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RESEARCH

Negotiating Conflict: Affective Behavioral Sequences in Belgian and Japanese Couple Interactions

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Abstract

During conflict, romantic partners' feelings and behaviors are closely intertwined, forming affective behavioral sequences. In this study, we examine cultural variations in these sequences and interpret them against the background of culturally different relationship goals. $N = 58$ Belgian and $N = 80$ Japanese couples engaged in a video-recorded conflict discussion in the lab which was coded using the Specific Affect Coding System. A dynamic network analysis showed that the Belgian network consisted of more significant sequences than the Japanese network, suggesting that Belgians responded to each other's affective behaviors more systematically than Japanese. This may reflect a greater readiness among Belgians (vs. Japanese) to negotiate individual needs, also evident in the Belgian sequences revolving around anger, criticism, and domineering. Exceptions existed: both Japanese and Belgian women's criticism was followed by men's defensiveness, suggesting some gender-based power imbalance in both cultures. However, additional Japanese sequences further underscored this imbalance—Japanese men's domineering was not likely to be followed by women's criticism, suggesting Japanese women's inhibited opposition. In contrast, several sequences in the Belgian network suggested more power balance. For example, women's anger was validated by men. Additionally, fear/tense behavior by either Belgian partner was unlikely to be met with assertion (i.e., anger), aligning with the Western view that assertion should remain within healthy boundaries. Finally, humor reciprocation occurred in both cultures. Taken together, this study showcases an approach to describing cultural variation in affective behavioral sequences that could provide better insight into the culturally specific ways in which couples weave their relationships.

Keywords Culture · Affective behavioral sequences · Dynamic networks · Romantic relationships

Within ongoing interactions, romantic partners' feelings and behaviors become inextricably linked (Butler, 2011, 2015; Levenson et al., 2014). One reason is that emotions and behaviors are inherently interpersonal; they convey our (relational) concerns and intentions and affect those of our partner (Fischer & Manstead, 2018; Frijda & Mesquita, 1994; Van Kleef, 2009; Parkinson, 2021; van Doorn et al., 2015). For instance, anger conveys one's perception of being treated unfairly and demands change (Fischer & Roseman, 2007; Kuppens et al., 2003). As a result, one partner's feelings and behaviors elicit responses from the other, forming sequences of affective behaviors. These sequences reflect how partners position themselves vis-à-vis each other and the relationship, and how they "negotiate" concerns and intentions (Keltner & Haidt, 1999; Ruan et al., 2020; Sanford & Grace, 2011). For instance, anger may be met with anger and frustration, or alternatively, with apologies and understanding. In the former sequence, one's claim for entitlement is challenged; in the latter, it is accepted. In each sequence, the interaction takes a different turn. Accordingly, relationship researchers have become increasingly interested in affective behavioral sequences within couple interactions (Butler, 2015; Schoebi & Randall, 2015; Solomon et al.,

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2022). In this study, we focus on couple conflict as a context for these sequences (Blickman et al., 2023; Gottman et al., 1999), as couple conflict is diagnostic of relationship quality (Leuchtmann et al., 2019; Markman et al., 2010).

Building on initial evidence that culture informs how partners respond to each other's feelings and behaviors (Boiger & Mesquita, 2012; Boiger et al., 2022; Schoebi et al., 2010), we examine cultural variation in affective behavioral sequences during conflict. We hypothesize that partners are more likely to respond to each other's anger in cultural contexts where the primary relationship goal is to assert individual needs and maintain autonomy (Boiger et al., 2012, 2013; Kitayama et al., 2006; Markus & Kitayama, 1991; McNulty & Russell, 2010; Yoo et al., 2011), than in contexts where the goal is to create harmony and adjust to other's expectations (Boiger et al., 2012, 2013; Morling et al., 2002; Rothbaum et al., 2000; Schouten et al., 2023; Tsai et al., 2007). We thus propose that affective behavioral sequences observed in couple conflict reflect the culture's dominant relationship goals—namely, autonomy versus harmony and adjustment.

This idea aligns with research showing that cultural differences in couples' emotional experiences and behaviors during conflict reflect differences in culturally central relationship goals (Boiger et al., 2022; Schouten et al., 2024). Whereas these studies focused on *average levels* of emotions and behaviors, we examine sequences of affective behaviors, in keeping with the idea that emotions and behaviors are interpersonal and unfold dynamically. Research on cultural variation in affective behavioral sequences is scarce. An exception is a study by Schoebi and colleagues' (2010), which found that wives' self-reported feelings of anger were more strongly associated with husbands' anger and sad feelings the next day in collectivistic cultures (Portugal and Russia) than in individualistic cultures (i.e., Belgium, Netherlands, Germany). In China, the anger-to-anger path did not emerge. The authors suggested that anger is more upsetting in cultures valuing relational harmony than in those valuing autonomy. This offers initial evidence that couples' emotion sequences—as measured across days—may vary across cultures.

Moving beyond this work, the present study investigates real-time *behavioral sequences* during *ongoing* conflict interactions, capturing how partners respond in the moment. In this context, the immediate effect of anger may differ from delayed effects observed across days. Moreover, this study examines a broader range of sequences, including responses to affective behaviors beyond anger, allowing for more granular descriptions of cultural variations in how partners navigate conflict.

To this end, we compared affective behavioral sequences between Belgian and Japanese couples during conflict. We coded couples' affective behaviors—anger, criticism, defensiveness, domineering, fear/tension, humor, and validation—using the Specific Affect Coding System (SPAFF) (see Schouten et al., 2024) and computed all possible sequences within each culture by applying a dynamic network approach (Bodner et al., 2018).

We expected that Belgian partners would readily respond to each other's anger, domineering, and criticism (i.e., assertive and confrontational behaviors), either by rejecting or validating them. This dynamic can be seen as Belgian partners entering negotiations of individual needs or views, which fits a concept of a close relationship where partners balance individual autonomy (Finkel et al., 2014; Rusbult et al., 2009) with closeness (Pietromonaco & Collins, 2017; Vanhee et al., 2018).

In Japan, we expected partners to mutually validate each other's opinions and mitigate potential anger, such that one partner's validation would elicit validation from the other, and sequences involving anger would be unlikely. In this way, Japanese partners would avoid further conflict (Lee et al., 2013), which aligns with the Japanese relationship ideal to prioritize harmony and mutual adjustment over individual autonomy (Morling et al., 2002; Rothbaum et al., 2000).

Method

Participants

Eighty Japanese and 58 Belgian mixed-sex couples participated in the study. We determined the sample size based on previous cross-cultural couple studies (Schoebi et al., 2010; Tsai et al., 2006). Power analyses were not conducted a priori because power analytical tools for dyadic data (i.e., Lafit et al., 2021, 2022) were not only unavailable at the time of data collection but also focused on other statistical approaches than the network models used in the present study. Belgian couples were recruited through advertisements on social media and flyers spread in and around the city of Leuven, and Japanese couples were recruited in the greater Tokyo/Kansai Area by a recruitment company. Partners of each couple were native Japanese/Dutch speakers, between 35 and 50 years old, in a mixed-sex relationship for at least two years and cohabiting. Each couple received a monetary compensation of 100 euros for completing the study (the Japanese couples received this amount from the recruitment company through an internal point system).

Belgian partners were slightly younger ($M_{BE} = 41.22$, $SD_{BE} = 5.15$; $M_{JP} = 42.98$, $SD_{JP} = 4.34$, $t(221.20) = 3.00$, $p < .01$), more likely to report that their socio-economic status was higher middle class (29.3% in Belgium; 10% in Japan) but less likely to indicate it was middle class than Japanese partners (58.6% in Belgium, 64.4% in Japan). The

average relationship duration was approximately 15 years in both cultures ($M_{BE} = 15.55$, $SD_{BE} = 8.18$; $M_{JP} = 14.98$, $SD_{JP} = 7.18$; $t(274) = -0.62$, $p = .54$), with Belgian couples being less likely to be married than Japanese couples (BE: 72.4%; JP: 97.5%, $\chi 2\ (1) = 37.31$, $p < .001$).

Procedure

This study was part of a larger study on couple conflict (see Boiger et al., 2022) in which couples participated in a dyadic interaction task originally developed by Levenson and Gottman (1983) to study marital processes. The task involved three interactions in the lab: a neutral, a disagreement, and a positive interaction, of which the disagreement interaction was of particular interest to the present study. The dyadic interaction task was preceded by a pre-laboratory phase and followed by a video-mediated recall and follow-up phase (for further details, see Boiger et al., 2022).

Disagreement Interaction. Couples engaged in a 10-minute disagreement interaction that was video recorded. The dyad room was equipped with three cameras: one camera recorded an overview of the interaction (both partners were visible from the side), and two other cameras recorded the frontal view of each partner. Partners were seated face to face; the woman was seated on the right, and the man on the left side of a table that was positioned in the middle of two chairs. Couples were asked to choose a disagreement topic from a list of disagreement topics they had rated as relevant on one of the questionnaires in the pre-laboratory phase (see Schouten et al., 2024 for the conflict topic questionnaire and an overview of chosen conflict topics). Once the disagreement topic was chosen, the couples were instructed to (a) talk about the disagreement as if they were at home, (b) start the conversation by having each partner state their point of view, and (c) try and solve the disagreement.

Measures

Affective Behaviors Partners' affective behaviors were coded in a previous study (see Schouten et al., 2024) using the Specific Affect Coding Scheme (SPAFF) (Coan & Gottman, 2007). The SPAFF includes 16 affective behaviors, of which five are positive (affection, enthusiasm, humor, interest and validation) and 11 are negative (anger, domineering defensiveness, belligerence, threat, criticism, contempt, fear/tension, sadness, disgust and whining). Each SPAFF code is (a) based on a combination of facial expressions, gestures, postures, verbal content, voice, and speech rate (the list of micro-behaviors provided per code is non-exhaustive) and (b) functionally defined by what an emotion achieves in the interaction. The purpose of the SPAFF is not to code for each single micro-behavior, but to observe micro-behaviors closely and assign a functional or social meaning to a combination or "gestalt" of micro-behaviors, given the socio-cultural context (Gottman & Coan, 1995). Because the SPAFF assumes that coders who are familiar with a specific socio-cultural context—cultural informants—are better able infer the meaning of micro-behaviors within a particular cultural context, three native Dutch-speaking coders coded the Belgian couple interactions, and three native Japanese-speaking coders coded the Japanese couple interactions (see Schouten et al., 2024). When behaviors were considered affective, coders picked one SPAFF-code to describe the behavior they observed (i.e., SPAFF-codes were mutually exclusive). Neutral behaviors were coded when exchanges were perceived as non-affective (i.e., mere informational exchanges such as "what are we eating for dinner tonight"), and listener behaviors were coded when partners were not speaking. All behaviors were coded second by second using the software The Observer XT (Noldus Information Technology, 2021), yielding binary time series data.

Inter-rater reliability (IRR) was based on at least 30% of the couples in each cultural group. For each of the SPAFF-codes, we established IRR by computing the average Gwet's AC for men and women separately and comparing it to the minimum Gwet's AC, defined as the 95th percentile of a distribution of Gwet's ACs based on simulated data in which error was introduced to each coder's data to reflect coder agreement expected by chance (see Bodner, Bringmann et al., 2021; Bodner, Tuerlinckx et al., 2021). Adequate IRR was obtained when a SPAFF-code's average Gwet's AC was significantly higher than the minimum Gwet's AC, indicating that coders' agreement for a SPAFF-code exceeded agreement that could be expected based on chance. We excluded SPAFF-codes for which IRR could not be reliably determined because of non-existent or low frequencies (i.e., observed in at least 5% of the interaction time in fewer than 10 participants across cultures). The remaining SPAFF-codes were anger, domineering, defensiveness, criticism, fear/tension, validation, and humor, for which adequate IRRs were obtained (with the average Gwet's AC ranging from 0.88 to 0.99 and the minimum Gwet's AC ranging from 0.77 to 0.79 across cultures). Table 1 provides an overview of the meaning of the SPAFF codes included in the study.

Statistical Analyses

We used a dynamic network approach (Bodner, Bringmann et al., 2021; Bodner, Tuerlinckx et al., 2021) to compute temporal affective behavioral sequences per culture. First, we concatenated the binary time-series data of all couples within each culture and used this concatenated data to compute the temporal affective behavioral sequences per culture. We thus did not compute affective behavioral sequences

Table 1 Overview of the SPAFF codes

SPAFF code	Meaning
Anger	Serves to respond to perceived violations of one's autonomy and respect, and to request better treatment. May involve frustration and commands to change behavior.
Criticism	Serves to attack the partner's character or personality and to convey a negative global assessment of the partner's abilities and value as a person. May involve blaming the partner.
Defensiveness	Serves to deflect responsibility and blame. Examples are minimizing the problem and finding excuses.
Domineering	Serves to exert and demonstrate control over the partner or conversation, and to get the partner to submit to one's own point of view. Examples are invalidating or lecturing and patronizing the partner.
Fear/Tense	Serves to communicate fear, worry, anxiety, nervous anticipation, or dread. Examples are speech disturbances, which involves having a difficult time expressing or knowing what to say, fidgeting and nervous laughter.
Humor	Serves to share in mutual amusement and joy following a mutually recognized moment of absurdity or fun. Examples are jokes.
Validation	Serves to show sincere understanding and acceptance of the partner's point of view. Examples are backchannels (such as nodding), apologies, and direct expressions of agreement.

separately per couple. The reason for this was that the occurrence of any one affective behavior within a couple interaction was relatively low. This made it difficult to determine whether partners responded to each other's behaviors in a systematic fashion, and hence complicated the interpretation of sequences at the couple level. Therefore, we decided to compute culture-level (as opposed to couple-level) networks.

After concatenating the data, we quantified the temporal affective behavioral sequences with a lag of five seconds using Cohen's Kappa. We retained a lag of five seconds because our inspection of contingency profiles, which map the variation of Cohen's Kappa with increasing lags, indicated that Cohen's Kappa was maximal at this lag. Cohen's Kappa ranges from − 1 to 1, with a positive Cohen's Kappa indicating that an affective behavioral sequence is more likely to occur than could be expected based on chance, and hence that one partner's affective behavior is *likely* to be followed by the other partner's affective behavior five seconds later. Conversely, a negative Cohen's Kappa indicates that an affective behavioral sequence is less likely to occur than could be expected based on chance, and thus that one partner's affective behavior is *not likely* to be followed by the other partner's affective behavior five seconds later. We computed Cohen's Kappa for each possible combination of partners' affective behaviors, yielding a total of 98 temporal affective behavioral sequences per culture (7 affective behaviors woman * 7 affective behaviors man * 2 partners (lagged affective behavior of each partner)).

Finally, to test the significance of each temporal affective behavioral sequence, we employed a permutation-based simulation approach using the ConNecT R package (see Bodner, Tuerlinckx et al. 2021; Bodner & Ceulemans, 2023). This method involves comparing the observed Cohen's Kappa for a given sequence to a distribution of Cohen's Kappa generated from resampled data, where the timepoints are shuffled and hence the association between the two variables of interest is disrupted. This way we can establish whether a sequence is *significantly* more or less likely to occur, or stated differently, whether one partners' affective behavior is *significantly* more or less likely to be followed by the other partners' affective behavior five seconds later, compared to chance. If a positive sequence is significant, it indicates systematicity in how partners respond to each other's affective behaviors, while if a negative sequence is significant, it indicates systematicity in how partners do *not* respond to each other's affective behaviors (i.e., a partner systematically does *not* respond with anger upon the other's fear/tense behavior). Importantly, the latter does not indicate an overall absence of the given affective behavior (i.e., anger) in the partner who does not respond—rather, it indicates that the partner systematically does not respond with that particular affective behavior. If a sequence is not significant it indicates a lack of systematicity in the way partners either respond or do not respond to each other's affective behaviors. We focused on affective behavioral sequences that were significant at a level of $p < 0.01$. Overviews of affective behavioral sequences per culture are provided in Tables 2 and 3. The syntax for this study can be found in the online supplementary material (OSM).

Results

Figure 1A visualizes the significant affective behavioral sequences in Belgian couples, with Fig. 1B–D probing the same Belgian network from a number of different perspectives, which will be outlined below. Figure 2 visualizes the significant affective behavioral sequences in Japanese couples. The arrows in these figures represent sequences in either direction, from the female partners' affective behavior to the male partners' affective behavior and vice versa. Solid arrows represent positive sequences, and dashed arrows represent negative sequences.

Table 2 Significant affective behavioral sequences in the Belgian network

Affective behavioral sequence	Direction	Significance
Anger F → Validation M	+	**
Criticism F → Defensiveness M	+	***
Criticism M → Fear F	–	***
Domineering M → Humor F	–	***
Fear F → Anger M	–	***
Fear F → Criticism M	–	***
Fear F → Fear M	–	***
Fear F → Validation M	–	***
Fear M → Anger F	–	***
Fear M → Criticism F	–	***
Fear M → Defensiveness F	–	***
Fear M → Domineering F	–	***
Fear M → Fear F	–	***
Humor F → Anger M	–	**
Humor F → Humor M	+	***
Humor M → Humor F	+	***
Validation M → Defensiveness F	–	**

***$p < .001$, **$p < .01$. "+" = positive association, "–" = negative association. *F* female, *M* male

Table 3 Significant affective behavioral sequences in the Japanese network

Affective behavioral sequence	Direction	Significance
Criticism F → Defensiveness M	+	***
Domineering M → Criticism F	–	**
Humor F → Humor M	+	***
Humor M → Humor F	+	***
Humor M → Validation F	–	***
Validation F → Validation M	–	***
Validation M → Validation F	–	***

***$p < .001$, **$p < .01$. "+" = positive association, "–" = negative association. *F* female, *M* male

The Belgian Network

The Belgian network consisted of 17 significant sequences out of the possible 98. In line with our expectations, we observed that confrontational and assertive behaviors (i.e., anger, criticism and domineering) were part of sequences that were both more and less likely to occur than could be expected based on chance (Fig. 1B). For instance, female partners' anger was likely to be met by male partners' validation five seconds later (reflected by the solid arrow), indicating that, in Belgian couples, men tend to validate women's anger by, for example, backchanneling or expressing agreement. We also found that female partners' criticism was likely to be followed by male partners' defensiveness in the next time frame (reflected by the solid arrow), meaning that Belgian men often respond defensively (or dismissively) when criticized by their counterpart. Lastly, we found that male partners' criticism was *not* likely to be followed by the female partners' fear/tense behavior, and that male partners' domineering did not render female partners' humor likely (reflected by the dashed arrows). This means that Belgian women are unlikely to be fearful when blamed or criticized by their counterpart, and they are also unlikely to joke or laugh when submitted to men's patronizing and invalidation.

We found that sequences involving fear/tense behaviors were less likely to occur than could be expected based on chance (Fig. 1C). For instance, male partners' fear/tense behavior was not likely to be followed by any of the female partners' negative affective behaviors (reflected by the dashed arrows). Hence, women did not readily respond with anger, criticism, defensiveness or fear upon their counterpart's fear/tense behavior (i.e., expressing worry, nervousness, being afraid of hurting the other). Similarly, female partners' fear/tense behavior did not render negative affective behaviors in men likely five seconds later (reflected by the dashed arrows). More specifically, Belgian men did not readily respond to their counterpart's fear/tense behavior with anger, criticism or fear/tension. Lastly, female partners' fear/tension was not likely to be followed by men's validation (reflected by the dashed arrows), suggesting that when women engage in fear/tense behavior, Belgian men do not respond with expressions of understanding.

Finally, sequences in which positive affective behaviors (Fig. 1D) were met with (other) positive affective behaviors were more likely to occur, while sequences in which these behaviors were met with negative affective behaviors were less likely to occur than could be expected based on chance (reflected by the solid arrows). For instance, humor in either partner rendered humor in the other partner more likely, suggesting that laughter and jokes were reciprocated. Furthermore, humor in male partners was not likely to be followed by female's anger, and a validating and understanding stance in men was not met with a defensive attitude in women (reflected by the dashed arrows).

The Japanese Network

We found that the Japanese network contained fewer significant sequences than the Belgian network; only 7 sequences were significant out of the possible 98. This suggests that, on average, partners' responses, or absences thereof, were less systematic; there was a smaller set of sequences that stood out as being more or less likely than chance. The few sequences that *were* significant, and hence that were either more or less likely to occur than could be expected based

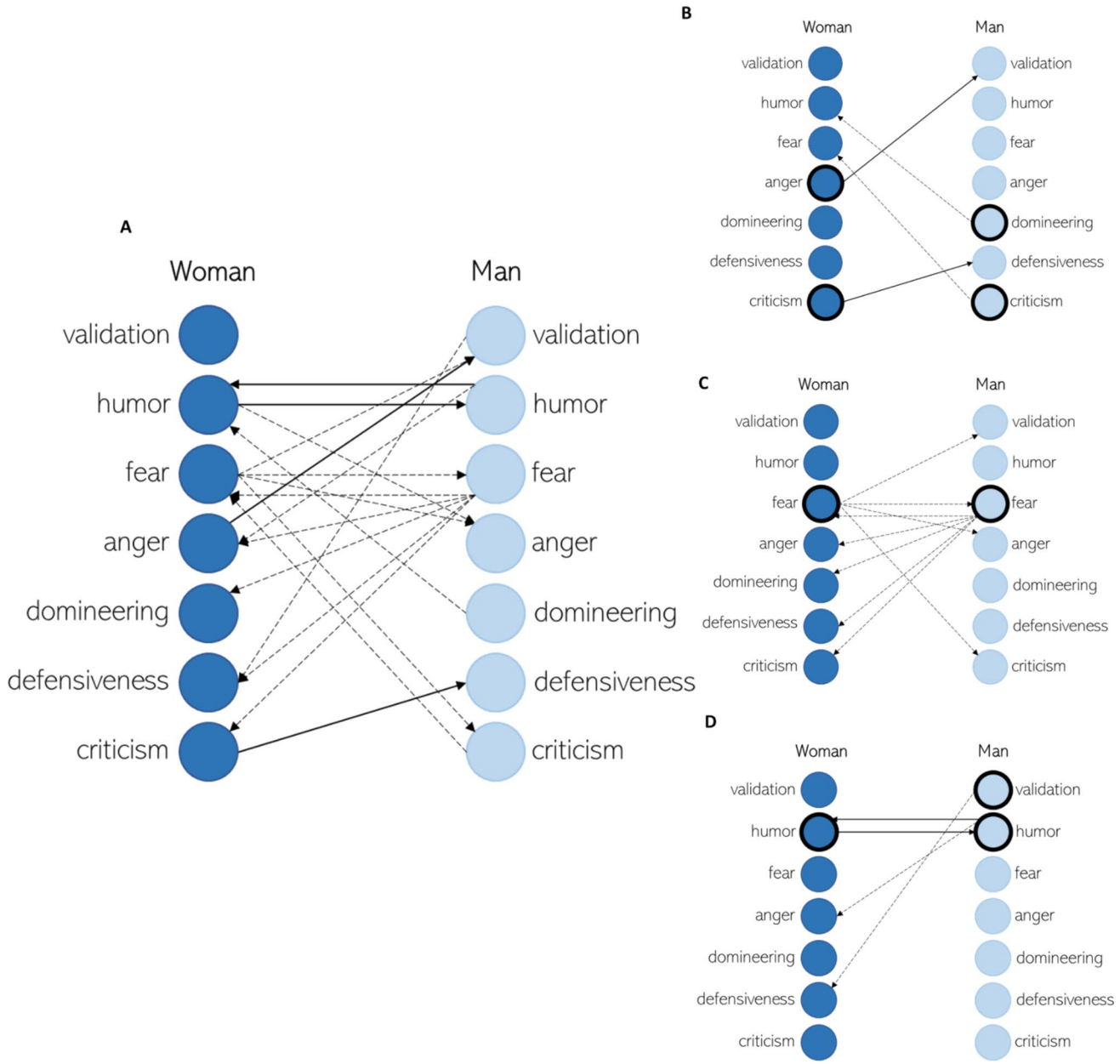

Fig. 1 The average Belgian network. **A** All sequences. **B** to **D** Break down the network into specific sequences for easier interpretation. **B** Sequences starting from confrontational and assertive behaviors (anger, domineering and criticism). **C** Sequences starting from fear/tense behavior. **D** Sequences starting from positive emotions. Dashed arrows represent negative sequences, and solid arrows represent positive sequences

on chance, centered around (1) validation, (2) humor, and (3) criticism.

We found a significant sequence between both partners' validating behavior. Against our expectations, however, validation by one partner was *not likely* to be followed by the other partner's validation (reflected by the dashed arrow), suggesting that validation was not reciprocated. In contrast, humor is one partner rendered subsequent humor in the other partner more likely, indicating that humor (i.e., making a joke, teasing the partner) tended to be reciprocated. However, Japanese men's humor was not likely to be met by women's validation (reflected by the dashed arrow), which suggests that women did not convey understanding upon their counterpart's jokes or laughter. Finally, one sequence involving confrontational and assertive behaviors was significantly more likely to occur, while another sequence involving these behaviors was significantly less likely to occur than chance. First, female partner's criticism was likely to be met

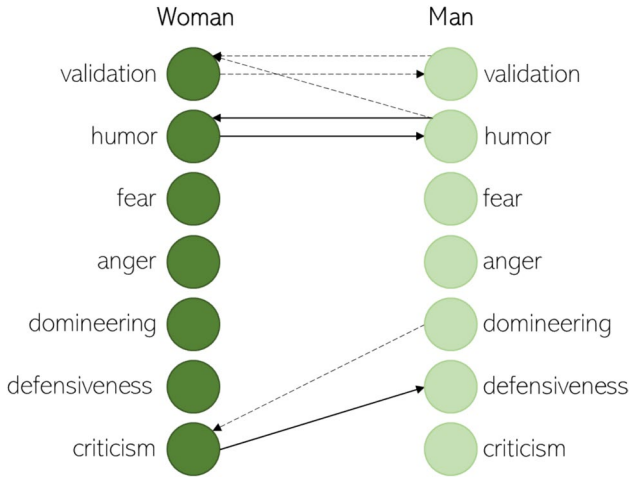

Fig. 2 The average Japanese network, depicting all sequences. Dashed arrows represent negative sequences, and solid arrows represent positive sequences

by men's defensiveness (reflected by the solid arrow), suggesting that Japanese men tend to defend themselves and deflect responsibility after being criticized by their counterpart. Second, Japanese male partners' domineering was not likely to be followed by female partners' criticism (reflected by the dashed arrow), suggesting that Japanese women are less likely to blame or negatively evaluate their partner, after the latter engaged in dominant behavior. None of the sequences that occurred above or below chance in the Japanese network involved anger.

Robustness Check

Because affective behavioral sequences are most reliably computed when both affective behaviors of a sequence occur in the couple interaction, we quantified the affective behavioral sequences again, but this time we excluded couples for which either the man's or woman's affective behavior of a respective sequence was not observed in the couple's interaction. In Belgium, the significance level (though not the direction) of the sequence *men's criticism → women's fear* and *women's fear → men's criticism* changed to $p < 0.05$. Both significance levels ($p < 0.01$) and directions of all other affective behavioral sequences in both cultures remained unchanged, indicating that our findings were robust (see OSM, Tables S1 and S2).

Discussion

In this study, we mapped affective behavioral sequences of Belgian and Japanese couples during conflict. We hypothesized that such sequences would vary across cultures. Using the SPAFF coding scheme (Coan & Gottman, 2007), we coded eleven negative and five positive affective behaviors second-by-second. Of these affective behaviors, seven occurred at least 5% of the time in more than ten participants across cultures: anger, domineering, defensiveness, fear/tension, criticism, humor, and validation. A culture-level dynamic network approach (Bodner, Bringmann et al., 2021; Bodner, Tuerlinckx et al., 2021) on these behaviors identified sequences that occurred significantly more or less than expected by chance. By contrasting Belgian with Japanese sequences, we gain insight in cultural similarities and differences in the turns that couple conflict takes. We interpret these sequences in light of each culture's relationship goals.

Negotiating Individual Needs or Maintaining Harmony

A notable difference between the Belgian and Japanese networks is that the Belgian network had more sequences that occurred above or below chance than the Japanese network. This suggests that Belgian partners responded more systematically to each other's affective behaviors than Japanese.

For Belgians, systematic responses may reflect an active, and possibly reactive, stance aimed at negotiating and asserting individual needs. This aligns with the Western belief that couples should address conflict directly to resolve relational issues (Ostenson & Zhang, 2014; Rothbaum et al., 2000; Schouten et al., 2023). Supporting this interpretation, several Belgian sequences involved anger, domineering or criticism—confrontational or assertive behaviors that in the Belgian context may signal unmet needs and demand change. For instance, Belgian men were more likely to respond to their counterpart's anger with validation, granting their partner's claim for better treatment.

In contrast, Japanese partners' lack of systematic responses suggests greater variability in how they react, possibly reflecting a proactive stance that helps to attune to relational demands in the moment. Consistent with this interpretation, none of the sequences that occurred above or below chance in the Japanese network involved anger, indicating that anger was neither systematically attended to, nor a response. This aligns with prior findings that Japanese partners prioritize mutual adjustment and relational harmony over asserting individual needs (Lee et al., 2013; Matsunaga & Imahori, 2009; Schouten et al., 2023).

While Japanese couples focus on adjustment and relational harmony, this does not mean they always avoid confrontation. This is evident from the sequence wherein women's criticism (i.e., blaming the partner, attacking the partner's character) is likely to be followed by men's defensiveness. Criticism in East-Asian cultures, rather than being hostile, may serve the goal of holding the other person to

(higher) social norms and relational standards (e.g., Campos et al., 2007; Heine et al., 1999; Wang, 2001). In the *women criticism—men defensiveness* sequence, Japanese women may thus appeal to their partner to meet higher relationship goals.

(Gender-Based) Power Negotiations

The *women criticism—men defensiveness* sequence can be interpreted as a power-based sequence that occurred above chance in both cultures, indicating that men were likely to resist negative images portrayed by women—as either not meeting relational standards or not meeting their wives' individual needs. This sequence aligns with the demand-withdraw dynamic commonly observed in Western romantic relationships (e.g., Holley et al., 2010; Eldridge & Christensen, 2002), reflecting a power asymmetry where women—who typically hold less power—demand change, while men—who hold more power—resist or withdraw. Power imbalances may thus shape partner dynamics during conflict in both cultures.

However, gender-based power differences appear to be more pronounced in Japan than in Belgium. Japanese women were less likely than chance to criticize upon men's domineering, which suggests they yield towards rather than challenge men's exertion of power. This may reflect traditional marital norms prevalent in Japan (North, 2009; Schouten et al., 2023; Taniguchi & Kaufman, 2022). In contrast, Belgian sequences suggest more power equality between the sexes. Belgian men yielded towards women's anger, and Belgian women were less likely than chance to respond with humor or fear upon men's domineering and criticism, respectively. These sequences imply men do not get away with more than women. Belgian sequences involving fear/tense behavior also suggest mutual respect and concern: fearful partners—who are hesitant and anxious to express themselves—were shielded from their partner's anger and criticism, perhaps preventing further discomfort. This supports the Western view that although necessary at times, confrontation should remain respectful to avoid harming the partner or the relationship (Overall & McNulty, 2017; Schouten et al., 2023).

The Role of Humor and Validation

Across cultures, sequences also involved positive affective behaviors. In both Belgium and Japan, partners reciprocated each other's humor above chance. In Western couples, shared positivity, like humor, may foster closeness and contribute to higher satisfaction with the relationship (Butzer & Kuiper, 2008; Horn et al., 2019; Otero et al., 2020). Humor reciprocation may serve similar functions in Japan.

However, our data suggests that humor may not carry the same social implications across cultures. In Belgium, men's humor buffered women's anger, while in Japan, no such buffering of negativity occurred. Furthermore, Japanese men's humor did not seem to foster positivity, as women were less likely than chance to respond with validation.

Validation also appeared to have culturally different social implications. In Belgium, men's validation buffered women's defensiveness, helping the couple move away from negativity. Yet, in Japan, one partner's validation rendered the other's validation less likely, suggesting that one partner's validation suffices to maintain harmony (Matsunaga & Imahori, 2009; Morling et al., 2002). This supports findings that Belgian couples savor positive affect more during conflict than Japanese couples (Kirchner-Häusler et al., 2022).

Limitations and Future Directions

This research has several limitations. First, as we used culture-level rather than couple-level networks, we could not statistically compare sequence occurrences across cultures. Nonetheless, contrasting the Belgian and Japanese network offers first insights into culturally specific conflict patterns.

Second, with culture-level networks, we could not differentiate between sequences characteristic of high- versus low-functioning couples. For example, validation following boundary-setting anger may benefit relationships in Belgian contexts (Gottman, 1993; Gottman et al., 1977), whereas male defensiveness following female criticism may not (Heavey et al., 1993; Papp et al., 2009). Both sequences support autonomy yet differ in relational outcomes. Future research with a higher incidence of affective behaviors should use couple-level networks.

Third, in our procedure, we neither controlled for, nor counterbalanced, which partner started the conversation. We chose this approach as Japanese couples considered it a breach of confidence for the research assistant to assign a conflict topic based on partner's private answers to the conflict topic questionnaire. However, previous work shows that women are more likely than men to initiate conflict conversations in the lab (Gottman et al. 1999). Our procedure does not permit to examine whether sequence occurrences depend on who starts the conversation. This would be a promising direction for future research.

Conclusion

This study is among the first to explore cultural variation in affective behavioral sequences during conflict between Belgian and Japanese couples, extending research beyond Western samples. It enhances our understanding of the social

implications of affective behaviors within different cultural contexts and offers initial insight into the micro-genesis of culture (Kashima, 2008; Kashima et al., 2020), by showing how couples weave culturally specific relationships through affective behavioral exchanges in real-time interactions.

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Data Availability No datasets were generated or analysed during the current study.

Author Contributions A.S. contributed to the conception and design of the work, collected the observational data, interpreted the sequence data and wrote the main manuscript text. N.B. and E.C. analyzed and interpreted the sequence data. M.B. contributed to the conception and design of the work, collected the video-recorded material, and interpreted the sequence data. Y.U. and B.M. contributed to the conception and design of the work, the collection of both video-recorded material and observational data in Japan and Belgium, respectively, and interpreted the sequence data. All authors reviewed the manuscript.

Ethical Approval The study was approved by the Social and Societal Ethics Committee of the University of Leuven (G-2015 08 312, Interactions in Close Relationships).

Informed consent Informed consent was obtained from all participants prior to the study.

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