

Running head: LISTENING DURING STRESS

**The power of listening: Lending an ear to the partner during dyadic coping  
conversations**

Rebekka Kuhn<sup>1</sup>, Thomas N. Bradbury<sup>2</sup>, Fridtjof W. Nussbeck<sup>3</sup>, and Guy Bodenmann<sup>1</sup>

<sup>1</sup> University of Zurich, <sup>2</sup> University of California at Los Angeles, USA, <sup>3</sup> Bielefeld  
University, Germany

Author Note

Rebekka Kuhn, Department of Psychology, University of Zurich, Switzerland;  
Thomas N. Bradbury, UCLA Department of Psychology, Los Angeles, CA, USA; Fridtjof  
W. Nussbeck, Bielefeld University, Germany; Guy Bodenmann, Department of Psychology,  
University of Zurich, Switzerland

Correspondence concerning this article should be addressed to Rebekka Kuhn,  
Department of Psychology, University of Zurich, Binzmuehlestr.14, Box 23, 8050 Zurich,  
Switzerland. E-mail: [rebekka.kuhn@uzh.ch](mailto:rebekka.kuhn@uzh.ch)

This research project has been funded by the Swiss National Science Foundation  
(SNF: CRSI11\_133004/1) to Guy Bodenmann, Veronika Brandstätter, Mike Martin, Fridtjof  
W. Nussbeck, and Thomas N. Bradbury.

**© 2018, American Psychological Association. This paper is not the copy of  
record and may not exactly replicate the final, authoritative version of the article.  
Please do not copy or cite without authors permission. The final article will be  
available, upon publication, via its DOI: 10.1037/fam0000421**

## Running head: LISTENING DURING STRESS

**Abstract**

Although active, responsive listening is widely assumed to be essential for well-functioning intimate relationships, the manner in which this important behavior might promote closeness remains unknown. To test the prediction that listening may be especially influential when partners disclose experiences of stress, we instructed 365 heterosexual couples to hold two 8-min conversations in which each partner discussed a stressful personal experience while the other partner was asked to respond as he or she ordinarily would. We coded expressions of stress and listening behavior at 10s-intervals during these conversations, applied Actor-Partner Multilevel models to compute a variable capturing the covariation between one partner's stress expression and the other partner's listening behavior, and then used that variable in regression analyses to predict observed dyadic coping behaviors, self-reports of the quality of dyadic coping in general, and self-reports of relationship satisfaction. Attentive listening while the other partner expressed stress was significantly linked with better dyadic coping behaviors and higher relationship satisfaction. Partners displaying less attentive listening during the partner's stress expression also engaged in more problem-oriented coping and more negative dyadic coping. Because attentive listening during disclosure of stress covaries in expected ways with support provision and judgments of relationship quality, appreciating the context-specific effects of active listening merits careful consideration as an intervention target in couple therapy and in relationship education programs.

*Keywords:* listening, dyadic coping, couple conversation, multilevel

## The power of listening:

### Lending an ear to the partner during dyadic coping conversations

Attentive listening in relationships, particularly during moments of self-disclosure, is hypothesized to be essential for sustaining intimacy (Reis & Shaver, 1988) and for providing adequate support (i.e., “dyadic coping”; Bodenmann, 2005). Evidence-based relationship education programs (e.g., CCET: Bodenmann & Shantinath, 2004; EPL: Hahlweg, Markman, Thurmaier, Engl, & Eckert, 1998; Couple Care: Halford & Simons, 2005), and most approaches of couple therapy, therefore aim to strengthen listening skills in couples as a strategy for promoting or restoring closeness. Nevertheless, listening remains underexplored (e.g., Bodie, Gearhart, Denham, & Vickery, 2013; Bodie, Vickery, Cannava, & Jones, 2015; Jones, 2011), especially in couples talking about stress. The current article thus seeks to understand mechanisms of listening and its association with supportive behaviors during couple conversations, as well as with subjective evaluations of partner support and relationship satisfaction.

### **The Role of Listening for the Relationship**

Active listening can be conceptualized as having three main elements (Weger et al., 2014). First, the listener shows interest in the speaker’s message by nonverbal behaviors such as back channeling. Back channeling includes brief acknowledgements showing that the listener is following the conversation, such as “mmh” or “yeah”. Second, active listening includes paraphrasing the partner’s message without evaluations or judgement. The third element is comprised of open questions that would encourage the speaker further to elaborate on his or her personal thoughts and feelings. These elements reflect Rogers’ (1951) basic features of interpersonal empathic listening and have several functions in the context of emotional disclosures of stressful events.

First, listening is necessary and inevitable if one wants to *understand* a partner's stressful experience and its meaning for the disclosing partner. As Garland (1981) states, "a spouse's perceptions of the partner's communicated attitudes, feelings, and behavior should be more accurate if he [or] she listens to the partner more effectively" (p. 298). According to the Systemic Transactional Model (STM; Bodenmann, 1995, 2005), the supporting partner must first perceive and decode the stressed partner's signs of stress in order to understand the significance of the stressful situation. This requires attentive listening which, in turn, is needed to adapt to the situation and provide adequate dyadic coping that meets the needs of the stressed partner (Bodenmann, 2007; Cutrona, Shaffer, Wesner, & Gardner, 2007; Garland, 1981; Jones, 2011). Dyadic coping is defined as the joint coping efforts enacted by both partners to deal with stress that concerns one or both partners (Bodenmann, 2005). The STM posits that, ideally, the stressed partner discloses his or her reflections about a personal stressor during which the other partner listens. On the basis of what the listening partner has perceived, he or she can then respond, for example, with supportive coping such as showing understanding or validating the partner's feelings. The current article tests this theoretical assumption of the STM.

Second, listening attentively and understanding the partner's stress also has an effect on the disclosing partner. In fact, active listeners are also *perceived* by disclosing partners as more understanding (Cahn & Frey, 1992), responsive (Reis, Lemay, & Finkenauer, 2017), and supportive (Collins & Feeney, 2000). Consequently, when partners are perceived to be more understanding and responsive, partners feel more intimate (Prager & Buhrmester, 1998; Reis & Shaver, 1988) and satisfied (Cahn, 1990) after having disclosed about a personal stressor; diary studies replicate this same effect (Laurenceau, Barrett, & Rovine, 2005).

Third, listening encourages more self-disclosure. When partners listen attentively, the speaker is more prone to talk without fear of criticism or negative judgements (Burlison &

Goldsmith, 1998), adding depth and detail to their disclosures. For example, people talking about their stress disclose more details to the extent their partner is attentive and responsive (Miller, Berg, & Archer, 1983). Listening, therefore, can be seen as “an essential component of interpersonal communication and of relationships more generally” (Bodie et al., 2013, p.114).

### **Experimental Manipulations of Listening in Applied Settings**

Distinguishing the appropriate roles and behaviors of speakers and listeners is central to relationship education programs and to couple therapy (e.g., Markman, Renick, Floyd, Stanley, & Clements, 1993). In communication training, partners are prompted to provide active listening and to summarize important aspects of the stress expression in order to enhance the partner’s deeper understanding and the process of jointly coping with the stressor (also called “dyadic coping”; Bodenmann, 2005). Experimental manipulations of the couple’s communication in intervention studies can therefore provide important basic information about listening and the specific pathways by which listening can promote relationship functioning. The Couples Coping Enhancement Training (CCET; Bodenmann & Shantinath, 2004), for example, is derived from the STM and systematically strengthens active listening in the 3-phase method (Bodenmann, 2010; Bodenmann & Randall, 2012). In the first phase, one partner is instructed to express his or her stress while the other partner listens attentively and summarizes what has been disclosed. Next, the listener is instructed to provide support in response to the partner’s specific needs, which the partner then acknowledges and comments upon in the third phase (Bodenmann, 2010). This intensive listening encourages the stressed partner to deepen his or her stress-related self-disclosure, thereby increasing both partners’ feelings of closeness, and allowing the couple to strengthen their dyadic coping repertoire. The efficacy of this intervention program has been documented using self-reports (e.g., Bodenmann, 2015; Zemp et al., 2017) and behavioral observation (Widmer, Cina, Charvoz,

Shantinath, & Bodenmann, 2005), providing some corroboration for the assumption that listening is a critical element in couple communication. These applied findings provide an important foundation for asking new questions in basic research addressing how and why listening might increase couple functioning. The present study aims to do so, focusing in particular on how the effects of listening on relationship functioning may depend upon the quality of listening a partner displays while his or her partner is disclosing stressful experiences.

### **Basic Research on Listening**

Despite its theoretical and clinical significance, research focusing specifically on listening as a fundamental element of responsiveness in relationships is surprisingly rare (Bodie et al., 2015; Jones, 2011), especially for couples talking about stress. Although most behavioral coding systems of interpersonal interaction (i.e., communication, dyadic coping) include listening as a category either directly or indirectly, this variable is often embedded within a larger construct of positive communication behavior (Hafen & Crane, 2003). Studies that code for listening behaviors have examined informal helping conversations between strangers (Bodie et al., 2015), conflict or problem-solving discussions (e.g., Gottman, Coan, Carrere, & Swanson, 1998; Pasupathi, Carstensen, Levenson, & Gottman, 1999), or dyadic coping conversations (Bodenmann, 2000; Widmer et al., 2005). While Gottman et al. (1998) questioned the usefulness of active listening in conflict discussions and criticized relationship education programs that aim to promote this communication behavior, others (Hafen & Crane, 2003; Stanley, Bradbury, & Markman, 2000) challenged this view on the grounds that it emphasized conflict over other prosocial domains of behavior in couples. For example, during conflict discussions, partners often show insufficient listening as they are primarily motivated to advance their own views or to solve the problem at stake rather than to understand or validate the partner's perspective or personal concern. In the context of

emotional disclosure related to stressful experiences, however, listening might play a different role (Pasch & Bradbury, 1998).

Given that listening is generally acknowledged to be an important element in couple communication, one might wonder how listening can be the most effective. In what particular moments might listening enable understanding and adequate dyadic coping? As Schumm (1983) noted, listening is relevant in moments of self-disclosure. Although more recent studies are beginning to identify crucial moments of stress disclosure (e.g., on days where the workload was particularly high; Laurenceau et al., 2005), researchers often use aggregated data such as average scores of partner support. Micro-processes of dyadic coping processes distinguishing between listening and other categories of support could yield valuable insights into underlying mechanisms (Johnson & Bradbury, 1999). Hence, there may be value in research that focuses more on moment-to-moment dynamics and crucial moments during a conversation, in order to identify the behaviors (e.g., listening) that are relevant for the couple's functioning. By examining the interdependent processes of partner's behaviors unfolding over time in this way, we position ourselves to "capture the complex nature of both listening and providing emotional support" (Jones, 2011, p. 92).

### **The Current Study**

We aim to understand mechanisms related to listening by observing dyadic interactions in which partners talk about a stressful experience that they have undergone. First, we graphically display and examine the temporal course of observed stress-related self-disclosure ("stress expression"), listening, and dyadic coping behavior during couples' conversations. Based on the assumptions of the STM, we investigate whether the listening of one partner occurring simultaneously with the stress expression of the other partner is functional for subsequent dyadic coping and subjective measures such as relationship satisfaction. Specifically, one could expect that attentive listening *during* stress expression

will co-vary with more functional dyadic coping and less negative dyadic coping displayed in the conversation, due to an enhanced understanding of the partner's experience. However, we treat listening and dyadic coping behaviors as mutually exclusive in our data analysis.

Therefore, we expect that partners who listen intensively would have lower scores of verbal dyadic coping. When almost exclusively displaying listening, they may not be able to verbalize much affective understanding or support during the conversation. Additionally, we expect that those who do not listen at all either provide no or inadequate emotional dyadic coping insofar as they might not be very motivated to truly understand their partner via listening. As a consequence, we postulate that the association between displayed listening and emotion-oriented dyadic coping behaviors would be quadratic instead of linear<sup>1</sup>. We code as well for problem-oriented dyadic coping, though we do not advance a specific prediction for this behavior, as the association could go in more than one direction. On one hand, problem-oriented responses might covary directly with partner listening because, e.g., more listening allows the listener to understand the problem better and thus provide informed solutions. On the other hand, more problem-oriented responding might covary with less partner listening to the extent that the listener might be overwhelmed by the discloser's stress, prompting less listening but verbalization of frequent, abrupt solutions aimed at curtailing the disclosure. Finally, we hypothesize that adequate listening also covaries with the general subjective perception of the partner's dyadic coping and relationship satisfaction, as assessed with questionnaires.

## **Method**

### **Participants**

---

<sup>1</sup> Similar to Olson (2011), we expect a curvilinear, i.e. quadratic model for emotion-oriented coping. In the model, he hypothesizes that too much or too little cohesion or flexibility would be unhealthy for marital and family functioning.



The current study uses data from a larger project investigating the impact of stress on the development of couple relationships. Couples were recruited in 2011 via radio and newspaper advertisements. To be eligible, couples had to be in their current relationship for at least one year. In total, 368 heterosexual couples filled out questionnaires and took part in videotaped conversations. Three couples did not have observational data (one couple refused to participate in the interaction task, one couple wanted to delete their video after the task, and one video is missing due to technical problems), yielding a final sample of 365 couples.

Participants ranged in age from 20 to 80 years old ( $M = 47.2$  years for women,  $SD = 18.3$ ;  $M = 49.3$  years for men,  $SD = 18.3$ ) and partners had been in their current relationship for  $M = 21.2$  years ( $SD = 18.1$ , range: 1-60). Sixty-six percent of the couples were married, 85% lived together, and 65% had children. The sample is a middle-class sample as indicated by the participant's level of education and income (for detailed sample description see Kuster et al., 2015).

### **Procedure**

Interested couples were informed about the study and, after agreeing to participate, were instructed to independently complete a set of questionnaires and bring them to the laboratory session. At the beginning of the session, partners provided informed consent and completed additional questionnaires in separate rooms. To generate samples of dyadic coping behavior, partners each identified recent stressors arising outside of the relationship. Using these topics, two 8-min interactions were recorded in which each partner described the outside stressor while the other partner responded as they typically would in their daily lives. In addition, observational data from a couple conflict were collected but are not used in the current report. Upon completion of the interactions, couples were debriefed and paid approximately \$100. All procedures were evaluated and approved by the local Institutional Review Board.

## Observational Measures

**Coding procedures.** Stress expression, listening, and dyadic coping were coded from the two dyadic coping conversations (once man and once woman as speaker per couple). Coding was based on the Coding System for Dyadic Coping (SEDC; System for assessing observed dyadic coping; Bodenmann, 2000), which was developed specifically to code support interactions in intimate relationships. Coders were trained to a criterion of .90 on interrater agreement, assessed by Cohen's kappa, requiring a minimum of 60 hours of coding. Each video was coded by two coders, who focused on either partner. Videos were split into 48 10s-sequences, and each unit was coded for the stress communication behavior of the one partner and listening/dyadic coping behavior of the other.

**Stress expression.** Stress expression was coded with a score of '1' during 10s-sequences when the disclosing partner was talking about a relevant stressful situation. Stress expression consisted of four subcategories: *verbal problem-oriented stress expression* (e.g., asking the partner for advice or specific assistance), *neutral stress expression* (neutral or factual descriptions), and verbal emotional self-disclosures including *implicit stress expression* (e.g. superficial feelings such as "stressed" or "frustrated"), and *explicit stress expression* ("I have never been that embarrassed" or "I was really hurt by that person's behavior"). For all 48 sequences, we created a stress expression score that was coded as '1' in sequences where one of the four stress expressions was observed. We do thus not differentiate between the different types of stress expression.

**Listening.** Listening was coded during 10s-sequences when the non-disclosing partner showed active, interested listening. The partner has to be oriented towards the speaker while seating and showing eye-contact. Listening was defined as nodding and back-channeling behaviors (e.g., "mmh", "yeah"). In addition, asking open questions ("What happened exactly?", "How did you experience the situation?"), as well as more specific

questions exploring the speaker's experience ("Was that aggravating?") were coded as listening.

**Dyadic coping.** Dyadic coping was coded into one of three categories: *problem-focused dyadic coping* (e.g., giving advice), *emotion-focused dyadic coping* (all emotion-focused positive verbal support; e.g., empathic understanding, showing solidarity with the partner, encouraging the partner), or *negative dyadic coping* (e.g., hostile, insensitive, superficial support behavior). In any sequence, the listener received only one possible score, thus, these behaviors are mutually exclusive in the coding system. Also, if a listener showed 3 seconds of listening behavior but 4 seconds of emotion-focused dyadic coping, only the latter was coded.

### **Self-Report Measures**

**Relationship satisfaction.** Relationship satisfaction was measured by the German version of the Relationship Assessment Scale (RAS; Hendrick, 1988; Sander & Boecker, 1993). Both partners rated seven items on a 5-point scale with various verbal anchors depending on the content of the items (e.g., "How often do you wish you had not gotten into this relationship?" (reverse coded)). Internal consistencies for men ( $\alpha = .84$ ) and women ( $\alpha = .84$ ) were acceptable.

**Evaluation of dyadic coping.** Subjective evaluations of partner's dyadic coping quality in the relationship were assessed using two items from the 37-item Dyadic Coping Inventory (DCI; Bodenmann, 2008): "I am satisfied with the support I receive from my partner and the way we deal with stress together"; "I am satisfied with the support I receive from my partner and I find as a couple, the way we deal with stress together is effective". This evaluation does not refer to the conversation but to the partner's dyadic coping efforts in general. Responses were made on 5-point Likert scales, where higher scores reflect greater

satisfaction with support. Cronbach's alpha was high with  $\alpha = .87$  for men and  $\alpha = .88$  for women.

### Statistical Analyses

We treated the behavioral coding as intensive longitudinal data. The dataset consisted of  $365$  (couples)  $\times$   $2$  (partners)  $\times$   $48$  (sequences) =  $35,040$  data points. To take the nested and dyadic structure of the data into account, we used a multilevel model for dyadic data that treats the three levels of our data (sequences nested within partners nested within couples) as two levels (see Laurenceau & Bolger, 2005; Raudenbush & Bryk, 2002). As the dependent variable of listening behavior was coded as a binary variable (0 = no listening, 1 = listening), we used a generalized mixed linear model with a logit link function, calculating average effects over all couples (fixed effects) and couple-specific residuals (random effects). We tested the optimal random structure with a stepwise procedure of model comparisons (comparing log likelihoods with a  $\chi^2$ -test; Zuur, Ieno, Walker, Saveliev, & Smith, 2009). This resulted in the specification of random slopes for all Level-1 within-person variables (sequence coded in minutes with, e.g., 1/6 representing the first sequence and 6/6 one minute, stress expression coded as 0 = absent and 1 = present). We used the lme4 package (Bates, Maechler, Bolker, & Walker, 2015) for multilevel modeling in R.

We extracted the individual random slopes of stress expression from the multilevel models. The slopes represent the strength of the association between stress expression of the one partner and listening behavior of his or her partner, and thus serve as the primary independent variable in this study. Because we had one conversation for the men's stress expression and one for the women's, each couple had two slopes. These slopes of listening during stress expression were normally distributed and had a mean of  $M = 0.00^2$  ( $SD = 1.68$ , range:  $-3.65 - 3.62$ ) for men and a mean of  $M = 0.00$  ( $SD = 1.40$ , range:  $-4.19 - 3.05$ ) for

---

<sup>2</sup> The mean is close to zero because listening occurs in approximately 50% of the cases.

women, indicating extensive variability in how people listen to their partner's stress expression.

We then estimated several sets of multiple regression models (see Table 2) in which the random slope was the independent variable and the intercept of the listening behavior were control variables; dependent variables included specific coping behaviors during the conversation that were averaged across sequences, self-report scores on the relationship satisfaction measure, or self-report scores on the evaluation of perceived dyadic coping quality. We did not estimate Actor-Partner Interdependence models due to the high shared variance ( $r = .83$ ) of men's and women's listening slopes<sup>3</sup>.

## Results

### Preliminary Analyses

Table 1 presents the means, standard deviations, t-tests, and intercorrelations of the mean amount of listening, stress expression and coping behaviors that were observed during the 48 sequences of the conversations for the two conversations, as well as self-reports of the evaluation of dyadic coping and relationship satisfaction. On average, listening and stress expression were displayed about half of the time of the conversation. Men's and women's listening behavior did not differ, but women expressed significantly more stress ( $t(364) = 3.77, p < .001$ ). Men displayed significantly more problem-oriented coping than women ( $t(364) = 4.15, p < .001$ ). Listening and partner's stress expressions were highly correlated across partners within the conversation ( $r = .80$  for men listening and  $r = .84$  for women listening). Men reported slightly higher relationship satisfaction than women ( $t(364) = -2.24, p = .025$ ).

---

<sup>3</sup> A lack of independent variance led us enter the slopes independently for male and female partners in the multiple regression part. We refrained from entering both slopes as we anticipated problems of multicollinearity and, hence, model estimation problems. In addition, we calculated the multiple regressions with the residual variance of the partner's behavior as an additional predictor. Only the residual variance of the female's stress conversation slope was significant in the model for male stress conversations and female relationship satisfaction ( $p = .040$ ).

## The Temporal Course of Listening, Stress Expression, and Coping Behaviors

Figures 1 and 2 show the general course of listening, stress expression and coping for the two conversations where either the man or the woman talked about a stressful experience. For a simplified illustration, we display the total amount of coping instead of the different forms. For each 10s-time point (sequence), the percentage of couples displaying the specified behavior is indicated on the y-axis. In general, the beginning of the conversation documents the highest amount of couples showing stress expression for both conversations. In fact, out of 365 couples, 76% of men and 79% of women show stress expression in the third sequence 20 seconds after the beginning of the conversation, which marks the highest point of stress expression. We can also observe a decrease in stress expression over the course of the conversation. In the last sequence, for example, only 23% of men and 28% of women still express stress. Similar results can be denoted for the listening behavior. The listening behavior is observed parallel to the stress expression and decreases over time. The percentage of couples displaying coping behaviors increases over the course of the conversation.

For illustrative reasons, we also display the two extreme groups with respect to the interplay of stress communication and listening behavior (Figures 3 and 4). The graphs on the left hand show the couples with the weakest association between listening and stress expression (15% of the couples with the lowest slopes), the “bad” listeners. These couples have a negative individual slope, which was extracted from the multilevel model ( $M = -2.53$ ,  $SD = 0.44$ , range:  $-3.65 - -1.92$  for men’s conversations and  $M = -2.12$ ,  $SD = 0.54$ , range:  $-4.19 - -1.58$  for women’s conversations). On the right side, the “good” listener couples with the strongest association of listening and stress expression are displayed (15% with the largest slopes), as indicated by the multilevel random slopes ( $M = 2.46$ ,  $SD = 0.54$ , range:  $1.99 - 3.62$  for men’s conversations and  $M = 2.06$ ,  $SD = 0.37$ , range:  $1.55 - 3.05$  for women’s conversations). These graphs are intended to visualize the difference of the temporal course

for the extreme “good” and “bad” listeners and their difference in coping behavior. Per definition, the group of “bad” listeners shows an asynchrony between listening and stress expression, whereas the “good” listeners have very similar amounts of stress expression and listening per time sequence. Observed coping behavior also differs between the two groups: Whereas the “good” listeners show very little coping, the “bad” listeners cope much more during the conversation. It thus seems important to investigate what type of coping the couples are using and what this might imply for the relationship.

### **Regression Analyses between Listening and Different Outcomes**

Table 2 displays the results of the multiple regression using the random slopes as predictors of observed coping behaviors and self-reported relationship outcomes (evaluation of the dyadic coping, relationship satisfaction). The random slopes (as measures of association) indicate the strength of the association between stress expression and listening, thus reflecting how likely partners listen when the other one is disclosing. We also used the random intercept as predictor to control for the unconditional level of listening, that is listening behavior that is not triggered by a stress communication; the intercept reflects the ratio of listening behavior if there is no stress communication. Because of the sparse research in this field, our analyses are exploratory and should be used as a basis for further investigations. To correct for multiple testing, we lowered the TYPE-I error rate to  $\alpha = .005$ .

Predicting observed coping behaviors with the random slopes showed that the stronger listening was associated with stress expression (positive random slope), the less problem-oriented coping was displayed throughout the conversation (Table 2). Effect sizes indicated strong effects ( $f = .55$  for men’s conversations and  $f = .52$  for women’s conversations; Cohen, 1992). The same effect was found for negative coping with effect sizes ranging from  $f = .39$  for men’s conversations and  $f = .46$  for women’s conversations.

Emotion-oriented coping was not associated with the random slopes for both conversations when we tested for linear effects. However, as expected, the conversations in which couples display the most responsive listening (highest 15%; see Figures 3 and 4) are characterized by very little observed coping behavior. We thus additionally tested for a quadratic association following the rationale that partners who always listen to the disclosing partner may prevent themselves from providing emotional support. Additional regression analyses with the quadratic term of the slope confirm our expectation that a moderate amount of listening might be the most suitable in order to provide more emotion-oriented coping for women's stress conversations (this effect is moderate in magnitude,  $f = .18$ ). For men's conversations, the quadratic regression coefficient was not significant.

Regression models predicting the evaluation of dyadic coping (as measured with the questionnaire) reveal that only women's evaluation of dyadic coping is associated with the random slope parameter. That is, the closer the relation between stress expression and active listening in cases where women are disclosing, the better they evaluate their partner's general dyadic coping efforts. With respect to relationship satisfaction, we found that both partners' relationship satisfaction can be predicted by the association between self-disclosure and active listening: the closer the association the higher the relationship satisfaction irrespective of who is expressing the stress; note, however, that the regression parameter linking the random slope of women's stress conversations to their own relationship satisfaction falls just short of our corrected  $p$  value ( $p = .006$ ). The strongest effect is found for women's relationship satisfaction in men's conversations ( $R^2 = .056$ ), indicating a moderate effect ( $f = .24$ ). The more listening women thus display during their partners' stress expression, the more satisfied they are. A similar finding is evidenced for men. In addition, men are also more satisfied when their partners listen more closely. The intercept of listening shows significant associations with women's relationship satisfaction only for the men's



conversations, perhaps indicating that men's listening independent of female stress expression is not as relevant as women's listening intercept.

### **Discussion**

The aim of this article was to investigate listening behavior during a support conversation and its association with different dyadic coping behaviors, the evaluation of the dyadic coping, and relationship satisfaction. We learn from this analysis that, although there are between-couple differences in the associations between stress expression and active listening, overall, partners listen quite closely to the other partner's stress expression. We also learn that active listening during stress expression is strongly related to dyadic coping behaviors that occur in the same conversation, and to women's evaluation of dyadic coping and relationship satisfaction.

The graphs of the temporal course illustrate how listening and stress expression represent parallel processes. In the current sample, the amount of couples displaying listening and stress expression decreases during the conversation, whereas the amount of couples displaying coping behaviors seems to increase. These observations are in line with the assumptions of the Systemic Transactional Model (STM; Bodenmann, 2005). Thus, we can assume that the partners generally first try to understand by listening before they provide dyadic coping, which is what the Couple Coping Enhancement Training (CCET; Bodenmann & Shantinath, 2004) or Coping-oriented Couple Therapy (COCT; Bodenmann, 2010) aim to strengthen. This might suggest that listening, by itself, might already function as a support strategy in relationships (Weger et al., 2014). Jones (2011) addressed this conceptual debate regarding whether listening should be considered as a form of support, and concluded that listening is indeed a key mechanism of emotional support. As evident from Figures 3 and 4 and the regression analyses, listening and dyadic coping are strongly interrelated. Whereas "good" listeners, or those who listen quite closely to the partner's expressions of stress, tend

to provide less problem-oriented and negative coping, relatively “bad” listeners are asynchronous to their partner and engage much more in giving advice or offering support that is negative or counterproductive. Ineffective listeners might be overwhelmed or flooded with the partner’s stress, more occupied with their own stress regulation, and therefore have fewer resources available to attend to the stressed partner’s needs and concerns (Jones, 2011; Muraven & Baumeister, 2000). Coping that is negative or problem-oriented might thus mask important affective experiences for the support provider, rendering him or her unable to pay close attention and otherwise overwhelmed by the immediate demands of the situation. Alternatively, partners might lack competence in active listening because they had never learned it in the first place. Another explanation might be that these partners are less committed, demonstrate decreased motivation in dyadic coping efforts, and are less satisfied with the relationship. Conversations characterized by less listening “do not flow as smoothly” (Bodie et al., 2015, p. 166) and, as a consequence, disclosing partners encounter difficulties expressing themselves. In a similar vein, listeners who primarily give advice rather than engaging in supportive listening techniques tend to be significantly more depressed and more dismissing of their distressed interaction partners compared to listeners who acknowledge the distressed person’s mood, which might be accomplished via more emotion-oriented support (Notarius & Herrick, 1988). Solutions and advice are often neither well received nor desired in the first place (e.g., Jones, 2011), which might explain the fact that listening less closely to the partner is associated with lower relationship satisfaction. Further research could test for potential mediating effects for listening and relationship satisfaction. Additional studies on physiological arousal and listening might affirm our assumptions about partners being too overwhelmed to listen closely.

Our results reveal differences between men and women in stress expression and dyadic coping competences, similar to previous studies (e.g., Barbee et al., 1993; Bodenmann

et al., 2015; Dindia & Allen, 1992; Noller, 1980). The finding that women talk significantly more about their stress aligns with previous findings that women report more stress (e.g., Matud, 2004). In addition, Figures 1 and 2 suggest that women, on average, listen more closely than men. Future studies should investigate gender differences in more detail during the temporal course of the conversation. At present, it is not clear how different types of stress expression shape listening behaviors. Whereas prior research reports gender differences for types of stress expression (e.g. factual vs. emotional), and investigates how different forms of stress expression are linked with different dyadic coping efforts (Kuhn, Milek, Meuwly, Bradbury, & Bodenmann, in press), it remains unclear whether listening is also dependent on different types of disclosure and differs for men and women.

Our descriptive findings raise questions about whether there is an optimal time point when dyadic coping should set in during the conversation. Obviously, it depends on the intensity and complexity of the stress experience being disclosed at what time point exactly the dyadic coping is perceived as helpful and not incomprehensive and overwhelming. Our analyses have advanced understanding of this issue by showing that good listening coincides with better dyadic coping efforts and with a better evaluation of the dyadic coping in women, and thus seems to be consequential for relationship functioning.

### **Strengths and Limitations**

Major strengths of the current study are the inclusion of intensive longitudinal observational data, the focus on listening behavior, and the investigation of the temporal course of the observed behaviors. Including observational data limits the risk of having inflated results due to shared method variance, and the additional inclusion of questionnaire data enables us to test our hypotheses using different methodological approaches. Furthermore, this study investigates the temporal dynamics of supportive discussions, which has rarely been done before.

Our results are limited, however, to fairly satisfied, heterosexual couples that made up the majority of our sample. Nevertheless, our focus on relatively satisfied couples might imply that the true association between satisfaction and listening in the general population might be even more robust. Severely dissatisfied couples, for example, might display much less listening behavior. Second, because the couple conversations took place in a laboratory, we do not have naturalistic observations of the couples speaking with each other. Listening partners might have felt pressured to show favorable behavior and thus showed more attentive behavior towards their disclosing partners (Jones, 2011). In fact, conversations like those in our study occur rarely in daily life (Campos et al., 2009), with back-channel communication only compromising about 8% of the respondent's behavior (Alberts, Yoshimura, Rabby, & Loschiavo, 2005). Third, in our coding system, we do not make a clear difference between verbal and nonverbal listening cues. Having information about verbal listening such as asking questions would provide further insight into the listener's role and the effect of listening on the speaker. In addition, positive and negative listening (such as turning away from the partner) behaviors might be distinguished. Furthermore, the evaluation of the dyadic coping quality has only been assessed generally and is not explicitly linked with the coping conversation. A direct rating following the conversation would provide even better insights of the subjective perception of partner's dyadic coping efforts. A statistical limitation of this study includes the two-step approach we adopted in our analyses. The slopes used as predictors for the multiple regression models might not be error free. One possible alternative might be to include, for example, relationship satisfaction as a moderator in the multilevel model. Finally, we cannot draw causal conclusions. Although the relationship between listening and relationship outcomes is most probably bi-directional, we cannot be certain that listening behavior exerts a causal effect on relationship satisfaction. As an alternative explanation, less satisfied couples might make fewer efforts to connect to their partner during

the conversation. However, women indicate being more satisfied with the dyadic coping they receive from their partner the closer their male partners listen during the conversation. This finding leads to the assumption that the partner's listening behavior has the potential to increase the satisfaction with the coping.

### **Clinical Implications**

Notwithstanding these limitations, the present study suggests that relationships benefit when partners listen attentively to the one another's expressions of stress. Clinicians might be able to improve couple's competences and functioning by focusing even more on effective listening. Effectiveness studies on the 3-phase-method (Bodenmann, 2007), where the first phase is devoted to stress expression and listening, support the contention that relationship education programs and couple therapy should continue to strengthen listening competences in the relationship. Listening seems to be a key component for dyadic coping and communication in general. Enhancing partners' listening might thus be a promising way to enhance relationship satisfaction and mutual intimacy. Evaluations of the 3-phase-method (Bodenmann, 2000) revealed that partners experience empathic listening as one of the most beneficial forms of support. This study highlighted why this is the case and how the fine tuning between self-disclosure and listening should be a focus of the therapists. Encouraging couples to listen more attentively in daily life might create positive changes in the experience of support with long-lasting effects on the relationship satisfaction.

### **Conclusion**

The current study advances existing research on listening by investigating the temporal course of couple conversations while one partner discusses a personal stress experience. The associations of listening with coping behaviors and couple's relationship satisfaction highlight the importance of listening behaviors when communicating with the partner. Future research should now address questions regarding the quality of listening,

different forms of listening, as well as the important time points within conversations when listening proves most beneficial. Furthermore, gender differences regarding these aspects should be addressed further in future studies.

## References

- Alberts, J. K., Yoshimura, C. G., Rabby, M., & Loschiavo, R. (2005). Mapping the topography of couples' daily conversation. *Journal of Social and Personal Relationships, 22*(3), 299–322. <https://doi.org/10.1177/0265407505050941>
- Bates, D., Maechler, M., Bolker, B., & Walker, S. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software, 67*(1), 1-48. doi:10.18637/jss.v067.i01.
- Barbee, A. P., Cunningham, M. R., Winstead, B. A., Derlega, V. J., Gulley, M. R., Yankeelov, P. A., & Druen, P. B. (1993). Effects of gender role expectations on the social support process. *Journal of Social Issues, 49*(3), 175–190. <https://doi.org/10.1111/j.1540-4560.1993.tb01175.x>
- Bodenmann, G. (1995). A systematic-transactional conceptualization of stress and coping in couples. *Swiss Journal of Psychology, 54*(1), 34–49.
- Bodenmann, G. (2000). *Stress und Coping bei Paaren [Stress and coping in couples]*. Göttingen: Hogrefe.
- Bodenmann, G. (2005). Dyadic coping and its significance for marital functioning. In T. A. Revenson, K. Kayser, & G. Bodenmann (Eds.), *Couples coping with stress: Emerging perspectives on dyadic coping* (pp. 33–49). Washington, DC, US: American Psychological Association.
- Bodenmann, G. (2007). Dyadic coping and the 3-phase-method in working with couples. In L. VandeCreek (Ed.), *Innovations in clinical practice: Focus on group and family therapy* (pp. 235–252). Sarasota: Professional Resource Press.
- Bodenmann, G. (2008). *Dyadisches Coping Inventar: Testmanual [Dyadic Coping Inventory]*. Bern: Huber.
- Bodenmann, G. (2010). New themes in couple therapy: The role of stress, coping, and social support. In K. Hahlweg, M. Grawe-Gerber, & D. H. Baucom (Eds.), *Enhancing*

*couples: The shape of couple therapy to come.* (pp. 142–156). Cambridge, MA, US: Hogrefe Publishing.

Bodenmann, G., Meuwly, N., Germann, J., Nussbeck, F. W., Heinrichs, M., & Bradbury, T. N. (2015). Effects of stress on the social support provided by men and women in intimate relationships. *Psychological Science, 26*(10), 1584–1594.  
<https://doi.org/10.1177/0956797615594616>

Bodenmann, G., & Shantinath, S. D. (2004). The Couples Coping Enhancement Training (CCET): A new approach to prevention of marital distress based upon stress and coping. *Family Relations, 53*(5), 477–484. <https://doi.org/10.1111/j.0197-6664.2004.00056.x>

Bodie, G. D., Gearhart, C. C., Denham, J. P., & Vickery, A. J. (2013). The temporal stability and situational contingency of active-empathic listening. *Western Journal of Communication, 77*(2), 113–138. <https://doi.org/10.1080/10570314.2012.656216>

Bodie, G. D., Vickery, A. J., Cannava, K., & Jones, S. M. (2015). The role of “active listening” in informal helping conversations: Impact on perceptions of listener helpfulness, sensitivity, and supportiveness and discloser emotional improvement. *Western Journal of Communication, 79*(2), 151–173.  
<https://doi.org/10.1080/10570314.2014.943429>

Burleson, B. R., & Goldsmith, D. J. (1998). How the comforting process works: Alleviating emotional distress through conversationally induced reappraisals. In P. A. Andersen, L. K. Guerrero, P. A. Andersen, & L. K. Guerrero (Eds.), *Handbook of communication and emotion: Research, theory, applications, and contexts.* (pp. 245–280). San Diego, CA, US: Academic Press.



- Cahn, D. D. (1990). Perceived understanding and interpersonal relationships. *Journal of Social and Personal Relationships*, 7(2), 231–244.  
<https://doi.org/10.1177/0265407590072005>
- Cahn, D. D., & Frey, L. R. (1992). Listeners' perceived verbal and nonverbal behaviors associated with communicators' perceived understanding and misunderstanding. *Perceptual and Motor Skills*, 74(3, Pt 2), 1059–1064.  
<https://doi.org/10.2466/PMS.74.4.1059-1064>
- Campos, B., Graesch, A. P., Repetti, R., Bradbury, T., & Ochs, E. (2009). Opportunity for interaction? A naturalistic observation study of dual-earner families after work and school. *Journal of Family Psychology*, 23, 798–807.  
<http://dx.doi.org/10.1037/a0015824>
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155–159.  
<https://doi.org/10.1037/0033-2909.112.1.155>
- Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. *Journal of Personality and Social Psychology*, 78(6), 1053–1073. <https://doi.org/10.1037/0022-3514.78.6.1053>
- Cutrona, C. E., Shaffer, P. A., Wesner, K. A., & Gardner, K. A. (2007). Optimally matching support and perceived spousal sensitivity. *Journal of Family Psychology*, 21(4), 754–758. <https://doi.org/10.1037/0893-3200.21.4.754>
- Dindia, K., & Allen, M. (1992). Sex differences in self-disclosure: A meta-analysis. *Psychological Bulletin*, 112(1), 106–124. <https://doi.org/10.1037/0033-2909.112.1.106>
- Garland, D. R. (1981). Training married couples in listening skills: Effects on behavior, perceptual accuracy and marital adjustment. *Family Relations*, 30(2), 297–306.  
<https://doi.org/10.2307/584144>

- Gottman, J. M., Markman, H., & Notarius, C. (1977). The topography of marital conflict: A sequential analysis of verbal and nonverbal behavior. *Journal of Marriage and the Family*, 39(3), 461. <https://doi.org/10.2307/350902>
- Gottman, J. M., Coan, J., Carrere, S., & Swanson, C. (1998). Predicting marital happiness and stability from newlywed interactions. *Journal of Marriage and the Family*, 60(1), 5.
- Gottman, J. M. (1979). The structure of interaction. In *Marital interaction: experimental investigations* (pp. 45-76). New York: Academic Press.
- Hafen, M., & Crane, D. R. (2003). When marital interaction and intervention researchers arrive at different points of view: the active listening controversy. *Journal of Family Therapy*, 25(1), 04-14. <https://doi.org/10.1111/1467-6427.00232>
- Hahlweg, K., Markman, H. J., Thurmaier, F., Engl, J., & Eckert, V. (1998). Prevention of marital distress: Results of a German prospective longitudinal study. *Journal of Family Psychology*, 12(4), 543-556. <https://doi.org/10.1037/0893-3200.12.4.543>
- Halford, W. K., & Simons, M. (2005). Couple relationship education in Australia. *Family Process*, 44(2), 147–159. <https://doi.org/10.1111/j.1545-5300.2005.00050.x>
- Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family*, 50(1), 93–98. <https://doi.org/10.2307/352430>
- Hoffman, L., & Stawski, R. S. (2009). Persons as contexts: Evaluating between-person and within-person effects in longitudinal analysis. *Research in Human Development*, 6(2–3), 97–120. <https://doi.org/10.1080/15427600902911189>
- Johnson, M. D., & Bradbury, T. N. (1999). Marital satisfaction and topographical assessment of marital interaction: A longitudinal analysis of newlywed couples. *Personal Relationships*, 6(1), 19–40. <https://doi.org/10.1111/j.1475-6811.1999.tb00209.x>

- Jones, S. M. (2011). Supportive listening. *International Journal of Listening*, 25(1–2), 85–103. <https://doi.org/10.1080/10904018.2011.536475>
- Kuhn, R., Milek, A., Meuwly, N., Bradbury, T. N., & Bodenmann, G. (in press). Zooming in - A microanalysis of couples' dyadic coping conversations after experimentally induced stress. *Journal of Family Psychology*, doi: 10.1037/fam0000354.
- Kuster, M., Bernecker, K., Backes, S., Brandstätter, V., Nussbeck, F. W., Bradbury, T. N., ... Bodenmann, G. (2015). Avoidance orientation and the escalation of negative communication in intimate relationships. *Journal of Personality and Social Psychology*, 109(2), 262–275. <https://doi.org/10.1037/pspi0000025>
- Laurenceau, J.-P., Barrett, L. F., & Rovine, M. J. (2005). The interpersonal process model of intimacy in marriage: A daily-diary and multilevel modeling approach. *Journal of Family Psychology*, 19(2), 314–323. <https://doi.org/10.1037/0893-3200.19.2.314>
- 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>
- Markman, H. J., Renick, M. J., Floyd, F. J., Stanley, S. M., & Clements, M. (1993). Preventing marital distress through communication and conflict management training: A 4- and 5-year follow-up. *Journal of Consulting and Clinical Psychology*, 61(1), 70–77. <https://doi.org/10.1037/0022-006X.61.1.70>
- Matud, M. P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, 37(7), 1401–1415. <https://doi.org/10.1016/j.paid.2004.01.010>
- Miller, L. C., Berg, J. H., & Archer, R. L. (1983). Openers: Individuals who elicit intimate self-disclosure. *Journal of Personality and Social Psychology*, 44(6), 1234–1244. <https://doi.org/10.1037/0022-3514.44.6.1234>

- Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: does self-control resemble a muscle? *Psychological Bulletin*, *126*(2), 247–259.
- Noller, P. (1980). Misunderstandings in marital communication: A study of couples' nonverbal communication. *Journal of Personality and Social Psychology*, *39*(6), 1135–1148. <https://doi.org/10.1037/h0077716>
- Notarius, C. I., & Herrick, L. R. (1988). Listener response strategies to a distressed other. *Journal of Social and Personal Relationships*, *5*(1), 97–108. <https://doi.org/10.1177/0265407588051006>
- Pasch, L.A., & Bradbury, T.N. (1998). Social support, conflict, and the development of marital dysfunction. *Journal of Consulting and Clinical Psychology*, *66*, 219-230. <http://dx.doi.org/10.1037/0022-006X.66.2.219>
- Pasupathi, M., Carstensen, L. L., Levenson, R. W., & Gottman, J. M. (1999). Responsive listening in long-married couples: A psycholinguistic perspective. *Journal of Nonverbal Behavior*, *23*(2), 173–193. <https://doi.org/10.1023/A:1021439627043>
- Prager, K. J., & Buhrmester, D. (1998). Intimacy and need fulfillment in couple relationships. *Journal of Social and Personal Relationships*, *15*(4), 435–469. <https://doi.org/10.1177/0265407598154001>
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical Linear Models: Applications and Data Analysis Methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Reis, H. T., Lemay, E. P., & Finkenauer, C. (2017). Toward understanding understanding: The importance of feeling understood in relationships. *Social and Personality Psychology Compass*, *11*(3). <https://doi.org/10.1111/spc3.12308>
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. Duck, D. F. Hay, S. E. Hobfoll, W. Ickes, & B. M. Montgomery (Eds.), *Handbook of personal*

- relationships: Theory, research and interventions.* (pp. 367–389). Oxford, England: John Wiley & Sons.
- Rogers, C. R. (1951). *Client-centered therapy, its current practice, implications, and theory.* Boston Houghton Mifflin.
- Sander, J., & Boecker, S. (1993). Die deutsche Form der Relationship Assessment Scale (RAS): Eine kurze Skala zur Messung der Zufriedenheit in einer Partnerschaft [The German version of the Relationship Assessment Scale (RAS): A short scale for measuring satisfaction in a dyadic relationship]. *Diagnostica*, 39(1), 55–62.
- Schumm, W. R. (1983). Theory and measurement in marital communication training programs. *Family Relations*, 32(1), 3–11. <https://doi.org/10.2307/583973>
- Stanley, S. M., Bradbury, T. N., & Markman, H. J. (2000). Structural flaws in the bridge from basic research on marriage to interventions for couples. *Journal of Marriage and the Family*, 62(1), 256–264. <https://doi.org/10.1111/j.1741-3737.2000.00256.x>
- Weger, H., Bell, G. C., Minei, E. M., & Robinson, M. C. (2014). The relative effectiveness of active listening in initial interactions. *International Journal of Listening*, 28(1), 13–31. <https://doi.org/10.1080/10904018.2013.813234>
- Widmer, K., Cina, A., Charvoz, L., Shantinath, S., & Bodenmann, G. (2005). A model dyadic-coping intervention. In T. A. Revenson, K. Kayser, & G. Bodenmann (Eds.), *Couples coping with stress: Emerging perspectives on dyadic coping* (pp. 159–174). Washington, DC, US: American Psychological Association.
- Zemp, M., Merz, C. A., Nussbeck, F. W., Halford, W. K., Schaer Gmelch, M., & Bodenmann, G. (2017). Couple relationship education: A randomized controlled trial of professional contact and self-directed tools. *Journal of Family Psychology*, 31, 347–357. <https://doi.org/10.1037/fam0000257>

Zuur, A. F., Ieno, E. N., Walker, N. J., Saveliev, A. A., & Smith, G. M. (2009). *Mixed Effect Models and Extensions in Ecology with R*. Berlin, Heidelberg: Springer.

Table 1  
*Intercorrelations, Means, and t-Tests of All Study Variables*

Variable	1	2	3	4	5	6	7	Women's Stress Conversation		Men's Stress Conversation		<i>t</i> ( <i>df</i> = 364)
								<i>M</i> ( <i>SD</i> )	Range	<i>M</i> ( <i>SD</i> )	Range	
1 Stress Expression	<b>.22**</b>	.80***	.11*	.08	.13*	-.02	-.08	0.50 (0.20)	.00 - 1.00	0.45 (0.22)	.00 - .98	3.77***
2 Listening	.84**	<b>.29**</b>	-.04	.07	-.23**	.07	.07	0.42 (0.22)	.00 - .94	0.42 (0.22)	.00 - 1.00	.33
3 Problem-Oriented DC	.10	-.02	<b>.28**</b>	-.14**	-.08	.03	.01	0.13 (0.15)	.00 - .73	0.09 (0.12)	.00 - .65	4.15***
4 Emotion-Oriented DC	.13*	.13*	-.06	<b>.17**</b>	-.06	.07	.08	0.03 (0.05)	.00 - .38	0.03 (0.05)	.00 - .31	1.33
5 Negative DC	.06	-.17**	.05	-.12*	<b>.10</b>	-.12*	-.15**	0.02 (0.07)	.00 - .69	0.01 (0.04)	.00 - .40	1.84
6 Evaluation DCI	.03	.10	-.02	.13*	-.21**	<b>.43**</b>	.64**	3.96 (0.86)	1.00 - 5.00	4.02 (0.76)	1.00 - 5.00	1.23
7 Relationship satisfaction	.00	.07	.01	.14**	-.18**	.64**	<b>.60**</b>	4.33 (0.50)	2.29 - 5.00	4.38 (0.47)	2.43 - 5.00	2.24*

*Note.* DC = dyadic coping; DCI = Dyadic Coping Inventory. Variables 1-5 represent the average score throughout the conversation. Correlations for women's conversation (with women expressing their stress and men coping) as well as women's evaluation and relationship satisfaction are presented above the diagonal, correlations for men's conversation (with men expressing their stress and women coping) as well as men's evaluation and relationship satisfaction are presented below the diagonal, and correlations between men and women are displayed in the diagonal (marked in bold).

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$  (two-tailed).

Table 2

*Results from the Multiple Regression Analyses of the Multilevel Intercept and Slopes on Video Data and Questionnaire Outcomes*

		Men's Stress Conversations						Women's Stress Conversations						
Observational		B	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i> <sup>2</sup>	<i>f</i>	B	<i>t</i>	<i>p</i>	<i>F</i>	<i>R</i> <sup>2</sup>	<i>f</i> <sub>total</sub>	
Problem-Oriented DC	Constant	.099	18.011	.000	55.063*	.233	.55	Constant	.135	19.152	.000	49.886*	.216	.52
	Intercept	-.017	-3.300	.001				Intercept	-.013	-2.010	.045			
	Slope	-.043	-9.505	.000		(.191)	(.49)	Slope	-.058	-8.902	.000		(.172)	(.46)
Emotion-Oriented DC	Constant	.026	10.929	.000	1.449	.008	.09	Constant	.030	11.141	.000	1.811	.010	.10
	Intercept	.002	.901	.368				Intercept	.002	.857	.392			
	Slope	.003	1.669	.096		(.008)	(.09)	Slope	.005	1.863	.063		(.010)	(.10)
Emotion-Oriented DC <sup>2</sup>	Constant	.031	9.256	.000	2.595	.021	.15	Constant	.037	10.410	.000	4.151*	.033	.18
	Intercept	.002	.773	.440				Intercept	.002	.923	.356			
	Slope	.003	1.514	.131				Slope	.004	1.755	.080		(.033)	(.18)
	Slope <sup>2</sup>	-.002	-2.203	.028		(.021)	(.15)	Slope <sup>2</sup>	-.004	-2.959	.003			
Negative DC	Constant	.014	6.455	.000	27.214*	.131	.39	Constant	.021	6.413	.000	38.754*	.060	.46
	Intercept	-.012	-6.001	.000				Intercept	-.021	-7.079	.000			
	Slope	-.013	-7.241	.000		(.126)	(.38)	Slope	-.026	-8.507	.000		(.043)	(.21)
<b>Questionnaire</b>														
Evaluation DCI Men	Constant	4.015	100.791	.000	1.722	.009	.10	Constant	4.015	101.161	.000	3.064 <sup>†</sup>	.017	.13
	Intercept	.067	1.850	.065				Intercept	.061	1.700	.090			
	Slope	.038	1.162	.246		(.003)	(.05)	Slope	.090	2.467	.014		(.017)	(.13)
Evaluation DCI Women	Constant	3.962	88.851	.000	3.590 <sup>†</sup>	.020	.14	Constant	3.962	89.792	.000	6.856*	.036	.19
	Intercept	.096	2.378	.018				Intercept	.107	2.704	.007			
	Slope	.093	2.531	.012		(.018)	(.14)	Slope	.156	3.850	.000		(.036)	(.036)
Relationship Satisfaction Men	Constant	4.385	180.878	.000	4.380 <sup>†</sup>	.024	.16	Constant	4.385	182.082	.000	6.856*	.036	.19
	Intercept	.044	2.008	.045				Intercept	.026	1.195	.233			
	Slope	.059	2.959	.003		(.024)	(.16)	Slope	.077	3.485	.001		(.032)	(.18)
Relationship Satisfaction	Constant	4.334	171.548	.000	10.829*	.056	.24	Constant	4.334	168.448	.000	3.958 <sup>†</sup>	.021	.15
	Intercept	.105	4.585	.000				Intercept	.029	1.255	.210			
	Slope	.078	3.731	.000		(.036)	(.19)	Slope	.065	2.751	.006		(.020)	(.14)

*Note.* *N* = 365. DC = dyadic coping; DCI = Dyadic Coping Inventory. Intercept (random intercept) and slope (random slopes) were derived from the multilevel models and represent the within-couple association between stress expression and listening. To test for quadratic effects, we added the squared slope as a predictor for emotion-oriented DC. Effect sizes were calculated based on Cohen (1992):  $f = \sqrt{\frac{R^2}{1-R^2}}$ . *R*<sup>2</sup> and *f* refer to the complete model including intercept and slope, *R*<sup>2</sup> and *f* in brackets refer to the change in *R*<sup>2</sup> for the model when the slope (or slope<sup>2</sup>) is added as an additional predictor compared to the model with constant and intercept (and linear slope) only. <sup>†</sup> *p* < .05, \* *p* < .01 (two-tailed).



Figure 1. *Temporal course of women's stress expression, and men's listening and coping behaviors as observed in the dyadic coping conversation.*

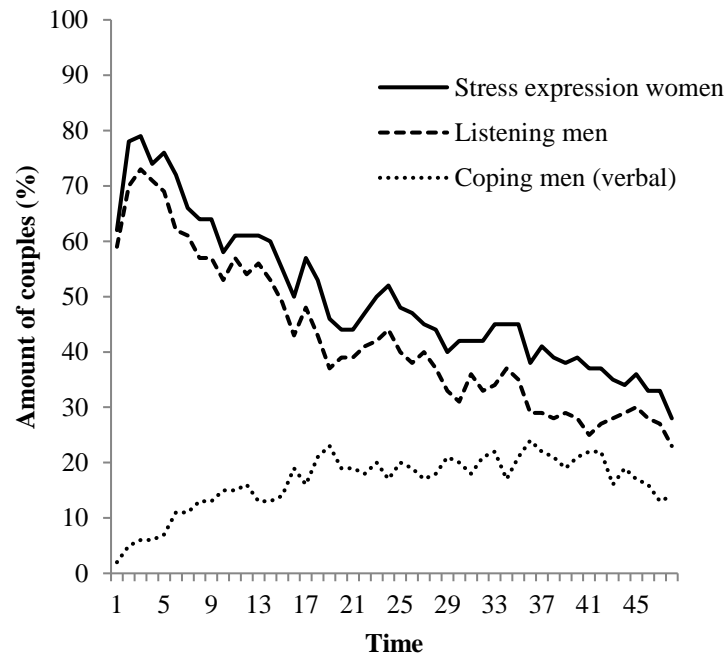


Figure 2. *Temporal course of men's stress expression, and women's listening and coping behaviors as observed in the dyadic coping conversation.*

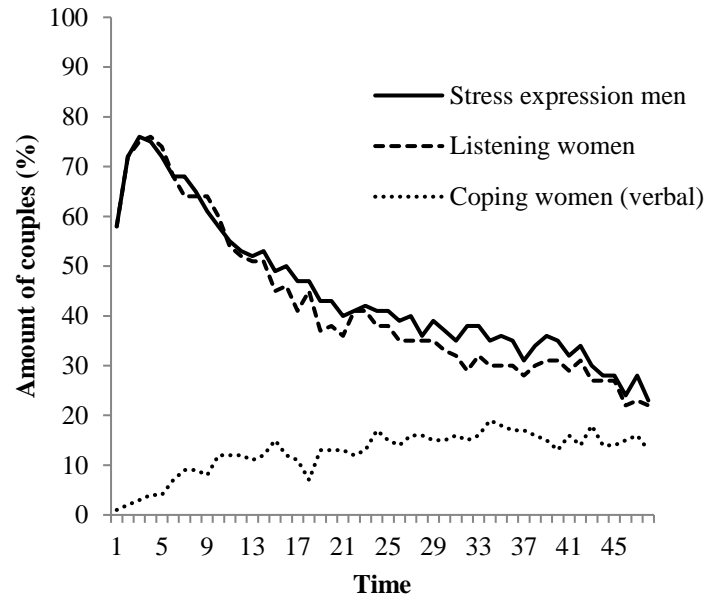


Figure 3. Temporal course of women's stress expression, men's listening and coping behaviors as observed in the dyadic coping conversation split for "bad" (left) and "good" (right) listeners.

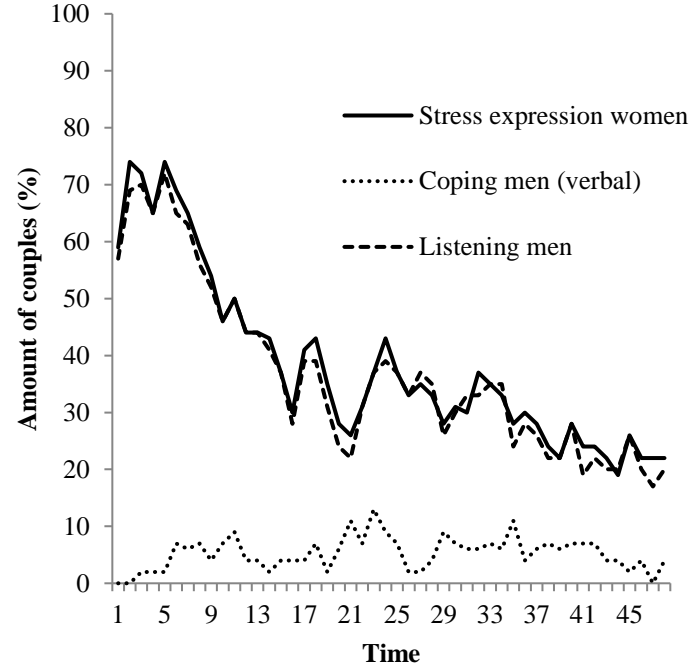
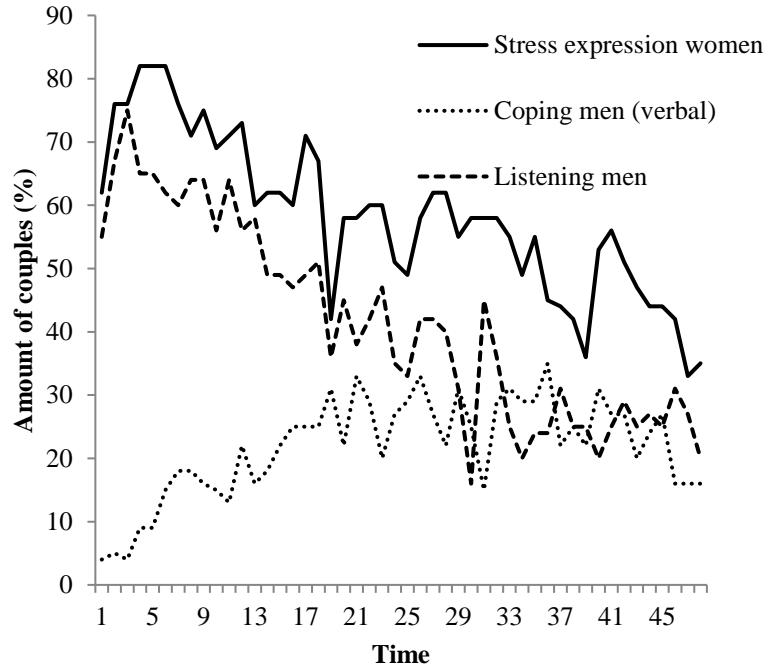


Figure 4. Temporal course of men's stress expression, women's listening and coping behaviors as observed in the dyadic coping conversation split for "bad" (left) and "good" (right) listeners.

