Couples' extrinsic emotion regulation and dyadic adjustment: an actor-partner interdependence model analysis

Ana Kinkead[1,2] · Christian Salas[3] · Carola Pérez Ewert[4]

Abstract

Couples' extrinsic emotion regulation strategies are associated with marital quality or dyadic adjustment. However, only the strategies employed according to the objective they are expected to achieve have been examined; it is not known if strategies on the bases of positive or negative extrinsic emotion regulation motivation would have the same consequences for the dyad. The purpose of this study was to examine if extrinsic emotion regulation (EER) predicts one's own and one's partner's dyadic adjustment and if this effect differs by gender and relationship length. Using the Actor-Partner Interdependence Model (a type of dyadic data analysis, which incorporates the scores of the two members of the relationship into the analyses), data from 103 Chilean couples who completed self-report scales on dyadic adjustment and EER were analyzed. The participants were between 22 and 78 years old ($M_{men} = 39.84$, $SD = 11.37$; $M_{women} = 38.01$, $SD = 10.64$), and the relationship lengths were between 1 and 50 years ($M = 12.98$, $SD = 11.53$). The motivation or the intention to make the partner feel good (positive) or bad (negative) respectively predict higher and lower dyadic adjustment in both the one who uses the strategy (actor) and the receiver of the strategy (partner). There was no difference by gender or by duration of the relationship in the dyads, but there was with children in common. It is important to consider the motivation underlying the emotional management of the couple, given its implication in marital quality and the need to broaden the understanding of other EERs related to healthy dyadic functioning.

Keywords Extrinsic emotion regulation · Dyadic adjustment · Emotional interdependence · Negative extrinsic regulation · Positive extrinsic regulation · Couples

✉ Ana Kinkead
akinkead@uautonoma.cl

Christian Salas
christian.salas@udp.cl

Carola Pérez Ewert
janetperez@udd.cl

1 Universidad Autónoma de Chile, Av. Pedro de Valdivia 425, Providencia, Santiago, Chile

2 Universidad Diego Portales, Santiago, Chile

3 Faculty of Psychology, Universidad Diego Portales, Santiago, Chile

4 School of Psychology, Universidad del Desarrollo, Santiago, Chile

Introduction

It is known that emotions and their regulation play a key role in the development and maintenance of close relationships, such as those of a couple, and that, in turn, these same bonds influence the emotional sphere of their members (Sels et al., 2016). Considering that romantic relationships are valuable to most people and that they impact the general well-being and the evaluation of one's own sentimental relationship (Jiménez-Picón et al., 2021; Jitaru, 2020), a relationship can represent both a resource and a significant source of stress (Farero et al., 2019). In fact, they also involve the parent-child subsystem, as inter-parental conflicts can generate anxiety in the children (Lucas-Thompson et al., 2020) and influence parenting practices when children express negative emotions (Gao et al., 2018). Therefore, examining what happens when people regulate their emotions in a close interpersonal context is relevant, as evidence indicates that there are

consequences in the affective field for those who participate in this type of interaction (Martinez-Inigo et al., 2013; Niven et al., 2015).

Despite the relevance of social context in emotion regulation (ER), traditionally, its study has been limited to *intrapersonal* processes, focusing, for example, on how people maintain control over their own emotional experience, either by avoiding what triggers anguish or by changing their view on a particular situation (Campos et al., 2011). For this reason, the focus of the study is placed on individual or intrapersonal ER. This will refer to the process by which a person modifies his or her own emotions, being able to determine how and when they are experimented and expressed, from their appearance, frequency, magnitude, and duration, to behavioral and physiological responses (Gross & Thompson, 2007). But it is important to note that when a person modulates his or her own emotional experience and expression, he or she also influences the emotional experience and expression of his or her partner. Under this scenario, when one of the members of the relationship shows concern to his partner about a particular issue that affects him or her, the effect that arises in the latter is to awaken a certain level of anxiety, and, therefore, mobilizes extrinsic regulation strategies towards the partner who shows such concern. When expression of concern is inhibited, such strategies are not deployed. (Parkinson et al., 2016). When people use emotional suppression (intrapersonal ER strategy), lower marital quality, less intimacy, and increased frequency of thoughts of relationship breakdown are registered (Chervonsky & Hunt, 2017; Peters & Jamieson, 2016). On the other hand, when people express themselves emotionally, there are better results for the relationship when the emotions are positive, while there are greater interpersonal problems when the emotions are negative (although the effect size was very small and had mixed results) (Chervonsky & Hunt, 2017). Despite these interesting findings, a first limitation when studying affectivity in couples under an intrapersonal paradigm is that it accentuates the assumption that the members of a dyad are independent of each other, which results in ER being observed and analyzed in a solitary environment (Fischer & Van Kleef, 2010), thus providing a limited and partial view (Benson et al., 2019). The above implies that relying on an intrapersonal perspective fails to account for the complexity of a dyadic interaction, it is not possible to visualize how emotions are regulated in the specific context of a couple relationship (e.g., regulating oneself with the support of the other). Since individual regulation context is not differentiated from an interpersonal one, the interpersonal consequences of using these strategies or, in other words, how these strategies act on each member of the relationship, are not clear either (Brandao et al., 2019; Frye et al., 2020; Rick et al., 2017). Despite this, the intrapersonal perspective continues to predominate in couple studies (Barthel et al.,

2018; English & Eldesouky, 2020; Rimé, 2009; Tamir, 2011), while an interpersonal perspective is still incipient.

Couples' extrinsic emotion regulation

Interpersonal emotion regulation (IER) refers to the interpersonal context in which emotions are regulated by other people (Hofmann et al., 2016). In other words, it is a tradition in the study of affectivity that recognizes that both emotions and their regulation tend to occur in essentially social settings (Dixon-Gordon et al., 2015; Parkinson et al., 2016; Zaki & Williams, 2013), and as such encompasses two ways of understanding it. One way refers to when a person utilizes the presence of others in order to regulate his or her own emotional experience, called *intrinsic emotion regulation* (Williams et al., 2018), e.g., "I look to other people when I feel depressed just to know that I am loved" (Hofmann et al., 2016, p. 354); the other way refers to when what is desired is to influence or control the emotional trajectory of other people, known as *extrinsic emotion regulation* (EER) (Altan-Atalay & Saritas-Atalar, 2019; Nozaki & Mikolajczak, 2020; Zaki & Williams, 2013), e.g., "I acted annoyed towards someone to try to make them feel worse" (Berrios et al., 2015, p. 75). In the first example, when looking for other people, it is with the intention of generating intrapersonal changes, while in the second, when looking for other people, it is expected to generate changes in them, that is, interpersonal. The latter is developed in the present study.

A regulation strategy is any activity subject to voluntary control that could influence an affect (Parkinson & Totterdell, 1999). Niven et al. (2009) sorted these strategies into two analysis dimensions. The first dimension includes the strategies according to *the objective sought with the regulation* (e.g., to modify a situation or an affective state or to get close to a person), while the second dimension alludes to the *motivation* by which people regulate extrinsically. Specifically, they refer to the intention behind making another person feel better (e.g., by listening to their problems or by making them laugh), referred to as *positive extrinsic regulation*, and the intention behind making another person feel bad (e.g., by pretending to be angry), referred to as *negative extrinsic regulation* (Niven et al., 2011). Several authors point out that, underlying these motivations, there could be hedonistic and instrumental (Netzer et al., 2015), altruistic (López-Pérez et al., 2017), egoistic (Niven et al., 2019), or antisocial (Zaki & Williams, 2013) reasons.

EER has been described as a central process in couple relationships (Debrot et al., 2013). For example, the way in which the use of humor and touching the partner in a positive and loving way are extrinsic strategies that affect psychological well-being and positive affect in the couple; the foregoing mediated by changes in psychological intimacy (Debrot et al., 2013; Horn et al., 2018). The findings

concerning the motivation dimension of EER arise in relationship contexts outside the scope of couple relationships. For example, the work by Niven et al. (2012) with the prisoners and staff from a therapeutic prison allows concluding that the emotional well-being of the regulator may increase or decrease depending on whether the motivation or intention underlying the regulation of others is positive or negative, respectively. This finding is consistent with other works on friends and health care workers dyads that indicate that trying to worsen the emotions of other people can predict greater emotional exhaustion in them (Martinez-Inigo et al., 2013) and that strategies such as reassuring, providing security, and welcoming or calming another person are positively associated with a good quality of interpersonal relationships (Niven et al., 2015). It is important to note that the positive and negative effect of a regulation intention does not always respond to the positive or negative intention of the regulator, observing inconsistent results. According to Niven et al. (2019), the perception of people regarding the reason behind who regulates would have a mediating role between the intention and its effect. For example, if employees perceive prosocial reasons (to benefit others) behind the positive regulation efforts of the company leader, this will generate a positive affective reaction and a better performance than would be expected if they perceived instrumental reasons (for personal benefit) behind the action of the leader. Others suggest that individual differences could mediate the effects of positive extrinsic regulation strategies, observing opposite results. The study by Marigold et al. (2014) illustrates this, since they found that positive EER attempts could generate a negative evaluation of the relationship based on the regulated person's self-esteem. Consequently, the absence of previous studies on the motivation of EER in couples does not allow to establish if the potential effects of a positive and negative regulatory intention are like those of other strategies already examined, and if their effects are reciprocal in the dyad.

Dyadic adjustment and interdependence

Although the impact of EER on couple satisfaction and marital quality is still a topic that has been little studied (Jitaru, 2020), several research suggest a strong link between this variable and EER (Scorsolini-Comin & dos Santos, 2012), as well as being an important intervening factor that helps to explain the links between attachment and co-parenting (Young et al., 2017).

Marital quality is usually studied under the notion of *dyadic adjustment*, a construct that captures the perception a couple has regarding the quality of their own romantic relationship or marital satisfaction through four dimensions: consensus, cohesion, affectional expression, and satisfaction (Cano-Prous et al., 2014). Besides, it implies almost

automatic and fundamental coexistence guidelines that favor functional, harmonious, and lasting relationships (Sabatelli, 1988). Furthermore, the quality of the relationship or dyadic adjustment are important factors that can act as triggers for climate and emotional expressiveness in the family. In fact, a positive link has been identified between the quality of the marital relationship and the relationship that parents establish with their children: when there is a greater dyadic adjustment, there are fewer family conflicts, while, with a low adjustment, a greater number of both physical and verbal aggressions in the family (Jiménez-Picón et al., 2021). But the presence or absence of children also has a direct or indirect impact on the conjugal subsystem. Studies identify a decrease in satisfaction with the relationship in couples with children compared to those who are not parents, a condition that increases as the number of children increases, which may influence that the dyad no longer has enough dedication or time to take care of each other (South et al., 2013; Urbano-Contreras et al., 2017). Regarding EER, its effective management can lead to people being more satisfied in various areas of life (Malouff et al., 2014; Scorsolini-Comin & dos Santos, 2012), and increasing cohesion and consensus in the dyad (Ursu & Turliuc, 2020).
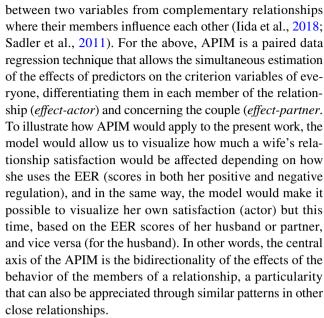
To better understand dyadic adjustment in a relationship, it is important to consider the role of gender, as it has been reported that women are more susceptible to negative interactions within marriage (Kwak & Ingersoll-Dayton, 2019). According to DeMaris (2010), this greater susceptibility has to do with the fact that, in the case of women, the socialization of gender roles favors a greater concern for intimate relationships and a greater investment of interpersonal resources to maintain them.

A perfect scenario to induce and regulate emotions is set in couple relationships, as their members—particularly in times of distress—become their own regulation agents (Butler & Randall, 2013; Randall & Schoebi, 2015; Sels et al., 2016). In this way, when couples experience negative emotional situations (anger caused by disagreements, disappointments, etc.), they are likely to fall into an interaction in which the other is harshly criticized (Vangelisti et al., 1991), ignored, or devalued; it is here where good emotional management helps to get out of this destructive dynamic (Bloch et al., 2014). In a more constructive sense, those who understand and manage their own emotions and help to regulate the emotions of their partners (better than the partner would do by him/herself) tend to establish more compatible, enjoyable, and mutually satisfying relationships (Malouff et al., 2014; Sels et al., 2018). When a couple becomes their own regulation agent, it means that they influence each other, develop strong expectations of each other, and are more susceptible to respond to the emotions of each other (Sels et al., 2019). This potential of the dyads to reciprocally shape their affections is called *emotional interdependence*, will refer to

that emotional bond between those who share a sentimental bond, a condition that emerges over time, becoming a peculiarity of intimate relationships (Butler, 2011; Schoebi & Randall, 2015). A condition that is proper to interdependence is dyadic identity, which arises when people begin to see themselves, not only in terms of feeling interconnected, but also as a specific and important part of a relationship, shaping a "sense of 'we-ness'" (Acitelli et al., 1999, p. 597). According to some authors, the *relationship length* of a dyad is important for developing a dyadic identity (Fincham et al., 2005; Fraley & Shaver, 2000), while others point out that interdependence is not necessarily subject to relationship length, but rather to duration of cohabitation (Sels et al., 2019). With respect to the moderating role of relationship length, there are several findings. For example, the results obtained by Ursu and Turliuc (2020) and Jelic et al. (2014) revealed that relationship length does indeed moderate couples' emotion regulation and dyadic satisfaction, although in a different sense than hypothesized in this study, since when relationship length increases and the emotions of the couple are regulated, satisfaction decreases. This is not the case in the findings by Sels et al. (2019), where the relationship length of the dyad was not determinative in detecting interdependence between IER and dyadic adjustment. Inconsistency in these findings could be due to methodological differences (individual vs. dyadic perspective), sampling differences, and/or the presence of uncontrolled variables (eg, presence/absence of children, mean age of participants). However, since the duration of the relationship - as a moderator in this context - has been little examined to date, other possible outcomes could also be considered. For example, if a couple that regulates themselves extrinsically in a positive way over the years reports greater emotional well-being than those that regulate themselves negatively (Debrot et al., 2013; Horn et al., 2018), one might think about the length of the relationship as a variable that accentuates the results, whether they are positive or negative according to the regulatory intention of the dyad.

When emotional regulation research considers the interpersonal context, it provides a unique insight into the functioning of intimate relationships, which would not be offered by an intrapersonal approach (Schoebi & Randall, 2015). Dyadic data analysis approaches are a set of techniques that allow capitalizing the correlations between dyad members on the basis of their interactions (Sadler et al., 2011). Therefore, a dyadic approach offers the possibility of studying interpersonal processes, as it investigates what happens in the couple on the basis of the behavior of both members (Bloch et al., 2014). There are several approaches to model dyadic dependence. For the purposes of this study, the Actor Partner Interdependence Model (APIM) is the recommended approach since its theoretical model requires looking at individuals as interdependent, as it would be an association

between two variables from complementary relationships where their members influence each other (Iida et al., 2018; Sadler et al., 2011). For the above, APIM is a paired data regression technique that allows the simultaneous estimation of the effects of predictors on the criterion variables of everyone, differentiating them in each member of the relationship (*effect-actor*) and concerning the couple (*effect-partner*. To illustrate how APIM would apply to the present work, the model would allow us to visualize how much a wife's relationship satisfaction would be affected depending on how she uses the EER (scores in both her positive and negative regulation), and in the same way, the model would make it possible to visualize her own satisfaction (actor) but this time, based on the EER scores of her husband or partner, and vice versa (for the husband). In other words, the central axis of the APIM is the bidirectionality of the effects of the behavior of the members of a relationship, a particularity that can also be appreciated through similar patterns in other close relationships.

Since this model operates under a framework where observations are interdependent, the unit of analysis is the dyad (Kenny & Ledermann, 2010). Additional studies from a dyadic perspective would strengthen a broader observation frame in such an everyday dynamic as IER (Campos et al., 2011; Parkinson & Manstead, 2015; Parkinson et al., 2016; Peters & Jamieson, 2016; Reeck et al., 2016).

The present study

Literature on couples' EER reflects a strong preference for the examination of EER strategies classified according to their objective (e.g., the works by Debrot et al., 2013 and Horn et al., 2018), while the study of strategies according to their motivation remain under investigated. On the other hand, what is known so far about EER motivation or intention is regarding labor relations and their impact on performance (Vasquez et al., 2020) and friendship relations and the assessment that is made concerning them (Chesney, 2018). The absence of previous studies about couples' EER motivation does not allow establishing if the potential effects of a positive and negative regulation intention are like those of other already-examined strategies and if their effects are reciprocal in the dyad. Finally, there are no conclusive findings regarding the moderating role of the duration of a relationship on EER, since on the one hand, the reports indicate a favorable effect on satisfaction with the relationship (Sels et al., 2019), and, in turn, adverse effects (Ursu & Turliuc, 2020; Jelic et al., 2014).

The purpose of this study was to answer three questions regarding the effect of the motivation or intention behind making the partner feel good or bad on the quality of the relationship from a dyadic perspective: (a) if the EER (positive and negative) predicts dyadic adjustment individually

(effect-actor), as well as dyadic adjustment in the couple (effect-partner); (b) if the effect on dyadic adjustment would be different according to the gender of each member of the relationship; and (c) if relationship length would moderate such effect (controlling the age of the participants and the presence of children in the couple). In this regard, it is hypothesized that couples (both in the actor and in the partner) that report greater use of positive EER will show greater dyadic adjustment, while the opposite effect will take place in dyads that report greater use of negative EER. On the other hand, gender will interact with the effects of the relationship between EER and dyadic adjustment, both in the actor and in the partner: that is, there will be a more pronounced effect in the female partner than in the male partner, both in the positive and negative EER. Lastly, the greater the relationship length (years), the greater the effect of EER on dyadic adjustment, strengthening it in the case of positive regulation and attenuating it in the case of negative extrinsic regulation. By integrating positive and negative dimensions of EER motivation in a dyadic analysis framework, it is expected to contribute new findings to the literature about interpersonal emotional regulation, specifically, a more complete and realistic understanding of the influence of emotionality in couples and the consequences of the affective.

interdependence condition on relationship satisfaction.

Method

Participants and procedure

The present work is a descriptive cross-sectional study involving 103 heterosexual couples. The inclusion criteria were to be at least 18 years old, to be Chilean or resident in Chile, to be in a relationship of at least one year, to be living together at the time of answering the scales, have at least one child (regardless of whether it was with the current partner), to have completed high school, and that both partners were committed to the participation. The participants were between 22 and 78 years old ($M_{men} = 39.84$, $SD = 11.37$; $M_{women} = 38.01$, $SD = 10.64$), and the relationship lengths were between 1 and 50 years ($M = 12.98$, $SD = 11.53$); 41.7% had no children in common with their partner, 23.8% had one, and 34.5% had more than one, and finally, 84.5% lived with their current partner and, 15.5% reported being married.

Non-probability sampling was carried out, where participants completed, separately, an online questionnaire sent by email about the intention underlying the regulation of the emotions of the partner (or extrinsic emotional regulation) and their dyadic adjustment. Two recruitment procedures were used. First, participants of a previous study (Chilean

validation of the scale that measures EER in couples), who had expressed interest in continuing to participate in another study with their partners, were contacted by e-mail (out of 178 interested, 20 responded). Second, four assistants recruited 110 dyads from their social networks using the snowball technique, and 27 dyads that did not satisfy the cohabitation criterion were excluded from the analyzes. Although the sample size was not previously estimated, a post-hoc analysis of the statistical power achieved was carried out with N = 103 cases, which was the sample collected. Using the *APIMPowerR*, a Shiny App for estimating statistical power for the Actor-Partner Interdependence Model (available at https://robert-a-ackerman.shinyapps.io/APIMPowerRdis/), a statistical power greater than .80 was obtained (minimum recommended value), for both coefficients (actor and partner) specifically, .87 for partner effect and .99 for actor effect when considering the global DAS score as a result variable. For the estimation of statistical power, the standardized regression coefficients for the actor and partner effect (.43 and .19 respectively), a correlation of .24 of the predictor variables and a correlation of .26 for the errors were considered (all these values correspond to standardized values). Thus, although an a priori sample size was not predefined, adequate power was achieved for the main effects of the model. The couples were assigned an alphanumeric code, so each record was associated with its respective couple. The data was collected in the months of January, February, and March in 2020, a period in which the sanitary measures adopted by COVID-19 in Chile were not yet implemented and, therefore, neither collateral effect in everyday life. All couples voluntarily consented to participate and signed the Informed Consent Form. This study was approved by the Research Ethics Committee of the Universidad Diego Portales, Chile (012–2019).

Measures

A questionnaire was applied to obtain sociodemographic data such as age, sex, number of children in the couple, marital and cohabitation status, and relationship length, among others. Subsequently, the following scales were applied.

Couples' Extrinsic Emotional Regulation Questionnaire (CEERQ) This self-report questionnaire was used to assess extrinsic emotional regulation, which evaluates the intention underlying the regulation of the emotions of the partner. Created by Niven et al. (2015) and adapted and validated for Chilean couples by Kinkead et al. (2021). It comprises two subscales with 6 items each: (a) Positive extrinsic regulation (EER+), which assesses deliberate intention to make the partner feel good, and (b) Negative extrinsic regulation (EER-), which assesses deliberate intention to make the

partner feel bad. It is answered on a 5-point Likert-type scale (1 = *never* to 5 = *always*). Example of EER+ items: "*I spent more time with my partner to try to make him/her feel better*"; example of EER- items: "*I pretended to be angry with my partner with the intention of making him/her feel bad*". CEERQ showed concurrent validity with other variables and internal consistency in the Chilean population (α = .8; EER+ α = .79 y EER- α = .85).

Dyadic Adjustment Scale (DAS) Measures marital satisfaction through the observation of couple dynamics. Created by Spanier (1988), it contains 32 items (1 Likert scale, 27 6-point Likert-type scales, 2 5-point scales, and 2 dichotomous scales) that provide an overall score and a score concerning its dimensions without losing its reliability and validity. These are: (a) Consensus: behaviors to reach agreements on crucial issues such as friends, economic affairs, religion, holidays, and philosophy of life, among others; item example: "*Agreement on the management of family finances*"; (b) Satisfaction: set of functional demands on the partner, which, in the opinion of the partner who demands, implies acceptance and recognition by the other: "*How often do you or your partner leave the house after a fight?*"; (c) Cohesion: emotional bonds, understood as a shared emotion or degree of closeness and perceived sense of connection and intimacy: "*Do you work together on any projects?*"; and (d) Affectional expression: concern for each other's needs through physical and affective care, mutually contributing to each other's well-being and development: "*Being too tired for sex*" (Alfonso et al., 2017; Scorsolini-Comin & dos Santos, 2012). The higher the score, the greater the adjustment perceived by the couple [0, 151]. Validated in Chile, the scale showed an internal structure like the original scale, a high internal consistency (α = .96) (Tapia & Poulsen, 2009).

Analysis plan

Descriptive statistics (means, standard deviation, ranges, etc.) were used to characterize the sociodemographic data and the dimensions of extrinsic emotional regulation (predictor variables) and dyadic adjustment (criterion variables). The normality of the distributions was evaluated using the Kolmogorov-Smirnov (*K-S*) test, an assumption that was not met (p <. 05). Consequently, the bivariate correlations of individuals and dyads were determined using Spearman's *Rho*. In addition, because they were related samples, the Wilcoxon signed-rank test was used to determine if there were differences according to gender in all the variables of the study. To answer the first research question of whether EER predicts dyadic adjustment itself, as well as dyadic adjustment in the couple, the Actor-Partner Interdependence Model (APIM) was used as it is considered a useful analytical tool for testing bidirectional effects from dyadic

data (Kenny et al., 2006). A prior criterion for using APIM is to establish interdependence in the dyad, which was done by estimating the intraclass correlation coefficient (ICC) following Cook and Kenny (2005). With respect to the second question of whether the effect on dyadic adjustment would differ by gender, the distinguishability of the dyad was assessed for each of the criterion variables. For this purpose, the level of adjustment of a multilevel linear mixed model (Level 1 = subject; Level 2 = dyad), with restricted estimation maximum likelihood (REML), which establishes actor and partner effects for each of the members of the dyad differentiated by gender, was compared with the adjustment of the model that establishes such effects, but without differentiation. If the comparison is not significant (p > .05), then there is no evidence that the dyads are distinguishable (Kenny & Ledermann, 2010). Given the indistinguishability of the dyads, the models were estimated including the actor effect (which captures the relationship between EER and adjustment for both women and men) and the partner effect (which captures the crossover effect between the partners, e.g., how the EER of the woman is related to the dyadic adjustment of the man) as criterion variables. Ten APIM models were estimated, in which extrinsic emotional regulation was expected to predict global dyadic adjustment (5 for EER+ and 5 for EER-). For the last question, the moderating role that the duration of the relationship had on these same effects was interpreted (Reis et al., 2000), incorporating the terms years of relationship and their interaction with the effects of partner and actor mentioned above as predictors. The presence of children in common in the couple and the age of the participants were analyzed as control variables since almost none showed interaction effects with the actor or with the partner. Finally, to facilitate the interpretation of the model, the predictor (EER), moderator (relationship length) and control (age) variables were mean centered. Since none of the interaction components were significant except for the positive EER on the dyadic satisfaction controlled by children in the relationship), the simplified models were interpreted (those that do not incorporate these parameters). The SPSS program (version 23) was used.

Results

Preliminary analyses

The means of positive and negative EER observed in the study participants are consistent with the findings of the CEERQ validation study for the Chilean population, i.e., the data express a greater tendency to use positive EER strategies than negative EER strategies. As for differences according to gender, they were only observed regarding negative EER, as the score was higher in women (*Med* = 1.83) than

in men ($Med = 1.5$) ($Z = -2.41$, $p < .05$). This suggests that women use negative EER strategies toward their partners more frequently, i.e., they tend to make their male partners feel bad. It is worth noting that according to Cohen's (1988) criteria, the size of this effect would be small ($g_{Hedges} = -0.27$). Dyadic adjustment and its dimensions also showed similar behavior to that reported in a previous study involving the Chilean population (Tapia & Poulsen, 2009), showing that, in general, the couples were quite satisfied with their relationships. There were no differences by gender regarding partner satisfaction (see Table 1).

The individual and dyadic correlation coefficients for the dimensions of the CEERQ and DAS scales are presented below, which allow determining if there is interdependence between the members of the dyad. In Table 2, all relationships were statistically significant, ranging from moderate to strong in most cases and in the expected direction; that is, the greater the intention to make the partner feel good (positive EER), the greater the reported dyadic adjustment, whereas the greater the intention to make the partner feel bad, the worse the perceived dyadic adjustment. At the individual level, the strongest correlations were between positive EER and global DAS, while, in the case of negative EER, it

was with dyadic satisfaction. The weakest correlations were between dyadic satisfaction and positive EER, and affectional expression and negative EER. At the dyadic level, the strongest correlations were between positive EER and consensus and between negative EER and dyadic satisfaction. In the same table, the ICCs quantify data interdependence, which was of moderate magnitude for most dimensions, with the highest proportion of shared variance for dyadic consensus, followed by cohesion and global DAS, and the lowest for positive EER. It is worth mentioning that there was a positive, strong, and statistically significant correlation between the age of the participants and length of the relationship ($r = .7$, $p < .001$). As a measure of reliability, the Cronbach's Alpha indices are reported for each of the variables.

Actor-partner interdependence model

Regarding distinguishability according to gender, the comparison of the models that included positive extrinsic regulation (EER+) as a predictor indicated that the dyads were empirically indistinguishable when considering global dyadic adjustment ($\Delta = 4.51$, $p = .34$) and its consensus

Table 1 Descriptive Statistics by Variable According to Gender and Difference of Medians According to Range

Variables	Men				Women				
	M (SD)	Min	Max	Med	M (SD)	Min	Max	Med	p
EER+	4.38 (.54)	2.67	5.00	4.5	4.49 (.49)	2.83	5.00	4.5	.14
EER–	1.69 (.75)	1.00	5.00	1.5	1.93 (.84)	1.00	5.00	1.83	.02[*]
Consensus DAS	53.82 (7.96)	21	65	55	53.34 (7.24)	33	65	54	.51
Satisfaction DAS	41.68 (7.36)	13	50	43	40.91 (6.85)	15	50	43	.16
Cohesion DAS	18.69 (3.57)	8	24	19	18.55 (3.63)	6	24	19	.80
Expression DAS	9.53 (1.91)	4	12	10	9.25 (2.14)	4	12	10	.32
Global DAS	123.72 (16.08)	75	151	128	122.06 (16.14)	74	151	124	.43

$N = 206$. EER+ = positive extrinsic regulation, EER– = negative extrinsic regulation, DAS = dyadic adjustment

[*]$p < .05$

Table 2 Spearman's Rho Correlation Coefficients and Intraclass Correlation for Each Variable

Variables	1	2	3	4	5	6	7	ICC	α
1. Consensus DAS	–	.56[**]	.68[**]	.52[**]	.87[**]	.61[**]	−.45[**]	.46[**]	.83
2. Satisfaction DAS	.56[**]	–	.41[**]	.39[**]	.82[**]	.42[**]	−.59[**]	.41[**]	.84
3. Cohesion DAS	.63[**]	.40[**]	–	.44[**]	.74[**]	.57[**]	−.47[**]	.45[**]	.64
4. Expression DAS	.51[**]	.41[**]	.44[**]	–	.60[**]	.39[**]	−.25[**]	.34[**]	.65
5. Global DAS	.86[**]	.82[**]	.73[**]	.61[**]	–	.55[**]	−.54[**]	.43[**]	.90
6. EER+	.46[**]	.34[**]	.45[**]	.38[**]	.48[**]	–	−.28[**]	.20[**]	.80
7. EER–	−.37[**]	−.48[**]	−.27[**]	−.15[*]	−.42[**]	−.09	–	.28[**]	.73

EER+ = positive extrinsic regulation, EER– = negative extrinsic regulation, DAS = dyadic adjustment, ICC = intraclass correlation coefficients, α = Cronbach's Alpha. *Note*: individual correlations are below the diagonal ($N = 206$) and dyadic correlations are above the diagonal ($N = 103$)

[*]$p < .05$, [**]$p < .01$ (one-tailed)

($\Delta = 2.65$, $p = .62$), satisfaction ($\Delta = 3.99$, $p = .41$), cohesion ($\Delta = 3$, $p = .56$), and affectional expression ($\Delta = 6.17$, $p = .19$) dimensions. The same occurred in the models that included negative extrinsic regulation (EER-) as a predictor, indicating that the dyads were indistinguishable when considering global dyadic adjustment ($\Delta = 1$, $p = .91$) and its consensus ($\Delta = 2.59$, $p = .63$), satisfaction ($\Delta = 2.62$, $p = .62$), cohesion ($\Delta = 3.18$, $p = .53$), and affectional expression ($\Delta = 3.34$, $p = .50$) dimensions. Consequently, the interdependence analyses did not consider gender when examining the influence of EER on dyadic adjustment (Table 3).

Concerning the first question (*effect-actor*), as hypothesized, significant effects of EER on the global dyadic adjustment score and each of its dimensions were observed, but in one dimension. Thus, partners (whether female or male) who reported more frequent use of positive EER, i.e., who tried to make their partner feel good or better, experienced greater global dyadic adjustment, as well as higher scores on its consensus, satisfaction, cohesion, and affectional expression dimensions. In addition, the hypothesis was partially supported with respect to negative EER, with negative effects being observed in the same dimensions, except for affectional expression, i.e., that making one's partner feel bad is associated with a lower valuation of one's own dyadic adjustment.

As for the effects of EER on the partner (*partner-effect*), significant effects were also recorded for positive and negative EER on global dyadic adjustment. The same is true when considering positive EER and consensus, and cohesion, except for affectional expression and satisfaction. These results suggest that the partners of those who reported more frequent use of positive EER experienced greater global dyadic adjustment, e.g., in the case of women, if their partner (the man) reports greater use of positive EER, their own (the woman's) global dyadic adjustment is greater. The inverse occurs in the case of attempts to make one's partner feel bad, as partners of those who reported more use of negative EER experienced lower global dyadic adjustment. The same results are found when considering the consensus, satisfaction, and cohesion dimensions, except with the affectional expression dimension in the couple.

Concerning the second question, *years of relationship* were evaluated as a variable that could moderate the relationship of positive EER and negative EER on dyadic adjustment, there were no significant effects concerning the values of this interaction (see the *Years of relationship X Actor* and *Years of relationship X Partner* parameters in Table 3). Regarding a positive EER controlled by the presence of children in the couple, only one effect was generated that was unfavorable on dyadic satisfaction. The effect of negative EER controlled by the age of the participants did not show any effect on the dimensions of dyadic adjustment. Finally, it is noteworthy that when controlling for age and presence of children, the actor effect of negative EER in cohesion and affectional expression is lost, while the partner effect would also be lost with positive EER with satisfaction, cohesion, and affectional expression and with the negative EER in affectional expression. However, the actor and partner effects of the positive and negative EER do remain in the global dyadic adjustment. The loss of these aforementioned effects suggests that the dimensions of the DAS by themselves would not be as permeable to the effects of the REE when they are controlled for age and presence of children, unless the global DAS score that contains them is considered.

Discussion

The present study aimed to examine, in a sample of 103 Chilean couples, the effect of positive and negative extrinsic emotional regulation motivation on the dyadic adjustment perceived by the one who acts (actor), as well as by the one who is the receiver of this effect within the dyad (partner). Additionally, this effect was expected to differ according to gender and relationship length. Data analyses were dyadic and were performed under the Actor-Partner Interdependence Model. The hypotheses of this study were partially supported. Regarding the first hypothesis, the results did in fact confirm that those who reported greater use of positive EER (effect-actor) obtained greater global dyadic adjustment, as well as greater scores in the four dimensions of the DAS: consensus, satisfaction, dyadic cohesion, and affectional expression. As for the effect on the partner (effect-partner), better results were also obtained in global dyadic adjustment, but only in two of its dimensions, excluding the positive EER effect on dyadic satisfaction, and affectional expression. On the other hand, couples who mostly used negative EER (effect-actor) registered a lower dyadic adjustment both at the global level and in each of its dimensions, except for affectional expression and when it came to the effect-partner, this negative relationship was present in global dyadic adjustment and in three of its dimensions, with the exception, once again, of *affectional expression*. Therefore, when considering the relationship between extrinsic emotional regulation and dyadic adjustment (and its dimensions), the same pattern of results was obtained, varying only in terms of the direction of the relationship, being direct in the case of positive EER and inverse in the case of negative EER.

With respect to these findings, a first point to discuss is the role that EER (especially positive EER) would play in influencing the quality of relationships. Niven et al. (2015) point out that this role would be that of social communication as, ultimately, attempts to make others feel good convey positive information about the other person that is extrinsically regulated (e.g., how valuable this person would be)

Table 3 EER Actor-Partner Effects on DAS and the Moderating Effect of Relationship Length Controlled by Age and Children in Common

DAS Dimensions	EER +		EER–	
	β (SE)	β (SE)	β (SE)	β (SE)
Dyadic consensus				
Intercept	50.95 (2.22)***	53.58 (.54)***	56.61 (2.31)***	53.58 (.58)***
Actor	6.04 (.96)***	5.69 (.90)***	−2.67 (.61)***	−2.74 (.61)***
Partner	3.46 (.95)***	3.05 (.90)**	−1.41 (.62)*	−1.54 (.61)***
Length relationship	.09 (.09)		.10 (.10)	
Length x Actor	.11 (.09)		.05 (.05)	
Length x Partner	.05 (.09)		−.01 (.05)	
Age	−.05 (.09)		−.15 (.09)	
Children	1.79 (1.34)		.59 (1.41)	
Dyadic satisfaction				
Intercept	46.39 (2.23)***	41.30 (.56)***	47.10 (2.01)***	41.30 (.52)***
Actor	3.96 (.96)***	4.02 (.91)***	−2.41 (.56)***	−2.38 (.57)***
Partner	.80 (.94)	.73 (.91)	−1.95 (.57)***	−1.99 (.57)**
Length relationship	.10 (.93)		.10 (.09)	
Length x Actor	.15 (.09)		−.02 (.05)	
Length x Partner	.05 (.08)		−.06 (.05)	
Age	.05 (.09)		.02 (.08)	
Children	−3.06 (1.35)*		−3.63 (1.23)	
Dyadic cohesion				
Intercept	18.38 (1.09)***	18.62 (.27)***	19.09 1.08)***	18.62 (.28)***
Actor	2.65 (.47)***	2.72 (.43)***	−.56 (.29)	−.63 (.29)*
Partner	.86 (.46)	.99 (.43)*	−1.25 (.29)***	−1.34 (.29)***
Length relationship	−.03 (.05)		−.01 (.05)	
Length x Actor	.01 (.04)		−.02 (.02)	
Length x Partner	.05 (.04)		−.00 (.02)	
Age	−.00 (.04)		−.04 (.04)	
Children	.20 (.66)		−.28 (.66)	
Affectional expression				
Intercept	8.88 (.63)***	9.39 (.15)***	9.36 (.65)***	9.39 (.16)***
Actor	1.50 (.27)***	1.43 (.25)***	−.22 (.18)	−.24 (.17)
Partner	.32 (.27)	.24 (.25)	−.28 (.18)	−.31 (.17)
Length relationship	−.00 (.03)		.01 (.03)	
Length x Actor	.01 (.02)		.01 (.01)	
Length x Partner	−.01 (.02)		.00 (.01)	
Age	.00 (.02)		−.02 (.03)	
Children	.33 (.38)		.02 (.39)	
Global DAS score				
Intercept	124.80 (4.61)***	122.89 (1.12)***	128.65 (4.55)***	122.89 (1.15)***
Actor	14.11 (2.02)***	13.87 (1.88)***	−5.85 (1.27)***	−5.99 (1.25)***
Partner	5.43 (1.99)**	5.01 (1.88)**	−4.88 (1.28)***	−5.17 (1.25)***
Length relationship	.16 (.19)		.22 (.19)	
Length x Actor	.28 (.18)		.02 (.11)	
Length x Partner	.14 (.18)		−.07 (.11)	
Age	−.01 (.18)		−.21 (.18)	
Children	.87 (2.79)		−3.62 (2.78)	

EER+ = positive extrinsic regulation, EER– = negative extrinsic regulation, DAS = dyadic adjustment, SE = standard error. N = 103 for the EER effect on DAS and dimensions

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

and this, in turn, tends to increase affect in this person. In addition to the role of EER in interpersonal communication is the fact that people develop specific expectations about how their partners should respond when regulating basic needs on a day-to-day basis. To explain this dynamic, when this regulation reflects coordinated and positive exchanges, expectations become resources for the relationship (greater intimacy, secure attachment, self-esteem, emotional capital, greater trust, among others) that can help buffer negative emotional responses resulting from individual and interpersonal stress and foster the exchange of positive emotions. On the contrary, if these experiences are negative, they can undermine this exchange and exacerbate the negative emotional response (Schoebi & Randall, 2015). Consequently, it is much more likely that a positive evaluation of one's own relationship happens on the basis of mutually fulfilled expectations, thus generating reciprocity, where emotional interdependence has an important place. For this reason, both members of the dyad (actor and partner) are not immune to mutual covariation when employing extrinsic regulatory strategies. These results are consistent with the findings by Ursu and Turliuc (2020), according to which the ability to recognize and regulate the emotions of the partner would be associated with greater consensus and cohesion in the dyad.

As noted earlier, the only dimension of dyadic adjustment that was not associated with either positive or negative EER was the affectional expression in the partner. It is striking that the affective expression dimension did not show variation in either the actor or the partner due to the negative EER effect, and neither in the partner in the case of the positive EER. The expression of affection reflects the level of satisfaction about sexuality and the different manifestations of tenderness or affection. If the dimensions of dyadic cohesion, consensus and satisfaction are reviewed, it could be seen that they are configurations that arise as the relationship develops over time, because of coexistence, routines, and common challenges. On the contrary, the expression of affection is a behavior that seems to respond more to the individual differences of its members and to be a dimension more susceptible to the mediation of other factors. Therefore, the partner's expression of affection alone may not be such a sensitive domain that EER appears to influence. A methodological aspect that is important to examine is that, even though the scale used in this study has known psychometric properties, there is no consensus on the validity of this dimension in the DAS scale. Some studies manage to confirm within their factorial structure the four dimensions that correspond to the original DAS scale, including affective expression (Cano-Prous et al., 2014; Carrasco et al., 2013; Cuenca et al., 2013; Moral de la Rubia, 2009), while other studies do not distinguish this factor (Busby et al., 1995) or present low factor loadings (Vajda et al., 2019). Consequently, it is suggested to be cautious

with this interpretation since, probably, and given the different validity results regarding this dimension and the fact that the global data express couples quite satisfied with their relationships, the EER is not powerful enough. as to affect this variable in the case of the *partner* but determining in the case of the positive EER on the *actor*.

Analyses by gender yielded interesting data both at the individual and dyadic levels. At the individual level, if the results are compared according to gender, significant differences are observed regarding the use of negative EER, with women using it more than men do, although the magnitude was small. In this regard, Lee (2020) states that an increase in the use of negative EER strategies would be associated with more feelings of hostility and anger, which could eventually lead to aggressive behaviors since, in times of tension or during a conflict, it is more difficult to regulate oneself and one's partner simultaneously. If this result is extrapolated, it shows consistency with other findings (Overall et al., 2016) that indicate that women tend to exhibit greater psychological aggression in the interactions with their partners when compared to men. However, it is important to remember that, in this sample, negative EER was not the preferred strategy to be used by either men or women, and the magnitude of the difference was small, so it can be inferred that its use would not be a constant during marital tensions or conflicts, especially when considering that they are satisfactory couple relationships. At the dyadic level, the second hypothesis of the study, which proposed that gender would be a differentiating quality concerning the effect of EER on dyadic adjustment, could not be confirmed. It is important to note that, although the current literature is not conclusive respecting the gender differences in this matter, some studies suggest that in couples in which traditional beliefs about gender roles prevail, some distinctions may be observed (Pietromonaco et al., 2020). For example, those who are in a relationship where they feel they have less power to resolve conflicts, disagreements, or to influence their partner, tend to display more aggressive behaviors to regain power or, on the contrary, tend to display submissive behaviors to give up the possibility of influencing their partner. In the case of men, they would tend to respond with greater aggressiveness, since feeling underpowered becomes a possible threat to masculinity (Overall et al., 2016); in contrast, in the case of women, responses such as giving in, repressing, or disconnecting would be observed (Pietromonaco et al., 2020). In the case of the dyads that participated in this study, this finding could be interpreted in terms of the existence of not-so-defined gender roles, i.e., there would be flexibility and alternation within the dyad in terms of perceived greater and lesser power during a conflict. Consequently, negative extrinsic emotional regulation would not be a strategy to be used preferably by both members of the relationship; otherwise, it could be reflected in a lower global dyadic

adjustment. It should be noted that, in recent decades, gender differences in emotion recognition, emotion regulation, and dyadic adjustment have been studied, and the results are still inconclusive, particularly because gender differences are considered in terms of the variables mentioned above, but not in terms of their possible moderating role (Ursu & Turliuc, 2020). In addition, the studies that do report gender differences in the affective dynamics of romantic couples carry out their procedures through time series or videotaped laboratory activities (e.g., Horne & Johnson, 2018; Parkinson et al., 2016). As this study was conducted under a design where EER and dyadic adjustment were assessed simultaneously in both members of the dyad, without the mediation of other contextual conditions (e.g., couple interaction tasks) or other variables (e.g., dyadic identity), it is possible that the result did not reflect these differences as accurately.

Relationship length did not moderate the effect of EER on dyadic adjustment. In this regard, the results are consistent with those of Sels et al. (2019). However, their studies did manage to distinguish couples according to cohabitation status, noting greater interdependence in those who lived together. In this study, a selection criterion was cohabitation status, but there was no record of the length of this status. Therefore, it is possible that the moderating effect was as a result of the duration of cohabitation rather than relationship length (Sels et al., 2019); thus, spending more time together seems to accentuate the effect of positive EER on one or more domains of dyadic adjustment, such as consensus on decisive issues of daily life such as finances, leisure, social life with friends and family, and even philosophy of life, which is functional for positively valuing a relationship (Scorsolini-Comin & dos Santos, 2012). Secondly, regarding the age of the participants, it is important to mention that there is a correlation between the age of the participants and the relationship length, so that the time of relationship captures part of the variability of the dependent variables associated with the effect of age. Finally, regarding the presence of children in common in the couple, it is observed that it is relevant in only on dyadic satisfaction. The literature has shown that the presence of children in the dyad tends to decrease their satisfaction over time (Jelic et al., 2014; Urbano-Contreras et al., 2017), so it is not surprising that it also happens in the presence of negative extrinsic strategies. What is striking is the increase in consensus regarding the use of positive EER in dyads with children in common. In this case, it could be thought that positive extrinsic strategies would be a mitigating factor of the negative effect of the presence of children, through the favorable consequences that the use of positive EER entails. The positive EER would be an interesting aspect to reinforce in couples, considering the difference in nuances that exist in couples with and without children. Although the effects

are usually lower in the partner than in the actor, when other variables such as the age of the participants and the presence of children are controlled, in some of the dimensions or subscales of the dyadic adjustment the actor effect and especially the partner effect they are lost (satisfaction, cohesion and expression of affection). This loss of actor and partner effects in some of the subscales could be due in part to a possible interaction (of these dimensions) with some underlying phenomenon that is not being captured in this study. For example, Debrot et al. (2013) and Horn et al. (2018) refer to psychological intimacy as a variable that could be participating as an indirect socio-affective mechanism between emotional changes that would arise in a romantic dyad and the use of EER strategies. In this scenario, psychological intimacy could be playing a role that modifies the results, especially in the partner, when interacting with the age of the participants and the presence of the children in the relationship.
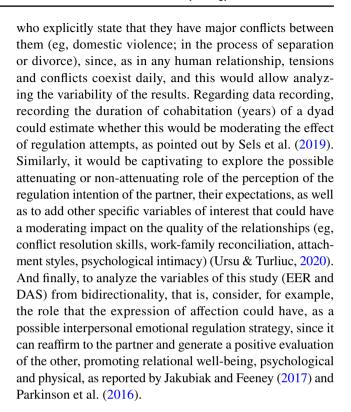
Given that emotions constitute a psychological phenomenon that has a great impact on people's lives, determine a good part of individual behavior, the way one navigates the social world, and, above all, enable the emergence of close bonds (Barthel et al., 2018; Gross, 2015), examining how people reciprocally vary each other in their emotional experience is relevant to the disciplinary practice and current research. Despite this, it is only recently that theoretical and empirical work on interpersonal emotion regulation has been thought of from its social nature (Chesney, 2018), and only considering some of the EER strategies employed. An empirical contribution of this study was the addition of a substantively different analysis component, investigating what happens in the couple considering the regulation intentions of its members under the actor-partner interdependence analysis model. On the other hand, a practical contribution of this work is to show how the way in which EER affects the marital system opens a way to identify areas of intervention, both for clinical diagnosis and at the level of counseling or couples therapy, examining which elements of daily life (for example, the positive and negative EER in the romantic dyad) affect not only the couple, but also the whole system. Research suggests that dyadic adjustment would be a powerful indicator of the couple's health and that it would maintain a positive link between the quality of the marital relationship and the relationship established with the children; therefore, problems in the marital system could influence children at an emotional, physiological, cognitive, and behavioral level, as well as their development and mental health (Jiménez-Picón et al., 2021). Exploring the motivation underlying EER in romantic partners broadens the understanding of other interpersonal strategies linked to healthy dyadic functioning.

Limitations and directions for future research

The invitation strategy to participate in the study was based mainly on dissemination in social networks and specific databases to which the research team had access. Therefore, the selection of the participants was carried out following a non-probabilistic sampling, since it was not possible to have a captive population at the time, that is, with the record of all possible participants from which to randomly subtract them (Del Cid et al., 2011). It is recognized that this limitation could have introduced biases by providing data that is not representative of the population, thus making it difficult to generalize the findings (Ato et al., 2013). Consequently, it was possible to appreciate that some of the characteristics of the participants were quite homogeneous. For example, most of the participants were couples who made a positive assessment of their own relationship, so the sample presented little variability in terms of their dyadic adjustment. On the other hand, although the age range of the participants had a wide range (between 22 and 78 years), as well as the relationship lengths (1 and 50 years), there was no significant frequency in the extreme values to have segmented these sample characteristics and observe the behavior of the data. Therefore, the interpretations presented in this study should be treated with extreme caution, since it is unknown what would happen with couples with poor or lower dyadic adjustment. Although the DAS scale has known psychometric properties in Chile, we think it would be useful to reexamine them at the local level, given that they date back more than 10 years, and thus clarify (as a possible reason presented) that the expression dimension of the affects could have a difficulty in this aspect. In addition, the records were self-reported and, therefore, there is a risk of response bias, mainly in consequence of social desirability. Another limitation of this study was its cross-sectional nature. This characteristic translates into the impossibility of making inferences of causality, fundamentally due to the temporal ambiguity that arises when simultaneously measuring the EER and the dyadic adjustment, not having a period that allows connecting the causes of the latter. Therefore, it is not possible to speak of causality strictly between the study variables. A data collection under a longitudinal design would allow a slightly less cautious interpretation to indicate that the dyadic adjustment responds to the ways in which the EER is used. However, it must also be considered that a couple is a relational system, characterized by circularity and recurrence, that is, each action that is exercised within this system can be understood as a reaction, and vice versa, every reaction becomes the cause of subsequent behaviors and actions (Campos & Linares, 2002 in Moreno-Manso et al., 2015). Therefore, looking at causality also deserves a systemic context.

In the future, it would be interesting to approach this topic in couples who are not so satisfied with their relationship or who explicitly state that they have major conflicts between them (eg, domestic violence; in the process of separation or divorce), since, as in any human relationship, tensions and conflicts coexist daily, and this would allow analyzing the variability of the results. Regarding data recording, recording the duration of cohabitation (years) of a dyad could estimate whether this would be moderating the effect of regulation attempts, as pointed out by Sels et al. (2019). Similarly, it would be captivating to explore the possible attenuating or non-attenuating role of the perception of the regulation intention of the partner, their expectations, as well as to add other specific variables of interest that could have a moderating impact on the quality of the relationships (eg, conflict resolution skills, work-family reconciliation, attachment styles, psychological intimacy) (Ursu & Turliuc, 2020). And finally, to analyze the variables of this study (EER and DAS) from bidirectionality, that is, consider, for example, the role that the expression of affection could have, as a possible interpersonal emotional regulation strategy, since it can reaffirm to the partner and generate a positive evaluation of the other, promoting relational well-being, psychological and physical, as reported by Jakubiak and Feeney (2017) and Parkinson et al. (2016).

Declarations

References

Acitelli, L. K., Rogers, S., & Knee, C. R. (1999). The role of identity in the link between relationship thinking and relationship satisfaction. *Journal of Social and Personal Relationships, 16*, 591–618. https://doi.org/10.1177/0265407599165003

Alfonso, H., Valladares G., Rodríguez S., & Selín, G. (2017). Comunicación, cohesión y satisfacción familiar en adolescentes de la enseñanza secundaria y preuniversitaria. Cienfuegos 2014. *Medisur, 15*(3), 341–349. https://www.redalyc.org/articulo.oa?id=180051460009

Altan-Atalay, A., & Saritas-Atalar, D. (2019). Interpersonal emotion regulation strategies: How do they interact with negative mood regulation expectancies in explaining anxiety and depression? *Current Psychology, 41*, 379–385. https://doi.org/10.1007/s12144-019-00586-2

Ato, M., López, J., & Benavente, A. (2013). Un sistema de clasificación de los diseños de investigación en psicología. *Anales de Psicología, 29*(3), 1038–1059. https://doi.org/10.6018/analesps.29.3.178511

Barthel, A., Hay, A., Doan, S., & Hofmann, S. (2018). Interpersonal emotion regulation: A review of social and developmental components. *Behaviour Change, 35*(4), 203–216. https://doi.org/10.1017/bec.2018.19

Benson, A., Cavallo, J., Daljeet, K., (2019). Tailoring emotions in romantic relationships: A person-centered approach. *Journal of Research in Personality, 84*(103897). https://doi.org/10.1016/j.jrp.2019.103897

Berrios, R., Totterdel, P., & Niven, K. (2015). Why do you make us feel good? Correlates and interpersonal consequences of affective presence in speed-dating. *European Journal of Personality, 29*, 72–82. https://doi.org/10.1002/per.1944

Bloch, L., Haase, C., & Levenson, R. (2014). Emotion regulation predicts marital satisfaction: More than a wives' tale. *Emotion, 14*(1), 130–144. https://doi.org/10.1037/a0034272

Brandao, T., Matias, M., Ferreira, T., Vieira, J., Schulz, M., & Mena, P. (2019). Attachment, emotion regulation, and well-being in couples: Intrapersonal and interpersonal associations. *Journal of Personality, 88*, 748–761. https://doi.org/10.1111/jopy.12523

Busby, D., Christensen, C., Crane, R., & Larson, J. (1995). A revision of the dyadic adjustment scale for use with distressed and nondistressed couples: Construct hierarchy and multidimensional scales. *Journal of Marital and Family Therapy, 21*(3), 289–308. https://doi.org/10.1111/j.1752-0606.1995.tb00163.x

Butler, E. (2011). Temporal interpersonal emotion systems the "TIES" that form relationships. *Personality and Social Psychology Review, 15*(4), 367–393. https://doi.org/10.1177/1088868311411164

Butler, E., & Randall, A. (2013). Emotional Coregulation in close relationships. *Emotion Review, 5*(2), 202–210. https://doi.org/10.1177/1754073912451630

Campos, J., Walle, E., Dahl, A., & Main, A. (2011). Reconceptualizing emotion regulation. *Emotion Review, 3*, 26–35. https://doi.org/10.1177/1754073910380975

Cano-Prous, A., Martín-Lanas, A., Moyá-Querejeta, J., Beunza-Nuin, M., Lahortiga-Ramosa, F., & García-Granero, M. (2014). Psychometric properties of a Spanish version of the dyadic adjustment scale. *International Journal of Clinical and Health Psychology, 14*(2), 137–144. https://doi.org/10.1016/S1697-2600(14)70047-X

Carrasco, J., Herrero-Fernández, D., & Castillo, I. (2013). Psychometric properties, and clinical applicability of dyadic adjustment scale in a Spanish sample. *Behavioral Psychology, 21*(3), 545–561.

Chervonsky, E., & Hunt, C. (2017). Suppression and expression of emotion in social and interpersonal outcomes: A Meta-analysis. *Emotion, 17*(4), 669–683. https://doi.org/10.1037/emo0000270

Chesney, S. (2018). Inside and Out: Intrapersonal and Interpersonal Emotion Regulation in Young – Adult Friendships. *Dissertations* (1934 -) 782. https://epublications.marquette.edu/dissertations_mu/782

Cohen J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Earlbaum Associates.

Cook, W., & Kenny, D. (2005). The actor–partner interdependence model: A model of bidirectional effects in developmental studies. *International Journal of Behavioral Development, 29*(2), 101–109. https://doi.org/10.1080/01650250444000405

Cuenca, M., Graña, J., Peña, M., & Andreu, J. (2013). Psychometric properties of the dyadic adjustment scale (DAS) in a community sample of couples. *Psicothema, 25*(4), 536–541. https://doi.org/10.7334/psicothema2013.85

Debrot, A., Schoebi, D., Perrez, M., & Horn, A. (2013). Touch as an interpersonal emotion regulation process in couples' daily lives the mediating role of psychological intimacy. *Personality and Social Psychology Bulletin, 39*(10), 1373–1385. https://doi.org/10.1177/0146167213497592

Del Cid, A., Méndez, R. & Sandoval, F. (2011). *Investigación. Fundamentos y Metodología*. Pearson.

DeMaris, A. (2010). The 20-year trajectory of marital quality in enduring marriages: Does equity matter? *Journal of Social and Personal Relationships, 27*(4), 449–471. https://doi.org/10.1177/0265407510363428

Dixon-Gordon, K., Bernecker, L., & Christensen, K. (2015). Innovations in the field of interpersonal emotion regulation. *Current Opinion in Psychology, 3*, 36–42. https://doi.org/10.1016/j.copsyc.2015.02.001

English, T., & Eldesouky, L. (2020). We're not alone: Understanding the social consequences of intrinsic emotion regulation. *Emotion, 20*(1), 43–47. https://doi.org/10.1037/emo0000661

Farero, A., Bowles, R., Blow, A., Ufer, L., Kees, M., & Guty, D. (2019). Rasch analysis of the revised dyadic adjustment scale (RDAS) with military couples. *Contemporary Family Therapy, 41*, 125–134. https://doi.org/10.1007/s10591-018-09486-2

Fincham, F., Jackson, H., & Beach, S. (2005). Transgression, severity and forgiveness: Different moderators for objective and subjective severity. *Journal of Social and Clinical Psychology, 24*(6), 860–875. https://doi.org/10.1521/jscp.2005.24.6.860

Fischer, A., & van Kleef, G. (2010). Where have all the people gone? A Plea for including social interaction in emotion research. *Emotion Review, 2*(3), 208–211. https://doi.org/10.1177/1754073910361980

Fraley, R., & Shaver, P. (2000). Adult romantic attachment: Theoretical development emerging controversies and unanswered questions. *Review of General Psychology, 4*(2), 132–154. https://doi.org/10.1037/1089-2680.4.2.132

Frye, N., Ganong, L., Jensen, T., & Coleman, M. (2020). A dyadic analysis of emotion regulation as a moderator of associations between marital conflict and marital satisfaction among first-married and remarried couples. *Journal of Family Issues, 41*(12), 2328–2355. https://doi.org/10.1177/0192513X20935504

Gao, M., Du, H., Davies, P., & Cummings, E. (2018). Marital conflict behaviors and parenting: Dyadic links over time. *Family Relations, 68*(1), 135–149. https://doi.org/10.1111/fare.12322

Gross, J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry, 26*, 1–26. https://doi.org/10.1080/1047840X.2014.940781

Gross, J. & Thompson, R. (2007). Emotion Regulation: Conceptual Foundations. En: J. Gross (Ed.), *Handbook of Emotion Regulation*. New York: Guilford Press. (pp. 3–24)

Hofmann, S. G., Carpenter, J. K., & Curtiss, J. (2016). Interpersonal emotion regulation questionnaire (IERQ): Scale development and psychometric characteristics. *Cognitive Therapy and Research, 40*, 341–356. https://doi.org/10.1007/s10608-016-9756-2

Horn, A., Samson, A., Debrot, A., & Perrez, M. (2018). Positive humor in couples as interpersonal emotion regulation. *Journal of Social and Personal Relationships, 36*(8), 2376–2396. https://doi.org/10.1177/0265407518788197

Horne, R., & Johnson, M. (2018). Gender role attitudes, relationship efficacy, and self-disclosure in intimate relationships. *The Journal of Social Psychology, 158*(1), 37–50. https://doi.org/10.1080/00224545.2017.1297288

Jakubiak, B., & Feeney, B. (2017). Affectionate touch to promote relational, psychological, and physical well-being in adulthood: A theoretical model and review of the research. *Personality and Social Psychology Review, 21*(3), 228–252. https://doi.org/10.1177/1088868316650307

Jelic, M., Kamenov, Z., & Huic, A. (2014). Perceived Spouse's affectionate and antagonistic Behaviours and marital satisfaction. *Journal for General Social Issues, 23*(1), 87–107. https://doi.org/10.5559/di.23.1.05

Jiménez-Picón, N., Romero-Martín, M., Ramirez-Baena, L., Palomo-Lara, J., & Gómez-Salgado, J. (2021). Systematic review of the relationship between couple dyadic adjustment and family health. *Children, 8*(6), 491. https://doi.org/10.3390/children8060491

Jitaru, M. (2020). *The associations between interpersonal emotion regulation and couple satisfaction: A dyadic perspective*. Conference Paper. Conference: Communication, Context and Interdisciplinarity 6 (CCI-6) At: Târgu Mureş, RomaniaVolume: Paths of Communication in Postmodernity.

Kenny, D., & Ledermann, T. (2010). Detecting, measuring, and testing dyadic patterns in the actor–partner interdependence model. *Journal of Family Psychology, 24*(3), 359–366. https://doi.org/10.1037/a0019651

Kenny, D., Kashy, D., & Cook, W. (2006). *Dyadic Data Analysis*. The Guilford Press.

Kinkead, A., Sanduvete-Chaves, S., Chacón-Moscoso, S., & Salas, C. (2021). Couples extrinsic emotion regulation questionnaire: Psychometric validation in a Chilean population. *PLoS ONE 16*(6): e0252329. https://doi.org/10.1371/journal.pone.0252329

Kwak, M., & Ingersoll-Dayton, B. (2019). Relationships between negative exchanges and depressive symptoms in older couples: The moderating roles of care and gender. *Journal of Social and Personal Relationships, 37*(3), 843–864. https://doi.org/10.1177/0265407519879504

Iida, M., Seidman, G., & Shrout, P. (2018). Models of interdependent individuals versus dyadic processes in relationship research. *Journal of Social and Personal Relationships, 35*(1) 59-88. https://doi.org/10.1177/0265407517725407

Lee, K. (2020). *The Effects Of Interpersonal Emotion Regulation During Conflict on Partner-Directed State Aggression*. Doctoral Dissertations. 2509. https://scholars.unh.edu/dissertation/2509

López-Pérez, B., Howells, L., & Gummerum, M. (2017). Cruel to be kind: Factors underlying altruistic efforts to worsen another person's mood. *Psychological Science, 28*, 862–871. https://doi.org/10.1177/0956797617696312

Lucas-Thompson, R., Seiter, N., & Lunkenheimer, E. (2020). Interparental conflict, attention to angry interpersonal interactions, and adolescent anxiety. *Family Relations, 69*(5), 1041–1054. https://doi.org/10.1111/fare.12505

Malouff, J., Schutte, S., & Thorsteinsson, E. (2014). Trait emotional intelligence and romantic relationship satisfaction: A Meta-analysis. *The American Journal of Family Therapy, 42*(1), 53–66. https://doi.org/10.1080/01926187.2012.748549

Marigold, D., Cavallo, J., Holmes, J., & Wood, J. (2014). You Can't always give what you want: The challenge of providing social support to low self-esteem individuals. *Journal of Personality and Social Psychology, 107*(1), 56–80. https://doi.org/10.1037/a0036554

Martinez-Inigo, D., Poerio, G., & Totterdell, P. (2013). The association between controlled interpersonal affect regulation and resource depletion. *Applied Psychology: Health and Wellbeing, 5*(2), 248–269. https://doi.org/10.1111/aphw.12009

Moral de la Rubia, J. (2009). Estudio de validación de la Escala de Ajuste Diádico (DAS) en población mexicana. *Revista Internacional de Ciencias Sociales y Humanidades, XIV*(1), 113–138.

Moreno-Manso, J., Serrano-Serrano, J., Galán- Rodríguez, A., & García-Baamonde, M. (2015). Psychopathology in children and expression of affection in couple relationships. *Clínica Contemporánea, 6*(1), 3–12. https://doi.org/10.5093/cc2015a1

Netzer, L., Van Kleef, G., & Tamir, M. (2015). Interpersonal instrumental emotion regulation. *Journal of Experimental Social Psychology, 58*, 124–135. https://doi.org/10.1016/j.jesp.2015.01.006

Niven, K., Totterdell, P., & Holman, D. (2009). A classification of controlled interpersonal affect regulation strategies. *Emotion, 9*(4), 498–509. https://doi.org/10.1037/a0015962

Niven, K., Totterdell, P., Stride, C., & Holman, D. (2011). Emotion regulation of others and self (EROS): The development and validation of a new individual difference measure. *Current Psychology, 30*, 53–73. https://doi.org/10.1007/s12144-011-9099-9

Niven, K., Totterdell, P., Holman, D., & Headly, T. (2012). Does regulating others' feelings influence people's own affective well-being? *The Journal of Social Psychology, 152*(2), 246–260. https://doi.org/10.1080/00224545.2011.599823

Niven, K., Garcia, D., Van der Löwe, I., Holman, D., & Mansell, W. (2015). Becoming popular: Interpersonal emotion regulation predicts relationship formation in real life social networks. *Frontiers in Psychology, 6*(1452), 1–11. https://doi.org/10.3389/fpsyg.2015.01485

Niven, K., Troth, A., & Holman, D. (2019). Do the effects of interpersonal emotion regulation depend on people's underlying motives? *Journal of Occupational and Organizational Psychology, 92*(4), 1020–1026. https://doi.org/10.1111/joop.12257

Nozaki, Y., & Mikolajczak, M. (2020). Extrinsic emotion regulation. *Emotion, 20*(1), 10–15. https://doi.org/10.1037/emo0000636

Overall, N., Hammond, M., McNulty, J., & Finkel, E. (2016). When power shapes interpersonal behavior: Low relationship power predicts Men's aggressive responses to low situational power. *Journal of Personality and Social Psychology, 111*(2), 195–217. https://doi.org/10.1037/pspi0000059

Parkinson, B. & Manstead, A. (2015). Current emotion research in social psychology: Thinking about emotions and other people. *Emotion Review,* 1–10. https://doi.org/10.1177/1754073915590624

Parkinson, B., & Totterdell, P. (1999). Classifying affect-regulation strategies. *Cognition & Emotion, 13*(3), 277–303. https://doi.org/10.1080/026999399379285

Parkinson, B., Simons, G., & Niven, K. (2016). Sharing concerns: Interpersonal worry regulation in romantic couples. *Emotion, 16*(4), 449–458. https://doi.org/10.1037/a0040112

Peters, B., & Jamieson, J. (2016). The consequences of suppressing affective displays in romantic relationships: A challenge and threat perspective. *Emotion, 16*, 1050–1066. https://doi.org/10.1037/emo0000202

Pietromonaco, P., Overall, N., Beck, L., & Powers, S. (2020). Is low power associated with submission during marital conflict? Moderating roles of gender and traditional gender role beliefs? *Social Psychological and Personality Science,* 165–175. https://doi.org/10.1177/1948550620904609

Randall, A., & Schoebi, D. (2015). Lean on me: Susceptibility to partner affect attenuates psychological distress over a 12-month period. *Emotion, 15*(2), 201–210. https://doi.org/10.1037/emo0000043

Reeck, C., Ames, D., & Ochsner, K. (2016). The social regulation of emotion: An integrative, cross-disciplinary model. *Trends in Cognitive Science, 20*(1), 47–63. https://doi.org/10.1016/j.tics.2015.09.003

Reis, H., Collins, W., & Berscheid, E. (2000). The relationship context of human behavior and development. *Psychological Bulletin, 126*, 844–872. https://doi.org/10.1037/0033-2909.126.6.844

Rick, J., Falconier, M., & Wittenborn, A. (2017). Emotion regulation dimensions and relationship satisfaction in clinical couples. *Personal Relationships, 24*(4), 790–803. https://doi.org/10.1111/pere.12213

Rimé, B. (2009). Emotion elicits the social sharing of emotion: Theory and empirical review. *Emotion Review, 1*(1), 60–85. https://doi.org/10.1177/1754073908097189

Sabatelli, R. (1988). Measurement issues in marital research: A review and critique of contemporary survey instruments. *Journal of Marriage and the Family, 50*(4), 891–915. https://doi.org/10.2307/352102

Sadler, P., Ethier, N., & Woody, E. (2011). Tracing the interpersonal web of psychopathology: Dyadic data analysis methods for clinical researchers. *Journal of Experimental Psychopathology, 2*(2), 95–138. https://doi.org/10.5127/jep.010310

Schoebi, D., & Randall, A. (2015). Emotional dynamics in intimate relationships. *Emotion Review, 7*(4), 342–348. https://doi.org/10.1177/1754073915590620

Scorsolini-Comin, F., & dos Santos, M. (2012). Correlations between subjective well-being, dyadic adjustment, and marital satisfaction in Brazilian married people. *The Spanish Journal of Psychology, 15*, 166–176. https://doi.org/10.5209/rev_SJOP.2012.v15.n1.37304

Sels, L., Ceulemans, E., Bulteel, K., & Kuppens, P. (2016). Emotional interdependence and well-being in close relationships. *Frontiers in Psychology, 7*(283). https://doi.org/10.3389/fpsy.2016.00283.

Sels, L., Ceulemans, E., & Kuppens, P. (2018). A general framework for capturing interpersonal emotion dynamics: Associations with psychological and relational adjustment. In A. Randall & D. Schoebi (Eds.), *Interpersonal emotion dynamics in close relationships (Studies in Emotion and Social Interaction)* (pp. 27–46). Cambridge University Press.

Sels, L., Cabrieto, J., Butler, E., Reis, H., Ceulemans, E., & Kuppens, P. (2019). The occurrence and correlates of emotional interdependence in romantic relationships. *Journal of Personality and Social Psychology, 119*(1). https://doi.org/10.1037/pspi0000212

South, S., Foli, K., & Lim, E. (2013). Predictors of relationship satisfaction in adoptive mothers. *Journal of Social and Personal Relationships, 30*(5), 545–563. https://doi.org/10.1177/0265407512462681

Spanier, G. (1988). Assessing the strengths of the dyadic adjustment scale. *Journal of Family Psychology, 2*(1), 92–94. https://doi.org/10.1037/h0080477

Tamir, M. (2011). The maturing field of emotion regulation. *Emotion Review, 3*(1), 3–7. https://doi.org/10.1177/1754073910388685

Tapia, L. & Poulsen, G. (2009). *La evaluación del Ajuste Marital*. Series Investigación Clínica en Terapia de Pareja: 1, Santiago, Chile: Ed. Facultad de Psicología. Universidad del Desarrollo. https://es.scribd.com/doc/265949696/LaEvaluacin-Del-Ajuste-Marital

Urbano-Contreras, A., Martínez-González, R., & Iglesias-García, M. (2017). Parenthood as a determining factor of satisfaction in couple relationships. *Journal of Child and Family Studies, 27*(5), 1492–1501. https://doi.org/10.1007/s10826-017-0990-3

Ursu, A., & Turliuc, M. (2020). Do emotion recognition and emotion regulation predict dyadic adjustment? The moderating role of relationship length. *Journal of Psychological and Educational Research, 28*(18), 45–63.

Vajda, D., Konkolÿ, B., & Rózsa, S. (2019). Factor structure of the dyadic adjustment scale a Bifactor exploratory structural equation modeling approach. *European Journal of Psychological Assessment, 35*, 326–334. https://doi.org/10.1027/1015-5759/a000405

Vangelisti, A., Daly, J., & Rudnick, J. (1991). Making people feel guilty in conversations: Techniques and correlates. *Human Communication Research, 18*, 3–39. https://doi.org/10.1111/j.1468-2958.1991.tb00527.x

Vasquez, C., Niven, K., & Madrid, H. (2020). Leader interpersonal emotion regulation and follower performance. *Journal of Personnel Psychology, 19*(2), 97–101. https://doi.org/10.1027/1866-5888/a000249

Williams, W., Morelli, S., Ong, D., & Zaki, J. (2018). Interpersonal emotion regulation: Implications for affiliation, perceived support, relationships, and well-being. *Journal of Personality and Social Psychology, 115*(2), 224–254. https://doi.org/10.1037/pspi0000132

Young, M., Riggs, S., & Kaminski, P. (2017). Role of marital adjustment in associations between romantic attachment and Coparenting. *Family Relations, 66*(2), 331–345. https://doi.org/10.1111/fare.12245

Zaki, J., & Williams, C. (2013). Interpersonal emotion regulation. *Emotion, 13*(2), 803–810. https://doi.org/10.1037/a0033839