# HUMAN Communication research

**Human Communication Research ISSN 0360-3989** 

ORIGINAL ARTICLE

# Connections Between Family Communication Patterns, Person-Centered Message Evaluations, and Emotion Regulation Strategies

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In this study, we theorize that family communication patterns (FCPs) and 2 emotion regulation strategies (reappraisal and suppression) explain variations in person-centered (PC) supportive message evaluations. Specifically, we forward an emotion regulation model that predicts reappraisal and suppression will mediate the relation between FCPs and PC message evaluations. Results (N=361) suggest that conversation orientation positively predicted reappraisal and negatively predicted suppression; conformity orientation positively predicted suppression only. Reappraisal positively and suppression negatively predicted the extent to which people discriminated among PC message evaluations. Reappraisal also mediated the relation between conversation orientation and PC message evaluations. These results have implications for how capable people are to evaluate and ultimately profit from beneficial support when coping with negative emotions.

Keywords: Comforting, Socialization, Human Information Processing, Social Support, Stress.

doi:10.1111/hcre.12103

Enacted emotional support, which consists of verbal and nonverbal messages people use to comfort distressed others, is a critical interpersonal support resource because it assists recipients in more effectively regulating their emotions (Bodie, 2011; Feeney & Collins, 2015; High & Solomon, 2014). Although enacted support possesses many characteristics (MacGeorge, Feng, & Burleson, 2011), one of the most important is *person centeredness* (PC) or the degree to which messages provide validation for expressed thoughts and feelings (Burleson, 1994). PC is a message quality that

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The study was approved by the Institutional Review Board of the University of Minnesota Twin Cities

operates on a continuum: Low person-centered (LPC) messages minimize or even deny the distressed person's emotions by criticizing the person, challenging the legitimacy of emotions, or telling the person how he or she should feel and act. Highly person-centered (HPC) messages, on the other hand, explicitly recognize and validate the recipient's emotions in compassionate and affirming ways by articulating these feelings and encouraging the distressed person to elaborate on them. Moderately person-centered (MPC) messages are nonfeeling-centered in nature and express an understanding of the situation by offering condolences or explanations for what happened (Burleson et al., 2009).

Over 30 years of research shows that HPC comfort is consistently evaluated more positively and does a better job of assisting emotional coping compared to MPC or LPC messages (for the most recent meta-analysis see High & Dillard, 2012). HPC support presumably helps recipients cope more effectively with their negative emotions because this support encourages recipients to work through the distressing event so that it attains a more positive meaning and perhaps even allows the recipient to learn and grow from it (Cannava & Bodie, 2016; Jones & Wirtz, 2006). At the same time, effects for PC do vary as a function of individual and contextual variables (for a review see Bodie & Burleson, 2008). If receiving and processing HPC comfort is advantageous for emotional improvement and other coping outcomes, then it is important to identify those barriers that keep people from fully profiting from these kinds of supportive messages.

Two crucial factors, namely family communication patterns (FCPs) and emotion regulation (ER) strategies, have thus far been overlooked in explaining why people process supportive messages that vary in PC in different ways, even though both factors play a decisive role in the support process. FCPs result in stable, relational schema that develop during socialization and that contain beliefs and values about social interaction within and outside of the family (Koerner & Fitzpatrick, 2002b). Because these schema store social information (e.g., affective responses, supportive interactions, conflict, everyday talk; Koerner & Cvancara, 2002; Koerner & Fitzpatrick, 1997, 2002a), persons might "default" to their FCPs when they are distressed, regardless of the context (High & Scharp, 2015, p. 2). ER strategies are goal-oriented "attempts to influence which emotions one has, when one has them, and how one experiences or expresses these emotions" (Gross, 2014, p. 5). Two strategies that consistently predict coping outcomes are cognitive reappraisal (or reappraisal) and expressive suppression (or suppression; John & Eng, 2014). The current study conceives of ER strategies as patterns of tactics that people habitually use when modulating their emotions (Gross & John, 2003).

The current study focuses on PC message evaluations—reactions people have to messages—as opposed to outcomes, which happen after messages have been evaluated (Bodie, Burleson, & Jones, 2012). Evaluations necessarily influence outcomes in order for communication to matter (Dillard, Shen, & Vail, 2007). Indeed, Bodie et al. (2012) showed that message evaluations completely mediated the relation between messages varying in PC and people's affective improvement (an outcome; see also

High & Solomon, 2016). Examining individual differences in how people discriminate among messages that vary in PC is thus theoretically important. In the current study we investigate whether FCPs and the habitual use of reappraisal and suppression either facilitate or impair people's abilities to assess distinctions among supportive messages that vary in PC. In addition, we also examined whether FCPs indirectly influence variations in how people evaluate supportive messages that vary in PC through two specific ER strategies (reappraisal and suppression). Before we present the results of our study, we advance a theoretical framework that links literatures on FCPs, ER strategies, and PC.

# FCPs and ER strategies

# Family communication patterns

FCP theory posits the family system as a primary socializing agent that influences the formation of relational schema for how family members interact with one another (Koerner, 2014; Young & Schrodt, 2016). Because cognitive orientations emerge from patterned ways of interaction within families and are deeply ingrained, they shape how people process social interaction not only within but also *beyond* the family (Koerner & Fitzpatrick, 2002a). Communication orientations reflect families' belief structures about norms of social interaction, including supportive communication, as well as the expression and regulation of emotions (Koerner, 2014; Koerner & Fitzpatrick, 2002a, 2002b; Schrodt, Witt, & Messersmith, 2008).

FCP theory describes two patterns: conversation orientation and conformity orientation (Koerner & Fitzpatrick, 2002a). Conversation orientation reflects the degree to which families create a climate in which all family members are encouraged to participate in unrestrained interactions about a range of topics. In high-conversation-oriented families, parents see frequent communication with their children as the main means to socialize them. Conversely, in low-conversation-oriented families, there is less exchange of private thoughts, feelings, and activities. These families believe that open and frequent exchanges of ideas, feelings, opinions, and values are unnecessary for the functioning of the family in general, and for the child's socialization in particular. The second orientation, conformity orientation, refers to the degree to which family communication stresses a climate of homogeneity of attitudes, values, and beliefs. High-conformity-oriented families are characterized by interactions that emphasize uniformity of beliefs and attitudes. In these families, parents are expected to make decisions for the family, and children are expected to act according to their parents' wishes. Interactions typically focus on obedience, coherence, conflict avoidance, and the interdependence of family members. Families on the low end of this dimension are characterized by heterogeneous attitudes and beliefs, as well as the individuality and independence of family members. Communication reflects beliefs in the equality of all family members (e.g., children are usually involved in decision making) and in less cohesive and hierarchically organized families. Low-conformity families usually encourage

personal growth of individual family members, even if that leads to a weaker family structure, and consider relationships outside of the family as important as family relationships.

FCPs are associated with a range of cognitive (e.g., cognitive complexity), behavioral (e.g., support seeking), and psychosocial (e.g., self-esteem) outcomes (for a review, see Schrodt et al., 2008). People with high conversation orientations report increased levels of emotional well-being, are more flexible and competent communicators, and are better able to process social and emotional information than people with either low conversation or high conformity orientations (Koesten & Anderson, 2004; Koesten, Schrodt, & Ford, 2009). Conformity orientation, on the other hand, is often negatively associated with well-being, social support, and partner confirmation behaviors, and positively associated with demand-withdraw patterns and self-oriented rather than other-oriented talk (Koerner & Cvancara, 2002; Koerner & Fitzpatrick, 2002b; Schrodt & Ledbetter, 2007; Schrodt, Ledbetter, & Ohrt, 2007; Young & Schrodt, 2016). Conversation orientation also is usually a stronger predictor of psychosocial outcomes than conformity orientation (Schrodt et al., 2008).

## **Emotion regulation**

Parental socialization not only shapes FCPs, but also how people learn to regulate their emotions (Thompson & Meyer, 2014). People rely on a host of ER strategies that differ as a function of the specific stages of the emotion-generating process (Gross, 2014; Gross & John, 2003). Two strategies that are particularly predictive of well-being are reappraisal and suppression (Aldao, Nolen-Hoeksema, & Schweizer, 2010; John & Gross, 2004). These strategies impact emotions in different ways: Reappraisal works by altering the meaning of an emotion-eliciting situation, with the individual considering its importance to personal goals, needs, and desires (Gross & John, 2003; Lazarus & Alfert, 1964). Reappraisal is an antecedent-focused cognitive change strategy that occurs early in the emotion-generating process, that is, before the person has fully formed an emotional response. Because it occurs early in the emotion-generating process, reappraisal has the capacity to change the entire temporal course of how an emotion unfolds, which also explains why reappraisal is associated with positive health outcomes. People who habitually use reappraisal experience more positive emotions, improved well-being, more perceived social support, and closer relational bonds (McRae, Jacobs, Ray, John, & Gross, 2012).

By contrast, suppression is a response-modulating strategy that arises later in the emotion-generating process, after the person has already formed an emotional response and inhibits "ongoing emotion-expressive behavior" (Gross & John, 2003, p. 348). While an antecedent strategy such as reappraisal influences whether specific emotions are triggered in the first place, suppression requires more effort because it influences emotions that have already been formed. Suppression modulates behavioral responses to negative emotions rather than the specific subjective experiences and physiological responses of these emotions (Cutuli, 2014; Mohiyeddini, Opacka-Juffry, & Gross, 2014). Suppression therefore is more closely associated

with how a person expresses (or does not expresses) emotions. In fact, suppression usually does *not* reduce negative emotions, because they are not directly targeted (Aldao et al., 2010; Blalock, Kashdan, & Farmer, 2016); rather, suppression targets how people communicate their emotions. Consequently, people have to continually suppress, which is another reason why suppression requires more effort. Suppression is associated with less positive emotions, as well as negative psychological and emotional health effects (Gross & John, 2003).

# **Linking FCP with PC theory**

Although connections between FCP and PC theories have, to our knowledge, not yet been empirically tested, parental socialization plays a formative role in both FCP and PC (Burleson, Delia, & Applegate, 1992; Burleson, Delia, & Applegate, 1995; Koerner & Fitzpatrick, 2004). PC specifies two contrasting communication approaches parents use when talking with their children: a high-person-centered approach, and a low-person-centered approach. When they utilize HPC communication, parents engage with their children by emphasizing psychological attributes of other people involved in emotion-eliciting events, as well as the social and relational dynamics that influence the specific event (e.g., "How would you feel if someone took away your toy?"). Conversely, parents who rely on LPC communication are more likely to stress rules and norms that guide the specific emotion-eliciting event, regardless of the idiosyncratic behaviors and emotional experiences of the people involved in the event (e.g., "Good children don't do things like that").

A question that informed early research on PC concerned how people acquire the ability to process, evaluate, and produce messages that vary in PC (Burleson et al., 1995). Using a developmental, sociocognitive approach, Burleson et al. provided evidence that sociopsychological information about people, social relationships, and behavior is organized in *interpersonal cognitive constructs* (e.g., Applegate, Burke, Burleson, Delia, & Kline, 1985). The more differentiated, abstract, and organized a person's interpersonal construct system, the more likely it is that this person will be able to effectively process, evaluate, and produce to PC communication. Parental socialization plays a critical role in the development of interpersonal constructs.

Both FCPs and PC reflect a strong commitment to social cognition and stipulate that people actively construe and interpret their world through ordered cognitive knowledge structures (Delia, O'Keefe, & O'Keefe, 1982; Fitzpatrick & Ritchie, 1994). Although we do not yet know in what ways FCPs predict variations in how people evaluate supportive messages that differ in PC, we do have evidence from three studies for associations between FCPs and cognitive processing. The first study found that high conformity orientation was associated with lower levels of cognitive complexity, or the extent to which people are able to access and process social-psychological information about others (Koesten & Anderson, 2004). No findings emerged for conversation orientation. The second study (Koesten et al., 2009), however, *did* find that conformity negatively and conversation orientation positively predicted cognitive flexibility, a construct similar to cognitive complexity that assesses the extent to

which people can interpret and adapt to different situations. In addition, Koerner and Cvancara (2002) coded speech acts from 15-minute family conversations about family problems and found that conformity-oriented families largely used self-oriented speech, which includes talk that emphasizes one's own rather than another's emotions and frame of reference. Koerner and Cvancara speculated that people in these families may be unable to process and respond to the perspectives of others.

Applied to the current study, when people receive supportive messages in response to stressful situations, cognitive constructs (i.e., orientations) are activated and subsequently influence how people evaluate these messages. People who have grown up in low-conversation-oriented families, where open expression about emotions, including stressful emotions, is not valued and practiced may perceive HPC messages as less effective for coping (compared to those raised in high-conversation-oriented families) and may therefore not differentiate as strongly among HPC, MPC, and LPC messages. Low-conversation-oriented people have not, or only rarely, been exposed to this kind of support and may view the validating and acknowledging characteristics of HPC messages as inappropriate because these messages express emotions and encourage expression of emotions. Similarly, high-conformity-oriented people, who have grown up in families that stress adherence to family norms in favor of unique, individual perspectives, may also not be able to differentiate HPC as strongly from MPC and LPC messages because HPC messages prioritize the individual and imply accountability to regulate one's own emotions over and above relying on family rules and norms.

We do not yet know how FCPs influence reappraisal and suppression, but it is plausible that compared to low-conversation-oriented families, high-conversationoriented families foster the habitual use of reappraisal in response to negative emotions (rather than suppression). High conversation orientation reflects emotion-confirming parenting, which involves responding to children's emotions in affirming and supportive ways — in short, with HPC support. High-conformityoriented families, on the other hand, likely foster suppressing emotions because expressions of individual views, including emotions, are not valued and encouraged in these families. Although they did not directly test FCPs, evidence supporting these claims comes from a study by Gunzenhauser, Fasche, Friedlmeier, and von Suchodoletz (2014) who had parents report on their own supportive (or nonsupportive) communication and their children's habitual use of ER strategies 1 year later. Supportive reactions were measured with hypothetical scenarios and included strategies parents use to help their children think of stressful events in less upsetting ways. Nonsupportive strategies included minimizing and punitive responses to children's emotions. ER strategies were measured with Gross and John's (2003) Emotion Regulation Questionnaire (ERQ). Parental supportive behaviors, which can be found in high-conversation-oriented families, positively predicted children's reappraisal and negatively predicted children's suppression; parental nonsupportive behaviors, which occur in low-conversation-oriented and high-conformity-oriented families, positively predicted children's suppression.

H1: Conversation orientation positively predicts reappraisal (H1a) and negatively predicts suppression (H1b).

H2: Conformity orientation negatively predicts reappraisal (H2a) and positively predicts suppression (H2b).

The effects of ER strategies on PC message evaluations also have not been examined yet, but research suggests that reappraisal and suppression are related to identifying, analyzing, and verbalizing emotions (Laloyaux, Fantini, Lemaire, Luminet, & Laroi, 2015). In addition, ER is associated with emotional intelligence, including those components of emotional intelligence that target a person's ability to constructively respond to emotions (Peña-Sarrionandia, Mikolajczak, & Gross, 2015). These lines of research are particularly crucial for HPC support, which contextualizes and explicitly captures emotional states as part of the upsetting event: People who rely on HPC messages should be better able to understand their own emotional states, because these people have the necessary interpersonal construct system to make sense of complex emotional dynamics, including their own. These assumptions lead us to advance the following hypotheses:

H3: Reappraisal positively predicts (H3a) and suppression negatively predicts (H3b) the extent to which people discriminate HPC messages from LPC messages such that HPC messages are evaluated more positively, whereas LPC messages are evaluated more negatively.

## The mediating role of ER strategies

Research documents the crucial influence of parental socialization on ER processes (Eisenberg, Hofer, Sulik, & Spinrad, 2014; Thompson & Meyer, 2014), on the development of social competencies (e.g., abilities to attend to, interpret, and predict behaviors), and on communication skills (e.g., cooperation, turn-taking, sharing) (Barnett, Gustafsson, Deng, Mills-Koonce, & Cox, 2012). Parents' constructive and supportive responses to children's emotions are associated with the development of more competent ER skills, and parents' dismissive, punitive, and critical practices are related to less competent ER skills in children (Eisenberg, Spinrad, & Smith, 2004; Meyer, Raikes, Virmani, Waters, & Thompson, 2014; Waller et al., 2015). FCPs are thus antecedent to both ER and PC message evaluations.

The mediating model that emerges is an *emotion regulation model* (ERM), which predicts that habitually using reappraisal or suppression influences the ability to discriminate among PC messages on the basis of cognitively stored information about past emotional experiences from family interactions (Figure 1). In other words, if a person's ability to evaluate PC messages relies on cognitive constructs that contain information about emotional experiences inside and outside of families, then that ability should be associated with tendencies to regulate emotions by reappraisal or suppression.

H4: ER strategies mediate the relation between the two FCPs and PC message discriminations.

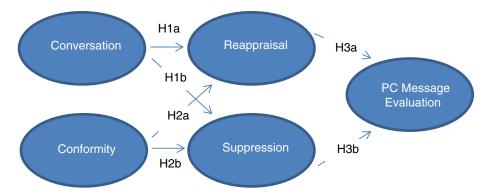


Figure 1 The emotion regulation model (ERM).

RQ: If ER strategies mediate the FCP – PC relationship, what is the relative contribution of reappraisal and suppression to the mediation?

#### Method

## Procedures and participants

Students (N=361) from undergraduate communication courses at the University of Minnesota-Twin Cities completed an online survey in exchange for minor extra credit. Because we had a sufficiently large sample, we opted to retain only complete cases (N=322; men=119 [37%]; women=202 [63%]; one missing; average age=21.30 years, SD=2.74; range=18-40 years). The majority of the sample consisted of White Americans (n=227); African Americans (n=17), Asians/Asian Americans (n=51), and Hispanics (n=9) made up the rest of the sample. Twenty-seven participants belonged to other ethnic groups (one missing). Measures are based on 5-point Likert scaling ( $5=Strongly\ Agree$ ) unless otherwise noted.

## Measures

#### Family communication patterns

Participants completed Fitzpatrick and Ritchie's (1994) 26-item R-FCP. The Conversation Orientation scale (M = 3.43; SD = .71) contained 15 items (e.g., "In our family we often talk about our feelings and emotions"). The Conformity Orientation scale (M = 2.88; SD = .66) contained 11 items (e.g., "When I am at home, I am expected to obey my parents' rules"). The two subscales were internally consistent and negatively correlated (see Table 1).

## ER strategies

Gross and John (2003) developed the 10-item ERQ to assess individual differences in the habitual use of reappraisal and suppression. The Reappraisal scale (M = 3.62;

α	M	SD	1	2	3	4
.92	3.43	.71	_			
.85	2.88	.66	50**	_		
.86	1.25	.95	.12*	14*	_	
.82	3.62	.61	.15*	04	.11*	_
.74	2.74	.75	24**	.23**	21**	03
	.92 .85 .86 .82	.92 3.43 .85 2.88 .86 1.25 .82 3.62	.92 3.43 .71 .85 2.88 .66 .86 1.25 .95 .82 3.62 .61	.92 3.43 .71 — .85 2.88 .66 —.50** .86 1.25 .95 .12* .82 3.62 .61 .15*	.92 3.43 .71 — .85 2.88 .66 —.50** — .86 1.25 .95 .12* —.14* .82 3.62 .61 .15* —.04	.92     3.43     .71     —       .85     2.88     .66    50**     —       .86     1.25     .95     .12*    14*     —       .82     3.62     .61     .15*    04     .11*

Table 1 Descriptive Information and Correlational Coefficients for Variables in the Study

*Note:* A higher index score means that people more strongly discriminated between low person-centered (LPC) messages and highly person-centered (HPC) messages. The reliability estimate is an average between LPC (.83) and HPC (.88); Moderately person-centered (MPC) message evaluation reliability was .71. N = 322. PC = person centeredness (\*p < .05. \*\*p < .001).

SD = .61) contained six items about regulating positive emotions (e.g., "When I want to feel more positive emotions [such as joy or amusement], I change what I'm thinking about") and negative emotions (e.g., "When I want to feel less negative emotions [such as sadness and anger], I change what I'm thinking about"). The Suppression scale (M = 2.74; SD = .75) consisted of four items (e.g., "I control my emotions by not expressing them"). Scale scores were reliable and not correlated (see Table 1).

## *Person-centered message evaluations*

After reading a hypothetical scenario that reflected a mildly upsetting event, participants evaluated nine prototypical messages that varied in PC. The scenario and the messages have been validated in past research (e.g., Jones & Burleson, 1997). Each of the nine messages operationalized one theoretical level in the nine-level hierarchical PC coding system formulated by Applegate (1980) and Burleson (1982). Three messages corresponded to the LPC level with message level 1 representing the lowest PC message level. Three messages made up moderately PC messages, and three messages were HPC in nature with message level 9 representing the highest PC message level. The nine messages were presented in a fixed random order, and participants evaluated these messages on four semantic differential scales that ranged from 1 (*very insensitive*, *ineffective*, *unhelpful*, *inappropriate*) to 5 (*very sensitive*, *effective*, *helpful*, *appropriate*).

Responses to the semantic differentials were used to compute three major PC message levels (i.e., LPC, MPC, and HPC) by combining four message ratings for each of the messages within each level, which resulted in 12 ratings per message level. To construct LPC we used the four ratings for the three LPC messages (M = 2.58, SD = .60;  $\alpha = .83$ ). Similarly, the four ratings for each of the three HPC messages were combined to form the HPC level (M = 3.83; SD = .67;  $\alpha = .88$ ), and the 12 MPC message evaluations formed the MPC level (M = 3.21; SD = .49;  $\alpha = .71$ ).

A repeated-measures analysis of variance (ANOVA) confirmed that evaluations varied significantly as a function of PC, F(2, 320) = 400.26, p < .001,  $\eta^2 = .55$ . The linear trend accounted for the entire message ratings effect, F(1, 321) = 550.59, p < .001,

 $\eta^2$  = .55; the quadratic trend was not significant, F(1, 321) = .05, p = .82. Follow-up, pairwise t-tests indicated that LPC messages were viewed as less beneficial (i.e., sensitive, effective) than MPC messages, t(321) = -17.10, p < .001, d = .50, and HPC messages, t(321) = -23.46, p < .001, d = .70. MPC and HPC messages also differed from one another, t(321) = -15.20, p < .001, d = .47.

In order to assess individual differences in PC message evaluations and to generate a continuous measure, we followed procedures developed by Burleson et al. (Bodie et al., 2011; Burleson et al., 2009) and generated a *message quality discrimination index*, henceforth *PC index*, by computing the difference between low and high PC message evaluations. Notably, MPC message evaluations are not included in the index. The resulting score could range from -4 to +4, but observed scores ranged from -1.42 to 3.67 (M=1.24; SD=.95; skew=-.14; kurtosis=-.64). Only 8.7% of participants (n=28) scored below 0; these participants evaluated LPC messages as more supportive than HPC messages. An additional 16 participants (5%) had a score of zero, evaluating LPC and HPC messages as equivalent. The vast majority of participants (n=277, 86%) evaluated HPC messages as more beneficial than LPC messages (range=.08-3.67).

#### Results

## Analysis plan and power analyses

The hypothesized model was analyzed with path-analytic procedures in AMOS 21 (Arbuckle, 2012). To obtain path estimates and estimates for indirect effects, we utilized bootstrapping methods (k = 5,000, bias-corrected 95% CIs). Using G\*Power (Faul, Erdfelder, Lang, & Buchner, 2007) and setting  $\alpha = .05$  (N = 322), (two-tailed), power to detect small effects ( $f^2 = .02$ ) was .09 and in excess of .99 for both moderate ( $f^2 = .15$ ) and large effects ( $f^2 = .35$ ). Correlations of study variables are shown in Table 1. Notably, conversation orientation was positively and conformity orientation was negatively correlated with the extent to which people discriminated among PC messages (PC index).

#### Model assessment

Prior to detailing results for the hypotheses, we tested the ERM (Model 1, Figure 1) and pitted it against three plausible alternative models. The ERM (Model 1) included indirect effects only and fit the data well on the basis of the AIC (28.13),  $\chi^2(3) = 4.13$ , p = .25, CFI = .99, RMR = .02, RMSEA = .03 (95% CI = .002, .253). This ERM, henceforth indirect-effects ERM, accounted for 5% of the variance in the PC index.

Model 2 was a full ERM that included direct and indirect effects for FCPs, ER strategies, and the PC index. We tested this full ERM to examine potential contributions of the two direct FCP-PC index paths. Model fit was adequate,  $\chi^2(1) = .26$ , p = .61, CFI = 1.00, RMR = .003, RMSEA = .000 (90% CI = .00, .12), AIC = 28.26, although this result could be a product of low degrees of freedom. The direct effects of conversation and conformity orientations on the PC index were small and not

statistically significant, ps = .32 and .31, respectively. The full ERM accounted for 7% of the variance in the PC index.

Model 3 was a nonmediating model in which both FCPs exerted main effects on the two ER strategies and the PC index. Model 4 was a model in which the influence of the FCPs on ER was mediated by the PC index, suggesting that evaluating emotional support is learned through family communication, and in turn, determines ER strategies. We tested these two models because they present alternative explanations for variable associations. Model 3 showed slightly poorer fit compared to the indirect-effects ERM (Model 1) and the full ERM (Model 2),  $\chi^2(5) = 11.95$ , p = .008, CFI = .93, RMR = .03, RMSEA = .10 (95% CI = .04, .16), AIC = 35.95. Model 4 received no support,  $\chi^2(5) = 34.77$ , p < .001, CFI = .76, RMR = .04, RMSEA = .14 (95% CI = .10, .18), AIC = 54.77. We utilized the indirect-effects ERM (Model 1) in all future analyses because it was the best-fitting and most parsimonious model.

## Hypotheses tests

On the basis of the indirect-effects ERM (Model 1), our first hypothesis, that conversation orientation positively predicts reappraisal (H1a) and negatively predicts suppression (H1b), was supported for reappraisal,  $\beta$  = .24, p < .001, 95% CI (.057, .392), but not for suppression,  $\beta$  = -.13, p = .07, 95% CI (-.277, .010). Our second hypothesis, that conformity orientation negatively predicts reappraisal (H2a) and positively predicts suppression (H2b), was supported for suppression,  $\beta$  = .19, p = .01, 95% CI (.044, .317), but not for reappraisal,  $\beta$  = .09, p = .27, 95% CI (-.064, .228). H3a and H3b were fully supported: People who scored higher on reappraisal,  $\beta$  = .13, p = .048, 95% CI (.02, .23), and lower on suppression,  $\beta$  = -.19, p = .002, 95% CI (-.286, -.097), discriminated more sharply among PC messages.

## Indirect effects of FCP on PC index through ER strategies

To explore H4, that reappraisal and suppression are significant mediators, we first tested the indirect effect of each FCP on the PC index. In support of H4, the indirect effect for conversation orientation was statistically significant,  $\beta$  = .06, p = .006, 95% CI (.017, .104). The result for conformity orientation, however, failed to support H4,  $\beta$  = -.03, p = .16, 95% CI (-.06, .10). Thus, H4 received only partial support. To answer the RQ, which asked about the strength of mediation for each ER strategy, we used the user-defined AMOS AXB Estimand (Gaskin, 2012) within the indirect-only ERM. Because the indirect effect was only significant for conversation orientation, we only tested mediation for this FCP. This analysis suggested that the effect of conversation orientation on the PC index was mediated by reappraisal,  $\beta$  = .04, p = .02, 95% CI (.01, .11), but not suppression,  $\beta$  = -.03, p = .11, 95% CI (-.080, .006).

#### Discussion

Supportive communication contributes considerably to a person's physical and mental well-being (Feeney & Collins, 2015), but for people to fully profit from high-quality

support, such as HPC support, they must be able to recognize this kind of support (Bodie et al., 2011, 2012). Not all people, however, evaluate supportive messages similarly (Bodie, 2011). The current study examines whether two factors, namely FCPs and ER strategies, explain variations in people's abilities to discriminate among supportive messages that vary in person-centeredness (PC).

Both FCP and PC theories assume that the ability to encode and decode emotions are learned through socialization and develop over time. FCP theory informs broad working models of parent – child interactions and affects how children interact inside and outside of the family (Koerner & Fitzpatrick, 2002a; Schrodt et al., 2008). PC is a message quality that influences how people cope with distressing emotions; messages that possess high PC content can mitigate the support recipient's emotional distress by explicitly validating these emotions and encouraging the recipient to reflect on and talk about them (Bodie et al., 2012; Jones & Wirtz, 2006). Messages with low PC content tend not to alleviate or can exacerbate negative emotions (Bodie, 2012) because these messages either ignore or even deny these emotions. Because both FCP and PC theories make predictions about how people make sense of emotions and because both theories presume sociocognitive development over time (Koerner & Fitzpatrick, 2002a), they can help us understand variations in how people make sense of messages that vary in support quality.

Conversation orientation positively predicted reappraisal, whereas conformity orientation positively predicted suppression. Broadly, these results resonate with those of Meyer et al. (2014), who found that parental expressivity and attention, as well as parental encouragements to express emotions, predicted children's use of emotion- and problem-focused regulation strategies. Specifically, these findings are in line with FCP research, which documents the beneficial effects of conversation orientation and the deleterious effects of conformity orientation on a variety of outcomes (Schrodt et al., 2008; Young & Schrodt, 2016). Notably, conversation orientation was associated only with reappraisal, but not with suppression. It appears that people from high-conversation-oriented families also habitually reappraise their emotions. Conversation-oriented families favor the free and open expression and engagement of emotion (Schrodt et al., 2007). These interaction patterns, in turn, socialize children to acknowledge their emotions and to feel enough in control of their emotions to use reappraisal to manage them. In contrast, conformity orientation predicted suppression only, yet did not influence reappraisal. Conformity-oriented families encourage behavior according to social expectations and discourage the expression of individual emotions; these families have a generally negative view of emotions, consider them threatening to social relationships, and socialize children to avoid displaying emotions. Unfortunately, this leads people who grew up in these families to use a more effortful but less effective strategy to manage their emotions, namely suppression.

People overwhelmingly preferred HPC messages followed by MPC and LPC messages. There were, however, significant variations in the linear trend for PC evaluations on the basis of ER strategies. People who tended to reappraise more and suppress

less were able to discriminate more strongly between supportive messages that varied in HPC and LPC. As a message quality, PC varies in how much emotional and contextual information about a unique upsetting event is linguistically embedded in talk (Vickery et al., 2015). At higher levels of PC, messages contain more nuanced and complex information about the event and the recipient's involvement in it. Lower levels of PC contain less emotionally sophisticated and contextually complex information. ER strategies are not a priori, but rather contextually adaptive or maladaptive (Peña-Sarrionandia et al., 2015). Applied to our study, high appraisers discriminated particularly sharply between HPC and MPC messages. High appraisers who can "catch" their upsetting emotions early and who can view difficult events more positively tend to be particularly responsive to sophisticated messages that possess high PC content. At the same time, suppression reduces a person's ability to discriminate among supportive messages that vary in PC. This also suggests that people who regularly suppress their emotions might not be able to fully profit from HPC messages. These results point to a poignant reinforcement effect: People who habitually reappraise their emotions tend to flock to HPC messages, which might reinforce subsequent tendencies to reappraise. The opposite might be the case for suppression: People who suppress might not be able to fully process beneficial supportive messages, such as HPC messages, which might impede coping and perhaps also fuel tendencies to continue to suppress. This reinforcing dynamic forms the theoretical basis of Broaden-and-Build Theory (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008) and the mindfulness-to-meaning model (Garland, Kiken, Faurot, Palsson, & Gaylord, 2016).

Reappraisals lead to more positive and less negative emotional experiences (Aldao et al., 2010). If reappraisals lead to more positive and less negative emotional experiences (Aldao et al., 2010), then the question of why reappraisers are better able to recognize HPC messages (vis à vis MPC or LPC messages) is an intriguing one. One explanation that emerges from the current study lies in the ways in which people have learned to express difficult emotions in their families. Reappraisal mediated conversation orientation's effects on PC message evaluations. People from conversation-oriented families are better able to discern PC messages, primarily because they are also better able to effectively regulate their own emotions by reappraising them.

#### Limitations and future research directions

Because our study is the first to examine the combined influence of FCPs, PC, and ER strategies, it is important to replicate these findings. An intriguing question that emerges from findings associated with the ERM is whether a person can ameliorate the negative affective, communicative, and relational consequences of difficult FCPs, such as low conversation and/or high conformity orientations by adjusting ER patterns. People are unable to revise their family communication histories, but may be able to adjust how they customarily rely on, activate, and utilize reappraisal and suppression in response to distressing emotions. Research on mindfulness, for instance, demonstrates that people who practice meditation can increase their tendencies to

reappraise and decrease their tendencies to suppress emotions (Garland, Gaylord, Boettiger, & Howard, 2010; Hill & Updegraff, 2012; Jazaieri et al., 2014). Thus, ER strategies may potentially counter the deleterious effects of challenging FCPs on people's variations in PC message discriminations and might allow people to fully access and consequently profit from supportive messages, particularly HPC messages.

Our study has several limitations. The use of self-report data likely affected our assessments of PC message discriminations. One critique levied against this so-called message perception paradigm is that the data generated from it are hardly analogous to real-life emotional support and emotional experiences (Parkinson & Manstead, 1993), nor is evaluating a comforting message commensurate with what people might ultimately say to a close other in real life. Hypothetical message evaluations in response to a stressed fictitious friend (Bodie et al., 2010) must be differentiated from asking people to evaluate the support they received in naturally occurring conversations (Priem & Solomon, 2015) or from general assessments of perceived support (Lakey & Orehek, 2011). We acknowledge this shortcoming, yet propose that this methodology can generate important initial information. Future research might utilize experimental designs that require people to engage in social interactions.

A second limitation concerns our cross-sectional sample which limits our ability to draw causal inferences about our variables. This shortcoming played out particularly when we tested path-analytic connections between FCPs, PC, and ER. The use of a cross-sectional design might be warranted, given that these variables have not been tested in conjunction with one another and given the support in the empirical literature for the hypothesized ERM. Nevertheless, we cannot establish causation because we gathered data at one point in time. In addition, we must take into consideration the possibility of shared method and situation variance: All variables were assessed under the same circumstances and with the same respondents.

A final limitation concerns our effect sizes. Overall, the ERM accounted for only 5% of the variance in people's ability to discriminate among messages that varied in PC. In addition, most of the path coefficients in the ERM were small. The strongest effect emerged for the linear trend in PC message evaluations, which alone accounted for 55% of the variance in message discriminations. This powerful effect suggests that people overwhelmingly view HPC support as most beneficial, followed by MPC and LPC support, which is viewed least beneficial. But our data certainly also suggest variations, some of which can be explained with FCP and how people regulate emotions, thus advancing our understanding how these PC messages work.

#### Conclusion

Our goal was to assess associations among FCPs, ER strategies, and person-centered message evaluations. The results of our study suggest that our families of origin influence how we regulate our emotions and how we process supportive messages. ER strategies will continue to play a primary role in studies examining human health and functioning. The current study is among the first to document the association of these two communicative constructs in the ER process.

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