$ ,  $t(206) = -1.06$ ,  $p = .29$ , in predicting partners' felt authenticity during the sacrifice. Of course we note that our sample size in this study was relatively small, and thus may not have been large enough for a robust test of gender moderation. Overall, though, these results provide at least preliminary evidence that gender was not likely a moderating factor of authenticity accuracy.

### Discussion

In Study 1, couples participated in a 14-day diary study in which they reported nightly on whether or not they or their romantic partner had made a sacrifice earlier in the day. If a sacrifice had occurred, participants made ratings about how authentic they felt and how authentic they believed their partner felt during the sacrifice. We compared participants' perceptions of how authentic they thought their partner was while their partner was making a sacrifice to how authentic their partner had self-reported feeling authentic while making the sacrifice. We found that people exhibited accuracy when judging their romantic partners' felt authenticity after their partner had made a sacrifice. This is some of the first evidence to support that people can accurately estimate another person's felt authenticity. This authenticity accuracy held even after accounting for partners' *trait* authenticity, perceivers' accuracy in emotion recognition, perceived negative emotions during the sacrifice events, trait and state emotion suppression, or relationship length and satisfaction. We also found that gender did not moderate authenticity accuracy. However, we did find that perceivers' authenticity accuracy may not be independent of their perception of their partners' positive emotions. We examined whether this result would replicate in Studies 2-3.

Because of the nature of the diary study, participants made daily perceived and felt ratings of authenticity about a sacrifice that could have happened at any point during the given day. In other words, no matter when the sacrifice event took place, participants did not make ratings about the sacrifice until later in the evening. This raises the question of whether authenticity accuracy may be affected by time passed between the sacrifice event and when the ratings of both perceived and felt authenticity were made. For example, perhaps accurate judgments of felt authenticity are a result of having more time to reflect on the experience that happened earlier in the day. That is, "being in the moment" might cloud one's judgment about how they or how their partner really feels, whereas being more removed from the situation may lead to clearer judgments. On the other hand, it could be that the retroactive ratings of perceived

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<sup>2</sup> When referencing gender in this paper, we use 'men' and 'women' to refer to cisgender men and women unless otherwise noted.

and felt authenticity during the sacrifice event were not as precisely reported due to the time lapse between the event and the ratings. Although we still found authenticity accuracy among raters who retroactively reported their feelings and judgments after sacrifice events in a daily diary study, we wondered if the ability to accurately estimate the felt authenticity of others would hold in more immediate, current situations – for example, would individuals still be accurate in their judgments of their partners' felt authenticity immediately after interacting with them? In Study 2, we investigated if couples were still accurate in judging their partners' felt authenticity directly after having a conversation.

## Study 2

In Study 2, we analyzed data from a previous, unrelated study conducted by Le and colleagues (2020). In this study, couples discussed two conversation topics in the lab, one about a change they wanted made in their relationship and another about a distressing event that occurred in their lives that did not involve their romantic partner or their relationship. Participants took turns being either the speaker or listener for each conversation topic. In total, participants had four conversations with their partner – two for each topic switching roles between conversations. We capitalized on self-reports of feelings and perceptions of authenticity during the conversations, as assessed from participants immediately after each conversation with their partner.

### Method

**Participants.** One-hundred and ten couples (220 individuals) were recruited from the community in the Greater Toronto Area from the original study conducted by Le and colleagues (2020). The sample included 105 heterosexual couples and 5 LGBTQ+ couples. Couples had been in a relationship from 11 months to 23 years (median = 38 months; *SD* = 41 months). Participant gender distribution was made up of 109 women, 106 men, 1 transgender individual, and 2 participants did not report their gender. On average, participants were 26.76 years old (*SD* = 7.17, range = 18 to 57). The sample was 37.3% White/European, 30.9% Asian, 2.3% Black/African American, 11.4% Hispanic / Latino, 10.5% bi- or multiethnic, 6.4% of other ethnicities, and 1.4% unreported.

**Procedure.** Participants first completed an online baseline questionnaire before coming into the lab. Baseline measures included questions about themselves and their relationship, as well as demographic information. Later, couples came into the lab and were video recorded while discussing two conversation topics – one in which they discussed a characteristic about their relationship that they would like their partner to change and the other in which they discussed a distressing personal event that did not involve their partner. The order of the two topics was counterbalanced. For each topic, there were two conversations – one conversation regarded an issue identified by Partner A and the other conversation regarded an issue identified by Partner B. Partners were randomly assigned to either start as the speaker (who identified the issue) or the listener and switched roles for the second part of each conversation topic. Thus, there were four conversations in total (two per topic). For each of the two conversation topics, a conversational structure was used as in past research (Fritz et al., 2003). Couples were first given the prompt to discuss. Speakers were given one minute to think about what they wanted to discuss related to the topic and then given one minute to answer the prompt to the listener. The

listener then responded for one minute. The speaker spoke for an additional one minute, followed by another minute by the listener. Finally, both partners spoke freely for an additional two minutes. At the end of each individual conversation, both partners rated how authentic they felt *during* their discussion and how authentic they believed their partner felt *during* the conversation, along with other measures. Couples then repeated this procedure for the same topic, with participants switching speaker and listener roles for the second conversation. This format followed for both conversation topics.

Overall, participants had a total of four conversations: two about a change desired in the relationship and two about a topic of personal distress. To help distinguish the two topics, we will refer to these conversations with the titles: Change and Distress.

## Measures

**Felt and Perceived Authenticity.** Directly after each conversation ended, participants indicated how much they felt authentic during their conversation with their partner. Specifically, participants rated their agreement with the statement, “I felt authentic (true to myself) in this conversation,” on a 7-point scale (1= Strongly disagree, 7 = Strongly agree). Self-reported felt authenticity for the Change conversations:  $M = 6.09$ ,  $SD = .90$ , and range = 2 to 7. Self-reported felt authenticity for the Distress conversations:  $M = 6.04$ ,  $SD = 1.10$ , and range = 1 to 7. Participants then rated how authentic they believed their partner felt during the conversation on the same 7-point scale, answering the statement, “My partner felt authentic (true to themselves) in this conversation.” Perception of partners’ felt authenticity for the Change conversations:  $M = 5.97$ ,  $SD = 1.08$ , and range = 1 to 7. Perception of partners’ felt authenticity for the Distress conversations:  $M = 5.98$ ,  $SD = 1.12$ , and range = 1 to 7.

**Emotion and Emotion Accuracy.** As noted, romantic partners took turns either being the speaker or the listener during each conversation. Participants were asked to rate how much they felt specific emotions during each conversation on a 10-point scale (1 = Not at all, 10 = As much as I’ve ever felt) when they were in both the speaker and the listener roles. In the original study conducted by Le and Colleagues (2020), the authors gathered different emotion data per conversation topic (i.e., Change or Distress) and per role (i.e., speaker or listener). For example, in the Change conversations, speakers rated themselves on how much they felt 16 negative emotions whereas listeners rated themselves on how much they felt 18 negative emotions. For this study, we allowed the rated emotions to vary by conversation topic (i.e., Change and Distress), but we utilized only the overlapping emotions that were rated by both the speaker and the listener within each conversation.

In the Change conversations, participants rated how much they felt 16 negative emotions (e.g., angry, annoyed, hostile, sad, upset, down, criticized, blamed, resentment, contempt, anxious, stressed, nervous, guilt, embarrassed, and ashamed),  $M = 2.84$ ,  $SD = 1.84$ , range = 1 to 9.44, and  $\alpha_{\text{speaker}} = .95$ ,  $\alpha_{\text{listener}} = .94$ , and three positive emotions (e.g., happy, grateful, and interested) during their conversations,  $M = 4.35$ ,  $SD = 2.42$ , range = 1 to 10, and  $\alpha_{\text{speaker}} = .78$ ,  $\alpha_{\text{listener}} = .82$ . They then rated how much they believed their partner felt those same negative emotions,  $M = 3.08$ ,  $SD = 1.94$ , range = 1 to 9.44, and  $\alpha_{\text{speaker}} = .95$ ,  $\alpha_{\text{listener}} = .95$ , and positive emotions,  $M = 3.73$ ,  $SD = 2.15$ , range = 1 to 10, and  $\alpha_{\text{speaker}} = .77$ ,  $\alpha_{\text{listener}} = .70$ , during their conversations on the same 10-point scale.

For the Distress conversations, participants rated how much they felt eight negative emotions (e.g., sad, upset, down, anxious, stressed, nervous, angry, and embarrassed) during the conversations,  $M = 3.26$ ,  $SD = 1.90$ , range = 1 to 9.25, and  $\alpha_{\text{speaker}} = .89$ ,  $\alpha_{\text{listener}} = .89$ . Participants then rated how much they believed their partner felt those same negative emotions during their conversations,  $M = 3.35$ ,  $SD = 1.97$ , range = 1 to 9.63, and  $\alpha_{\text{speaker}} = .84$ ,  $\alpha_{\text{listener}} = .89$ . Since the Distress conversations only included one positive emotion item (e.g., grateful), we were not able to create a positive emotion composite. For this reason, we only examined the negative emotion composite for the Distress conversation in this study.

Emotion accuracy scores were calculated the same way as in Study 1. However, instead of emotion accuracy scores being calculated for each participant and *each day*, they were calculated for each participant and *each conversation*. The rest of the method was the same as in Study 1: we correlated a range of self-reported feelings of one participant with the perceptions of their partner to create an emotion accuracy score ranging between -1 and 1. Emotion accuracy for the Change conversations:  $M = .25$ ,  $SD = .37$ , and range = -.71 to .97. Emotion accuracy for the Distress conversations:  $M = .36$ ,  $SD = .39$ , and range = -.81 to 1.

**Emotion Suppression.** During the baseline questionnaire, trait emotion suppression was assessed with the same three items from the ERQ used in Study 1 plus an additional statement from the ERQ: “I keep my emotions to myself.” All four of these items answered on a 9-point scale (1 = Strongly disagree, 9 = Strongly agree) and were combined to measure *trait* emotion suppression,  $M = 4.45$ ,  $SD = 2.07$ , range = 1 to 9, and  $\alpha = .70$ .

State emotion suppression was assessed directly after each conversation. Participants rated how much they agreed with statements about their experience holding back emotions during the conversation: “When I was feeling negative emotions, I made sure not to express them to my partner,” and “I kept my negative emotions to myself” on a 7-point scale (1 = Strongly disagree, 7 = Strongly agree). This two-item measure was combined to assess *state emotion suppression* during each conversation. Self-reported state emotion suppression for the Change conversations:  $M = 2.76$ ,  $SD = 1.61$ , range = 1 to 7, and  $\alpha_{\text{speaker}} = .87$ ,  $\alpha_{\text{listener}} = .88$ . Self-reported state emotion suppression for the Distress conversations:  $M = 2.73$ ,  $SD = 1.58$ , range = 1 to 7, and  $\alpha_{\text{speaker}} = .84$ ,  $\alpha_{\text{listener}} = .88$ .

Participants also rated how much they believed their partner was withholding their emotions (*perceived state emotion suppression*) on the same two-item measure with the same 7-point scale. Perceived state emotion suppression for the Change conversations:  $M = 2.79$ ,  $SD = 1.55$ , range = 1 to 7, and  $\alpha_{\text{speaker}} = .88$ ,  $\alpha_{\text{listener}} = .89$ . Perceived state emotion suppression for the Distress conversations:  $M = 2.70$ ,  $SD = 1.44$ , range = 1 to 7, and  $\alpha_{\text{speaker}} = .83$ ,  $\alpha_{\text{listener}} = .78$ .

**Relationship Satisfaction.** Relationship satisfaction was assessed at baseline with the single-item version of the Relationship Assessment Scale (RAS-1; Hendrick 1988). Participants answered, “In general, how satisfied are you with your relationship?” on a 6-point scale (1 = Not at all, 6 = Completely),  $M = 4.95$ ,  $SD = 1.01$ , and range = 1 to 6.



## Results

**Data Analytic Strategy.** Since partners in each couple took turns being either the ‘speaker’ or the ‘listener’ for each of the two conversation topics, couples had a total of four conversations. We analyzed each conversation topic in separate models. To account for the non-independence of the couples, we fit multilevel models with random intercepts for couples and random slopes for perceivers’ perception of their partners’ felt authenticity. For simplicity and to directly test our core question about whether people have a general ability to accurately judge felt authenticity, we ran the analyses without accounting for role (speaker or listener) such that the results estimate an average accuracy across roles. This analytic decision was further supported by there being no significant main effect of role or moderation of authenticity accuracy by role.<sup>3</sup> In summary, we present two analyses, one for each conversation, that estimate overall authenticity accuracy regardless of role.

The multilevel models were run using the same method and analysis software as in Study 1.

**Feelings and Perceptions of Authenticity Across Conversation Topics.** In Study 2, we examined accuracy in judgments of felt authenticity directly after having conversations with one’s romantic partner. As seen in *Table 1*, participants’ mean levels of self-reported felt authenticity were high on a 7-point scale during both the Change conversations,  $M = 6.09$ , and Distress conversations,  $M = 6.04$ . This suggests that most participants did feel as though they could be authentic during these conversations with their romantic partner. Despite these high levels of felt authenticity, there was still substantial variability in both the Change conversations,  $SD = .90$  and Distress conversations,  $SD = 1.10$ , of approximately one full scale point on the 7-point scale. This was the same case for perceptions of felt authenticity. That is, perceivers’ mean level perceptions of their partners’ felt authenticity were high for both the Change conversations,  $M = 5.97$ , and Distress conversations,  $M = 5.98$ . Additionally, there was still variability among perceivers’ perception of partners’ felt authenticity in both the Change conversations,  $SD = 1.08$  and Distress conversations,  $SD = 1.12$ , of approximately one full scale point on the 7-point scale.

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<sup>3</sup> This is the same as analyzing the data as indistinguishable dyads (Olsen & Kenny, 2006). Gender is often the distinguishing variable in couples data, but our data includes same-gender couples. Role is theoretically important and unique for each conversation, making it suitable as a distinguishable variable. Distinguishability tests for the primary analysis (self-reported authenticity predicted by partner perception of authenticity) indicated that distinguishing by role was not significantly better than the indistinguishable model in either the Change conversations,  $\chi^2(2) = 4.4$ ,  $p = .111$ , or Distress conversations,  $\chi^2(2) = 1.94$ ,  $p = .389$ .

**Table 1**

Study 2: Felt and Perceived Authenticity Across Conversation Topics

	Change Conversations		Distress Conversations	
	Felt Authenticity	Perceived Authenticity	Felt Authenticity	Perceived Authenticity
<i>M</i>	6.09	5.97	6.04	5.98
<i>SD</i>	.90	1.08	1.10	1.12

Table 1. Self-reported felt and perceived authenticity during the Change and Distress conversations. Participants rated authenticity on a 7-point scale.

To test whether mean levels of felt and perceived authenticity were indeed similar across conversation topics, we subjected these means to a 2 x 2 (Change vs. Distress Conversation Topic x Felt vs. Perceived Authenticity) within-subjects ANOVA using a multilevel model. The results indicated that there was no interaction between self-reported feelings of authenticity versus perceptions of partners' felt authenticity and conversation topic,  $F(1, 693) = .82, p = .37$ . There was only a main effect of self-reported feelings of authenticity versus perceptions of partners' felt authenticity,  $F(1, 140) = 5.64, p = .02$ , with felt authenticity being higher than perceived authenticity. The effect of conversation topic was not significant,  $F(1, 113) = .08, p = .78$ . Collapsing across conversation topics, participants rated their partners as significantly less authentic than themselves,  $b = -0.09, SE = .04, t(275) = -2.29, p = .02$ , but the practical difference on a 7-point scale is very small. Thus, participants felt as if they were able to express their true selves to their romantic partner more than they perceived their partner as feeling authentic, but both felt and perceived authenticity were relatively high overall. This was true regardless of the conversation being about a personally distressing topic (self-focused) or a topic of desired change in their relationship (relationship-focused). More pertinent to the key question of accuracy in authenticity perceptions, these numbers indicate that although mean levels were generally high for both self-reported felt authenticity and perceived levels of partners' felt authenticity, there was still variability – these means were higher or lower for some couples compared to others – making it possible to detect potential correspondence between felt and perceived authenticity, which we turn to next.

### Were Participants Accurate in Their Judgments of their Partners' Felt Authenticity?

As in Study 1, our primary question was whether individuals had the ability to accurately judge their romantic partners' felt authenticity during their interactions. We found that perceivers were accurate in estimating their romantic partners' felt authenticity during both the Distress and Change conversations. Perceivers were significantly accurate in judging their partners' felt authenticity when the couples discussed a change they wanted in their relationship,  $\beta = .38, SE = .06, t(62) = 6.64, p < .001$ , and when the couples discussed a topic of personal distress,  $\beta = .46, SE = .06, t(79) = 7.81, p < .001$ . This is the second study in which we have found significant correspondence between self-reported feelings and perceived ratings of authenticity between partners. Furthermore, in this study, we found that perceivers were accurate when judging their partners' felt authenticity across four conversations and two different topics.

### **Was Authenticity Accuracy Robust to Trait Authenticity?**

In Study 2, we did not have a direct self-report measure of trait authenticity. However, because couples had engaged in two different conversation topics (i.e., Change and Distress), we were able to examine whether perceivers' authenticity accuracy in one conversation was independent of their perception of their partners' felt authenticity in the other conversation. To further explain, if participants had based their judgments of their partners' felt authenticity on how authentic their partner usually is (trait authenticity), then their perception of their partners' felt authenticity in one conversation should not be independent of their perception of their partners' felt authenticity in the next conversation. Thus, we investigated whether perceivers' authenticity accuracy during the Change conversations remained significant after controlling for their perceptions of partners' authenticity in the Distress conversations, and vice versa.

We found that perceivers remained significantly accurate at judging their partners' felt authenticity in the Change conversations even after controlling for their perception of their partners' felt authenticity in the Distress conversations,  $\beta = .23$ ,  $SE = .06$ ,  $t(70) = 4.52$ ,  $p < .001$ . We found a similar result for the Distress conversations. Specifically, we found that perceivers remained significantly accurate at judging their partners' felt authenticity in the Distress conversations even after controlling for their perception of their partners' felt authenticity in the Change conversations,  $\beta = .39$ ,  $SE = .06$ ,  $t(102) = 6.19$ ,  $p < .001$ . These results indicated that participants' accuracy in judgments of their partners' authenticity in one conversation topic was independent of their judgments in the other conversation topic. Thus, participants were sensitive to *felt* differences in authenticity — they did not appear to rely on inferences about *trait* authenticity to guide their authenticity judgments in both conversations.

### **Was Authenticity Accuracy a Byproduct of Emotion Accuracy?**

In Study 1, we observed that authenticity accuracy was independent of emotion accuracy. Yet it is possible such independence would not be obtained in Study 2. Perhaps emotions during the conversations were more salient at the time of rating, and thus have more of an effect on authenticity accuracy than did the retrospective ratings made in Study 1. Perceivers remained significantly accurate in their judgments of their partners' felt authenticity even after controlling for their own emotion accuracy for both the Change conversations,  $\beta = .39$ ,  $SE = .06$ ,  $t(59) = 6.53$ ,  $p < .001$ , and Distress conversations,  $\beta = .48$ ,  $SE = .06$ ,  $t(65) = 7.60$ ,  $p < .001$ . Additionally, there were no significant 3-way interactions between the perceivers' perceptions of their partners' felt authenticity, their emotion accuracy, and role (i.e., speaker or listener) in predicting their partners' felt authenticity during the either the Change conversations,  $\beta = .14$ ,  $SE = .12$ ,  $t(345) = 1.20$ ,  $p = .23$ , or Distress conversations  $\beta = -.21$ ,  $SE = .11$ ,  $t(213) = -1.92$ ,  $p = .06$ . Overall, these results provide further evidence that authenticity accuracy was not a product of emotion accuracy for either the Change or Distress conversations.

### **Was Authenticity Accuracy a Byproduct of Perceptions of Emotion?**

As a reminder, in Study 1 we had found that perceivers' authenticity accuracy was not independent of their perception of their partners' positive emotions. We examined if this result would replicate in Study 2. It did not. We found that perceivers in Study 2 were still significantly accurate at judging their partners' felt authenticity even after controlling for their perceptions of their partners' *positive* emotions in the Change conversations,  $\beta = .38$ ,  $SE = .06$ ,  $t(58) = 6.50$ ,  $p <$

.001<sup>4</sup>. Lastly, there was no significant 3-way interaction between perceivers' perceptions of their partners' felt authenticity, their perceptions of their partners' positive emotions, and role in predicting their partners' felt authenticity during the Change conversations,  $\beta = -.05$ ,  $SE = .10$ ,  $t(255) = -.52$ ,  $p = .60$ . Overall, though, we found that perceivers' authenticity accuracy in the Change conversations was not significantly affected by their perceptions of their partners' positive emotion during the conversations – a result that was in direct contrast to our finding in Study 1.

We performed the same analyses but with perceptions of partners' negative emotions. We found that perceivers remained significantly accurate at judging their partners felt authenticity even after controlling for their perceptions of their partners' negative emotion in both the Change conversations,  $\beta = .39$ ,  $SE = .06$ ,  $t(58) = 6.42$ ,  $p < .001$ , and Distress conversations,  $\beta = .48$ ,  $SE = .06$ ,  $t(73) = 7.76$ ,  $p < .001$ . Also, there were no significant 3-way interactions between perceivers' perceptions of their partners' felt authenticity, their perception of their partners' negative emotions, and role in predicting their partners' felt authenticity during the either the Change conversations,  $\beta = -.01$ ,  $SE = .10$ ,  $t(268) = -.10$ ,  $p = .92$ , or Distress conversations,  $\beta = -.07$ ,  $SE = .11$ ,  $t(294) = -.63$ ,  $p = .53$ . Altogether, these results suggest again that authenticity accuracy is independent of perceptions of partners' emotion.

### **Was Authenticity Accuracy Robust to Emotion Suppression?**

As mentioned previously, we wondered whether authenticity accuracy may be reduced to the extent that a partner suppressed emotion and/or that the perceiver believed their partner suppressed their emotions. We tested this by examining the influence of both partners' typical (trait) emotion suppression and their state emotion suppression (i.e., suppressing during the conversations). We found that in the Change conversations, perceivers were still significantly accurate at judging their partners' felt authenticity even after controlling for their partners' *trait* emotion suppression,  $\beta = .41$ ,  $SE = .06$ ,  $t(61) = 6.92$ ,  $p < .001$ , or their partners' *state* emotion suppression during the conversations,  $\beta = .33$ ,  $SE = .06$ ,  $t(68) = 5.89$ ,  $p < .001$ . We found the same result in the Distress conversations: perceivers were still significantly accurate at judging their partners' felt authenticity even after controlling for their partners' *trait* emotion suppression,  $\beta = .47$ ,  $SE = .06$ ,  $t(78) = 8.09$ ,  $p < .001$ , or their partners' *state* emotion suppression during the conversations,  $\beta = .45$ ,  $SE = .06$ ,  $t(81) = 7.71$ ,  $p < .001$ . As in the parallel analyses in Study 1, these results suggest that perceivers' authenticity accuracy was robust to partners' trait and state emotion suppression.

We also examined whether emotion suppression might moderate authenticity accuracy. In brief, emotion suppression did not moderate authenticity accuracy in any conversation or analysis. Specifically, in the Change conversations, we did not find any significant interactions between perceivers' perceptions of their partners' felt authenticity and their partners' *trait* emotion suppression,  $\beta = -.07$ ,  $SE = .06$ ,  $t(215) = -1.20$ ,  $p = .23$ , nor *state* emotion suppression during the conversations,  $\beta = -.03$ ,  $SE = .05$ ,  $t(155) = -.63$ ,  $p = .53$ , in predicting their partners' felt authenticity. There was also no significant 3-way interaction in the Change conversations for perceivers' perception of their partners' felt authenticity, their partners' trait emotion suppression, and role in predicting partners' felt authenticity,  $\beta = -.09$ ,  $SE = .11$ ,  $t(275) = -.81$ ,  $p = .42$ . Nor was there a significant 3-way interaction for perceivers' perception of their partners'

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<sup>4</sup> As mentioned in the Measures section, we could not create a composite of positive emotions in the Distress conversations because this dataset only included one positive emotion item for the Distress topic (i.e., grateful). For this reason, we were unable to conduct these same analyses for the Distress topic.

felt authenticity, their partners' state emotion suppression during the Change conversations, and role in predicting partners' felt authenticity,  $\beta = -.07$ ,  $SE = .09$ ,  $t(302) = -.82$ ,  $p = .41$ .

Analyses on the Distress conversations produced similar results: there were no significant interactions between perceivers' perception of their partners' felt authenticity and their partners' *trait* emotion suppression,  $\beta = -.03$ ,  $SE = .05$ ,  $t(270) = -.65$ ,  $p = .52$ , nor their partners' *state* emotion suppression during the conversations,  $\beta = .08$ ,  $SE = .05$ ,  $t(287) = 1.56$ ,  $p = .12$ , in predicting partners' felt authenticity. There was also no significant 3-way interaction for perceivers' perception of their partners' felt authenticity, their partners' trait emotion suppression during the Distress conversations, and role in predicting partners' felt authenticity,  $\beta = .07$ ,  $SE = .10$ ,  $t(346) = .74$ ,  $p = .46$ . And there was no significant 3-way interaction for perceivers' perception of their partners' felt authenticity, their partners' state emotion suppression during the Distress conversations, and role in predicting partners' felt authenticity,  $\beta = -.03$ ,  $SE = .09$ ,  $t(375) = -.31$ ,  $p = .76$ . Overall, across both conversation topics, perceivers were still accurate in judging their partners' felt authenticity even after taking their partners' trait and state emotion suppression into account.

We then examined the degree to which perceivers' authenticity accuracy may have been impacted by their *perceptions* of their partners' state emotion suppression. We found that perceivers remained significantly accurate in their judgments of their partners' felt authenticity even after controlling for their perceptions of their partners' state emotion suppression for both the Change conversations,  $\beta = .38$ ,  $SE = .06$ ,  $t(68) = 6.33$ ,  $p < .001$ , and the Distress conversations,  $\beta = .46$ ,  $SE = .06$ ,  $t(85) = 7.45$ ,  $p < .001$ . Additionally, we tested interactions to investigate whether perceivers' perceptions of their partners' state emotion suppression moderates their authenticity accuracy. The results here differ from those for partners' actual state and trait emotion suppression. There was a significant interaction for the Change conversations between perceivers' perception of their partners' felt authenticity and perception of their partners' emotion suppression in predicting their partners' felt authenticity,  $\beta = -.19$ ,  $SE = .04$ ,  $t(126) = -4.22$ ,  $p < .001$ . Simple slopes analysis revealed that authenticity accuracy remained significant in the Change conversations, whether perceivers thought that their partners were relatively *low* in suppressing emotion [ $\beta = .61$ ,  $SE = .08$ ,  $t(135) = 7.67$ ,  $p < .001$ ] or relatively *high* in suppressing emotion [ $\beta = .23$ ,  $SE = .06$ ,  $t(59) = 3.63$ ,  $p < .001$ ], even though accuracy was significantly higher when perceptions of partners' state emotion suppression were low.

We conducted the same moderator analysis for the Distress conversations, and failed to observe a significant interaction. Specifically, we did not find a significant interaction between perceivers' perception of their partners' felt authenticity and their perceptions of their partners' state emotion suppression in predicting their partners' felt authenticity,  $\beta = .01$ ,  $SE = .04$ ,  $t(235) = .30$ ,  $p = .77$ . There were also no significant 3-way interactions for perceivers' perceptions of their partners' felt authenticity, perception of state emotion suppression, and role in predicting partners' felt authenticity in either the Change conversations,  $\beta = -.14$ ,  $SE = .09$ ,  $t(260) = -1.52$ ,  $p = .13$ , or Distress conversations,  $\beta = -.09$ ,  $SE = .08$ ,  $t(296) = -1.11$ ,  $p = .27$ . All in all, it seems as though trait and state emotion suppression, as well as perceptions of state emotion suppression, did not impede perceivers' authenticity accuracy for either of the conversation topics or either role.

### **Was Authenticity Accuracy Robust to Relationship Characteristics?**

Similar to Study 1, we examined whether relationship length and/or relationship satisfaction could impact authenticity accuracy. We found that relationship length did not

interact with perceivers' perception of their partners' felt authenticity in predicting their partners' felt authenticity for either the Change conversations,  $\beta = .06$ ,  $SE = .07$ ,  $t(127) = .88$ ,  $p = .38$ , or Distress conversations,  $\beta = .12$ ,  $SE = .08$ ,  $t(167) = 1.55$ ,  $p = .12$ . There were also no significant 3-way interactions between perceivers' perception of their partners' felt authenticity, relationship length, and role in predicting their partners' felt authenticity for either the Change conversations,  $\beta = -.13$ ,  $SE = .13$ ,  $t(285) = -.94$ ,  $p = .35$ , or Distress conversations,  $\beta = -.12$ ,  $SE = .13$ ,  $t(391) = -.86$ ,  $p = .39$ . Thus, relationship length did not moderate authenticity accuracy.

We also found that relationship satisfaction did not interact with perceivers' perception of their partners' felt authenticity in predicting their partners' felt authenticity for either the Change conversations,  $\beta = .04$ ,  $SE = .05$ ,  $t(101) = .74$ ,  $p = .46$ , or Distress conversations,  $\beta = -.30$ ,  $SE = .05$ ,  $t(86) = -.57$ ,  $p = .57$ . There were no significant 3-way interactions between perceivers' perception of their partners' felt authenticity, relationship satisfaction, and role in predicting partners' felt authenticity for either the Change conversations,  $\beta = -.02$ ,  $SE = .09$ ,  $t(281) = -.23$ ,  $p = .82$ , or Distress conversations,  $\beta = .03$ ,  $SE = .08$ ,  $t(392) = .37$ ,  $p = .71$ . Altogether, these results give evidence that perceivers are accurate in their judgments of their partners' felt authenticity regardless of their relationship length or relationship satisfaction.

### **Was Authenticity Accuracy Robust to Gender?**

As in the previous study, we did not have any firm hypotheses about gender, but we conducted exploratory analyses to examine the potential of gender moderating authenticity accuracy. In the Change conversations, gender did not significantly interact with perceivers' perception of their partners' felt authenticity in predicting their partners' felt authenticity,  $\beta = .02$ ,  $SE = .10$ ,  $t(297) = .22$ ,  $p = .83$ .

In the Distress conversations, however, we found a significant interaction between perceivers' perception of their partners' felt authenticity and gender in predicting their partners' felt authenticity,  $\beta = .29$ ,  $SE = .10$ ,  $t(336) = 3.01$ ,  $p = .003$ . Simple slopes analysis revealed that in the Distress conversations, both men [ $\beta = .35$ ,  $SE = .07$ ,  $t(111) = 4.89$ ,  $p < .001$ ] and women [ $\beta = .64$ ,  $SE = .08$ ,  $t(151) = 4.89$ ,  $p < .001$ ] were significantly accurate in their judgments of their partners' felt authenticity, even though accuracy was significantly greater when perceivers were women. Lastly, there were no significant 3-way interactions between perceivers' perception of their partners' felt authenticity, gender, and role in predicting their partners' felt authenticity for either the Change conversations,  $\beta = .11$ ,  $SE = .19$ ,  $t(309) = .55$ ,  $p = .58$ , or Distress conversations,  $\beta = .04$ ,  $SE = .18$ ,  $t(380) = .23$ ,  $p = .82$ . Overall, these results suggest that gender did not moderate authenticity accuracy for the Change conversations but that it was a moderator of the strength of the effect for authenticity accuracy in the Distress conversations, but significant for both men and women. Similar to the previous study, due to the relatively small sample size of our couples data, any conclusions about gender should be viewed with caution.

## **Discussion**

Participants in Study 2 displayed accuracy in discerning their romantic partners' felt authenticity during a conversation, and such accuracy was robust to different conversation topics, different roles, and in a total of four conversations. More specifically, in both the Change and Distress conversations, perceivers were significantly able to judge how authentic their partner felt during their conversations regardless of whether they or their partner was the speaker or the listener. Perceivers' authenticity accuracy held even after accounting for trait levels of partners'

authenticity (via cross-conversation authenticity analyses), emotion accuracy, perceived emotions during the conversations, trait and state emotion suppression, and relationship characteristics. Unlike Study 1, we found no evidence that perceptions of partners' positive emotion accounted for authenticity accuracy. We did not find gender to be a moderator of authenticity accuracy in the Change conversations, but it did moderate the strength of authenticity accuracy in the Distress conversations. More specifically, women were better at discerning their partners' felt authenticity than men when discussing a topic of personal distress, though men were still significantly accurate. We hesitate to draw any conclusions from this single gender finding, given it only emerged in one analysis and given our relatively small sample. Future research is needed before any firmer conclusions can be drawn.

Overall, Study 2 yielded evidence suggesting that perceivers' authenticity accuracy is not confined to having longer periods of reflection (e.g., retroactive ratings in the diary study). Furthermore, we were able to test this twice since participants engaged in two different conversation topics. Thus, considering both Studies 1 and 2, we have shown that accurate judgments of felt authenticity appear to emerge across both daily life settings with time to reflect on the interaction (Study 1), and within contexts in which authenticity judgments are made directly after a conversation (Study 2). Across Studies 1 and 2, representing three different types of interactions, we found that participants exhibited above-chance accuracy in their judgments of their partners' felt authenticity. In Study 3, we investigated whether perceivers' authenticity accuracy held across another type of conversation topic – an area of conflict in one's relationship.

### Study 3

In the first two studies, we examined authenticity accuracy in three different couple contexts: a sacrifice one partner made for the other, a desired change in the relationship, and a topic of personal distress (not related to the partner). Whereas discussing each of these topics may – for some couples – produce some conflict, this was by no means a given. In each of these conversations, partners were not explicitly at odds so it is unlikely that these conversations were regarded as antagonistic. In Study 3, we aimed to examine if authenticity accuracy would extend to more high-stakes contexts in which the partners explicitly discuss an issue of conflict. Similar to Study 2, participants had completed ratings of felt and perceived authenticity directly after their conversation with their partner. Data were culled from an unrelated study conducted by Gordon and Chen (2013), in which perceivers rated their feelings of their own authenticity and judgments of their partners' felt authenticity after a conversation about conflict between the two partners. Similar to Studies 1 and 2, data from this study included several other measures that were used for an unrelated research question. In Gordon and Chen's study (2013), one of their research questions was regarding the effects of power. To manipulate power, one partner in each couple was randomly assigned to be "in charge" of the conversation by picking the conflict topic to discuss (high-power), while the other had to go along with this conversation topic (low-power). For more details, please refer to Gordon and Chen (2013). Our main goal was to focus on self-reported feelings and perceptions of authenticity within acquainted dyads, so the power manipulation was not part of our research question. However, we conducted analyses to investigate whether this manipulation may have affected our outcomes (it did not). For our study, we utilized some of their measures to examine the degree to which participants were able to accurately estimate how authentic their partner felt during a conflict conversation.

## Method

**Participants.** Seventy-two couples (144 individuals) were recruited by Gordon and Chen (2013) through at the University of California, Berkeley campus and community. The sample included 71 heterosexual couples and 1 LGBTQ+ couple. Couples had been in a relationship from 1 month to 7.25 years (median = 13 months;  $SD = 21.38$  months). Participant gender distribution was made up of 73 women and 71 men. On average, participants were 22 years old ( $SD = 5.40$ , range = 18 to 56). The sample was 40.3% Asian/Asian American, 36.1% European/European American, 9.0% Hispanic or Latino, 1.4% African/African American, and 13.2% other ethnicities.

**Procedure.** Two days before their session, each partner was sent an email directing them to a secure website with a questionnaire to gather baseline measures (e.g., trait relational authenticity, demographics) about themselves and their relationship. During their lab session, participants engaged in videotaped conversations and answered questionnaires about their experience. The first conversation was a teamwork task designed to help the couples become comfortable with interacting and being videotaped in the laboratory. For this conversation, couples were given the Winter Survival Exercise (Johnson & Johnson, 2003) but did not make ratings of felt or perceived authenticity.

Participants engaged in a second conversation about a source of conflict in their relationship. As mentioned previously, as part of the power manipulation, one partner in each couple was randomly assigned to be in the high-power condition by being “in charge” of the conversation and picking the conflict topic, while the partner in the low-power condition had to go along with the chosen conversation topic. Couples were then given five minutes to work toward a resolution. The partner who was “in charge” of the conversation was also given a clipboard with a list of questions to help move the conversation along if the couple got stuck. After the conflict conversation, the partners completed questionnaires pertaining to the conversation, including the critical questions about how authentic they felt and their judgments of their partners’ felt authenticity during the conversation. Each partner was thanked and compensated with \$10 or course credits, and each couple was entered into a lottery for a chance to win \$75.

## Materials and Measures

**Power Manipulation.** One member in each couple was randomly assigned to be in the high-power condition in which they would be “in charge” of their conversation with their partner. High-power participants chose the topic of conflict in their relationship to discuss with their partner. After choosing the conflict topic, the experimenter gave them a clipboard and asked them to write down the topic and write their name as the “leader.” Low-power participants were instructed that their partner would choose the source of conflict and that their partner was selected to be in charge. They were then instructed to sit and wait while their partner picked the topic to discuss. Afterwards, the experimenter took the clipboard from the high-power participant and took the couple to the conversation area.



The experimenter then explained that the couple would be working towards a resolution on a source of conflict in their relationship and that the researchers were interested in how couples resolve conflict when one partner is in charge. The experimenter handed the clipboard back to the high-power partner, emphasizing that he or she had chosen the topic, was in charge of the conversation, and could lead the conversation in any way that he or she wanted. The clipboard also included a list of questions to help move the couple's discussion along in case they got stuck during their conversation. They also reminded the low-power partner that he or she should follow the other partner's lead. Lastly, the experimenter placed a sign labeled "Discussion Leader" in front of the high-power partner and left the room.

**Felt and Perceived Authenticity.** After the conflict conversation, participants were asked to rate how authentic they felt and how authentic they believed their partner felt during their conversation. Participants were shown a list of feelings and emotions to rate including "authentic (true to yourself)" at the end of the list. Participants were specifically asked how authentic they felt (true to themselves) during the conversation they had just had with their partner on a 5-point scale (1 = Not at all, 5 = A lot),  $M = 4.16$ ,  $SD = .89$ , and range = 1 to 5. Participants then indicated how much they believed their partner felt 'authentic (true to themselves)' during the conversation (1 = Not at all, 5 = A lot),  $M = 4.14$ ,  $SD = .85$ , and range = 1 to 5.

**Trait Relational Authenticity.** Although we did not have a direct measure of trait authenticity in this dataset, we were able to use *trait relational authenticity* (i.e., how authentic someone typically is within their relationship) as a proxy for trait authenticity. Trait relational authenticity was measured using an adapted general authenticity measure from English and John (2013) that has been used in previous research (e.g., Gan & Chen, 2017). Participants indicated how much they agreed or disagreed with five statements on a 7-point scale (1 = Completely disagree, 7 = Completely agree): "I can be myself with my partner," "It is easy to express my true attitudes and feelings during interactions with my partner," and "My behavior around my partner is usually an expression of my true inner feelings, attitudes and beliefs." The statements "I change myself to get along with my partner" and "It is easy to express my true attitudes and feelings during interactions with my partner" were reverse-scored. These items were combined to measure how much participants felt like they could be their authentic self within their relationship,  $M = 6.23$ ,  $SD = .76$ , range = 3.2 to 7, and  $\alpha = .70$ .

**Emotion and Emotion Accuracy.** Directly after the conflict conversation, participants were asked to indicate how much they felt eight positive emotions (e.g., caring, happy, confident, cared for, successful, appreciative, content, and appreciated),  $M = 3.60$ ,  $SD = .77$ , range = 1 to 5, and  $\alpha = .90$ , and ten negative emotions (e.g., insecure, depressed, angry, resentful, powerless, ashamed, anxious, rejected, and defensive),  $M = 1.70$ ,  $SD = .66$ , range = 1 to 4, and  $\alpha = .87$ , during their conversation on a 5-point scale (1 = Not at all, 5 = A lot). Participants also rated how much they believed their partner was feeling each of the same positive emotions,  $M = 3.52$ ,  $SD = .79$ , range = 1.38 to 5, and  $\alpha = .90$ , and negative emotions,  $M = 1.68$ ,  $SD = .66$ , range = 1 to 4.1, and  $\alpha = .88$ , during the conversation using the same 5-point scale.

Emotion accuracy scores were created with the same method used in Study 2,  $M = .56$ ,  $SD = .34$ , and range = -.50 to .98.

**Relationship Satisfaction.** Relationship satisfaction was assessed in the baseline questionnaire with the four-item version of the Couples Satisfaction Index (Funk & Rogge, 2007) in which participants indicated how they felt on 6-point scales about statements regarding their relationship. Participants rated the statements: “Please indicate the degree of happiness, all things considered, of your relationship” (1 = Extremely unhappy, 6 = Perfect), “I have a warm and comfortable relationship with my partner” (1 = Not at all true, 6 = Completely true), “How rewarding is your relationship with your partner?” (1 = Not at all, 6 = Completely), and “In general, how satisfied are you with your relationship?” (1 = Not at all, 6 = Completely). These items were combined to measure overall baseline relationship satisfaction,  $M = 5.09$ ,  $SD = .63$ , range = 2.25 to 6, and  $\alpha = .75$ .

**Power Ratings.** Power during the conflict conversation was measured using the item, “During the conversation you just had, who had more power?” on a 0 to 100 scale (0 = My partner had more power, 50 = We had equal power, 100 = I had more power),  $M = 48.41$ ,  $SD = 17.10$ , and range = 8.57 to 100.

## Results

**Data Analytic Strategy.** To account for the non-independence of the couples, we fit multilevel models with random intercepts for couples. The multilevel models were run using the same analysis software as the previous studies.

### Were Participants Accurate in Their Judgments of Their Partners’ Felt Authenticity?

As in the previous studies, our main question was whether or not individuals exhibited accuracy in their judgments of their romantic partners’ felt authenticity – however, this time we examined this accuracy when couples were having a conflict conversation. In direct contrast to Studies 1 and 2, perceivers did not exhibit accuracy in their judgments of their partners’ felt authenticity when discussing a topic of conflict,  $\beta = -.06$ ,  $SE = .08$ ,  $t(140) = -.66$ ,  $p = .51$ . To explore why there was an absence of authenticity accuracy, we examined if the power manipulation had any effect on perceivers’ inaccurate judgments of their partners’ felt authenticity. We also tested many of the same variables for non-independence or moderation that were in Studies 1 and 2, and that we had access to in Study 3.

### Was (In-)Accuracy in Authenticity Ratings Dependent on the Power Manipulation?

As mentioned previously, the data from Study 3 came from a study conducted by Gordon and Chen (2013) that included a power manipulation in which one couple member was randomly assigned to a high-power condition and the other to low-power. As reported by Gordon and Chen (2013), the power manipulation was successful. Participants in the low-power condition rated themselves lower in power,  $M = -9.12$ ,  $SD = 15.10$ , relative to participants in the high-power condition who had rated themselves as higher on power,  $M = 6.04$ ,  $SD = 15.63$ ,  $t(141) = 5.90$ ,  $p < .001$ , during the conflict conversations. A potential explanation why perceivers were inaccurate in their judgments of their partners’ felt authenticity might be due to the power manipulation. For example, research has observed that individuals who are higher in power tend to report higher ratings of felt authenticity (e.g., Kifer et al., 2013; Kraus et al., 2011). It could be that participants in the high-power role reported inflated ratings of felt authenticity, leading to inaccurate perceptions of felt authenticity by their partners. Other research has suggested that individuals who are lower on power tend to be perceived as lower on authenticity (e.g., Gan et

al., 2018). In short, perhaps authenticity accuracy was affected by power roles in this study. We ran analyses to test these possibilities.

First, we investigated whether the power manipulation affected self-ratings of felt authenticity during the conflict conversation. We found that the power manipulation did not significantly affect participants' self-ratings of felt authenticity during the conflict conversations,  $\beta = .14$ ,  $SE = .17$ ,  $t(141) = .87$ ,  $p = .39$ . This contrasted with prior research on self-rated authenticity and power.

We then examined whether the power manipulation affected perceivers' ratings of their partners' felt authenticity. We found that the power manipulation did not significantly affect perceivers' ratings of their partners' felt authenticity,  $\beta = -.10$ ,  $SE = .16$ ,  $t(71) = -.65$ ,  $p = .52$ . Again, this result seems to contrast prior research on perceived authenticity and power. Thus, it does not appear that the power manipulation biased self-reports or perceptions of authenticity, suggesting that this manipulation may not explain the absence of authenticity accuracy in Study 3.

Finally, we examined whether perceivers remained inaccurate in their judgments of their partners' felt authenticity after accounting for power condition. We found that perceivers remained inaccurate in their judgments of their partners' felt authenticity after including power condition as a covariate,  $\beta = -.05$ ,  $SE = .085$ ,  $t(139) = -.61$ ,  $p = .55$ . Additionally, we did not find an interaction between perceivers' authenticity accuracy and power condition,  $\beta = -.24$ ,  $SE = .17$ ,  $t(138) = -1.40$ ,  $p = .16$ . These results suggest that the power manipulation did not explain why perceivers were not significantly accurate in their judgments of their partners' felt authenticity.

### **Was (In-)Accuracy in Authenticity Ratings Dependent on Trait (Relational) Authenticity?**

Our goal in examining if authenticity accuracy is independent of – or moderated by – trait authenticity was to determine if perceivers were basing their ratings of their partners' felt authenticity on how authentic their partner usually is (trait authenticity). Trait relational authenticity measures how much individuals typically feel as though they can be themselves and be authentic in their relationship with their partner. This served as a close measure of trait authenticity since it encompasses the same qualities of trait authenticity but within their relationship with the person with whom they would be interacting.

We examined if perceivers' inaccuracy in judging their partners' felt authenticity may have been affected by their partners' trait relational authenticity. Perceivers remained inaccurate in their judgments of their partners' felt authenticity after including their partners' trait relational authenticity as a covariate,  $\beta = -.07$ ,  $SE = .08$ ,  $t(136) = -.86$ ,  $p = .39$ . However, there was a significant interaction between perceivers' perception of their partners' felt authenticity and their partners' trait relational authenticity in predicting their partners' felt authenticity,  $\beta = .12$ ,  $SE = .06$ ,  $t(135) = 2.20$ ,  $p = .03$ . Unfortunately, the pattern of moderation did not help to explain the absence of authenticity accuracy: authenticity accuracy was not significant for partners who were low *or* high in authenticity accuracy. Simple slopes analysis revealed that authenticity accuracy was *negative* (anti-accurate) for partners who were low on relational authenticity, though this negative correlation did not reach conventional levels of statistical significance [ $\beta = -.17$ ,  $SE = .09$ ,  $t(135) = -1.81$ ,  $p = .07$ ]. Conversely, the same correlation was positive for partners who were high on relational authenticity, though this effect also did not approach statistical significance [ $\beta = .08$ ,  $SE = .11$ ,  $t(135) = .70$ ,  $p = .48$ ]. Conceptually, both anticorrelations and null correlations are a form of inaccuracy. Altogether, these results suggest a trend in which perceivers become worse at accurately discerning their partners' felt authenticity during a conflict conversation

when their partners are very low on trait relational authenticity. Nonetheless, we failed to observe authenticity accuracy for participants whose partners were low *or* high in relational authenticity.

### **Was Authenticity (In-)Accuracy a Byproduct of Emotion Accuracy?**

We again examined whether perceivers' emotion accuracy may have played a role in their authenticity accuracy. Perceivers remained inaccurate in their judgments of their partners' felt authenticity even after including their emotion accuracy as a covariate,  $\beta = -.09$ ,  $SE = .08$ ,  $t(139) = -1.17$ ,  $p = .24$ . Thus, perceivers' perceptions of their partners' emotions did not explain the non-significant authenticity accuracy results.

### **Was Authenticity (In-)Accuracy a Byproduct of Perceptions of Emotion?**

When examining if perceptions of emotions affected authenticity accuracy, we found that perceivers remained inaccurate in their judgments of their partners' felt authenticity even after controlling for their perceptions of their partners' positive emotions,  $\beta = -.12$ ,  $SE = .09$ ,  $t(138) = -1.26$ ,  $p = .21$ , as well as negative emotions,  $\beta = -.10$ ,  $SE = .09$ ,  $t(138) = -1.09$ ,  $p = .28$ , during the conflict conversations. From these results, it appears that perceptions of emotions did not account for why perceivers were inaccurate in their judgments of their partners' felt authenticity.

### **Was (In-)Accuracy in Authenticity Ratings Dependent on Relationship Characteristics?**

Finally, we investigated if relationship characteristics such as relationship length and relationship satisfaction might explain the non-significant relationship between self-reported felt and perceived authenticity ratings during the conflict conversation. When we examined the length of time couples have been together, we found that relationship length did not significantly interact with perceivers' perception of their partners' felt authenticity in predicting their partners' felt authenticity,  $\beta = -.05$ ,  $SE = .08$ ,  $t(138) = -.68$ ,  $p = .50$ .

Similar to the previous studies, we examined if relationship satisfaction impacted authenticity accuracy. Relationship satisfaction did not significantly interact with perceivers' perception of their partners' felt authenticity in predicting partners' felt authenticity,  $\beta = .08$ ,  $SE = .07$ ,  $t(137) = 1.19$ ,  $p = .24$ . Overall, relationship characteristics also did not elucidate why perceivers were not accurate in their felt authenticity judgments during the conflict conversations.

### **Was Authenticity Accuracy Dependent on Gender?**

As in previous studies, we explored whether gender may have impacted authenticity accuracy. We found that there was no significant interaction between perceivers' perception of their partners' felt authenticity and gender in predicting partners' felt authenticity during the conflict conversations,  $\beta = -.05$ ,  $SE = .17$ ,  $t(138) = -.28$ ,  $p = .78$ . Similar to the other variables we tested, gender did not explain the lack of authenticity accuracy during the conflict conversation. A summary of the methodological procedures for Studies 1-3 can be found in *Table 2* and a summary of their results can be seen in *Table 3*.

**Table 2**

Studies 1-3 Methods: Acquainted Dyads (Romantic Couples)

Topic	Interaction type	Structure
<b>Study 1:</b> Sacrifice made in relationship	14-day diary study	<p>At the end of each day, if a participant had made a sacrifice in their relationship, the participant rated how authentic they felt while making the sacrifice.</p> <p>If the participant's partner made a sacrifice, the participant then rated how much they believed their partner felt authentic during the sacrifice.</p>
<b>Study 2:</b> Change wanted in relationship and topic of personal distress (counterbalanced topics and randomized speaker/listener roles)	In-lab video recorded conversations	<p>Couples took turns being either the speaker or the listener discussing topics of Change and Distress.</p> <p>The speaker was given one minute to think about the topic and one minute to answer the prompt to the listener. The listener was given one minute to respond. The speaker was then given one minute to respond. The listener responded for another minute. Both spoke freely for the last two minutes.</p> <p>Couples rated both their feelings and perceptions of their partners' felt authenticity directly after each conversation.</p>
<b>Study 3:</b> A conflict in the relationship	In-lab video recorded conversation	<p>Couples had five minutes to discuss a conflict in their relationship and work towards a resolution.</p> <p>One partner was randomly assigned to be in a high-power condition to be "in-charge" of the conversation and chose the topic. The other partner was low-power.</p> <p>Couples rated both their feelings and perceptions of their partners' felt authenticity directly after the conversation.</p>

**Table 3**

Studies 1-3 Results Summary: Connected Dyads (Romantic Couples)

Topic	<i>n</i>	$\beta$	<i>SE</i>	<i>t</i>	Self-Authenticity POMP <sup>†</sup> M(SD)	Perceived Authenticity POMP <sup>†</sup> M(SD)
<b>Study 1:</b> Sacrifice made in the relationship (daily diary)	120	.19*	.07	2.95	74.96% (18.68%)	76.40% (16.22%)
<b>Study 2:</b> Change wanted in the relationship (conversation)	220	.38***	.06	6.64	87.04% (12.82%)	85.23% (15.49%)
<b>Study 2:</b> Topic of personal distress (conversation)	220	.46***	.06	7.81	86.27% (15.68%)	85.37% (15.97%)
<b>Study 3:</b> Conflict in the relationship (conversation)	144	-.06	.08	-.66	83.22% (17.71%)	82.80% (17.05%)

<sup>†</sup> POMP = Percent of Max Possible

Note: \* indicates significance at  $p < .05$ , \*\*\* indicates significance at  $p < .001$

Table 3. Summary of results in which partners in romantic couples self-reported their own feelings of authenticity and perceptions of their partners' felt authenticity. Participants were accurate in their judgment of their partners' felt authenticity in three out of four types of interactions.

## Discussion

The results from Study 3 suggested that immediately following a conversation about a conflict in their relationship, individuals were not accurate in judging their romantic partners' felt authenticity during their conversation. These results contrast sharply from those in Studies 1 and 2 in which individuals *did* show accuracy in their judgments of their romantic partners' felt authenticity about sacrifices made earlier in the same day (Study 1) or about their experiences *during* two different types of conversations (desired change in the relationship and distressing personal event), as assessed immediately after these conversations (Study 2).

Study 3's perceivers remained inaccurate in their judgments of their partners' felt authenticity even after accounting for variables such as trait (relational) authenticity, emotion accuracy, perceived emotions, and relationship characteristics. Additionally, for a third time out of four, we found that gender did not moderate perceivers' authenticity accuracy.

Since the original study that Study 3's data came from had a power manipulation as part of their design, we accounted for the possibility that the power manipulation skewed perceivers'

authenticity accuracy. Even so, we still did not see a change in the non-significant relationship between self-reported felt and perceived authenticity during the conflict conversation. What, then, might explain the lack of authenticity accuracy in Study 3?

To speculate, one difference between Studies 1 and 2 versus Study 3 could be that the conflict topic in Study 3 may have interfered with people's ability to discern their partners' felt authenticity. Discussing conflicts, points of disagreement, or having someone mention flaws they see in their partner may interfere with one's ability to focus on their partner's felt authenticity. Whereas Studies 1 and 2 focused on either relationship-irrelevant topics (one person's personal distress) or on relationship topics that did not require conflict resolution (a sacrifice made or a relationship change to consider), Study 3 focused directly on conflict and resolution. It seems possible that the conflict topic may have increased cognitive load by forcing perceivers to generate persuasive arguments, to persevere on the conflict, or to more closely monitor their own behavior. Notably, cognitive load may interfere with perceivers' ability to attend closely to their partner's authenticity but may not inhibit – and could even facilitate (Vrij et al., 2008) – behavioral expressions that reveal authenticity or inauthenticity. Accordingly, in Study 4A and Study 4B we had outside observers (without “skin in the game”) passively observe videos from Study 3 couples, and judge some of the partners' felt authenticity. In doing so, these final two studies allowed us to address the question of whether being in a conflict interaction impedes accurate authenticity perceptions, as well as the broader question of whether the skill to accurately judge others' felt authenticity extends to unacquainted outside observers. If observers show evidence of authenticity accuracy, this would suggest that there is some quality about being *in* a conflict that may limit authenticity accuracy.

### Study 4A

Can people accurately judge another person's felt authenticity without knowing or interacting with them? In Study 4A, outside observers watched videos of the romantic couples from Study 3, whom they were unfamiliar with, and were told to focus on one specific partner (target person) during the conversation. To the best of our knowledge, this is the first study to examine whether people can form accurate impressions of felt authenticity in unfamiliar strangers.

#### Method

**Participants.** One-hundred and forty participants (i.e., outside observers) were recruited from the University of California, Berkeley and participated in exchange for course credit to watch videos of the couples from Study 3 and make judgments. Participants did not know the couples in the videos. Seven participants were removed for failing to pass any of the three attention checks within the study (e.g., ‘Please select ‘strongly disagree’ for this question’), leaving 133 participants. Gender distribution of participants was made up of 101 women, 30 men, and 2 non-binary individuals. The sample was 58.6% Asian, 28.6% White, 6.7% Hispanic/Latino, .8% Black/African American, and 5.3% of other ethnicities. On average, participants were 20.80 years old ( $SD = 3.5$ , range = 18 to 44). For clarity, we will refer to participants as either ‘outside observers’ or ‘observers’ for Studies 4A and 4B.

**Procedure.** Observers came into the lab and consent was obtained. In a quiet room, they were asked to put on headphones and watch videos of a subset of couples from Study 3.

Observers were informed that they would be watching three 20-second video clips for each of 12 couples discussing a conflict in their relationship (cf., Ambady et al., 2000). Before each video was presented, observers were told the topic of conflict and shown a picture of one member of each couple (target person) to focus on while they watched the video. After each video clip, observers were asked to rate how much they believed the target felt authentic (true to themselves) in the clip that they just watched. When observers finished watching all the clips for the 12 couples, they filled out demographic information and were thanked and compensated with course credit for their participation.

## Materials and Measures

**Targets and videos.** The videos used in the present study came from Study 3 (i.e., Gordon & Chen, 2013). We utilized these videos because couples had given consent to having their videos shown in other studies and both members of each couple provided self-reported ratings of felt authenticity and ratings of their perception of their partners' felt authenticity. As a reminder, in the conflict conversation, one partner in each couple was randomly assigned to choose the conflict topic and each couple had five minutes to work towards a resolution. Thin-slice video clips were created from recordings of these five-minute conversations.

Target persons used for our study were chosen based on set criteria: consent must have been given by both romantic partners in the couple for their videos to be shown to participants, both partners had to be clearly audible, and their bodies had to be fully visible in the videos. Moreover, we excluded couples in which one member rarely spoke.

Targets were also selected on their authenticity categorization of being either low or high on felt authenticity. From the selected videos, half of the targets were categorized as being low on authenticity and half were categorized as being high on authenticity based on targets' self-reported feelings of authenticity during their conflict conversation. As a reminder, individuals in Study 3 rated how authentic they felt during their conversation on a 5-point scale (1 = Not at all, 5 = A lot). We categorized low-authentic targets as those who rated themselves between 1 and 3 in felt authenticity and high-authentic targets as those who rated themselves as 4 or 5 in felt authenticity. Self-reported ratings of felt authenticity were negatively skewed (this was also the case for Studies 1 and 2), meaning that most participants had rated themselves as a 4 or 5 on felt authenticity. For this reason, we elected for the low-authentic category to include the middle value of 3. We aimed to have a balanced number of low-authentic targets and high-authentic targets evenly split on gender. Altogether, observers made judgments on a total of 12 targets: three low-authentic and three high-authentic men targets and three low-authentic and three high-authentic women targets, in randomized order<sup>5</sup>. The selected low-authentic and high-authentic targets' self-reported felt authenticity was representative of the whole sample from Study 3 as seen in *Table 4*.

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<sup>5</sup> As a reminder, in Study 3 there was power manipulation that was part of the original study in which the data came. Just as before, power was not part of our research question and due to restrictions based on target criteria (e.g., targets' consent, gender, etc.), we did not have an equal distribution of power on targets. However, for reference, nine out of twelve of the targets were in the high-power condition and only one of the low-authentic targets was in the low-power condition. For these reasons, we do not explore power in our analyses.



**Table 4**

Self-Reported Felt Authenticity: Study 3 Whole Sample and Studies 4A &amp; 4B Targets

	Study 3 Whole Sample		Studies 4A & 4B Targets	
	Low-Authenticity	High-Authenticity	Low-Authenticity	High-Authenticity
<i>M</i>	2.72	4.53	2.83	4.5
<i>SD</i>	.52	.50	.41	.55

Table 4. Self-reported authenticity of the 12 targets in Studies 4A & 4B were representative of the whole sample from Study 3. Low-authentic targets were categorized as those who rated themselves between 1 and 3, and high-authentic targets as 4 or 5 on a 5-point scale.

For this study, observers watched three 20-second clips of each couple, one from the beginning (0:00-1:30), middle (1:31-3:30), and end (3:31-5:00) of the five-minute conflict conversations (cf. Ambady et al., 2000). Thin-slice clips in each time section were selected on the basis of audio and video quality (e.g., if the target's entire body could be seen) and roughly equal talking-time for both partners in the couple.

**Felt and Perceived Authenticity.** As explained in Study 3, immediately after the couples' conflict conversation, the targets in the videos had rated how authentic they felt during their conversation with their partner on a 5-point scale (1= Not at all, 5 = A lot),  $M = 4.16$ ,  $SD = .89$ , and range = 1 to 5. After watching each video clip, outside observers rated how much they believed each target felt authentic (true to themselves) on a 5-point scale (1= Not at all, 5 = A lot),  $M = 3.38$ ,  $SD = .71$ , range = 1.22 to 5.

## Results

**Data Analytic Strategy.** Participants rated multiple targets. To account for the non-independence of the ratings, we fit multilevel models with random intercepts for raters. Originally, outside observers rated each target at three time points. For data simplification and because our primary interest was overall ability to discern felt authenticity, we aggregated observers' ratings of felt authenticity for each target and tested if the mean target rating was predicted by targets' self-rating, dichotomized as low-authenticity (1 to 3) or high-authenticity (4 or 5). For gender-specific analyses, we exclude non-binary because there was only one individual and therefore not enough data to draw any statistical inferences.

The multilevel models were fit with the statistical modeling package lmerTest 3.1-3 (Kuznetsova et al., 2017) and lme4 1.1-27.1 (Bates et al., 2015) in the programming language R 4.1.2 using Restricted Maximum Likelihood (REML) estimation. The lmerTest package uses the Satterthwaite method to approximate degrees of freedom, and so degrees of freedom are decimal values that vary for each variable and from model-to-model. We rounded the degrees of freedom

to the nearest whole. Finally, we provide  $\beta$  estimates by standardizing the variables prior to running the models (Ferron et al., 2008).

### **Were Observers Accurate in Their Judgments of Unacquainted Targets' Felt Authenticity?**

In the previous studies, we established that participants often exhibited accuracy when making judgments of their romantic partners' felt authenticity. In Study 4A, we aimed to extend this research by determining whether outside observers were accurate at judging the felt authenticity of unacquainted others. To do so, we compared observers' judgments of the felt authenticity of self-reported low-authentic targets to their ratings of high-authentic targets. We found that outside observers were accurate at estimating targets' felt authenticity by giving significantly lower ratings of authenticity to low-authentic targets than high-authentic targets,  $\beta = -.97$ ,  $SE = .06$ ,  $t(398) = -17.48$ ,  $p < .001$ . To our knowledge, this is some of the first research revealing evidence that individuals are able to accurately discern the degree to which someone is relatively low or high on felt authenticity. Additionally, this result suggests that perhaps *being removed* from a conflict conversation rather than being *in* a conflict conversation could lead to greater authenticity accuracy since outside observers were accurate in their judgments whereas the couples in Study 3 were not.

### **Was Authenticity Accuracy Robust to Target and Observer Gender?**

We did not have any initial hypotheses about gender but conducted exploratory analyses to investigate whether observer or target gender affected authenticity accuracy. When examining *target* gender, we found a significant interaction between target authenticity (high-authentic and low-authentic) and target gender in predicting observers' ratings of targets' felt authenticity,  $\beta = -.85$ ,  $SE = .10$ ,  $t(396) = -8.47$ ,  $p < .001$ . Low-authentic targets were rated lower in authenticity than high-authentic targets for both men [ $\beta = -1.39$ ,  $SE = .07$ ,  $t(396) = -19.73$ ,  $p < .001$ ] and women [ $\beta = -.55$ ,  $SE = .07$ ,  $t(396) = -7.76$ ,  $p < .001$ ], though the effect of low versus high authenticity was smaller for women. These results could indicate that men and women have differing expressions of felt authenticity, leading to different perceptions of authenticity. We discuss these potential implications further in the Discussion.

When examining *observer* gender, we did not find a significant interaction between target authenticity and observer gender in predicting observers' perceptions of targets' felt authenticity,  $\beta = -.05$ ,  $SE = .13$ ,  $t(391) = -.34$ ,  $p = .73$ . Since participant gender distribution contained far more women than men, it is likely that our sample may not have been large enough for a robust test of gender moderation. Overall, observers still accurately gave lower ratings of felt authenticity to low-authentic targets than high-authentic targets regardless of their own gender.

## **Discussion**

In Study 4A, outside observers watched thin-slice video clips of a subset of couples having a conflict conversation from Study 3. Observers made ratings of perceived felt authenticity on one target person in each couple and viewed a total of six low-authentic and six high-authentic targets, evenly split on gender, that were categorized by self-reports of felt authenticity. Outside observers showed authenticity accuracy in that they gave significantly lower ratings of authenticity to low-authentic targets than to high-authentic targets. This study provides the first evidence that people can accurately estimate the felt authenticity of unacquainted others. That is, even though our observers had no interactions with the targets and

did not know them, they were still able to estimate the degree to which the targets felt authentic through thin-slice video clips.

Interestingly, in Study 3 we had found that individuals were not accurate when making judgments about their romantic partners' felt authenticity during a conflict conversation. However, the observers in Study 4A were accurate when judging a representative subset of those individuals' felt authenticity when watching videos of the conflict conversations. These findings suggest that there may be some quality about actively taking part in a conflict conversation that may interfere with accurate judgments of felt authenticity. For example, perhaps couples may feel an added pressure to uphold their position and refute statements that their partner makes when having a conflict – this might increase cognitive load and decrease the ability to pay attention to their partners' felt authenticity – which outside observers did not experience.

We conducted exploratory analyses to see how authenticity accuracy was impacted by both target and observer gender. When examining *target* gender, there was a larger difference in ratings between low- and high-authentic men targets than the difference between low- and high-authentic women targets. This could perhaps indicate that it is easier to detect felt authenticity in men than in women when watching as an outside observer. Or, that men have greater differences in expressions of low versus high felt authenticity than women. We did not find any effects of *observer* gender on authenticity accuracy. We return to a discussion about these gender analyses in the General Discussion, after testing the role of gender in Study 4B.

### Study 4B

Study 4B was a pre-registered replication of Study 4A. We predicted that we would find the same results as we did in Study 4A – that outside observers would be accurate in their judgments of targets' felt authenticity by rating low-authentic targets as lower on authenticity than high-authentic targets. Observers followed a very similar procedure to Study 4A.

### Method

**Participants.** As described in our pre-registration, we aimed to collect 2.5 times our original sample size (Simonsohn, 2015). Three-hundred and fifty-nine participants (i.e., outside observers) were recruited from the University of California, Berkeley and participated in exchange for course credit. Thirty-five were removed for failing to pass any of the three attention checks as in Study 4A, leaving 324 participants. Gender distribution of participants was made up of 240 women, 81 men, and 3 non-binary individuals. On average, participants were 20.9 years old ( $SD = 3.3$ , range = 18 to 58). The sample was 49.4% Asian, 23.5% White, 12.7% Hispanic/Latino, 1.9% Black/African American, and 12.5% of other ethnicities.

**Procedure.** Similar to Study 4A, outside observers watched videos of the same subset of couples from Study 3 having a conflict conversation and made judgments based on what they saw. The study was conducted online and observers were instructed to go to a quiet room and wear headphones during the study. Consent was obtained and this time observers were informed that they would be watching *two* 20-second video clips of 12 couples discussing a conflict in their relationship (we used two instead of three video clips to reduce the study time for participants). Observers were told the topic of conflict and shown a picture of the same target

persons for the video clips as in Study 4A. After watching *both* video clips back-to-back of each target (in Study 4A, participants made ratings after each clip and we aggregated across ratings), observers were asked to make *one* overall rating about how much they believed the target felt authentic (true to themselves) during the conversation that they just watched. Participants then filled out demographic questionnaires and were thanked and compensated with course credit for their participation.

## Measures

**Targets and videos.** Targets and videos were nearly identical to those in Study 4A. The one difference is that in Study 4B, outside observers only viewed two video clips of each couple instead of three and made only one rating per target. For each couple, thin-slice clips came from the beginning (0:00-1:30) and end (3:31-5:00) of the couples' five-minute conflict conversation.

**Perceived Authenticity.** After watching *both* video clips of each target, observers made one rating about how much they believed each target felt authentic (true to themselves) during the conflict conversation on a 5-point scale (1= Not at all, 5 = A lot),  $M = 3.32$ ,  $SD = 1.17$ , range = 1 to 5.

## Results

**Data Analytic Strategy.** We followed the same strategy as in Study 4A except we did not have to aggregate authenticity ratings because participants only made one rating per target.

### Were Observers Accurate in Their Judgments of Unacquainted Targets' Felt Authenticity?

We hypothesized that our findings in Study 4A would replicate in which outside observers would have accuracy in judging unacquainted others' felt authenticity. As predicted, we found that outside observers were accurate in their judgments of targets' felt authenticity by giving lower ratings of felt authenticity to low-authentic targets than high-authentic targets,  $\beta = -.67$ ,  $SE = .03$ ,  $t(3519) = -22.90$ ,  $p < .001$ . These results suggest again that people have the ability to accurately judge the felt authenticity of unacquainted others. For the second time, outside observers accurately judged the felt authenticity of targets from the Study 3 conflict conversations. This again suggests that the couples from Study 3's authenticity accuracy may have been hindered by the nature of *discussing* conflict. The main effect of authenticity accuracy from Studies 4A and 4B can be seen in *Figure 1*.

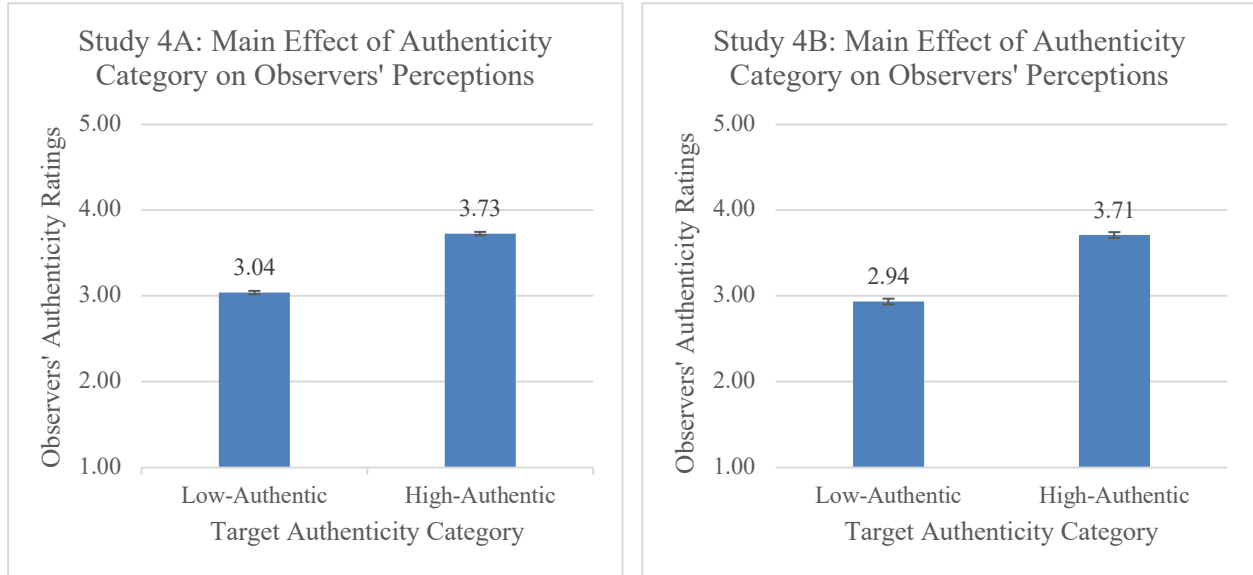


Figure 1. Average participant ratings of low- and high-authentic targets. Participants rated low-authentic targets as lower on authenticity than high-authentic targets by a statistically significant difference ( $p < .001$ ) both in Studies 4A and 4B.

### Was Authenticity Accuracy Robust to Target and Observer Gender?

As in Study 4A, we examined the effects of both target and observer gender on authenticity accuracy. The gender results replicated from Study 4A. We again found that there was a significant interaction between target authenticity (high-authenticity vs. low-authenticity) and *target* gender in predicting observers' perceptions of targets' felt authenticity,  $\beta = -.35$ ,  $SE = .06$ ,  $t(3517) = -6.12$ ,  $p < .001$ . Low-authentic targets were rated lower in authenticity than high-authentic targets for both men [ $\beta = -.84$ ,  $SE = .04$ ,  $t(3517) = -20.60$ ,  $p < .001$ ] and women [ $\beta = -.49$ ,  $SE = .04$ ,  $t(3517) = -11.95$ ,  $p < .001$ ], though the effect of low- versus high-authenticity was smaller for women.

We again did not find a significant interaction between target authenticity and *observer* gender in predicting observers' ratings of targets' felt authenticity,  $\beta = -.04$ ,  $SE = .07$ ,  $t(3485) = -.55$ ,  $p = .58$ . Altogether, observers were still accurate at estimating low-authentic targets as lower in felt authenticity than high-authentic targets. However, the differences in felt authenticity ratings were more substantial between low- and high-authentic men targets than low- and high-authentic women targets. Gender results from Studies 4A and 4B can be seen in *Figure 2*.

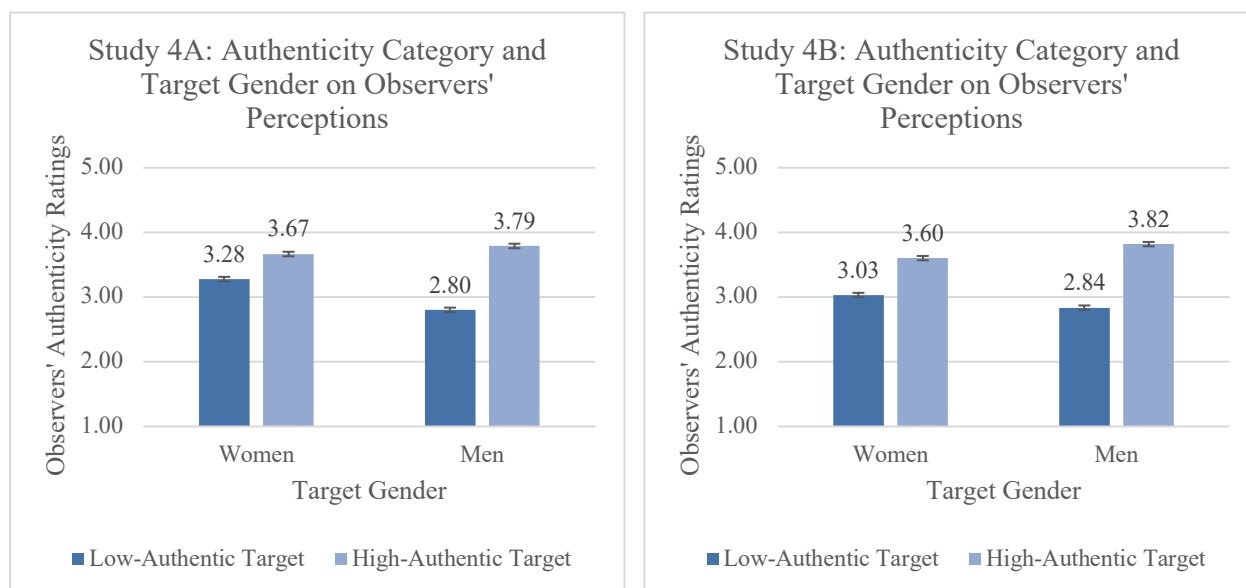


Figure 2. Significant interactions were found in both Studies 4A and 4B ( $p < .001$ ) between target authenticity (high-authenticity vs. low-authenticity) and target gender in predicting observers' perceptions of targets' felt authenticity. The interaction was significant such that the difference between low- and high-authentic men targets was larger than the difference between low- and high-authentic women targets.

## Discussion

All of the results from Study 4A replicated in Study 4B with a larger sample of participants. This time, observers watched a total of two videos back-to-back of the same targets in Study 4A and made one overall rating of targets' felt authenticity during their conflict conversations. Again, observers accurately rated low-authentic targets as being lower on felt authenticity than high-authentic targets. This is also the second time that we have found that observers were accurate at judging the felt authenticity of couples discussing a conflict when the couples themselves did not have authenticity accuracy during their conversations.

We also found the same results as in Study 4A when examining both target and observer gender as moderators of authenticity accuracy. For *target* gender, we again found that there was a larger difference between observers' ratings of felt authenticity for low- and high-authentic men targets than there was between low- and high-authentic women targets. And once more we found that *observer* gender did not impact authenticity accuracy.

This study provides further evidence that people can have accurate perceptions of others' felt authenticity even without interacting with or having a personal relationship with the person they are judging. Additionally, it seems as though authenticity is a dimension that can be accurately judged from short viewings of interactions of others.

## General Discussion

Previous research on authenticity has focused on its intrapersonal and interpersonal consequences, demonstrating that feeling authentic and being perceived as authentic has many benefits. An imperative question linking the two has remained unanswered: Are people's perceptions of others' felt authenticity accurate? To the best of our knowledge, the present

studies are the first to provide evidence that people can accurately discern (above-chance) others' felt authenticity.

### **Discernment of Felt Authenticity**

For romantic couples, we found accuracy in individuals' perceptions of their partners' felt authenticity in three out of the four types of settings we examined. Study 1 revealed that in a daily-life setting, perceivers were accurate in their retroactive judgments of their romantic partners' felt authenticity. In this daily diary study, participants evaluated their own or their partners' authenticity after one partner had made a sacrifice earlier in the day. In Study 2, couples rated felt and perceived authenticity directly after having conversations with their romantic partner. Partners discussed two different topics: (1) a desired change in their relationship and (2) personal distress that did not involve their relationship. Partners also took turns being either the 'speaker' or the 'listener' for each conversation topic. In each of four conversations (two per topic with romantic partners taking turns in each role for each topic), we found that perceivers were accurate in their judgments of their partners' felt authenticity. In Study 3, couples discussed a topic of conflict in their relationship. In direct contrast from the findings in Studies 1 and 2, perceivers in Study 3 were not accurate at judging their partners' felt authenticity.

One possible explanation for the lack of accurate authenticity judgments in Study 3 could be that discussing a topic of conflict may have interfered with partners' cognitive resources for evaluating each others' felt authenticity. This led us to wonder if – using videos of the Study 3 couples – outside observers (i.e., who were not involved in the conflict being discussed) would be accurate in their perceptions of the felt authenticity of the target persons they viewed in Study 3's videos. Indeed, in both Studies 4A and 4B, unacquainted outside observers showed above-chance accuracy at judging targets' felt authenticity.

Importantly, across all studies, we examined a number of variables that may explain or moderate authenticity accuracy. On the whole, these analyses revealed that authenticity accuracy was largely robust to differences in *partner* trait authenticity, trait emotion suppression, and state emotion suppression. Moreover, authenticity accuracy was robust to *perceivers'* emotion accuracy, perceptions of partner emotion, as well as, gender, relationship length, and relationship satisfaction. There were a small handful of interesting, unanticipated results that emerged from our studies which we discuss below.

### **Impact of Context on Authenticity Accuracy**

In four out of five of our studies, we found consistent results demonstrating that people exhibit above-chance accuracy when discerning others' felt authenticity. However, this was not the case in Study 3 for couples discussing a conflict in their relationship. As alluded to in various places above, one theory about why there was a lack of authenticity accuracy in this study has to do with the *effort* it takes to estimate others' felt authenticity. It could be that certain contexts (e.g., talking about a conflict in one's relationship) take up more cognitive resources, leaving less leftover for relatively effortful judgments of others' felt authenticity. For example, during conflict conversations, one could be focused on protecting one's self-image, stance, or reputation, or experiencing feelings of threat, any of which may function like a cognitive load that interferes with discerning others' felt authenticity to some degree.

By comparison, the conversations in Study 2 revolved around topics that are likely to have been less taxing and threatening to perceivers to talk about than a relationship conflict. Discussing a conflict could bring up flaws, sensitive issues, recurring relationship problems, and hostility. In contrast, the discussion topics used in Study 2 were not likely to breed conflict and associated emotions. Asking for a change in a relationship could be relatively neutral in nature and not target personal qualities about either member of the couple. And, by definition, the personal distress topic did not involve the other partner, making the discussion unlikely to implicate the partner in any way. Consistent with the speculation that there is something about actually partaking in a discussion about a conflict that involves oneself that may impede people's ability to discern their partners' felt authenticity, the outside observers of Studies 4A and 4B were accurate when judging the felt authenticity of targets from a subset of the couples from Study 3.

Altogether, our findings suggest that in most cases, people are accurate in their judgments of others' felt authenticity. Yet in contexts in which, for example, a higher degree of cognitive load is involved (e.g., conflict), authenticity accuracy may be impaired.

### **Gender and Perceptions of Authenticity**

We did not see consistent differences in gender when looking at romantic couples discerning their partners' felt authenticity. However, there was a reliable effect in the outside observer studies. This suggests that discernment of felt authenticity in men and women might differ for unacquainted individuals. Specifically, in both Studies 4A and 4B, we found that observers' authenticity ratings for low- versus high-authentic men targets differed more than their authenticity ratings for low- versus high-authentic women targets. A potential explanation for this result may be that there is something specific to men's expressions of authenticity that leads to more extreme ratings. Previous research has observed that women are more emotionally expressive than men (Brody & Hall, 1993; Kring & Gordon, 1998). However, recall that our research observed that authenticity discernment did not consistently rely on perceptions of emotion. It could be that men may not be as expressive in *emotions*, but have more extreme differences in their expressions of other cues that indicate felt authenticity and inauthenticity. Future research is needed to explore this possibility and others.

### **Broader Implications**

This research begins to fill a significant gap in the literature on authenticity. Prior research has mainly focused on the consequences of feeling and being perceived as authentic (e.g., Bargh et al., 2002; Brunell et al., 2010; Kernis & Goldman, 2006; Liu & Perrewe, 2006; Reis & Patrick, 1996; Robinson et al., 2012; Wickham, 2013). To our knowledge, no previous work has examined the correspondence between feelings and perceptions of authenticity. Can people accurately discern the felt authenticity of others? On balance, our findings suggest yes. In four out of five studies, above-chance authenticity accuracy emerged and was robust to a range of variables including trait authenticity, emotion, relationship characteristics, and gender. Further, we showed that authenticity accuracy can be exhibited for individuals with whom people are acquainted (i.e., a romantic partner) as well as for unacquainted strangers.

These results have several important implications. As noted, there are many benefits of being perceived as authentic such as being trusted, liked, and being given loyalty (Bargh et al.,



2002; Brunell et al., 2010; Liu & Perrewe, 2006; Reis & Patrick, 1996; Wickham, 2013). It was unknown previously if these benefits were being bestowed to those who were *actually* authentic since previous work focused solely on *perceptions* of authenticity rather than the accuracy of those perceptions. Our research suggests that in most situations, the positive benefits that come from being perceived as authentic are likely being given to those who *are* authentic. This research may provide encouragement for individuals to be their true selves since their efforts will be recognized and rewarded.

However, it is important to note that there was one instance where we did not find authenticity accuracy – during conflict. Perceived and felt authenticity are important factors for relationship quality. Previous research has observed that authenticity within romantic relationships is associated with greater intimacy, commitment, trust, and relationship satisfaction (Wickham, 2013). Instances of impaired authenticity accuracy for romantic partners could have detrimental outcomes for couples. For example, it is important to accurately perceive when a romantic partner is giving an authentic apology. The absence of accuracy could lead to an undeserved forgiveness or a rejection of a well-intended expression of remorse. Both outcomes could lead to decreased relationship satisfaction or the demise of the relationship altogether. More research is needed to understand contexts such as conflict and other circumstances in which authenticity accuracy may be impeded. We have speculated that cognitive load may have been one mechanism underlying the lack of authenticity accuracy during conflict, but research is needed to test this directly and explore other possible explanations.

Our research also established that perceivers may exhibit accuracy when judging the felt authenticity of unacquainted others. Still, these perceptions of authenticity may not be immune from perceivers' own biases. We found that perceivers were accurate when judging the felt authenticity of both men and women targets, however, participants gave more extreme authenticity ratings for low- versus high-authentic men targets than they did for low- versus high-authentic women targets. In contrast, in the studies involving romantic couples, gender did not consistently moderate authenticity accuracy. Perhaps perceivers rely in some manner on gender stereotypes when judging the felt authenticity of unacquainted others about whom they do not have any other knowledge. The precise ways in which gender stereotypes may have accounted for the observed differences in ratings of men versus women targets in Studies 4A and 4B is an important topic for future research, as the possibility that such stereotypes influence the social perception of others' felt authenticity may have broad implications. For instance, gender stereotypes could impact how authentic men versus women political candidates are viewed when running for office.

### **Limitations and Future Research**

Several limitations should be noted. First, all of our studies included romantic couples in some way. In Studies 1-3, romantic couples served as participants who made judgments about their own partners' felt authenticity. And in Studies 4A and 4B, outside observers watched videos of romantic couples and discerned the felt authenticity of target persons within each couple. Thus, the dynamics of other relationships such as friendships and stranger interactions were not examined. However, we would expect that the ability to accurately perceive felt authenticity to be generalized across different relationship types since our studies found that felt authenticity can be accurately perceived on opposite ends of the spectrum of closeness in relationships (i.e., by both individuals observing strangers and by romantic couples directly

interacting with their partners). Future research should investigate whether correspondence between felt and perceived authenticity ratings holds for people in different kinds of relationships (e.g., same-sex friendships).

Additionally, data from Studies 1-3 came from previous research on unrelated topics. These datasets were useful because they allowed us to capitalize on felt and perceived ratings of authenticity. However, we were not able to choose conversation topics or the nature of the interactions. The variety of conversations allowed us to examine the differences in topics and authenticity accuracy. Yet, we were not able to test any topics twice to confirm that the context of the interaction accounted for the lack of authenticity accuracy within Study 3. Future research should re-examine these conversation topics, or closely related ones, to determine the extent to which authenticity accuracy remains. Also critical is further exploration of conversations that may lead to increased cognitive load (e.g., conflict) to see whether accuracy of authenticity perceptions is again compromised. Research would benefit from determining what the specific factors are that interfere with accurate perceptions of felt authenticity.

Furthermore, in Studies 4A and 4B we were constrained to only using videos from the couples in Study 3. The original research from Study 3 asked participants for consent in using their videos in future studies whereas the consent form from Study 2 did not. For this reason, we were unable to examine outside observers' authenticity accuracy when viewing different sets of targets. Also, a majority of the individuals from Study 3 had rated themselves as high on felt authenticity. This, paired with being limited to only targets who consented for use of their videos in future studies, led us to being constrained to a smaller sample of potential low-authentic targets to show participants. Future research would benefit from using a larger pool of different targets to determine whether authenticity accuracy emerges again for outside observers. It would also be beneficial for outside observers to view different *kinds* of targets such as people they know personally. Examining how outside observers discern the felt authenticity of men and women who they *do* know may help determine whether differences in authenticity rating by gender emerge from (a) being acquainted with the person they are judging or (b) are based within contexts of outside observation rather than face-to-face interactions.

Lastly, although we accounted for a variety of variables that could arguably explain how people discern authenticity in others, we did not identify the direct cue(s) underlying authenticity accuracy. As we noted at the outset, evidence for accurate discernment of authenticity would suggest that people have a shared representation of authenticity and that authenticity is expressed through similar behaviors in different people. Since we *did* find accuracy in perceptions of felt authenticity, then this leads us to believe that there must be some expression of cues that people use to detect others' felt authenticity. In our studies, emotion did not consistently play a key role in the accurate discernment of felt authenticity. Perhaps instead accuracy in felt authenticity judgments come from other types of behavioral cues.

Previous research on social perception may give guidance on what perceivers might be using to determine the authenticity of another person. For example, markers to accurately detect honesty often rely on vocal and verbal cues (Gundersen & Brinke, 2019), whereas indicators of socioeconomic status are displayed through non-verbal cues (Kraus & Keltner, 2009). For authenticity discernment, perhaps accuracy in felt authenticity judgments come from *what* is being said and *how* it is being said. For example, it could be based on tone of voice, inflections, or hesitancy when speaking. Or, it could be based on visual non-verbal cues that are not fixed within emotion such as eye contact or fidgeting. Although we established that there is evidence

for accurate perceptions of felt authenticity, there is a need for future research to further explore what cues lead to that accurate discernment of authenticity.

## **Conclusion**

We are often told to “be yourself” but research has not addressed the question of whether our efforts to be ourselves are recognized by others. On balance, the present findings suggest that when someone feels authentic and is true to themselves that others are likely to be able to accurately perceive it. Since others value and can detect authenticity, being authentic is important not only for the benefits of internal self-perception, but also for the benefits of external appraisal. Altogether, this is some of the first research showing that individuals, both acquainted dyads and outside observers, are able to accurately estimate how authentic another person feels.

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### Appendix A

Comparison of multilevel model coefficients of sacrificers' self-reported authenticity predicted by perceivers' perception of their felt authenticity for Study 1

Predictors	Model	
	Reported	Added Couple Random Effects
(Intercept)	3.70 *** (3.54 – 3.86)	3.70 *** (3.54 – 3.86)
<b>Random Effects</b>		
$SD_{\text{residual}}$	0.78	0.78
$SD_{\text{participant-intercept}}$	0.53	0.53
$SD_{\text{couple-intercept}}$	---	0.00

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Table A1. Unstandardized coefficients and random effects from intercept-only model with and without couple as random intercept.

Predictors	Model	
	Reported	Added Couple Random Effects
(Intercept)	-0.048 *** (-.220 – .123)	-0.048 *** (-.218 – .122)
Perceived Authenticity	0.198 ** (.064 – .331)	0.198 ** (.064 – .330)
<b>Random Effects</b>		
$SD_{\text{residual}}$	0.81	0.81
$SD_{\text{participant-intercept}}$	0.58	0.58
$SD_{\text{participant-perception-slope}}$	0.02	0.02
$SD_{\text{couple-intercept}}$	---	0.00
$SD_{\text{couple-perception-slope}}$	---	0.00
$R_{\text{participant-intercept-perception-slope}}$	.99	.99

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Table A2. Standardized coefficients and random effects from model with and without couple as random intercept.