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Mariana Beleza Reis Gomes Sarmiento

**HOW EVOLUTIONARY VARIABLES
INFLUENCE COPING WITH MARITAL
CONFLICT:
A RESEARCH ON WOMEN FROM THE COMMUNITY**

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Psicologia, Área de Psicologia Clínica e da Saúde, Subárea de
Intervenções Cognitivo-Comportamentais nas Perturbações
Psicológicas e Saúde, sob a orientação do Professor Doutor Daniel
Maria Bugalho Rijo e da Professora Doutora Diana Ribeiro da Silva
e apresentada à Faculdade de Psicologia e Ciências da Educação da
Universidade de Coimbra**

Julho de 2021

Faculdade de Psicologia e Ciências da Educação
da Universidade de Coimbra

How Evolutionary Variables Influence Coping With Marital Conflict: A Research On Women From The Community

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A presente Dissertação de Mestrado insere-se no âmbito do projeto “Violência nas Relações de Intimidade: Uma Abordagem Diádica à luz dos Modelos Evolucionários” (SFRH/BD/137335/2018), atualmente a ser desenvolvido no Centro de Investigação em Neuropsicologia e Intervenção Cognitivo-Comportamental (CINEICC), inserido no grupo de investigação “Cognitive and Behavioral Processes and Change”, na Faculdade de Psicologia e Ciências da Educação da Universidade de Coimbra, realizada no âmbito de um projeto de doutoramento financiado pela Fundação para a Ciência e a Tecnologia (FCT).

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“Quando a nossa infância é calorosa, ficamos protegidos do frio para o resto da vida”

Pedro Martins

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Abstract

Early experiences of shame, as well as early experiences of warmth and safeness greatly impact the individual development and adjustment throughout life. While the last ones can be protective, shame, including maladaptive shame coping strategies (*Attack Self, Withdrawal, Avoidance, and Attack Other*), are related with negative outcomes. Using a community sample of females from heterosexual couples ($N = 144$) and a set of self-report measures, this study tested a predictive model for the impact of evolutionary (early memories of warmth and safeness and shame) and dyadic variables (dyadic adjustment, submissive behavior, and communication) in the explanation of females' psychological, behavioral, and relational adaptation, when involved in marital conflict. The model explained the impact of early memories of warmth and safeness on women's shame levels. In addition, results indicated that shame was directly linked with submissive behavior, coping with marital conflict, and dyadic adjustment. Moreover, shame was indirectly, through the shame coping strategy *Attack Self*, linked with submissive behavior. Findings offer support for conceptualizing shame levels as a predictive factor of women's submissive behavior and marital conflict coping, and for opening new pathways to prevention and intervention program designs.

Keywords: marital conflict, shame, shame coping strategies, early memories, women

Resumo

As experiências precoces de vergonha, bem como as experiências precoces de calor e segurança influenciam significativamente o desenvolvimento ao longo da vida. Enquanto que as últimas podem ser protetoras, a vergonha, incluindo estratégias maladaptativas de *coping* com vergonha (*Attack Self*, *Withdrawal*, *Avoidance* e *Attack Other*), estão relacionadas com *outcomes* negativos. Recorrendo a uma amostra, da população geral, de mulheres de casais heterossexuais ($N = 144$) e a um conjunto de medidas de autorrelato, este estudo testou um modelo preditivo do impacto de variáveis evolucionárias (memórias precoces de calor e segurança e vergonha) e diádicas (ajustamento diádico, comportamento de submissão e comunicação) na explicação da adaptação psicológica, comportamental e relacional da mulher, quando na presença de conflito conjugal. O modelo explicou o impacto das memórias precoces de calor e segurança nos níveis de vergonha atuais das mulheres. Os resultados também indicaram que a vergonha estava diretamente associada ao comportamento de submissão, *coping* com o conflito conjugal e ajustamento diádico. Ainda, a vergonha mostrou-se como indiretamente associada, através da estratégia de *coping* com a vergonha *Attack Self*, ao comportamento de submissão. Os resultados oferecem suporte para conceptualizar os níveis de vergonha como um fator preditivo do comportamento de submissão e do *coping* com conflito conjugal, nas mulheres, e novos programas de prevenção e intervenção.

Palavras-Chave: conflito conjugal, vergonha, estratégias de *coping* com a vergonha, memórias precoces, mulheres

Introduction

Although much has been written about marital conflict, less is known about the variables that can impact the way women cope with it. Marital conflict can be defined as the opposition between spouses, which is identified as disagreement and leads to difficulties within the couple (Reis & Sprecher, 2009). Marital conflict can have an impact on mental, physical, and family health (Fincham, 2003), and it can lead to intimate partner violence (IPV), which has physical and psychological consequences for the victims (WHO, 2012). Some studies found that spouses' early life experiences of shame can impact marital adjustment (Martins et al., 2016) and predict violent outcomes in latter relationships (Velotti et al., 2014). These early experiences, as well as experiences of warmth and safeness greatly impact one's development and adjustment (Gilbert, 2009a; Richter et al., 2009). While the last ones can be protective, shame, including maladaptive shame coping styles, have been found to be related with negative outcomes (Vagos et al., 2016; Velotti et al., 2017). Also, dyadic adjustment and communication, seem to be associated with individual and relational well-being (Falconier et al., 2015; Falconier & Kuhn, 2019; Pagani et al., 2015). Although there are several studies focused on these associations, to our best knowledge, the impact of evolutionary and dyadic variables in the explanation of females' psychological, behavioral, and relational adaptation, when involved in marital conflict, remains to be investigated. The study of these associations could bring to light the identification and understanding of the factors that compromise both adaptive coping with shame and adaptive coping with marital conflict, which are of most importance when designing prevention and intervention strategies aimed at promoting a higher individual and relational well-being.

To study the impact that evolutionary variables may have on marital conflict, it is relevant to describe the concept of emotion regulation systems. These systems are associated with threat and self-protection (threat system), incentive and resource-seeking (drive system),

and soothing and contentment (soothing system) (Gilbert, 2009a; Kolts & Gilbert, 2018), and their balance seems to lead to emotion regulation, well-being, and mental health (Gilbert, 2009b).

The threat system aims to detect and alert of threats, enabling us to prepare and take action to protect ourselves, producing anxiety, anger, and disgust (Gilbert, 2009a, 2010, 2015; Kolts & Gilbert, 2018). The amygdala and the stress hormone cortisol seem to be important for this system, sensitizing us to threats and influencing the way we experience and act on them, resorting mostly to automatic and universal responses of protection: fight, flight, freeze, or submission (Gilbert, 2009a, 2010, 2015; Kolts & Gilbert, 2018).

The drive system guides and motivates individuals to pursue, achieve and consume resources that we need to survive, reproduce, and prosper, producing positive feelings such as excitement and pleasure (Gilbert, 2009a, 2010, 2015; Kolts & Gilbert, 2018). The dopamine seems to play an important role in this system, to guide us towards our life goals (Gilbert, 2009a, 2010).

The soothing system is responsible for promoting a sense of contentment, peacefulness, and safeness, and focuses on the need for affiliative relationships (Gilbert, 2009a, 2009b, 2010, 2015; Kolts & Gilbert, 2018). This system is related to feelings of well-being and satisfaction, in this way, the focus is not on threat and/or in the pursuit for resources (Gilbert, 2009a, 2010, 2015; Kolts & Gilbert, 2018). Also, the soothing system supports the regulation of the threat experience (Gilbert, 2009a; Kolts & Gilbert, 2018). Endorphin and the hormone oxytocin promote affiliative behavior, related to feelings of social safeness, belonging, and well-being (Gilbert, 2009a; Colonnello, 2017). This system developed as the evolution of attachment behavior occurred due to the soothing effect that the warm and caring behavior of the parents has on their children (Bowlby, 1982; Mikulincer & Shaver, 2020). Likewise, there is evidence that the recall of feeling loved and cared for as a

child is positively related to positive affiliative social feelings and negatively associated with depressive symptoms (Capinha et al., 2021a; Matos et al., 2015a; Steindl, 2018).

Childhood experiences seem to have a major impact on emotional, psychological, physical, and social adjustment (Richter et al., 2009). Also, according to a study with a sample of Portuguese women, the recall of early positive memories is associated with psychological well-being (Marta-Simões et al., 2018). Moreover, the recall of positive early memories is associated with the development of self-regulation and affiliative bonds with others (Gilbert et al., 2006), and with compassion (Capinha et al., 2021a; Steindl, 2018) (i.e., as defined by Gilbert (2017b) “a sensitivity to suffering in self and others, with a commitment to try to alleviate and prevent it” (p.11)). In this way, emotional early memories of safeness, reassurance, and acceptance underlie the development of the affiliative-soothing system (Gilbert, 2009a). Also, when shame memories become central to one’s identity and life story, early memories of warmth and safeness seem to buffer the impact of shame on psychopathology (Matos et al., 2015a).

According to the evolutionary and biopsychosocial model of shame, since we all need to feel connect to others, and be accepted and cared for, early experiences of rejection, abuse or neglect may lead to the development of negative feelings and thoughts about the self in the mind of others, that is, to shame (Gilbert, 2010).

From an evolutionary perspective, shame can be defined as an alarm, as a protective response to devaluations (Elison, 2019). Functioning as an emotional barometer (Tangney et al., 2007), shame is a self-focused, and self-conscious emotion, that motivates us to maintain our relationships and status and to avoid exclusion (Elison, 2019; Elison et al., 2006b). Although the momentary experience of shame is common and adaptive (Paulo et al., 2019), the frequent and persistent experience of this emotion is painful (Elison, 2019; Elison et al., 2006b), related to feelings of being inferior, inadequate, and worthless (Gilbert, 2009a).

Consequently, shame experiences are felt as threats to the social self and to self-identity (Matos et al., 2017). In this way, shame experiences may be associated with the activation of the threat system (Gilbert, 2009a; Matos et al., 2017). Frequent early experiences of shame may lead to shame-proneness in adulthood (Velotti et al., 2017); in other words, a predisposition to experience shame (Schalkwijk et al., 2019) which, in turn, may lead to maladaptive shame coping strategies (Schalkwijk et al., 2016). Furthermore, shame seems to be associated with maladaptive emotion regulation, low self-esteem, hostility, psychological distress (Velotti et al., 2017), and psychological symptomatology (Vagos et al., 2016).

Some psychopathologies related to shame are more prominent in women, suggesting a gender difference in the experience of shame (Else-Quest et al., 2012). Likewise, shame seems to be associated with the development of eating psychopathology in women (Oliveira et al., 2017; Woodward et al., 2019). Moreover, shame-proneness in women seems to predict nonsuicidal self-injury, suicidal ideation, and other symptoms related to borderline personality disorder (Cameron et al., 2020). Nevertheless, findings concerning gender differences in shame experience are not consistent. While some studies found that women experience more shame than men in adulthood (Brody & Hall, 2008; Brody et al., 2016; Else-Quest et al., 2012; Ferguson & Eyre, 2000; Velotti et al., 2017) and adolescence (Nyström & Mikkelsen, 2013), recent studies with adolescent Portuguese samples found no gender differences regarding the experience of shame (Paulo et al., 2019; Vagos et al., 2016). However, these studies found gender differences regarding the shame coping strategies more frequently used by boys and girls (Paulo et al., 2019; Vagos et al., 2016).

More than the experience of shame *per se*, the way one copes with shame feelings seems to be what leads to problematic psychological states and other negative outcomes (Elison, 2019; Elison et al., 2006b). Nathanson (1992) defined a compass of shame with four poles, corresponding to different shame coping strategies: *Withdrawal*, which refers to the

recognition and acceptance of the shame message and to the tendency to limit shameful exposure and to hide from it; *Attack Self*, that points to the acceptance, internalization, and magnification of the shame message and to the self-directed criticism, contempt, anger, and disgust; *Attack Other*, which refers to the shame message refusal and to the tendency to feel anger for others and to verbally or physically attack them; *Avoidance*, which points to the unconscious experience of shame, not accepting it or denying the shame message and to the tendency to distract the self from the painful feeling and the others from what is happening (Elison et al., 2006a, 2006b; Harper, 2011; Nathanson, 1992). These strategies tend to be maladaptive, insofar as these usually avoid processing the experience of shame (*Attack Other and Avoidance*) or, in the case of *Attack self* and *Withdrawal*, these experiences are processed, yet in a hostile and maladaptive manner (Elison, 2019; Nathanson, 1992). There is also an adaptive way to cope with shame, in which one accepts and recognizes the shame experience as valid, restores the relationship with others (apologizing or making amends with them) and is self-reassuring (Nathanson, 1992; Schalkwijk et al., 2016; Schalkwijk et al., 2019).

In a recent study with a Portuguese sample, Capinha and colleagues (2021b) found that females tend to resort mostly to *Avoidance*, *Attack Self*, and *Withdrawal*. Nevertheless, previous studies have suggested that women tend to display more internalizing shame coping strategies (i.e., *Withdrawal*, *Attack Self*) than men, both in adulthood (Nyström et al., 2018) and during adolescence (Paulo et al., 2019). Literature points out that internalizing strategies to cope with shame are those with the highest association with low self-esteem (Miceli & Castelfranchi, 2018; Yelsma et al., 2002), and maladaptive perfectionism (Schalkwijk et al., 2019). Paulo et al. (2019), resorting to an adolescent Portuguese sample, found that *Attack Self* was associated with internalizing and externalizing symptoms, except physical aggression, and that *Withdrawal* was associated with depression, stress (i.e., internalizing

symptoms), and hostility (i.e., externalizing symptom). Also, internalizing shame coping styles were found to be significant predictors of impaired intimate relationship functioning in a clinical sample of individuals with mental health problems (e.g., generalized anxiety, depression, posttraumatic stress disorder) (Black et al., 2013). Moreover, shame and strategies to cope with it have been found to impact on dyadic adjustment (Martins et al., 2016) and seem to predict violent outcomes in relationships (Velotti et al., 2014). In these violent outcomes, anger and aggression appear to function as shame maladaptive defenses (Elison et al., 2014; Velotti et al., 2014, 2017), being considered outcomes of the threat system (Gilbert, 2009a, 2010, 2015; Kolts & Gilbert, 2018).

Conflict theory indicates that conflict is an inevitable part of all human relationships, whereas violence is not an unavoidable strategy to deal with conflict (Straus et al., 1996). Four maladaptive strategies to cope with conflict have been proposed, in which one resorts to violence and aggression, that is, to any act that is perceived or has the intention to hurt others (Paiva & Figueiredo, 2006; Straus et al., 1996): (1) *psychological aggression*, which refers to active or passive, and verbal or nonverbal acts that intent or are perceived as having the intent to cause psychological pain to another person (Straus et al., 1996; Vissing et al., 1991); (2) *physical assault*, that refers to the act that intents to cause physical harm to another, not leading to physical damage (Stets, 1990; Straus et al., 1996); (3) *injury*, which refers to the behavior that leads to physical damage, continuous pain for more than a day, or the need for medical care (Straus et al., 1996); (4) *sexual coercion*, that refers to the verbal or physical behavior that intents to compel one to engage in unwanted sexual activity (Straus et al., 1996). Also, one adaptive strategy to cope with conflict has been proposed, *negotiation*, which is related to the attempt to resolve conflicts through communication and expression of affection and respect for the partner (Paiva & Figueiredo, 2006; Straus et al., 1996). In a Portuguese study, the *negotiation* was the most reported tactic, followed by *psychological*

aggression (Paiva & Figueiredo, 2006). There is evidence that the percentage of men and women, from community settings, that assault their partner is the same or even higher in women (Fiebert, 2014). Previous studies with Portuguese community samples seem to corroborate this evidence since violence seems to be bidirectional (Machado et al., 2019), and men and women demonstrated a similar prevalence of victimization and perpetration of *psychological aggression*, *physical assault*, and *injury* (Costa et al., 2015). Likewise, a Spanish study with a community sample of heterosexual couples, has found that, even though most partners resorted to the *negotiation*, the prevalence of *psychological* and *physical aggression* were similar in both men and women (Cuenca et al., 2015).

Nonetheless, subordinate behavior can also be used to cope with interpersonal conflict (Allan & Gilbert, 1997). According to evolutionary models, it is a form of social defense from those perceived as more powerful or as occupying higher social ranks (Gilbert, 2009a). Moreover, this behavior can be either of active escape (flight) or passive inhibition (avoidance), depending on the individual and social context (Allan & Gilbert, 1997). Also, this behavior can be motivated by shame experiences (Martins et al., 2016) and can be linked to angry thoughts and feelings (Allan & Gilbert, 1997).

When considering the maladaptive strategies used to cope with marital conflict, it is relevant to contemplate which dyadic variables can have a buffering effect on the negative impact of these strategies. Spanier (1976), argued that dyadic adjustment is a process with a qualitative dimension, which can be conceptualized as having four components: (1) the *dyadic satisfaction*, which refers to the perception of issues such as leaving home after a fight, regret with marriage, divorce, trusting the spouse, the level of happiness and commitment to the relationship's future (Hernandez & Hutz, 2008); (2) the *dyadic cohesion*, that refers to the feeling or experience of union and intimacy between spouses (Scorsolini-Comin & Santos, 2012), indicating the couple's perception of emotional sharing, such as

mutual external interests, ideas stimulation, joint fun and working together on projects (Hernandez & Hutz, 2008); (3) the *dyadic consensus*, which refers to the sharing of ideas and perspectives (Scorsolini-Comin & Santos, 2012), indicating the perception of the couple's level of agreement on primary relationship matters, such as financial, religious, goals, decisions, housework, friendships, conventionality, time spent together and leisure time (Hernandez & Hutz, 2008); and (4) the *affectional expression*, that assesses the couple perception of the agreement on affections, lack of love, sexual relations, and sex refusals (Hernandez & Hutz, 2008).

Improvement in dyadic adjustment is associated with a decrease in depressive symptoms (Tilden et al., 2010). Likewise, positive dyadic coping has been found to reduce stress levels (Meuwly et al., 2012) and the associations between stress and both verbal aggression and anger (Bodenmann et al., 2010). Moreover, it predicts life and relationship satisfaction, while negative dyadic coping is linked to relationship dissatisfaction, destructive communication and conflict resolution, and lower physical and emotional well-being (Falconier et al., 2015; Falconier & Kuhn, 2019). Additionally, communication is an important component in intimate relationships (Pagani et al., 2015). There is evidence that communication skills are associated with marital satisfaction (Burleson & Denton, 1997; Fowers & Olson, 1989, 1993; Gordon et al., 1999; Ruffieux, 2014). In this context, the literature points to the possible benefits of explicit communication, such as fostering individual and relational well-being (Pagani et al., 2015). Likewise, positive communication in conflict situations seems to affect the marital quality (Ledermann et al., 2010). On the other hand, negative communication may lead to violence and other marital problems (Burleson & Denton, 1997).

Despite the presumed relevance that evolutionary and dyadic variables have to the understanding of coping with marital conflict, to our knowledge, no research has included

these variables or explored the links between them. The understanding of these variables' role may have practical implications, through the identification and understanding of the factors which compromise both adaptive coping with shame and adaptive coping with marital conflict. This can be important in the design of preventive programs, and intervention strategies in clinical (e.g., couples' therapy) and forensic (e.g., intimate partner violence interventions) settings aimed at promoting a higher individual and relational well-being.

The Current Study

The main goal of this study is to understand the influence of evolutionary variables (e.g., early memories of warmth and safeness, shame and coping with shame) on the intrapersonal and dyadic processes (e.g., dyadic adjustment, communication, submissive behavior, and coping with marital conflict) linked to the (mal)adaptive coping with the marital conflict, in a sample of women from the community.

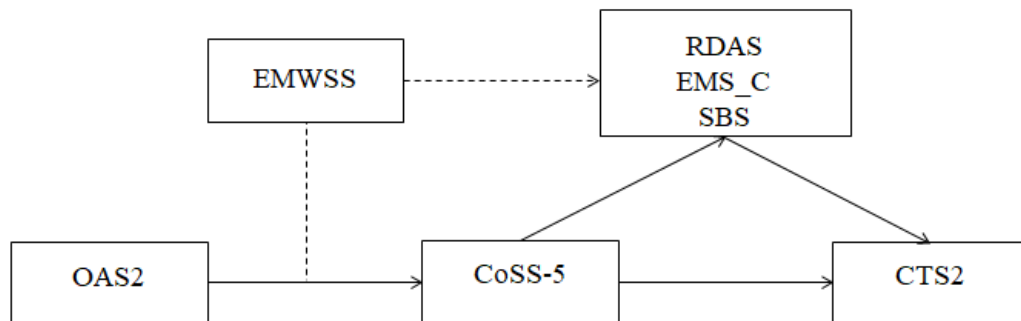
The specific goals are: (1) to explore the association between previous experiences of warmth and safeness and dyadic adjustment, communication, and submissive behavior; (2) to assess the impact of the association between shame and coping strategies with shame in the marital conflict coping strategies (adaptive, aggressive, submissive); (3) to assess the impact of previous experiences of warmth and safeness in the association between shame and coping strategies with shame; (4) and to assess the effect of dyadic adjustment, communication, and submissive behavior on the association between shame-coping styles and coping with marital conflict.

In this study, hypotheses are as follows (see Figure 1): Hypothesis 1: Early experiences of warmth and safeness are positively associated with dyadic adjustment. Hypothesis 2: Early experiences of warmth and safety are positively associated with better communication in couples. Hypothesis 3: Early experiences of warmth and safeness are

negatively associated with submissive behavior. Hypothesis 4: Early experiences of warmth and safeness moderate the links between shame and adaptive coping with shame. Hypothesis 5: Dyadic adjustment mediates the links between coping with shame and adaptive coping with marital conflict. Hypothesis 6: Communication mediates the links between coping with shame and adaptive coping with marital conflict. Hypothesis 7: Submissive behavior mediates the links between coping with shame and adaptive coping with marital conflict. Hypothesis 8: The affect (des)regulation is predisposed by high levels of shame experiences and low levels of warm and safe experiences, leading to a shame maladaptive coping that impairs dyadic adjustment, communication, and submissive behavior, promoting dominant and submissive coping strategies with marital conflict.

Figure 1

Predictive model for the impact of evolutionary and dyadic variables in the explanation of females' psychological, behavioral and relational adaptation, when involved in marital conflict



Note: EMWSS = Early Memories of Warmth and Safeness Scale; RDAS = Revised Dyadic Adjustment Scale; EMS_C = ENRICH Marital Satisfaction (Communication subscale); SBS = Submissive Behaviour Scale; OAS2 = Other as Shamer Scale - 2; CoSS-5 = Compass of Shame Scale; CTS2 = Revised Conflict Tactics.

Method

Participants

The sample of the study comprised 144 female participants ($N = 144$) from the community, which presented a mean age of 42.68 years ($SD = 11.51$) (see Table 1).

Measures

Participants filled out a questionnaire regarding sociodemographic, and medical data, and data related to experiences of violence (see Table 1).

Table 1

Sociodemographic, medical, developmental and relational characteristics of the sample

	Female (<i>N</i> = 144)	
	<i>M</i>	<i>DP</i>
Age	42.68	11.51
Relationship duration	18.32	11.59
	<i>N</i>	%
Marital Status		
Married	100	69.4
Cohabiting	44	30.6
Number of children		
0	36	25.0
1	42	29.2
2	57	39.6
3	8	5.6
5	1	0.7
Education		
Basic Education (1-9 years)	14	9.8
Secondary Education (High School)	30	21.0
Technical/Professional Education	6	4.2
Higher Education (University)	93	65.0
Professional situation		
Employed	122	86.5
Student	7	4.9
Unemployed	7	4.9
Retired	5	3.5
Financially dependent of partner	29	20.3
Residence		
Countryside	43	29.9
Urban	101	70.1
Nationality		
Portuguese	142	98.6
Other	2	1.4
Alcohol use		
Never	37	25.7
Once a month	44	30.6
2 to 4 times a month	37	25.7
2 to 3 times a week	13	9.0
4 or more times a week	13	9.0
Alcohol abuse		
Never	116	80.6
Once a month or more	28	19.5

	<i>N</i>	%
Drugs use		
Never	142	99.3
Once a month or more	1	0.7
Tobacco use	22	15.3
Experienced abuse in family context	23	16.0
Witnessed abuse in family context	52	36.1
Domestic Violence Lawsuits (Victim)	5	3.5
IPV Program		
Victim	1	0.7
Aggressor	1	0.7
Violent Partners		
0	129	90.8
1	12	8.5
2	1	0.7
Psychological or psychiatric treatment	17	12.0
Infected with SARS-CoV-2	13	9.2
Covid-19 Pandemic Relationship Impact		
Equal	116	82.9
Better	15	10.7
Worse	9	6.4

Participants also completed a set of self-report questionnaires, which are listed below. See Table 2 for descriptive statistics and internal consistency values of these measures in the present study.

The **Early Memories of Warmth and Safeness Scale** (EMWSS) (Richter et al., 2009; Portuguese version by Capinha et al., 2021a) measures the recall of feeling warm, safe, and cared for in childhood, and higher mean scores indicate higher reminiscence of feelings of warmth and safeness. The EMWSS is a self-report questionnaire comprising 21 items (e.g., “I felt loved”; “I felt secure and safe”), each rated on a five-point *Likert*-type scale (0 = *No, never* to 4 = *Yes, most of the time*), and assessing how frequently each statement applied to the participants’ childhood. Both in its original study and in the Portuguese version, the EMWSS presented a one-factor structure and excellent internal consistency, with a Cronbach’s alpha of .97 and .96, respectively (Capinha et al., 2021a).

The **Other as Shamer Scale – 2** (OAS2) (Portuguese scale by Matos et al., 2015b) is a shorter version of the OAS original version by Goss et al. (1994). It is an eight-item scale

used to explore a subject's expectations of being negatively judged by others (e.g., "I feel other people see me as not good enough"). Higher scores on this scale indicate high external shame. Each item is rated on a five-point *Likert*-type scale ranging from *Never* (0) to *Almost always* (4). The OAS2 revealed having a one-factor structure and excellent internal consistency with a Cronbach's alpha of .91 (Matos et al., 2015b).

The **Compass of Shame Scale** (CoSS-5) (Elison et al., 2006b; Portuguese version by Capinha et al., 2021b) was developed to assess the four maladaptive (withdrawal, attack-self, attack-others, and avoidance) and one adaptive coping styles described by Nathanson (1992). It is a 58-item self-report questionnaire (e.g., "I try not to be noticed" (Withdrawal); "I criticize myself" (Attack Self); "I blame other people." (Attack Other); "I pretend I don't care" (Avoidance); "When I feel lonely or left out, I talk to a friend." (Adaptive)), each rated on a five-point *Likert*-type scale, ranging from *Never* (0) to *Almost always* (4). It assesses how frequently respondents use one particular strategy. The first 48 items refer to the maladaptive coping strategies and are distributed across 12 shame prompting scenarios, while the last 10 items refer to the adaptive response to a shameful event. Both in its original version (Withdrawal, .89; Attack Other, .85; Attack Self, .91; Avoidance, .74) as in the Portuguese version (Withdrawal, .89; Attack Other, .82; Attack Self, .90; Avoidance, .79; Adaptive, .84) CoSS-5 subscales achieved at least acceptable internal consistency (Capinha et al., 2021b). Although both versions presented four and five-factor measurement models, in this study we will use the last one, which includes an adaptive coping style. Regarding the CoSS-5 internal consistency in the current study (see Table 2), the Adaptive subscale presented an unacceptable Cronbach's alpha of .27, however, a Mean Inter-Item Correlation (MIIC) of .27 was achieved.

The **Revised Conflict Tactics Scales** (CTS2) (Straus et al., 1996; Portuguese version by Paiva & Figueiredo, 2006) measures the extent to which specific tactics have been used in

couples' conflicts (prevalence and chronicity). The CTS2 has symmetry in measurement as items are asked in the form of pairs of questions, enabling the measurement of the behavior of both the respondent and the respondent's partner. The CTS2 is a self-report questionnaire, that comprises five scales (negotiation "I agreed to try a solution to a disagreement my partner suggested"; psychological aggression "I called my partner fat or ugly"; physical assault "I grabbed my partner"; sexual coercion "I made my partner have sex without a condom"; injury "I went to a doctor because of a fight with my partner") and 78 items (39 pairs) (e.g., "I beat up my partner/ My partner did this to me") rated on a eight-point *Likert*-type scale (1 = *once*; 2 = *twice*; 3 = *3-5 times*; 4 = *6-10 times*; 5 = *11-20 times*; 6 = *more than 20 times*; 7 = *not in referent period but happened before*; 8 = *never*). Although both versions presented a five-factor structure, the original version achieved internal consistency between acceptable and excellent (Cronbach's alpha ranging from .79 to .95), and the Portuguese version revealed internal consistency between poor and acceptable (Cronbach's alpha ranging from .50 to .78) (Paiva & Figueiredo, 2006). Regarding the internal consistency of CTS2 in the current study (see Table 2), the Maladaptive strategies perpetration presented an unacceptable Cronbach's alpha of .47, and a MIIC of .09.

The **Submissive Behaviour Scale** (SBS) (Allan & Gilbert, 1997; Portuguese version by Castilho, 2011) measures the submissive behavior frequency, and higher mean scores indicate higher submissive behaviors. The SBS is a self-report questionnaire that comprises 16 items (e.g., "I let others criticize me or put me down without defending myself"), rated on a five-point scale (ranging from 0 = *never* to 4 = *always*). Although both versions presented a one-factor structure, the original version revealed good internal consistency with a Cronbach's alpha of .82, for the student sample, and .85 for the clinical sample (Allan & Gilbert, 1997); while the Portuguese version presented internal consistency between good and

excellent with a Cronbach's alpha of .81, for the student sample, .84 for the community sample, and .90 for the clinical sample (Castilho, 2011).

The **Revised Dyadic Adjustment Scale (RDAS)** (Busby et al., 1995; Portuguese version by Pereira et al., 2017) measures the romantic relationship quality regarding consensus (e.g., "Agreement or disagreement between you and your partner: Religious matters"), satisfaction (e.g., "How often do you and your partner quarrel?"), and cohesion (e.g., "Do you and your mate engage in outside interests together?"), and higher mean scores indicate greater relationship satisfaction. The RDAS is a self-report questionnaire that comprises 14 items, rated on a five-point (e.g., "Do you and your mate engage in outside interests together?") or a six-point scale (e.g., "Do you ever regret that you married (or lived together)?"). Although both versions presented a three-factor structure, the original version achieved excellent internal consistency with a Cronbach's alpha of .90, and the Portuguese version revealed good internal consistency with a Cronbach's alpha of .89 (Pereira et al., 2017).

The **ENRICH Marital Satisfaction (EMS) Scales** (Fowers & Olson, 1993; Portuguese version by Lourenço, 2006) is a brief but valid and reliable measure of marital quality. In this study, we will only use the Communication subscale, which comprises 10 items (e.g., "My partner is always a good listener"), rated on a five-point *Likert*-type scale (ranging from 0 = *strongly disagree* to 4 = *strongly agree*). In the original version, the EMS Communication subscale presented good internal consistency with a Cronbach's alpha of .82 (Fowers & Olson, 1989), while the Portuguese version revealed acceptable internal consistency with a Cronbach's alpha of .78 (Lourenço, 2006). In the current study, the EMS presented an unacceptable Cronbach's alpha of .42, and a MIIC of .03 (see Table 2).

Table 2*Descriptive of measures (N = 144)*

	N of Items	Mean	Variance	Std. Deviation	Cronbach's Alpha	MIIC
EMWSS	21	67.965	271.439	16.475	.977	.674
OAS2	8	6.931	20.652	4.545	.875	.482
CoSS-5_WD	12	18.510	92.769	9.632	.893	.409
CoSS-5_AS	12	20.400	90.592	9.518	.897	.421
CoSS-5_AO	12	10.600	42.732	6.537	.832	.303
CoSS-5_AV	12	18.130	44.311	6.657	.749	.195
CoSS-5_ADP	10	27.350	97.699	9.884	.270	.272
CTS2_N_CP	6	60.014	1408.433	37.529	.777	.371
CTS2_CP	33 (17 ^a)	67.458	1735.313	41.657	.470	.088
SBS	16	20.184	48.559	6.968	.772	.183
RDAS_T	14	52.483	62.932	7.933	.840	.313
EMS_C	10	25.285	49.013	7.001	.423	.027

Note: EMWSS = Early Memories of Warmth and Safeness Scale; OAS2 = Other as Shamer Scale - 2; CoSS-5 = Compass of Shame Scale (CoSS-5_W - Withdrawal; CoSS-5_AS – Attack Self; CoSS-5_AO – Attack Other; CoSS-5_AV – Avoidance; CoSS-5_ADP – Adaptive); CTS2 = Revised Conflict Tactics Scales (CTS2_N_CP – Chronicity Negotiation Perpetration; CTS2_CP – Chronicity Maladaptive Strategies Perpetration); SBS = Submissive Behaviour Scale; RDAS = Revised Dyadic Adjustment Scale (RDAS_T – Total); EMS_C = ENRICH Marital Satisfaction (Communication subscale); MIIC = Mean Inter-Item Correlation.

^a The Cronbach alpha and the mean inter-item correlation of CTS2_CP were calculated without the following items: 19, 21, 23, 27, 31, 33, 43, 47, 53, 55, 57, 61, 63, 71, 73, 75. These items were excluded because they presented zero variance.

Procedure

The sample was collected by geographic convenience, within females from heterosexual couples (with at least 18 years old and married or living together for more than three months) from the Portuguese community, in the framework of the project “Intimate partner violence: A dyadic approach from an evolutionary perspective” (SFRH/BD/137335/2018), and in collaboration with another researcher that will focus on male participants from the recruited couples.

Exclusion criteria were: having an history of psychiatric illness, the presence of cognitive deficit, and the fact that none of the partners of the couple have Portuguese nationality (if only one does not have this nationality, the mastery of Portuguese language must be ensured). These criteria were intended to confirm that the questions within the present measures were understood and correctly interpreted, also psychiatric illness may bias

relational outcomes in the marital context. Approval was requested from the Research Ethics and Deontology Committee of the Faculty of Psychology and Educational Sciences of the University of Coimbra. All procedures followed the prescribed ethical and deontological recommendations for studies with humans (e.g., Declaration of Helsinki; Order of Portuguese Psychologists' Code of Ethics), contemplating the requirements for voluntary participation, anonymity and confidentiality, and informed consent form. Furthermore, this study counterbalanced the protocols' order in an attempt to control any fatigue effects in the response to the self-report questionnaires.

Data Analyses

Data were analyzed with the IBM SPSS Statistic 25 and Mplus v8.3 software. The IBM SPSS Statistic 25 software was used for initial statistical analysis: missing value analysis, descriptive analyses, and internal consistency based on Cronbach alpha and MIIC (see Measures section, Table 2, and Table 3). Mplus v7.0 was used for structural equation modeling (SEM), and for testing the mediation and moderation effects. This allowed us to test the model adjustment, as well as to explore relationships between all the assessed variables within the model.

Missing values were found for 77 participants. Specifically, 17 females had over 20% of missing responses in some items, and the remaining 60 participants had at least one missing value on the assessed self-report measures. These missing values were missing completely at random (MCAR) on the following measures: CoSS-5 ($\chi^2(1178) = 1175.870$, $p = .51$), SBS ($\chi^2(90) = 111.250$, $p = .06$), CTS2 ($\chi^2(1174) = 951.562$, $p = 1.00$), EMS ($\chi^2(35) = 26.680$, $p = .843$). In the EMWSS, OAS2, RDAS, the missing values presented a significant value on the Little's MCAR test ($p < .05$) (Little, 1988). However, a missing rate of 5% or less is considered inconsequential (Schafer, 1999), and the present ones were inferior than 3%. Considering both the randomness and the scarceness of missing values, we

Table 3*Correlation between variables (N = 144)*

	1	2	3	4	5	6	7	8	9	10	11	12
1. EMWSS	-											
2. OAS2	-.389***	-										
3. CoSS-5_WD	-.339***	.519***	-									
4. CoSS-5_AS	-.202*	.464***	.744***	-								
5. CoSS-5_AO	-.197*	.392***	.563***	.530***	-							
6. CoSS-5_AV	-.180*	.307***	.511***	.443***	.514***	-						
7. CoSS-5_ADP	.176*	-.244**	.012	.115	-.041	.198*	-					
8. CTS2_N_CP	.029	.223**	.086	.169*	.003	-.060	-.074	-				
9. CTS2_CP	-.076	.295***	.177*	.248**	.075	-.015	-.122	.954***	-			
10. SBS	-.275**	.506***	.469***	.431***	.380***	.338***	-.115	.109	.158	-		
11. RDAS_T	.332***	-.320***	-.321***	-.153	-.246**	-.067	.140	.029	-.080	-.288***	-	
12. EMS_C	-.095	.135	.100	.013	.136	.052	-.102	.004	.002	.327***	-.263**	-

Note: EMWSS = Early Memories of Warmth and Safeness Scale; OAS2 = Other as Shamer Scale - 2; CoSS-5 = Compass of Shame Scale (CoSS-5_W - Withdrawal; CoSS-5_AS – Attack Self; CoSS-5_AO – Attack Other; CoSS-5_AV – Avoidance; CoSS-5_ADP – Adaptive); CTS2 = Revised Conflict Tactics Scales (CTS2_N_CP – Chronicity Negotiation Perpetration; CTS2_CP – Chronicity Maladaptive Strategies Perpetration); SBS = Submissive Behaviour Scale; RDAS = Revised Dyadic Adjustment Scale (RDAS_T – Total); EMS_C = ENRICH Marital Satisfaction (Communication subscale). * $p < .05$. ** $p < .01$. *** $p < .001$.

opted for a listwise approach bearing consistency and stability of the results (e.g., using the same sample size as considered for all analyses, either using the MPlus or the SPSS). Thus, the participants who indicated over 20% of missing responses were excluded from the sample of the current work ($n = 17$; 9.04%ⁱ) (i.e., included neither in the description of participants nor in the data to be analyzed), because a higher percentage may interfere with imputation methods (Enders, 2003). Also, subjects who indicated at least one missing value, in the assessed self-report measures CoSS-5 and CTS2 ($n = 27$; 14.36%ⁱ), were removed due to the impact of the imputation method on these measures' internal consistency coefficients (Cokluk & Kayri, 2011). Considering the loss of subjects that would be deleted due to the remaining missing values in the other measures (SBS, EMS, EMWSS, OAS2, RDAS), they were dealt via linear interpolation imputation method (Meyers et al, 2006).

In addition, only the chronicity was assessed in CTS2, in both *Maladaptive Strategies* and *Negotiation Perpetration*. In this way, the value of the original scale was transformed into the midpoint of each category and then added for each scale (Straus et al., 1996).

Descriptive analyses (see Table 2) included Cronbach's alphas, which presented values ranging from unacceptable (i.e., CoSS-5_ADP; CTS2_CP; EMS_C) to excellent (George & Mallery, 2003). Due to the imperfection and ambiguity of this internal consistency indicator, the MIIC was also calculated (acceptable values should range between .15 and .50) (Clark & Watson, 1995). In this way, except for "Chronicity of Maladaptive Strategies Perpetration" and "ENRICH Marital Satisfaction" (Communication subscale), all variables showed acceptable internal consistency.

The data for most measures were found to deviate from univariate normal distribution (i.e., Kolmogorov-Smirnov test) and so the Maximum Likelihood Robust estimator was used

ⁱThis percentage was calculated considering the initial total sample ($N = 188$)

for the SEM (see Results section and Table 4) because it is viable when analyzing non-normal data with no missing values (Lai, 2018).

In the baseline model (see Figure 1), shame was entered as an independent variable, coping with marital conflict as a dependent variable, early memories of warmth and safeness as a moderator variable, and dyadic adjustment, communication, and submissive behavior as mediator variables. Also, the impact of early memories of warmth was entered as an independent variable directly associated with dyadic adjustment, communication, and submissive behavior. We adopted a model generation approach in which *a priori* model was tested on the data and was sequentially improved (i.e., only one modification was made at a time) based on theoretical considerations and statistical indicators.

To determine the structural model adjustment, we considered a standardized root mean square residual (SRMR) value ≤ 0.09 combined either with a comparative fit index (CFI) value $\geq .95$ or with a root mean square error of approximation (RMSEA) value ≤ 0.06 (Hu & Bentler, 1999).

Finally, according to Bentler & Chou (1987), SEM samples must have a minimum of five subjects for each free parameter (5:1 ratio). In this way, 310 women would be needed for this sample. However, as literature diverges on the required sample size, a minimum sample size of 100 may be considered acceptable to conduct a SEM (Ding et al., 1995).

Table 4*Fit Indicators for Structural Equation Models*

	χ^2	Df	RMSEA	90% CI for RMSEA	CFI	SRMR
Baseline model with moderator and mediator effects	363.371***	47	0.216	[0.196, 0.237]	0.460	0.330
Baseline model with mediator effects	90.610***	33	0.110	[0.083, 0.137]	0.910	0.114
Final model	16.325	13	0.042	[0.000, 0.098]	0.995	0.035

Note: RMSEA = root mean square error of approximation; CI = confidence interval; CFI = comparative fit index; SRMR = standardized root mean square residual. *** $p < .001$.

Results

The baseline model (see Figure 1) did not achieve an acceptable goodness of fit (see Table 4), or revealed moderator and mediator effects. Subsequent changes were sequentially made to the model: (a) exclusion of all nonsignificant pathways and (b) inclusion of pathways that could be both theoretically relevant and were suggested by the modification indices, one at a time. In line with the assumption of the impact of shame and of early memories of warmth and safeness in one's development and social adjustment (Gilbert, 2009a, 2010; Richter et al., 2009), direct and indirect associations with coping with shame and with marital conflict, dyadic adjustment and submissive behavior were sequentially integrated into the model. The data analyzes relied on SEM positing marital conflict coping strategies, submissive behavior, dyadic adjustment, and communication as dependent variables; and the early memories of warmth and safeness as an independent variable. Indirect effects between the independent and dependent variables were also considered through shame and coping with shame. This resulted in a specific model that achieved very good fit indicators (see

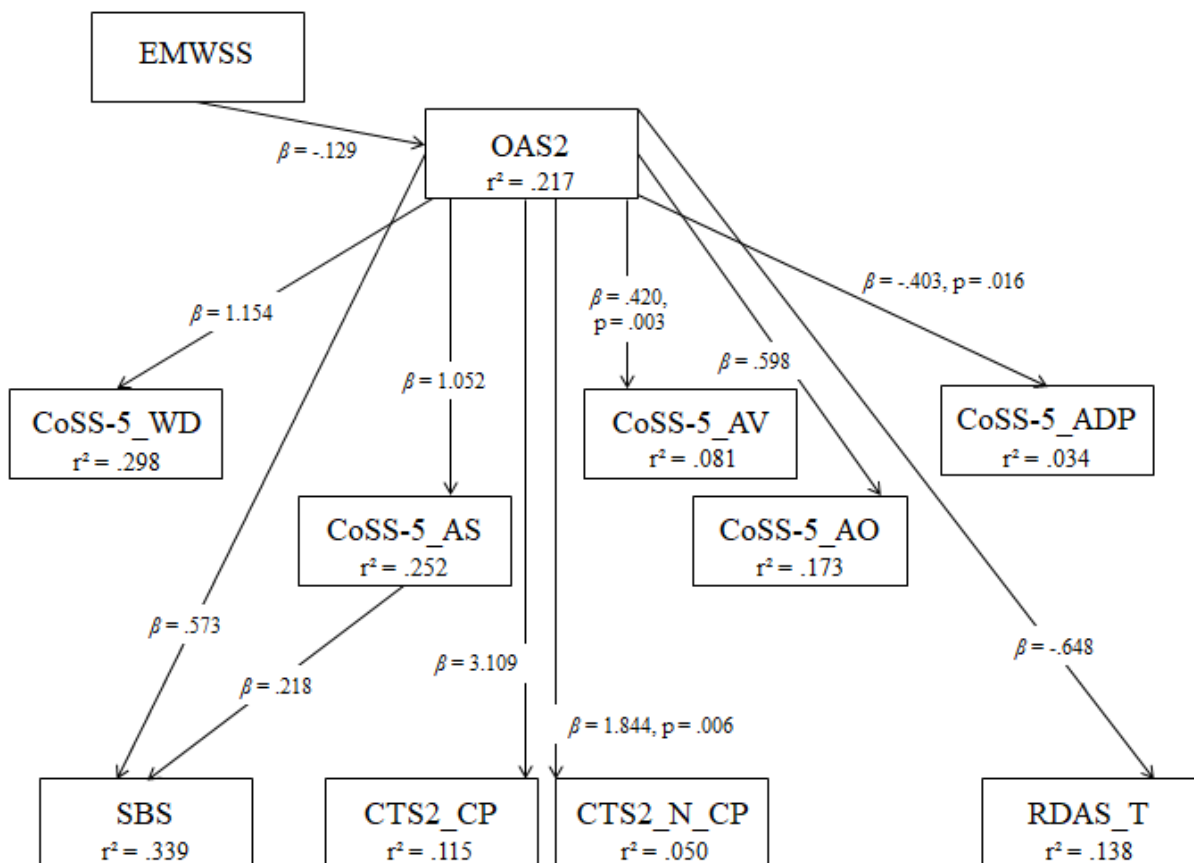
Table 4). The model and the variance of each dependent variable explained by this model are depicted in Figure 2.

Early memories of warmth and safeness were negatively and indirectly (through shame) associated with the perpetration of maladaptive and adaptive strategies of coping with marital conflict (see Table 5). Also, early memories of warmth and safeness were positively and indirectly (through shame) associated with dyadic adjustment (see Table 5). Furthermore, early memories of warmth and safeness were negatively and indirectly, through shame and the shame coping strategy *Attack Self*, associated with submissive behavior (see Table 5). The more one recalls such experiences of warmth and safeness, the more likely one is to present dyadic adjustment, the less likely one is to endorse maladaptive and adaptive strategies with marital conflict and to demonstrate submissive behaviors.

Shame was positively and directly associated with submissive behavior, and with the perpetration of maladaptive and adaptive strategies of coping with marital conflict (see Figure 2). Moreover, shame was negatively and directly associated with dyadic adjustment (see Figure 2). Reporting higher levels of shame was positively and directly associated with all maladaptive shame coping strategies and negatively and directly associated with the adaptive shame coping strategy. Furthermore, the maladaptive strategies, *Attack Other*, *Avoidance*, *Attack Self* and *Withdrawal*, were correlated with each other, while the adaptive coping style was not correlated with any of them (see Table 3). Also, *Attack Self* was positively and directly associated with submissive behavior; specifically, the more one tends to attack the self in the presence of a shame experience, the more likely one is to endorse submissive behavior. Moreover, it was found, by comparing the mean scores, that the most common coping style reported by women was the adaptive one. Regarding the maladaptive shame coping styles, *Attack self* seems to be the most prevalent, and *Attack Other* tends to be the one to which women resort less frequently (see Table 2).

Finally, the perpetration of maladaptive strategies with the marital conflict (*psychological aggression, physical assault, injury, sexual coercion*) was positively associated with the perpetration of the *negotiation* strategy (see Table 3). In this way, it seems that women resort to both maladaptive and adaptive strategies to cope with marital conflict, not opting for an exclusive type. However, through the mean score comparison, women seem to resort mostly to *negotiation* rather than to any of the maladaptive strategies (see Table 2).

Figure 2
Final model



Note: EMWSS = Early Memories of Warmth and Safeness Scale; OAS2 = Other as Shamer Scale – 2; CoSS-5 = Compass of Shame Scale (CoSS-5_W - Withdrawal; CoSS-5_AS – Attack Self; CoSS-5_AO – Attack Other; CoSS-5_AV – Avoidance; CoSS-5_ADP – Adaptive); CTS2 - Revised Conflict Tactics Scales (CTS2_CP – Chronicity Maladaptive Strategies Perpetration; CTS2_N_CP – Chronicity Negotiation Perpetration); RDAS (RDAS_T – Total); SBS - Submissive Behaviour Scale. All pathways were significant at p < .001, unless stated otherwise.

Table 5*Indirect Pathways*

Independent variable	In-between variable	In-between variable	Dependent variable	Indirect effect
EMWSS	-	-	CTS2_CP	-0.400**
EMWSS	OAS2	-	CTS2_CP	-0.400**
EMWSS	-	-	CTS2_N_CP	-0.237*
EMWSS	OAS2	-	CTS2_N_CP	-0.237*
EMWSS	-	-	RDAS_T	0.083*
EMWSS	OAS2	-	RDAS_T	0.083*
EMWSS	-	-	SBS	-0.103***
EMWSS	OAS2	-	SBS	-0.074***
EMWSS	OAS2	CoSS-5_AS	SBS	-0.030*

Note: EMWSS = Early Memories of Warmth and Safeness Scale; OAS2 = Other as Shamer Scale – 2; CTS2 = Revised Conflict Tactics Scales (CTS2_CP – Chronicity Maladaptive Strategies Perpetration; CTS2_N_CP – Chronicity Negotiation Perpetration); RDAS = Revised Dyadic Adjustment Scale (RDAS_T – Total); SBS = Submissive Behaviour Scale; CoSS-5 = Compass of Shame Scale (CoSS-5_AS – Attack Self). * $p < .05$. ** $p < .01$. *** $p < .001$.

Discussion

The relevance of the current study relied on starting to fill the gaps of existing research about marital conflict, by exploring variables that could impact the way women cope with it. This study tested a predictive model for women's strategies to cope with marital conflict, using the framework of evolutionary and dyadic variables. Specifically, we examined an initial model (see Figure 1) in which it were tested the associations between early memories of warmth and safeness and dyadic adjustment, communication, and submissive behavior, and the moderator effect of those memories on the association between shame experiences and coping with shame. Also, it was tested the dyadic adjustment, communication, and submissive behavior mediator effects in the association between coping with shame and coping with marital conflict. However, contrary to what was hypothesized, this model did not present acceptable fit indicators.

Resorting to theoretical and statistical assumptions, sequential changes were made to this initial model. The final model, which achieved very good fit indicators, included early memories of warmth and safeness as an independent variable, marital conflict coping

strategies, dyadic adjustment, communication, and submissive behavior as dependent variables, and tested the indirect effects between the independent and dependent variables through shame and shame coping strategies.

In this study, early memories of warmth and safeness were negatively and directly associated with shame. These findings are in agreement with previous research (Gilbert, 2010; Paulo et al., 2019), highlighting the hypothesis that females who recall positive memories of relationships from childhood tend to develop the perception of the self as able to attract positive attention and affect from others (Marta-Simões et al., 2018), which may lead to lower levels of shame. In fact, it seems that early memories of warmth and safeness are associated with the development of affiliative bonds with others (Gilbert et al., 2006), psychological well-being (Marta-Simões et al., 2018), and may have a buffer effect on shame (Matos et al., 2015a).

According to the literature, the recall of early warm and affiliative experiences seem to be associated with the development of self-regulation (Gilbert et al., 2006), and social safeness (Matos et al., 2015a; Silva et al., 2019), which may be linked with the activation of the soothing system (Gilbert, 2009a; Colonnello, 2017). This system promotes feelings of contentment and regulates the threat system (Gilbert, 2009a; Kolts & Gilbert, 2018), which can lead to decreased endorsement of typical defensive responses: fight, flight, freeze, or submission (Gilbert, 2009a, 2010, 2015; Kolts & Gilbert, 2018). This is in line with findings from the present study, which refer to early memories of warmth and safeness as positively and indirectly associated with dyadic adjustment, and as negatively and indirectly (through shame) associated with maladaptive marital conflict coping strategies (*psychological aggression, physical assault, injury, and sexual coercion*). However, following that assumption, and considering that *negotiation* seems to be the most reported strategy to cope with marital conflict in heterosexual couples from the community (Cuenca et al., 2015; Paiva

& Figueiredo, 2006), it was expected that memories of warmth and safeness were positively associated with this coping style. Surprisingly, these memories were presented as negatively and indirectly (through shame) associated with both types of tactics in the presence of marital conflict, the adaptive (*negotiation*) and the maladaptive ones. Nevertheless, in the present work, and according to a study with a sample of Portuguese heterosexual couples (Paiva & Figueiredo, 2006), the *negotiation* strategy was the one that women mostly reported to resort to. The mean frequency of this adaptive tactic was higher than the one computed with all of the mentioned maladaptive styles combined.

In this study, shame was also presented as positively and directly associated with both maladaptive and adaptive marital conflict coping strategies. The association of shame with maladaptive styles is in conformity with the assumptions that shame seems to be associated with maladaptive emotion regulation, and hostility (Velotti et al., 2017), and seems to predict violent outcomes in relationships (Velotti et al., 2014). Also, Portuguese studies with samples from the community, showed that women resort to violent strategies as much as their male partners (Costa et al., 2015; Machado et al., 2019). Regarding the unexpected associations with the *negotiation* coping style, it may be conceivable that women tend to use both maladaptive and adaptive strategies to cope with marital conflict, not opting for an exclusive type. This finding deserves further investigation in studies with larger samples and in comparison with women from clinical/forensic settings.

Furthermore, it is important to mention that only chronicity was assessed in this study. In this way, it was evaluated the mean frequency of the perpetrated violent acts and negotiation strategy in the past year. These values were reported because of the importance of interpreting the values of repeated behaviors rather than the data that the prevalence provides (i.e., the presence or absence of a behavior report) related to the past year or lifetime.

In agreement with the assumption that higher levels of shame experiences may lead to maladaptive shame coping strategies (Schalkwijk et al., 2016; Velotti et al., 2017), the current study also found that shame was positively and directly associated with all maladaptive shame coping strategies (*Withdrawal*, *Attack Self*, *Avoidance*, and *Attack Other*), and negatively and directly associated with the adaptive shame coping style. Besides, in accordance with a recent Portuguese study (Capinha et al., 2021b), women reported the adaptive strategy as the most used to cope with shame. This may be explained due to the nature of the recruited community sample. Regarding the maladaptive strategies, *Attack Self* seems to be the most frequently used, and *Attack Other* tends to be the less prevalent. This is also in line with previous studies, as *Attack Self* is suggested as one of the most displayed by women since females tend to report higher levels of internalizing shame coping strategies when compared to males (Nyström et al., 2018; Paulo et al., 2019). In addition, these results followed the assumption that one can select different shame coping strategies, not exclusively resorting to a specific style (Elison et al., 2006a).

According to a recent study, which found that shame and strategies to cope with it have an impact on dyadic adjustment (Martins et al., 2016), in the present work shame was presented as negatively and directly associated with dyadic adjustment. Following the assumption that shame is a self-focused and self-conscious emotion (Elison, 2019; Elison et al., 2006b), and considering that the threat system may be activated by shame experiences (Gilbert, 2009a; Matos et al., 2017), it can be hypothesized that individuals with higher levels of shame are focused on the possibility of exclusion (Elison, 2019; Elison et al., 2006b), and on the attempt to avoid it, which can lead to decreased levels of feelings of safeness and belonging in the affiliative context, not allowing the development of dyadic adjustment.

Finally, the current study found early memories of warmth and safeness to be negatively and indirectly (through shame and the shame coping style *Attack Self*) associated

with submissive behavior. From an evolutionary perspective, submissive behavior appears to function as a form of social defense from those with higher social ranks (Gilbert, 2009a). In this way, this association was expected, since positive early experiences seem to promote emotional, psychological, physical, and social adjustment (Richter et al., 2009), and early memories of acceptance seem to underlie the development of the affiliative-soothing system (Gilbert, 2009a). In addition, shame was found as positively and directly associated with this behavior. This finding is in conformity with the study developed by Martins and colleagues (2016), which demonstrated that submissive behavior could be motivated by shame experiences. From an evolutionary framework, this behavior can be seen as having an adaptive and safety function, for children who have suffered shame, humiliation, and violent experiences (Gilbert, 2017a). Namely, in this type of hostile environment, submissive behavior could decrease the frequency of harsh experiences, disengaging from possible conflicts, and also preventing consequent negative emotions.

Regarding the strategies to cope with shame, only one style was found as presenting a direct association. Specifically, the *Attack Self* was presented as positively and directly associated with submissive behavior. This internalizing coping strategy is related to the acceptance, and magnification of the shame message and to the self-directed criticism, and disgust (Elison et al., 2006a, 2006b; Harper, 2011; Nathanson, 1992). These findings may lead to the assumption that the *Attack Self* is the most internalized and submissive strategy to cope with shame. Therefore, in the presence of a shame experience, women who usually resort to this coping style would also tend to be the most submissive. In addition, these findings can conduct to the hypothesis that women who present higher levels of shame, and consequently tend to resort to the internalizing strategy to cope with shame *Attack Self*, may develop a submission-proneness, which may be observed through flight or avoidance behavior (Allan & Gilbert, 1997).

In the present study, no direct associations were found between early memories and strategies to cope with shame and marital conflict, dyadic adjustment, and submissive behavior. The absence of these direct associations may be explained by the impact of shame (as also reported in this work) in the social self (Matos et al., 2017).

The limitations in the current study should be carefully considered when interpreting the results. First, this study used a convenience sample, which did not achieve the required minimum number of subjects to test SEM (according to the 5:1 ratio, see Data Analyses section), and relied uniquely on self-report measures. This may raise some reliability and validity issues. Namely, the subscales related to the Maladaptive Strategies Perpetration, in the CTS2, and the communication subscale, in the EMS Scale, did not achieve acceptable internal consistency in either Cronbach's alpha or MIIC. In what concerns the CTS2, those analyses were calculated only with 17 of the 33 items, due to the zero variance of the excluded items, which could have led to the reported values. The presented variance in the items related to violent behavior may also be explained by the homogeneity of the sample, which was composed only by subjects from the community. In this way, it is important to reaffirm that the variance explained by this model is limited. Also, due to the exclusion of EMS nonsignificant pathways, the effects of the communication were not included in this study. These limitations may have influenced the non-fit of the initially proposed predictive model. Therefore, and because the type of sample may also be biasing the fit of the model, future research should try to include representative and forensic samples, and a longitudinal design. Also, other assessment methods should be integrated, specifically to measure communication styles, and adaptive processes, such as psychological flexibility.

Despite these limitations, findings indicate that early experiences of warmth and safeness may have a buffering effect on shame levels. Also, shame levels seem an important predictor of one's submissive behavior, dyadic adjustment, and coping strategies with shame

and marital conflict. Moreover, findings pointed out that *Attack Self* possibly plays a central role in submissive behavior in women. These data may help to give ground to some theories arguing that women, despite tending to use negotiation tactics to cope with marital conflict, also resort to maladaptive coping styles. Furthermore, current research findings may have important research and clinical implications, namely, for the study of the marital conflict, and the early experiences impact in women's coping with marital conflict. Moreover, positive parenting training should be considered into preventive program designs, in order to buffer risk pathways for women themselves and their relationships. Finally, the present study may offer important inputs for the design of preventive and intervention programs for IPV, which probably should address shame and shame regulation.

References

- Allan, S., & Gilbert, P. (1997). Submissive behaviour and psychopathology. *British Journal of Clinical Psychology*, *36*(4), 467-488. <https://doi.org/10.1111/j.2044-8260.1997.tb01255.x>
- Bentler, P. M., & Chou, C.-P. (1987). Practical issues in structural equation modeling. *Sociological Methods & Research*, *16*(1), 78-117. <https://doi.org/10.1177/0049124187016001004>
- Black, R. S. A., Curran, D., & Dyer, K. F. W. (2013). The impact of shame on the therapeutic alliance and intimate relationships. *Journal of Clinical Psychology*, *69*(6), 646-654. <https://doi.org/10.1002/jclp.21959>
- Bodenmann, G., Meuwly, N., Bradbury, T. N., Gmelch, S., & Ledermann, T. (2010). Stress, anger, and verbal aggression in intimate relationships: Moderating effects of individual and dyadic coping. *Journal of Social and Personal Relationships*, *27*(3), 408-424. <https://doi.org/10.1177/0265407510361616>
- Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, *52*(4), 664-678. <https://doi.org/10.1111/j.1939-0025.1982.tb01456.x>
- Brody, L. R., & Hall, J. A. (2008). Gender and emotion in context. In M. Lewis, J. M. Haviland-Jones & L. F. Barrett (Eds.), *Handbook of emotions* (3th ed., pp. 395-408). The Guilford Press.
- Brody, L. R., Hall, J. A., & Strokes, L. R. (2016). Gender and emotion theory, findings, and context. In L. F. Barrett, M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (4th ed., pp. 369-392). The Guilford Press.
- Burleson, B. R., & Denton, W. H. (1997). The relationship between communication skill and marital satisfaction: Some moderating effects. *Journal of Marriage and Family*, *59*(4), 884-902. <https://doi.org/10.2307/353790>

- Busby, D., Christensen, C., Crane, D., & 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>
- Cameron, A. Y., Erisman, S., & Reed, K. P. (2020). The relationship among shame, nonsuicidal self-injury, and suicidal behaviors in borderline personality disorder. *Psychological Reports*, 123(3), 648-659. <https://doi.org/10.1177/0033294118818091>
- Capinha, M., Matos, M., Pereira, M., Matos, M., & Rijo, D. (2021a). The Early Memories of Warmth and Safeness Scale: Dimensionality and measurement invariance. *Journal of Affective Disorders*, 280 (Part A), 228-235. <https://doi.org/10.1016/j.jad.2020.11.033>
- Capinha, M., Rijo, D., Matos, M., & Pereira, M. (2021b). The Compass of Shame Scale: Dimensionality and gender measurement invariance in a Portuguese sample. *Journal of Personality Assessment*. <https://doi.org/10.1080/00223891.2020.1866587>
- Castilho, P. (2011). *Modelos de relação interna: Autocriticismo e autocompaixão. Uma abordagem evolucionária compreensiva da sua natureza, função e relação com a psicopatologia* [Doctoral dissertation, University of Coimbra]. Estudo Geral. <http://hdl.handle.net/10316/20463>
- Clark, L., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, 7(3), 309–319. <https://doi.org/10.1037/1040-3590.7.3.309>
- Cokluk, O., & Kayri, M. (2011). The effects of methods of imputation for missing values on the validity and reliability of scales. *Educational Sciences: Theory & Practise*, 11(1), 303-309.

- Colonnello, V., Petrocchi, N., & Heinrichs, M. (2017). The psychobiological foundation of prosocial relationships: The role of oxytocin in daily social exchanges. In P. Gilbert (Ed.), *Compassion: Concepts, research and applications* (pp. 105-119). Routledge.
- Costa, D., Soares, J., Lindert, J., Hatzidimitriadou, E., Sundin, O., Toth, O., Ioannidi-Kapolo, E., & Barros, H. (2015). Intimate partner violence: a study in men and women from six European countries. *International Journal Public Health, 60*, 467–478. <https://doi.org/10.1007/s00038-015-0663-1>
- Cuenca, M. L., Granã, J. L., & Redondo, N. (2015). Differences in prevalence of partner aggression as the Revised Conflict Tactics Scale: Individual and dyadic report. *Psicología Conductual, 23*(1), 127-140.
- Ding, L., Velicer, W., & Harlow, L. (1995). Effects of estimation methods, number of indicators per factor, and improper solutions on structural equation modeling fit indices. *Structural Equation Modeling: A Multidisciplinary Journal, 2*(2), 119-143. <https://doi.org/10.1080/10705519509540000>.
- Elison, J. (2019). Interpreting instances of shame from an evolutionary perspective: The pain analogy. In C.-H. Mayer & E. Vanderheide (Eds.), *The bright side of shame: Transforming and growing through practical applications in cultural contexts* (pp. 395–412). Springer.
- Elison, J., Garofalo, C., & Velotti, P. (2014). Shame and aggression: Theoretical considerations. *Aggression and violent behavior, 19*(4), 447-453. <https://doi.org/10.1016/j.avb.2014.05.002>.
- Elison, J., Lennon, R., & Pulos, S. (2006a). Investigating the compass of shame: The development of the Compass of Shame Scale. *Social Behavior and Personality: An International Journal, 34*(3), 221–238. <https://doi.org/10.2224/sbp.2006.34.3.221>

- Elison, J., Pulos, S., & Lennon, R. (2006b). Shame-focused coping: An empirical study of the compass of shame. *Social Behavior and Personality: An International Journal*, 34(2), 161–168. <https://doi.org/10.2224/sbp.2006.34.2.161>
- Else-Quest, N. M., Higgins, A., Allison, C., & Morton, L. C. (2012). Gender differences in self-conscious emotional experience: A meta-analysis. *Psychological Bulletin*, 138(5), 947–981. <https://doi.org/10.1037/a0027930>
- Enders, C. K. (2003). Using the expectation maximization algorithm to estimate coefficient alpha for scales with item-level missing data. *Psychological Methods*, 8(3), 322–337. <https://doi.org/10.1037/1082-989X.8.3.322>
- Fiebert, M. S. (2014). References examining assaults by women on their spouses or male partners: An updated annotated bibliography. *Sexuality & Culture*, 18, 405–467. <https://doi.org/10.1007/s12119-013-9194-1>
- Falconier, M. K., Jack, J. B., Hilpert, P., & Bodenmann, G. (2015). Dyadic coping and relationship satisfaction: A meta-analysis. *Clinical Psychology Review*, 42, 28–46. <http://doi.org/10.1016/j.cpr.2015.07.002>
- Falconier, M. K., & Kuhn, R. (2019). Dyadic coping in couples: A conceptual integration and a review of the empirical literature. *Frontiers in Psychology*, 10, 571. <https://doi.org/10.3389/fpsyg.2019.00571>
- Ferguson, T., & Eyre, H. (2000). Engendering gender differences in shame and guilt: Stereotypes, socialization, and situational pressures. In A. H. Fischer (Ed.), *Gender and emotion: Social psychological perspectives* (pp. 254–276). Cambridge University Press. doi:10.1017/CBO9780511628191.013
- Fincham, F. D. (2003). Marital conflict: Correlates, structure, and context. *Current Directions in Psychological Science*, 12(1), 23–27. <https://doi.org/10.1111/1467-8721.01215>

- Fowers, B. J., & Olson, D. H. (1989). ENRICH marital inventory: A discriminant validity and cross-validation assessment. *Journal of Marital and Family Therapy*, 15(1), 65–79. <https://doi.org/10.1111/j.1752-0606.1989.tb00777.x>
- Fowers, B. J., & Olson, D. H. (1993). ENRICH Marital Satisfaction Scale: A brief research and clinical tool. *Journal of Family Psychology*, 7(2), 176–185. <https://doi.org/10.1037/0893-3200.7.2.176>
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Allyn & Bacon.
- Gilbert, P. (2009a). *The compassionate mind: A new approach to life's challenges*. Constable-Robinson.
- Gilbert, P. (2009b). Introducing compassion-focused therapy. *Advances in psychiatric treatment*, 15, 199-208.
- Gilbert, P. (2010). *Compassion focused therapy: Distinctive features*. Routledge.
- Gilbert, P. (2015). An evolutionary approach to emotion in mental health with a focus on affiliative emotions. *Emotion Review*, 7 (3), 230-237. <https://doi.org/10.1177/1754073915576552>
- Gilbert, P. (2017a). Compassion as a social mentality: An evolutionary approach. In P. Gilbert (Ed.), *Compassion: Concepts, research and applications* (pp. 31-68). Routledge.
- Gilbert, P. (2017b). Compassion: Definitions and controversies. In P. Gilbert (Ed.), *Compassion: Concepts, research and applications* (pp. 3-15). Routledge.
- Gilbert, P., Baldwin, M. W., Irons, C., Baccus, J. R., & Palmer, M. (2006). Self-criticism and self-warmth: An imagery study exploring their relation to depression. *Journal of Cognitive Psychotherapy: An International Quarterly*, 20(2), 183-200. <https://doi.org/10.1891/jcop.20.2.183>

- Gordon, K. C., Baucom, D. H., Epstein, N., Burnett, C. K., & Rankin, L. A. (1999). The interaction between marital standards and communication patterns: How does it contribute to marital adjustment? *Journal of Marital and Family Therapy*, 25(2), 211-223.
- Hernandez, J. A. E., & Hutz, C. S. (2008). Gravidez do primeiro filho: Papéis sexuais, ajustamento conjugal e emocional. *Psicologia: Teoria e Pesquisa*, 24(2), 133-141.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
- Kolts, R., & Gilbert, P. (2018). Understanding and using compassion-focused therapy in forensic settings. In A. R. Beech, A. J. Carter, R. E. Mann & P. Rotshtein (Ed.), *The wiley blackwell handbook of forensic neuroscience* (pp. 725-754). Routledge.
- Lai, K. (2018). Estimating standardized SEM parameters given nonnormal data and incorrect model: Methods and comparison. *Structural Equation Modeling: A Multidisciplinary Journal*, 25(4), 600-620. <https://doi.org/10.1080/10705511.2017.1392248>
- Ledermann, T., Bodenmann, G., Rudaz, M., & Bradbury, T. N. (2010). Stress, communication, and marital quality in couples. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, 59(2), 195–206. <https://doi.org/10.1111/j.1741-3729.2010.00595.x>
- Little, R. J. A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, 83(404), 1198–1202.
- Lourenço, M. C. (2006). *Casal: Conjugalidade e ciclo evolutivo* [Unpublished doctoral dissertation]. University of Coimbra.

- Machado, A., Santos, A., Graham-Kevan, N., & Matos, M. (2019). The prevalence of bi-directional intimate partner violence reported by Portuguese men. *International Journal of Law, Crime and Justice*, 57, 83-90. <https://doi.org/10.1016/j.ijlcj.2019.03.002>.
- Marta-Simões, J., Ferreira, C., & Mendes, A. L. (2018). Self-compassion: An adaptive link between early memories and women's quality of life. *Journal of Health Psychology*, 23(7), 929–938. <https://doi.org/10.1177/1359105316656771>
- Martins, T. C., Canavarro, M. C., & Moreira, H. (2016). Adult attachment and dyadic adjustment: The mediating role of shame. *The Journal of Psychology*, 150(5), 560-575. <https://doi.org/10.1080/00223980.2015.1114461>
- Matos, M., Duarte, J., & Pinto-Gouveia, J. (2017). The origins of fears of compassion: Shame and lack of safeness memories, fears of compassion and psychopathology. *The Journal of Psychology Interdisciplinary and Applied*, 151(8),804-819. <https://doi.org/10.1080/00223980.2017.1393380>
- Matos, M., Pinto-Gouveia, J., & Duarte, C. (2015a). Constructing a self protected against shame: The importance of warmth and safeness memories and feelings on the association between shame memories and depression. *International Journal of Psychology and Psychological Therapy*, 15(3), 317–335.
- Matos, M., Pinto-Gouveia, J., Gilbert, P. Duarte, C., & Figueiredo, C. (2015b). The Other as Shamer Scale – 2: Development and validation of a short version of a measure of external shame. *Personality and Individual Differences*, 74, 6-11. <https://doi.org/10.1016/j.paid.2014.09.037>
- Meuwly, N., Bodenmann, G., Germann, J., Bradbury, T. N., Ditzen, B., & Heinrichs, M. (2012). Dyadic coping, insecure attachment, and cortisol stress recovery following

- experimentally induced stress. *Journal of Family Psychology*, 26(6), 937–947.
<https://doi.org/10.1037/a0030356>
- Meyers, L., Gamst, G., & Guarino, A. J. (2006). *Applied multivariate research: Design and interpretation*. Sage.
- Miceli, M., & Castelfranchi, C. (2018). Reconsidering the differences between shame and guilt. *Europe's Journal of Psychology*, 14(3), 710–733.
<https://doi.org/10.5964/ejop.v14i3.1564>
- Mikulincer, M., & Shaver, P. R. (2020). Applications of attachment theory and research: The blossoming of relationship science. In J. P. Forgas, W. D. Crano & K. Fiedler (Ed.), *Applications of social psychology: How social psychology can contribute to the solution of real-world problems* (pp. 187-206). Routledge
- Nathanson, D. L. (1992). *Shame and pride: Affect, sex and the birth of the self*. Norton.
- Nyström, M., Kjellberg, E., Heimdahl, U., & Jonsson, B. (2018). Shame and interpersonal sensitivity: Gender differences and the association between internalized shame coping strategies and interpersonal sensitivity. *Bulletin of the Menninger Clinic*, 82(2), 137–155. <https://doi.org/10.1521/bumc.2018.82.2.137>
- Nyström, M. B. T., & Mikkelsen, F. (2013). Psychopathy-related personality traits and shame management strategies in adolescents. *Journal of Interpersonal Violence*, 28(3), 519-537. <https://doi.org/10.1177/0886260512455512>
- Oliveira, V. R., Ferreira, C., Mendes, A. L., & Marta-Simões, J. (2017). Shame and eating psychopathology in Portuguese women: Exploring the roles of self-judgment and fears of receiving compassion. *Appetite*, 110, 80-85.
<https://doi.org/10.1016/j.appet.2016.12.012>.
- Pagani, A. F., Donato, S., Parise, M., Iafrate, R., Bertoni, A., & Schoebi, D. (2015). When good things happen: Explicit capitalization attempts of positive events promote

- intimate partners' daily well-being. *Family Science*, 6(1), 119-128.
<https://doi.org/10.1080/19424620.2015.1082013>
- Paiva, C. A., & Figueiredo, B. (2006). Versão portuguesa das “Escala de táticas de conflito revisadas”: Estudo de validação. *Psicologia: Teoria e Prática*, 8(2), 14-39.
- Paulo, M., Vagos, P., Ribeiro da Silva, D., & Rijo, D. (2019). The role of shame and shame coping strategies on internalizing/externalizing symptoms: Differences across gender in adolescents. *European Journal of Developmental Psychology*, 17(4), 578-597.
<https://doi.org/10.1080/17405629.2019.1682991>
- Pereira, M., Moura-Ramos, M., Narciso, I., & Canavarro, M. C. (2017, July 5-8). *Psychometric properties of the Revised Dyadic Adjustment Scale (DAS) in a sample of couples: Testing the factorial invariance across gender* [Paper presentation]. 14th European Conference on Psychological Assessment, Lisbon, Portugal.
- Reis, H. T., & Sprecher, S. (2009). *Encyclopedia of human relationships*. Sage Publications.
- Richter, A., Gilbert, P., & McEwan, K. (2009). Development of an Early Memories of Warmth and Safeness Scale and its relationship to psychopathology. *Psychology and Psychotherapy: Theory, Research and Practice*, 82(2), 171-184.
<https://doi.org/10.1348/147608308X395213>
- Ruffieux, M., Nussbeck, F. W., & Bodenmann, G. (2014). Long-term prediction of relationship satisfaction and stability by stress, coping, communication, and well-being. *Journal of Divorce & Remarriage*, 55(6), 485-501.
<https://doi.org/10.1080/10502556.2014.931767>

- Scorsolini-Comin, F., & Santos, M. A. (2012). Dyadic adjustment and marital relationship: evaluation of well-being in marriage. *Journal of Human Growth and Development*, 22(3), 367-372.
- Silva, C., Ferreira, C., Mendes, A. L., & Marta-Simões, J. (2019). The relation of early positive emotional memories to women's social safeness: The role of shame and fear of receiving compassion. *Women & Health*, 59(4), 420–432. <https://doi.org/10.1080/03630242.2018.1487906>
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and Family*, 38(1), 15-28. <https://doi.org/10.2307/350547>
- Steindl, S. R., Matos, M., & Creed, A. K. (2018). Early shame and safeness memories, and later depressive symptoms and safe affect: The mediating role of self-compassion. *Current Psychology*. <https://doi.org/10.1007/s12144-018-9990-8>
- Stets, J. (1990). Verbal and physical aggression in marriage. *Journal of Marriage and Family*, 52(2), 501-514. <https://doi.org/10.2307/353043>
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, 17(3), 283-316. <https://doi.org/10.1177/019251396017003001>
- Schalkwijk, F., Stams, G. J., Dekker, J., Peen, J., & Elison, J. (2016). Measuring shame regulation: Validation of the Compass of Shame Scale. *Social Behavior and Personality: Na International Journal*, 44(11), 1775–1792. <https://doi.org/10.2224/sbp.2016.44.11.1775>

- Schalkwijk, F., Van Someren, E. J. W., & Wassing, R. (2019). A clinical interpretation of shame regulation in maladaptive perfectionism. *Personality and Individual Differences, 138*, 19–23. <https://doi.org/10.1016/j.paid.2018.09.001>
- Tangney, J.P., Stuewig, J., & Mashek, D.J. (2007). Moral emotions and moral behavior. *Annual Review of Psychology, 58*, 345–372. <https://doi.org/10.1146/annurev.psych.56.091103.070145>
- Tilden, T., Gude, T., Hoffarte, A., & Sexton, H. (2010). Individual distress and dyadic adjustment over a three-year follow-up period in couple therapy: A bi-directional relationship?. *Journal of Family Therapy, 32*(2), 119-141. <https://doi.org/10.1111/j.1467-6427.2010.00490.x>
- Vagos, P., Ribeiro da Silva, D., Brazão, N., Rijo, D., & Gilbert, P. (2016). Dimensionality and measurement invariance of The Other as Shamer Scale across diverse adolescent samples. *Personality and Individual Differences, 98*, 289–296. <https://doi.org/10.1016/j.paid.2016.04.046>
- Velotti, P., Elison, J., & Garofalo, C. (2014). Shame and aggression: Different trajectories and implications. *Aggression and Violent Behavior, 19*(4), 454-461. <https://doi.org/10.1016/j.avb.2014.04.011>
- Velotti, P., Garofalo, C., Bottazzi, F., & Caretti, V. (2017). Faces of shame: Implications for self-Esteem, emotion regulation, aggression, and well-being. *The Journal of Psychology, 151*(2), 171-184. <https://doi.org/10.1080/00223980.2016.1248809>
- Vissing, Y. M., Straus, M. A., Gelles, R. J., & Harrop, J. W. (1991). Verbal aggression by parents and psychosocial problems of children. *Child Abuse & Neglect, 15*(3), 223–238. [https://doi.org/10.1016/0145-2134\(91\)90067-N](https://doi.org/10.1016/0145-2134(91)90067-N)
- Woodward, K., McIlwain, D., & Mond, J. (2019). Feelings about the self and body in eating disturbances: The role of internalized shame, self-esteem, externalized self-

perceptions, and body shame. *Self and Identity*, 18(2), 159-182.

<https://doi.org/10.1080/15298868.2017.1403373>

World Health Organization. (2012). Understanding and addressing violence against women:

Intimate partner violence.

http://apps.who.int/iris/bitstream/10665/77432/1/WHO_RHR_12.36_eng.pdf

Yelsma, P., Brown, N. M., & Elison, J. (2002). Shame-focused coping styles and their

associations with self-esteem. *Psychological Reports*, 90, 1179-1189.

<https://doi.org/10.1177/003329410209000320.2>