

Is older indeed wiser? Identifying conflict communication patterns in
older and younger dating couples

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Abstract

More adults are dating in later life, yet little is known regarding how older adults navigate conflict in their newly formed relationships. Given theories suggesting that older adults are especially skilled in enhancing positivity and minimizing negativity within their relationships, the current study utilized data from 81 dating couples (age range 30-88) to examine potential age differences in couples' behavioral patterns during observed conflict discussions. Using sequence analysis, we identified four distinct multi-turn conversational motifs which characterized couples' discussions: oppositional problem-solving, cooperative problem-solving, positive passivism, and avoidance. Further analyses revealed no significant age differences in the prevalence of these motifs within couples' conversations. However, age moderated the effect of oppositional problem-solving motifs on post-conversation appraisals for men. If couples engaged in more oppositional problem-solving sequences, younger, but not older, men rated the conversation as less satisfying. The implications of these findings for understanding age differences in communication are discussed.

Keywords: CONFLICT RESOLUTION, PROBLEM-SOLVING, AGE DIFFERENCES, DATING, ROMANTIC RELATIONSHIPS

Is older indeed wiser? Identifying conflict communication patterns within older and younger dating couples

Recent decades have seen a dramatic rise in the prevalence of dating in later life. Longer life expectancies and rising divorce rates among couples over age 50 have contributed to a new social reality in which older adults increasingly find themselves single again and searching for new romantic partnerships (Brown et al., 2018; Cooney & Dunne, 2001). Consequently, the number of older adults who describe themselves as being in a steady dating relationship is growing (Brown & Shinohara, 2013; Carr & Utz, 2020). Yet despite these societal trends, research on how older couples navigate their newly-formed romantic relationships is scarce. This gap in our understanding is problematic given the unique challenges associated with the early stages of relationship development. According to the relationship turbulence model (Knobloch, 2007; Solomon & Knobloch, 2004), partners' early efforts to integrate their lives can prove quite disruptive as it takes time to establish smooth interdependence within the relationship. For this reason, the transition into a committed dating relationship is often marked by escalations in relationship tensions. Weathering this turbulent period, then, requires that couples become adept at resolving those inevitable conflicts and develop more cooperative patterns of interaction.

Notably, several prominent theories within the aging literature suggest that older adults may have an advantage over younger adults in managing these early relationship tensions due to the changing motivational priorities and increases in socioemotional expertise that come with age (Carstensen, 2006; Charles, 2010). In essence, a wealth of research indicates that as individuals grow older, they are more likely to prioritize the maintenance of harmonious social relationships over other goals (Carstensen, 2006; Sorkin & Rook, 2004). Consequently, aging is associated with a greater reliance on cognitive and behavioral strategies that serve to minimize the

experience of negative emotions and enhance the experience of positive emotions within their close relationships (see Charles & Carstensen, 2010 for review). From this perspective, older may indeed be wiser as accrued life experiences allow individuals to develop a more astute sense of how to effectively mitigate conflict (Blanchard-Fields, 2007).

Nonetheless, to date, our understanding of age-related changes in couples' conflict strategies is hindered by several notable limitations of the existing literature. First, studies directly comparing older and younger couples' conflict responses rarely rely on observational methodologies to identify age differences in communication behaviors. Instead, most prior work has utilized daily diary surveys (e.g., Birditt & Fingerman, 2005; Birditt et al., 2005), which cannot determine whether age differences arise from differences in couples' conflict behaviors or from differences in couples' perceptions and recollections of those behaviors (e.g., Charles et al., 2003). Second, the few observational studies of couples' conflict communication that do exist have focused exclusively on older adults in longstanding marriages (e.g., 20+ years). Unfortunately, this focus confounds age with relationship duration, and thus raises questions regarding whether results may generalize to newer dating relationships. Finally, prior observational work also tends to concentrate on examining the overarching tenor of couples' conversations, which may obscure meaningful differences in couples' turn-by-turn conversational dynamics.

The goal of the current study, then, was to provide a more nuanced understanding of potential age differences in couples' conflict communication by addressing these methodological limitations. Namely, using data from a sample of dating couples who varied in age, but were of similar relationship duration, we employed a novel statistical technique known as sequence analysis to identify common multi-turn communication patterns in couples' observed conflict

resolution discussions. We also explored whether age may be linked to the prevalence of those patterns within couples' conversations, and/or may moderate the effects of those conversational patterns on partners' post-conversation appraisals.

Age Differences in Couples' Conflict Behaviors and Appraisals

According to theories of socioemotional expertise (Charles & Carstensen, 2010), older couples should be more likely than their younger counterparts to enact benevolent responses when faced with interpersonal tensions. Indeed, some observational work indicates that older individuals exhibit more reassuring behaviors and fewer critical behaviors during discussions of relational conflicts (Carstensen et al., 1995; Holley et al., 2013; Verstaen et al., 2020). Specifically, both cross-sectional and longitudinal comparisons of middle-aged and older married couples' problem-solving discussions have found that older adults were especially skilled in "softening" tensions through the use of passive constructive emotional behaviors. That is, older adults exhibited greater levels of humor, validation, and optimism throughout these discussions. Relative to middle-aged married couples, older married couples also were less likely to engage in destructive emotional behaviors, such as belligerence, defensiveness, and whining (Carstensen et al., 1995; Verstaen et al., 2020). Finally, and again supporting the notion that the motivation to minimize negative experiences may increase with age (Carstensen, 2006), some evidence suggests that individuals are more likely to engage in avoidant behaviors, such as shifting the conversation away from the conflict to other benign topics, as they grow older (Holley et al., 2013).

Other studies, however, have failed to find age differences in couples' observed problem-solving behaviors (Smith et al., 2009; Story, et al., 2007). Rather, and in line with research suggesting that individuals tend to recall events more positively as they get older (Carstensen &

DeLiema, 2018), this work has identified a greater positivity bias in older couples' appraisals of their conflict exchanges. Namely, older adults were especially likely to interpret their partner's behavior in a more positive manner than was warranted by observers' ratings (Henry et al., 2007; Story et al., 2007) and experienced less subjective distress in response to their conflict interactions (Smith et al., 2009). These findings emerged despite the fact that older adults' observed behaviors did not differ from the observed behaviors of their middle-aged and younger counterparts (Smith et al., 2009; Story et al., 2007). In other words, these findings suggest that age may be linked not to how couples behave during their interactions, but rather in how they appraise those interactions.

Using Sequence Analysis to Examine Patterns of Communication

At present, then, lingering questions remain regarding the precise effects of age on couples' conflict responses (e.g., Carstensen et al., 1995; Story et al., 2007). A closer look at the existing literature, however, reveals that researchers have not taken full advantage of the richness of their observational data. Consequently, important nuances within couples' conversations may have been overlooked. Although observational methods provide valuable information on the verbal content, emotional tone, and nonverbal behaviors that characterize couples' conversational exchanges, the analytic techniques traditionally applied to observational data are limited. For instance, researchers often assess conversations at the microlevel, also referred to as the speaking-turn level, which utilizes categorical coding schemes to assign behavioral codes to the alternating speaking turns of each partner across the interaction. Despite using this fine-grained, microlevel coding technique, many researchers then analyze the aggregated proportions or relative frequencies of each partner's codes across the entire conversation (e.g., what proportion of the individual's speaking turns were constructive or destructive within the

conversation; for a review of microlevel coding techniques, see Friedlander et al., 2019). As such, potentially meaningful information on the temporal back-and-forth exchange between partners as the conversation unfolds is lost.

To illustrate the methodological shortcomings of aggregating speaking turns, Figure 1 compares two conflict conversations between dating couples in our sample that are visualized using categorical dyadic time series plots (Solomon et al., 2021). The upper portion of each plot represents Partner 1's speaking turns, whereas the lower portion represents Partner 2's speaking turns. The colors indicate the behavioral code assigned to the speaking turn. As seen in this figure, the proportion of passive constructive behaviors, or indirect positive codes (e.g., use of humor, validation, optimism), is equivalent within each conversation (i.e., approximately 14% of total speaking turns; see yellow bars). Thus, at the aggregate level, these two conversations look remarkably similar with regard to the use of this behavioral strategy. Yet, when comparing the temporal structure of the conversations, the function of these indirect positive behaviors appears to differ. In Conversation A, Partner 2 appears to employ indirect positive behaviors in response to Partner 1's negative expressions, perhaps as an attempt to downregulate that negativity and reestablish a positive rapport. Conversely, in Conversation B, indirect positive behaviors are confined to segments of the conversation in which more active constructive, or direct positive, behaviors are exchanged, rather than in response to negativity. In other words, within this conversation, indirect positive behaviors appear to reaffirm the positive rapport that is already occurring. Taken together, this example illustrates the nuances in conversation that can emerge when considering the minutiae of dyadic interactions (Solomon et al., 2021), and emphasizes the lack of precision by common observational methods to detect these conversational nuances within and across dyads.

Based on these illustrations, we propose that more advanced statistical techniques which consider the temporal structure of couples' conversations may offer unique insights into potential age differences in couples' conflict communication. To this end, in the current paper we employ a novel approach called sequence analysis to identify the dynamic patterns present within couples' conversations. Specifically, this approach extracts common multi-turn behavioral sequences from the data, known as conversational motifs, which then can be linked to theoretically important antecedent and outcome variables (Solomon et al., 2021; 2022).

Overview of the Current Study

The overarching goal of the current study was to identify the multi-turn patterns, or conversational motifs, which characterize couples' conflict resolution discussions and to examine potential age differences in the prevalence and effects of those motifs. To untangle the effects of age from relationship duration, we utilized data from a sample of 81 couples who ranged in age from 30 to 88 and were in newer dating relationships of similar length. Couples engaged in a videotaped discussion of a source of tension in their relationship and reported their overall appraisal of the discussion immediately after the conversation. Using this data, we addressed three general research questions.

First, what conversational motifs characterize conflict resolution discussions among dating couples? In contrast to previous literature examining conversations at the aggregate level, we used sequence analysis to summarize patterns of turn sequences throughout the discussion (Solomon et al., 2021; 2022). Sequence analysis is a data-driven and inductive approach to uncovering meaningful patterns in conversational data, and thus we did not have any formal hypotheses regarding the types of conversational motifs that might emerge. Second, are there age differences in the conversational motifs exhibited within the conversations? Finally, does age

moderate any associations between the prevalence of conversational motifs and partners' feelings following the discussion? With regard to these latter two questions, several prominent theories of aging (e.g., Carstensen, 2006; Charles, 2010) emphasize that older adults are more capable of enhancing positivity and avoiding or minimizing negativity within their relationships compared to younger adults. However, prior research does not clearly indicate whether this benefit of age may manifest in the types of conversational motifs older couples exhibit (e.g., conversational motifs characterized by the strategic use of behaviors that "soften" the conversation may be more prevalent within the conversations of older couples) or in the effects of conversational motifs on individuals' satisfaction with the conversation (e.g., older individuals may engage in more benevolent appraisals of the behavioral exchanges within the conversation). Consequently, these questions were exploratory.

Methods

Participants

Couples who were either (a) in dating relationships of 3 years or less or (b) in marriages of at least 10 years in length were recruited to participate in a broader study of relationships across the lifespan through advertisements placed in the community (e.g., farmers' markets, retirement/senior living centers) and on social networking websites (e.g., Nextdoor neighborhood groups, Facebook). However, this project will only focus on the subsample of couples in dating relationships. Only individuals who reported being in good health (i.e., rated their health as the same or better than the health of most people their age; Charles & Carstensen, 2008) and who reported at least moderate levels (e.g., several times a year) of involvement in organized activities, volunteer activities, and/or time with friends and family were eligible to participate (Brown & Shinohara, 2013). These eligibility requirements were implemented to limit potential

confounds between health and age-related processes. Initially, 89 different-sex dating couples were enrolled in the study; however, 7 couples withdrew before attending the on-campus lab session and engaging in the observed conflict discussion. Of the remaining 82 couples, the conflict video for one couple could not be coded due to technical difficulties. Thus, this study utilized data provided by 81 dating couples.

Overall, 68.9% of these participants identified as White, 16.5% as Hispanic/Latinx, 6.7% as African American, 3.0% as Asian American, and 4.3% as other. Data were missing for 1 (0.6%) participant. In terms of the highest educational degree received, 14.6% reported having a high school diploma or GED, 13.4% reported an Associate's/vocational degree, 38.4% reported a bachelor's degree, 24.4% reported a master's degree and 9.1% reported a PhD, MD, or DDS. Regarding employment, 72.0% indicated they were employed full time, 7.9% were employed part-time, 8.5% were retired, and 11.6% indicated another category (e.g., unemployed, disabled, and unable to work, or homemaker). The median household income reported was between \$50,001 and \$60,000 USD.

On average, the participants in this subsample of dating couples were 44.5 years old ($SD = 12.7$; Median = 41.0; Range = 30 – 88) and reported dating their partner for 12.7 months on average ($SD = 9.7$; Median = 9.0 months; Range = 1 month to 36 months). Approximately 4% of participants characterized their relationship as casually dating, 62% as seriously dating, and 34% as cohabiting. With regard to their previous relationship status, 6.7% were widowed, 58.5% were divorced, and 34.8% were never married. Finally, 22% of dating participants indicated they had children under the age of 18 living in the home.

Procedure

Each couple member was sent a unique link to complete an online background questionnaire prior to attending a laboratory session. In the lab, couples completed several additional questionnaires and engaged in three videotaped discussions: one eight-minute conflict discussion and two eight-minute support discussions. The current study focuses on data from the conflict discussion only. For this discussion, couples were asked to identify a source of tension or disagreement within their relationship. They were then instructed to discuss their chosen topic with the goal of working toward some resolution on the issue. After the lab session, couples were also asked to complete a 21-day daily diary survey not relevant to the current paper. All couples received \$150 USD for their participation. As data collection began in July 2015, all data were collected prior to the onset of the COVID-19 pandemic. An overview of the study protocol, which includes all measures administered as part of the larger study, can be found on the OSF page for the project

(https://osf.io/d623c/?view_only=e27aeff34fea4678b4d594a0e3be25c1).

Background Questionnaire Measures

Age

Participants indicated their age when they completed the background questionnaire.

Lab Session Measures

Observed Conflict Behaviors

To assess the conflict behaviors that participants exhibited during the videotaped discussion, a modified version of the Verbal Tactics Coding Scheme (VTCS; Sillars, Coletti, Parry, & Rogers, 1982; see also Overall & McNulty, 2017) was used. Each conflict interaction was divided into speaking turns, and each speaking turn could receive one of the following six

codes: direct positive, indirect positive, direct negative, indirect negative, neutral, or off-task. Participants received a direct positive code for behaviors that promoted the resolution of the problem such as helping to define the problem or suggesting a plan for overcoming the issue. Participants received an indirect positive code for behaviors such as providing encouragement and affection to their partner, use of humor, expressing optimism that the problem will improve, or minimizing the severity of the problem while still acknowledging the issue. Direct negative codes were assigned to behaviors that directly criticize, fault, blame, or reject the partner, or demanding change in the partner. Indirect negative codes were assigned to behaviors such as avoiding responsibility, hostile questioning, and statements intended to induce guilt in the partner. Off-task codes were assigned to behaviors that focused attention away from the issue, such as topic shifting and topic avoidance. Lastly, neutral codes were given to speaking turns that did not meet threshold for these other codes, as well as to turns that were unclear, difficult to understand, or exceptionally brief (e.g., yeah, uh-huh, ok).

Five research assistants were trained to code the interactions independently using the coding scheme. Inter-rater reliability, which was assessed by having randomly selected pairs of observers code a randomly selected 11% of the interactions, was generally quite high (intraclass correlation coefficients = .84 for direct positive, .86 for indirect positive, .95 for direct negative, .51 indirect negative, .61 for neutral and .82 for off-task; overall kappa = .67).

Post-Conversation Appraisals

Immediately following the discussion, participants completed a questionnaire regarding their appraisal of the discussion. As part of this questionnaire, participants indicated their agreement (1 = not at all; 7 = extremely) with six items that assessed their satisfaction with the conversation (“how much did you enjoy the conversation?”; “how satisfied were you with the

tone of the conversation?") and their feelings of connection to their partner ("how close to your partner did the conversation make you feel?"; "how satisfied with your relationship did the conversation make you feel?"; "how much did you feel that your partner understood you during the conversation?"; "how much did you feel that your partner accepted you during the conversation?"). These six items were averaged for each participant, with higher scores indicating more positive appraisals of the discussion. Internal consistency was good for both men and women (coefficient alphas = .89 and .91 respectively).

Analytic Approach

To investigate the conversational motifs that characterize conflict discussions among dating couples, we used a sequence analysis allowing us to capture the nonlinear dynamics of interactions as they unfold. To accomplish this, we followed a comprehensive series of steps outlined by Solomon and colleagues (2021; 2022). First, and as previously described, we assigned one code to each speaking turn in the discussion. Next, we segmented each discussion into six-turn sequences, using a 1-unit offset between sequences. We determined that six-turn sequences would be most appropriate for our data to allow each partner to have three speaking turns within a sequence; this approach, then, enabled us to capture nonlinear change in both partners per sequence unit. The 1-unit offset specifies the degree of overlap between sequences (e.g., the first sequence is comprised of speaking turns 1-6; the second sequence is comprised of speaking turns 2-7, and so on) and allows for either partner to initiate a sequence, as is advised for dyads that are not distinguishable by role. In all, there were a total of 3,676 sequences in the dataset. Third, we utilized an optimal matching algorithm to calculate the dissimilarity between sequences by determining the number of manipulations necessary to transform one sequence into the other. The "cost" of transforming one sequence into the other was set at a value of 2, creating

a constant substitution cost matrix of calculated dissimilarities among sequences (for a thorough description of the optimal matching algorithm and cost matrix, see Solomon et al., 2022). Using the dissimilarity cost matrix, sequences were then clustered hierarchically to reveal groups of similar sequences across dyads referred to as conversational motifs. Finally, to examine the associations between conversational motifs and partners' post-conversation appraisals, we calculated the overall proportion of each motif observed within the discussion for each couple. All data preparation and some data analyses were completed using R (R Core Team, 2020). A thorough description of the R packages used for data preparation and step-by-step tutorials for conducting sequence analysis can be found at the Longitudinal Human Analytics Made Accessible website (<https://lhama.la.psu.edu>).

To examine whether age was associated with the types of conversational motifs used by dating couples during their conflict discussions, linear regressions were conducted in which the prevalence of each motif that emerged was modeled as a function of each partner's age. To examine whether the prevalence of each conversational motif also was associated with participants' post-discussion appraisals of the conversations, as well as whether any such associations are moderated by age, multilevel modeling analyses were conducted using Hierarchical Linear Modeling v. 7.03 (Raudenbush et al., 2013). To account for the dependency in the data, the effects for men and women were estimated simultaneously for all analyses and dummy variables were used to nest male and female data within each couple (Laurenceau & Bolger, 2005). This approach allowed for straightforward tests of gender differences in coefficients of interest (a 1-*df* χ^2 test).

Results

What conversational motifs characterize conflict resolution discussions among these dating couples?

Results from the sequence analysis revealed four conversational motifs. Visualizations of each motif are presented in Figure 2. The most frequently occurring motif (60% of all six-turn sequences) reflects the most dynamically affective interplay between partners, with turns varying between direct and indirect positive, direct and indirect negative, and neutral across each of the six-turn sequences. Although direct positive messages have a strong overall presence within this motif, the simultaneous presence of direct and indirect negative messages suggest that partners were also expressing criticism, rejection, or hurt toward one another. Therefore, we labeled this conversational motif *oppositional problem-solving*. In contrast, the second most frequently occurring motif (27% of all six-turn sequences) consists entirely of direct positive speaking turns. As this motif captures patterns of responding that are consistently positive and productive across the entire turn sequence, we labeled this conversational motif *cooperative problem-solving*. The third motif (9% of all six-turn sequences) is mainly characterized by indirect positive and neutral speaking turns, though some negativity is also present. In this way, this motif appears to capture a tendency for partners to soften the discussion by validating and affirming one another while downplaying the severity of the problem. For this reason, we labeled the third motif *positive passivism*. The fourth and final motif only consisted of 4% of all six-turn sequences; off-task speaking turns were highly prevalent within this motif, with nearly half of the sequences consisting entirely of off-task turns. Given that these sequences shifted the conversation away from the topic at hand, we labeled the fourth motif *avoidance*.

Are there age differences in the conversational motifs exhibited within the discussions?

To examine potential age differences in the use of these four conversational motifs, we modeled the prevalence of each motif as a function of both partners' age. Each motif was examined in a separate analysis. Contrary to perspectives suggesting that older and younger adults may differ in their approach to resolving conflicts, no significant age effects were found (see Table 1).

Does age moderate any associations between the prevalence of conversational motifs and partners' post-conversation appraisals?

We used multilevel modeling to examine participants' appraisals of the conversation as a function of the prevalence of a conversational motif within the discussion, participants' age, and the interaction between the two. The four conversational motifs were examined in separate models, and the results from all four models are presented in Table 2.

Oppositional Problem-Solving

A significant main effect of oppositional problem-solving emerged for both men ($b = -1.68, p < .001$) and women ($b = -1.76, p = .002$), such that when couples' conversations were characterized by a greater prevalence of oppositional problem-solving sequences, partners reported less positive appraisals of the conversation. Notably, the moderating effect of age also emerged as significant for men ($b = 0.06, p = .035$), but not for women ($b = 0.01, p = .818$), although the strength of the moderation effect did not significantly differ between men and women ($\chi^2(1) = 2.27, p = .128$). As seen in Figure 3, the overall pattern of results for men was consistent with the notion that age may be associated with positively biased appraisals. Simple slope analyses confirmed that if couples engaged in more (versus less) oppositional problem-solving sequences, younger men (age 30: $b = -2.62, p < .001$; see blue line) and middle-aged men (age 50: $b = -1.38, p = .004$; see red line) rated the conversation as less satisfying. However,

among older men, the prevalence of these oppositional sequences was not associated with their post-conversation appraisals (age 70: $b = -0.13$, $p = .867$; see green line).

Cooperative Problem Solving

Turning to the results for cooperative problem-solving, a significant main effect of this motif emerged for both men ($b = 1.44$, $p = .003$) and women ($b = 1.31$, $p = .015$). That is, participants reported more positive appraisals of the conversation if they engaged in more cooperative problem-solving sequences. Age did not moderate this effect for either partner (men: $b = .014$, $p = .684$; women: $b = 0.0002$, $p = .997$).

Positive Passivism

Surprisingly, the prevalence of positive passivism was not associated with couples' appraisals of the conversation (men: $b = -0.84$, $p = .432$; women: $b = 0.84$, $p = .498$). Moreover, no moderating effects of age emerged (men: $b = -0.008$, $p = .905$; women: $b = 0.03$, $p = .688$).

Avoidance

Although the main effect of the avoidance motif was not significant for either partner (men: $b = 0.95$, $p = .362$; women: $b = 0.06$, $p = .962$), the interaction of this motif with age was significant for men ($b = -0.09$, $p = .034$), though not for women ($b = -0.02$, $p = .706$). Further analyses indicated that this apparent gender difference was not significant ($\chi^2(1) = 2.16$, $p = .137$). Notably, when investigating the moderation for men, simple slope analyses indicated that the prevalence of avoidance sequences was not significantly associated with positive appraisals of the conversation among younger men (age 30: $b = 2.33$, $SE = 1.43$, $p = .108$), middle-aged (age 50: $b = 0.47$, $SE = 0.97$, $p = .629$), or older men (age 70: $b = -1.38$, $SE = 1.14$, $p = .229$). As the simple slope analyses did not reach significance, and avoidance sequences were rather rare within the sample, we are hesitant to interpret this interaction further.

Discussion

Although the aging literature has developed influential theories regarding older adults enhanced capacity for navigating interpersonal tensions (Carstensen, 2006; Charles, 2010), empirical examinations of these ideas within the romantic domain have focused exclusively on identifying the conflict strategies of older couples in longstanding marriages (e.g., Carstensen et al., 1995; Story et al., 2007; Verstaen et al., 2020). Given the recent explosion of older adults entering the dating market (Brown et al., 2018), the current study examined the timely question of whether previously documented age differences in couples' conflict resolution behaviors generalize to an understudied relationship context: early stage dating relationships. Specifically, we used a novel statistical technique for capturing nonlinear and dynamic variation within conversations to extract the multi-turn conversational patterns, or conversational motifs, that characterized couples' conflict discussions (Solomon et al., 2021). Compared to prior research, which typically aggregates couples' speaking turns to examine the affective tone of the conversation as a whole, these motifs offer more nuanced insights into the back-and-forth temporal structure of couples' behaviors within the conversation. Thus, by examining the conversational motifs of dating couples who varied in age, but were of similar relationship duration, the current study provides one of the most methodologically rigorous examinations of age differences in conflict communication to date.

Identifying the Prevalence and Effects of Couples' Conversational Motifs

Sequence analysis revealed four distinct conversational motifs within couples' conflict resolution discussions. The two most commonly occurring six-turn sequences to emerge from the conversations were the *cooperative problem-solving* motif and the *oppositional problem-solving* motif. The cooperative problem-solving motif captured a conversational pattern in which couples

exhibited positive and productive behaviors that moved the conversation forward across all six speaking turns. Not surprisingly, then, both men and women reported highly positive appraisals of the conversation when this motif was more prevalent throughout the discussion. Notably, no significant age differences in the prevalence or consequences of this motif were found.

In contrast, the oppositional problem-solving motif reflected a more variable and dynamic exchange in which couples' generally constructive behaviors were interspersed with direct and indirect expressions of negativity. Put another way, within this motif, couples' positive rhythm appeared to give way to more frequent statements of blame and hurt. It is worth emphasizing that 60% of all sequences fell within this motif, which supports the notion that the early stages of a relationship may be characterized by greater turbulence as couples learn to negotiate their interdependence and work toward more cooperative relationship functioning (Knobloch, 2007; Solomon & Knobloch, 2004). Contrary to expectations derived from theories on aging, however, the prevalence of this motif within the conversation did not differ by age. Rather, both older and younger couples alike seemed to exhibit some difficulty effectively navigating their relational conflict.

In general, partners appraised their conversation less positively when the discussion contained a greater proportion of oppositional problem-solving sequences. However, consistent with prior work suggesting that older adults are more likely than younger adults to reappraise negative exchanges in a positive light (Henry et al., 2007; Story et al., 2007), evidence for a positivity bias in older adults' post-conversation appraisals emerged for men, though not for women. Namely, if couples engaged in more oppositional problem-solving sequences, younger and middle-aged men, but not older men, rated the conversation as less satisfying. Thus, older men appeared more adept in "not sweating the small stuff" and preventing moments of negativity

from stoking feelings of dissatisfaction. Importantly, given that direct tests for gender differences in the moderating effect of age did not reach significance, the lack of moderating effect for women should be interpreted with caution. Future investigations are needed to replicate this pattern and perhaps consider the role of gender for conflict exchanges among older dating couples.

The final two motifs, *positive passivism* and *avoidance*, appeared rather infrequently within these conversations (9% and 4% of all sequences, respectively). The positive passivism motif captured patterns of communication consisting of primarily of indirect positive and neutral exchanges between partners, though some negativity was present as well. Thus, these exchanges exemplify the “softening” strategies described in prior research, in which partners minimize tension by validating each other’s feelings or expressing optimism that the problem will improve (Carstensen et al., 1995; Verstaen et al., 2020). Likewise, the avoidance motif reflected multi-turn sequences in which partners shifted the conversation to matters that were unrelated to their chosen conflict topic. Unlike prior work, which suggests that older adults may be especially likely to rely on these strategies when navigating conflict (Holley et al., 2013; Verstaen et al., 2020), no significant age differences in the prevalence of either motif were found. Moreover, these motifs were not robustly associated with couples’ appraisals of the conversation. Nonetheless, the infrequency of these motifs within the data may have limited power for detecting effects. Additional studies employing larger samples are needed to explore the prevalence and consequences of these motifs further.

Is Older Necessarily Wiser?

Consistent with the perspective that age-related increases in socioemotional expertise should promote benevolent responses to conflict (Carstensen, 2006; Charles, 2010), some extant

research has demonstrated that older adults are more skilled than younger adults in effectively navigating tensions within longstanding marriages. Contrary to this work, however, few significant age differences were found when examining couples' conflict communication patterns within an equally important, but quite different relational context - early stage dating relationships. Of course, definitive conclusions cannot be drawn from null findings; yet, the methodological rigor of this study raises the possibility that there might be boundary conditions to the age effects identified in prior work. Indeed, theories of relationship development frequently emphasize the importance of the relational context for adaptive dyadic functioning (e.g., Van Lange, 2010). For instance, converging evidence suggests that efforts to preserve harmony and minimize negative relationship experiences may prove more difficult in the early stages of relationship development as couples negotiate their increasing interdependence (Knobloch, 2007; Solomon & Knobloch, 2004). As such, it may be that both "time lived" and "time lived within the relationship" are crucial for understanding the dynamic exchanges between romantic partners. Researchers should continue to examine whether age-related increases in socioemotional expertise are sufficient to ensure older adults' advantage over younger adults when navigating relational conflicts within the normatively turbulent early stages of dating relationships.

Limitations and Future Directions

The implications of our findings should be evaluated in the context of several key limitations. First, the sample was comprised of different-sex couples who were predominantly White and higher in socioeconomic status. Given the inevitability of conflict within all romantic couples, it is essential that future research examine communication patterns across couples of varying sexual orientation, race and ethnicity, and socioeconomic class. Additionally, despite the

many advantages of sequence analysis for the examination of conversational data, this approach is an inductive method for exploring conversational motifs within a sample. Thus, these findings should be tested and replicated in other dating samples. Moreover, the application of sequence analysis to conversational data requires specific theoretical and analytical judgements that are still being refined and may impact study findings (e.g., the length of the sequences examined, the degree to which the sequences should overlap, the cost matrix that should be applied). Further research is needed to understand these possible impacts and develop more comprehensive guidelines for applying sequence analysis to particular datasets.

Conclusion

To provide a more nuanced examination of potential age differences in couples' conflict communication patterns, the current study addressed several methodological shortcomings of the existing literature. Rather than aggregating couples' communication behaviors across the entire conflict conversation, we leveraged a novel and rigorous methodological technique to identify meaningful patterns in couples' turn-by-turn conversational dynamics. Moreover, we examined these multi-turn sequences within a unique sample that enabled us to untangle the effects of age from the effects of relationship duration. These findings not only raise questions regarding whether theories of age-related changes in socioemotional expertise should be fine-tuned to consider the relational context, but also showcase how sequence analysis can refine the study and understanding of dyadic communication.

References

- Birditt, K.S., & Fingerman, K. L. (2005). Do we get better at picking our battles? Age group differences in descriptions of behavioral reactions to interpersonal tensions. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 60B, P121-P128. <https://doi.org/10.1093/geronb/60.3.P121>
- Birditt, K.S., Fingerman, K. L., & Almeida, D. M. (2005). Age differences in exposure and reactions to interpersonal tensions: a daily diary study. *Psychology and Aging*, 20, 330-340. <https://doi.org/10.1037/0882-7974.20.2.330>
- Blanchard-Fields, F. (2007). Everyday problem solving and emotion: An adult developmental perspective. *Current Directions in Psychological Science*, 16(1), 26–31. <https://doi.org/10.1111/j.1467-8721.2007.00469.x>
- Brown, Lin, I.-F., Hammersmith, A. M., & Wright, M. R. (2018). Later life marital dissolution and repartnership status: A national portrait. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 73(6), 1032–1042. <https://doi.org/10.1093/geronb/gbw051>
- Brown, S. L., & Shinohara, S. K. (2013). Dating relationships in older adulthood: A national portrait. *Journal of Marriage and the Family*, 75(5), 1194-1202. <https://doi.org/10.1111/jomf.12065>
- Carr, D., & Utz, R. L. (2020). Families in later life: A decade in review. *Journal of Marriage and Family*, 82(1), 346-363. <https://doi.org/10.1111/jomf.12609>
- Carstensen, L. L. (2006). The influence of a sense of time on human development. *Science*, 312(5782), 1913–1915. <https://doi.org/10.1126/science.1127488>

- Carstensen, L. L., & DeLiema, M. (2018). The positivity effect: A negativity bias in youth fades with age. *Current Opinion in Behavioral Sciences*, 19, 7–12.
<https://doi.org/10.1016/j.cobeha.2017.07.009>
- Carstensen, L. L., Gottman, J. M., & Levenson, R. W. (1995). Emotional behavior in long-term marriage. *Psychology and Aging*, 10(1), 140–149. <https://doi.org/10.1037/0882-7974.10.1.140>
- Charles, S. T. (2010). Strength and Vulnerability Integration (SAVI): A model of emotional well-being in later adulthood. *Psychological Bulletin*, 136(6), 1068–1091.
<https://doi.org/10.1037/a0021232>
- Charles, S. T., & Carstensen, L. L. (2008). Unpleasant situations elicit different emotional responses in younger and older adults. *Psychology and Aging*, 23(3), 495–504.
<https://doi.org/10.1037/a0013284>
- Charles, S. T., & Carstensen, L. L. (2010). Social and emotional aging. *Annual Review of Psychology*, 61, 383–409. <https://doi.org/10.1146/annurev.psych.093008.100448>
- Charles, S. T., Mather, M., & Carstensen, L. L. (2003). Aging and emotional memory: The forgettable nature of negative images for older adults. *Journal of Experimental Psychology. General*, 132(2), 310–324. <https://doi.org/10.1037/0096-3445.132.2.310>
- Cooney, T. M., & Dunne, K. (2001). Intimate relationships in later life: Current realities, future prospects. *Journal of Family Issues*, 22(7), 838 – 858.
<https://doi.org/10.1177/019251301022007003>
- Friedlander, M. L., Lee, M., & Escudero, V. (2019). What we do and do not know about the nature and analysis of couple interaction. *Couple and Family Psychology: Research and Practice*, 8(1), 24–44. <https://doi.org/10.1037/cfp0000114>

- Henry, N. J., Berg, C. A., Smith, T. W., & Florsheim, P. (2007). Positive and negative characteristics of marital interaction and their association with marital satisfaction in middle-aged and older couples. *Psychology and Aging*, 22(3), 428-441.
<https://doi.org/10.1037/0882-7974.22.3.428>
- Holley, S.R., Haase, C.M., & Levenson, R.W. (2013). Age-related changes in demand-withdraw communication behaviors. *Family Relations*, 75(4), 822-836.
<https://doi.org/10.1111/jomf.12051>
- Knobloch, L. K. (2007). Perceptions of turmoil within courtship: Associations with intimacy, relational uncertainty, and interference from partners. *Journal of Social and Personal Relationships*, 24(3), 363-384. <https://doi.org/10.1177/0265407507077227>
- Laurenceau, J. P., & Bolger, N. (2005). Using diary methods to study marital and family processes. *Journal of Family Psychology*, 19(1), 86–97. <https://doi.org/10.1037/0893-3200.19.1.86>
- Overall, N. C., & McNulty, J. K. (2017). What type of communication during conflict is beneficial for intimate relationships? *Current Opinion in Psychology*, 13, 1–5.
<https://doi.org/10.1016/j.copsyc.2016.03.002>
- R Core Team. (2020). R: A language and environment for statistical computing.
R Foundation for Statistical Computing, Vienna, Austria. Retrieved from <https://www.R-project.org/>.
- Raudenbush, S. W., Bryk, A. S., & Congdon, R. (2013). *HLM 7.01 for Windows*. Scientific Software International, Inc.

- Sillars, A. L., Coletti, S. F., Parry, D., & Rogers, M. A. (1982). Coding verbal conflict tactics: Nonverbal and perceptual correlates of the “avoidance–distributive–integrative” distinction. *Human Communication Research*, 9(1), 83–95.
<https://doi.org/10.1111/j.1468-2958.1982.tb00685.x>
- Smith, T. W., Berg, C. A., Florsheim, P., Uchino, B. N., Pearce, G., Hawkins, M., . . . Olsen-Cerny, C. (2009). Conflict and collaboration in middle-aged and older couples: I. Age differences in agency and communion during marital interaction. *Psychology and Aging*, 24(2), 259–273. <https://doi.org/10.1037/a0015609>
- Solomon, D. H., Brinberg, M., Bodie, G. D., Jones, S. Ram, N. (2021). A dynamic dyadic systems approach to interpersonal communication. *Journal of Communication*, 71(6), 1001–1026. <https://doi.org/10.1093/joc/jqab035>
- Solomon, D. H., Jones, S., Brinberg, M., Bodie, G. D., & Ram, N. (2022, online first publication). Using sequence analysis to identify conversational motifs in supportive interactions. *Journal of Social and Personal Relationships*.
<https://doi.org/10.1177/02654075211066618>
- Solomon, D. H., & Knobloch, L. K. (2004). A model of relational turbulence: The role of intimacy, relational uncertainty, and interference from partners in appraisals of irritations. *Journal of Social and Personal Relationships*, 21(6), 795-816.
<https://doi.org/10.1177/0265407504047838>
- Sorkin, D. H., & Rook, K. S. (2004). Interpersonal control strivings and vulnerability to negative social exchanges in later life. *Psychology and Aging*, 19(4), 555-564.
<https://doi.org/10.1037/0882-7974.19.4.555>

Story, T. N., Berg, C. A., Smith, T. W., Beveridge, R., Henry, N. J. M., & Pearce, G. (2007).

Age, marital satisfaction, and optimism as predictors of positive sentiment override in middle-aged and older married couples. *Psychology and Aging*, 22(4), 719–727.

<https://doi.org/10.1037/0882-7974.22.4.719>

Van Lange, P. A. M. (2010). It is the relationship, stupid. *Personal Relationships*, 17(2), 176-

179. <https://doi.org/10.1111/j.1475-6811.2010.01270.x>

Verstaen, A., Haase, C. M., Lwi, S. J., & Levenson, R. W. (2020). Age-related changes in emotional behavior: Evidence from a 13-year longitudinal study of long-term married

couples. *Emotion*, 20(2), 149–163. <https://doi.org/10.1037/emo0000551>

Table 1

Are there age differences in the conversational motifs exhibited within the conversations?

Variable	Men					Women				
	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI	<i>p</i>	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI	<i>p</i>
				[LL, UL]					[LL, UL]	
Oppositional Problem-Solving	-0.003	0.002	-1.572	[-0.006, 0.001]	.120	-0.002	0.002	-1.067	[-0.005, 0.002]	.289
Cooperative Problem-Solving	0.000	0.002	0.273	[-0.003, 0.004]	.785	0.000	0.002	0.003	[-0.004, 0.004]	.997
Positive Passivism	0.001	0.001	1.379	[-0.001, 0.003]	.172	0.001	0.001	0.816	[-0.001, 0.002]	.417
Avoidance	0.001	0.001	1.106	[-0.001, 0.003]	.272	0.001	0.001	1.258	[-0.001, 0.003]	.212

Note. *df* = 80; *b* = unstandardized beta coefficient; *SE* = standard error; CI = confidence interval; LL = lower limit; UL = upper limit

Table 2

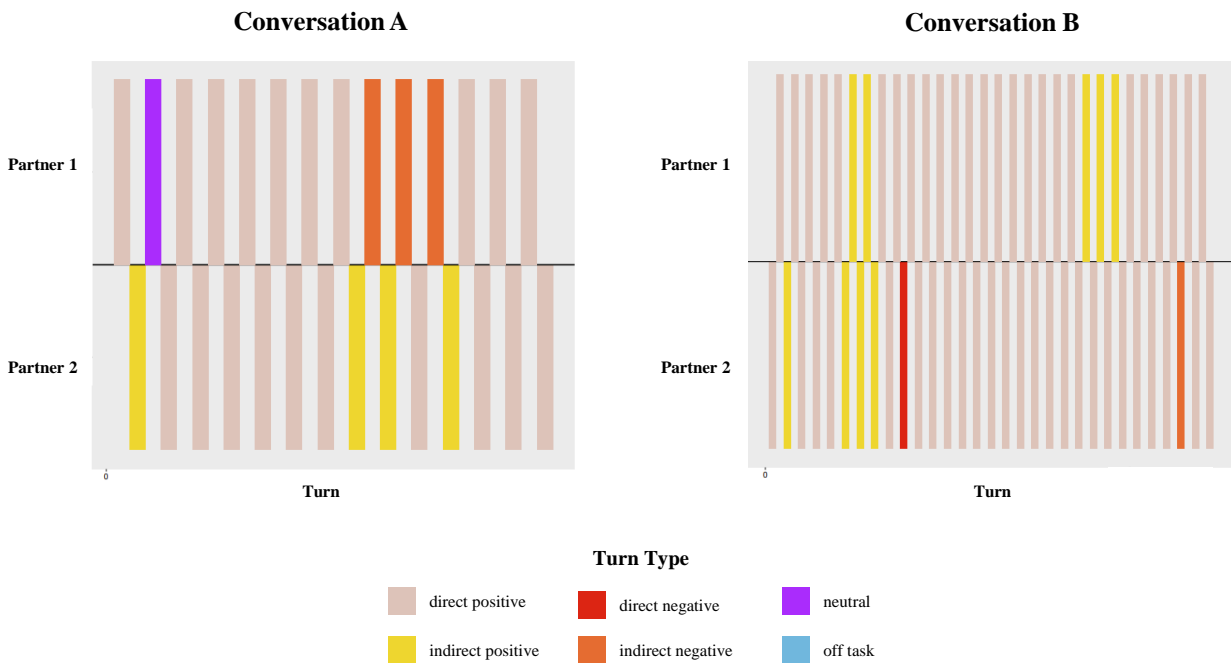
Does age moderate any associations between the prevalence of conversational motifs and partners' post-conversation positive appraisals?

Variable	Men					Women				
	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI [LL, UL]	<i>p</i>	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI [LL, UL]	<i>p</i>
Intercept	6.052	0.090	67.057	[5.873, 6.232]	<.001	5.920	0.105	56.481	[5.712, 6.129]	<.001
Age	0.007	0.007	1.006	[-0.007, 0.021]	.317	0.010	0.008	1.228	[-0.006, 0.027]	.223
Oppositional Problem-Solving	-1.677	0.480	-3.495	[-2.632, -0.722]	<.001	-1.758	0.556	-3.160	[-2.866, -0.651]	.002
Age X Oppositional Problem-Solving	0.062	0.029	2.147	[0.004, 0.120]	.035	0.008	0.036	0.231	[-0.064, 0.080]	.818
Intercept	6.026	0.092	65.463	[5.843, 6.209]	<.001	5.916	0.107	55.374	[5.703, 6.129]	<.001
Age	0.008	0.007	1.070	[-0.007, 0.022]	.288	0.014	0.009	1.474	[-0.005, 0.032]	.145
Cooperative Problem-Solving	1.442	0.464	3.104	[0.517, 2.366]	.003	1.306	0.526	2.481	[0.258, 2.354]	.015
Age X Cooperative Problem-Solving	-0.014	0.035	-0.408	[-0.084, 0.055]	.684	0.000	0.045	0.004	[-0.090, 0.090]	.997
Intercept	6.026	0.098	61.288	[5.830, 6.222]	<.001	5.917	0.111	53.284	[5.695, 6.138]	<.001
Age	0.011	0.008	1.465	[-0.004, 0.026]	.147	0.013	0.009	1.369	[-0.006, 0.031]	.175
Positive Passivism	-0.845	1.070	-0.790	[-2.976, 1.285]	.432	0.843	1.237	0.682	[-1.619, 3.306]	.498
Age X Positive Passivism	-0.008	0.064	-0.120	[-0.135, 0.120]	.905	0.033	0.082	0.403	[-0.130, 0.196]	.688
Intercept	6.040	0.096	63.210	[5.850, 6.230]	<.001	5.921	0.111	53.132	[5.699, 6.142]	<.001
Age	0.014	0.007	1.848	[-0.001, 0.028]	.068	0.015	0.009	1.632	[-0.003, 0.033]	.107
Avoidance	0.953	1.039	0.917	[-1.115, 3.022]	.362	0.059	1.229	0.048	[-2.387, 2.505]	.962
Age X Avoidance	-0.092	0.043	-2.155	[-0.176, -0.007]	.034	-0.020	0.053	-0.378	[-0.126, 0.086]	.706

Note. Each motif was examined in a separate model. *df* = 77; *b* = unstandardized beta coefficient; *SE* = standard error; CI = confidence interval; LL = lower limit; UL = upper limit

Figure 1

Categorical Time Series Plots Comparing the Temporal Structure of Two Conflict Conversations



Note. These plots compare the conversational patterns of two different couples within the sample. Although the aggregate proportion of indirect positive behaviors used by each couple is equivalent (approximately 14%), these plots highlight the unique temporal structure of each conversation.

Conversational Motifs Within Couples' Conflict Discussions

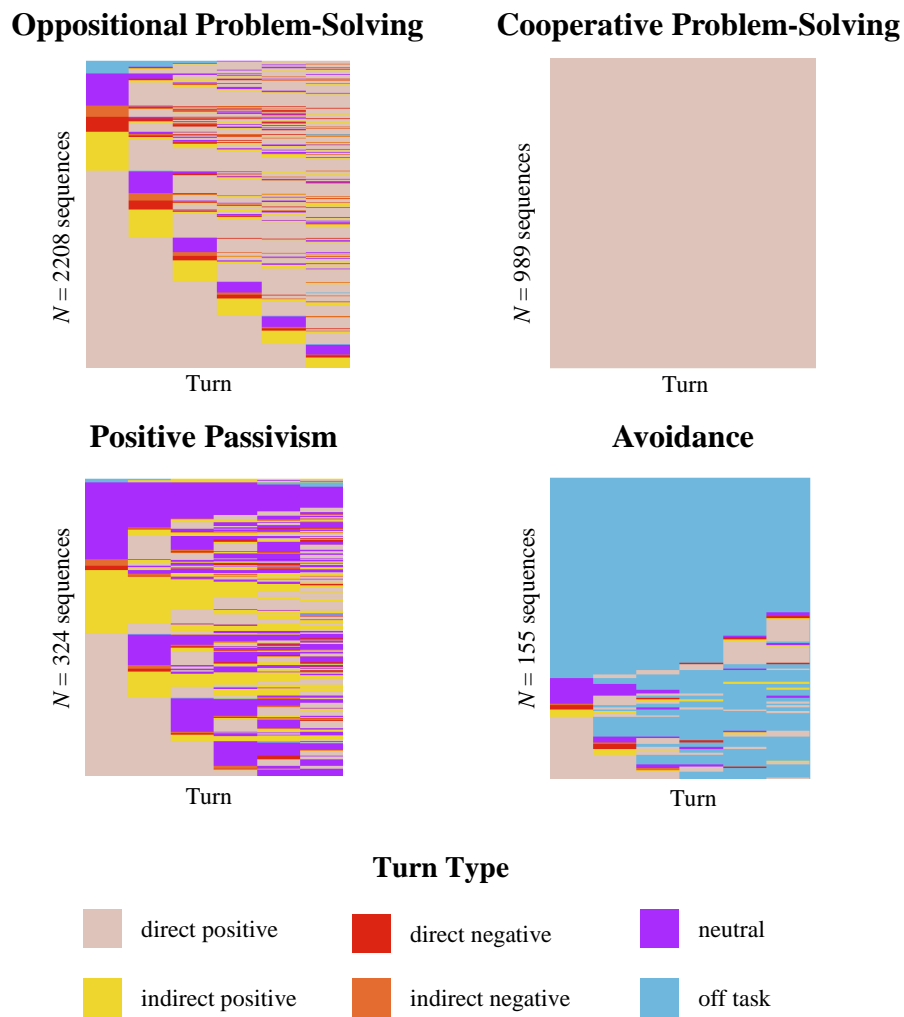


Figure 3

Age Moderated the Link Between Oppositional Problem-Solving Motifs and Post-Conversation

Positive Appraisals for Men

