

Maria Francisca Machado Castro Alves

# THE INFLUENCE OF EVOLUTIONARY AND DYADIC VARIABLES ON COPING WITH INTIMATE PARTNER CONFLICT IN A MALE SAMPLE

Dissertação de Mestrado no âmbito do Mestrado Integrado em Psicologia, área de especialização em Psicologia Clínica e da Saúde, subárea de Intervenções Cognitivo-Comportamentais nas Perturbações Psicológicas e Saúde, orientada pelo Professor Doutor Daniel Maria Bugalho Rijo e pela Doutora Diana Ribeiro da Silva, e apresentada à Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra

julho de 2021



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#### **Abstract**

Conflict is intrinsic to any intimate relationship. Evolutionary variables (i.e., early memories of warmth and safeness, shame and shame coping strategies) are expected to impact emotional (dys)regulation and, consequentially, influence the resort to different coping strategies when dealing with intimate partner conflict. Alongside with these, dyadic variables and inherent processes of the dyad (i.e., dyadic adjustment, communication) provide fundamental information regarding coping strategies in intimate relationships. There seems to be a gap in the literature regarding the promotion/prevention of healthy intimate relationships focusing on dyadic variables, and traditional genderfocused models have been narrowing the assessment of intimate partner conflict and conflict coping strategies. This study aims to test an evolutionary-based predictive model encompassing the impact of the aforementioned evolutionary and dyadic variables in the explanation of males' psychological, behavioral and relational adaptation, within a dyadic perspective, being one of the first studies to do so. Participants were 152 men in a marital relationship recruited from a pool of community couples. The following self-report measures were completed: Early Memories of Warmth and Safeness Scale; Other as Shamer Scale – 2; Compass of Shame Scale; Submissive Behavior Scale; Revised Conflict Tactics Scale; ENRICH Marital Satisfaction Scale – Communication Subscale; Revised Dyadic Adjustment Scale. **Results**: early memories of warmth and safeness were negatively and directly linked to shame and negatively and indirectly (through shame) linked to submissive behavior. Shame was positively and directly associated with submissive behavior. All maladaptive shame coping strategies were positively and directly associated with shame. Lastly, withdrawal was the only coping strategy found to be positively and directly linked to submissive behavior. Conclusions: early memories of warmth and safeness, considered to be physiological and psychological regulators, have a buffering effect on the harshness of shameful experiences and are inversely associated with emotional defensive responses. The absence of early memories of warmth and safeness is associated with emotional defensive responses, such as defensive feelings (e.g., shame) and behaviors (e.g., submission, withdrawing from the situation). In addition, the presence/absence of early memories of warmth and safeness was found to be a weak predictor, in men, regarding intimate partner conflict coping strategies.

Keywords: early memories of warmth and safeness, shame, intimate partner conflict, coping with shame, coping with intimate partner conflict, emotion regulation.

#### Resumo

O conflito é intrínseco às relações íntimas. Variáveis evolucionárias (e.g., memórias precoces de calor e afeto, vergonha e coping com a vergonha) podem impactar a (des)regulação emocional e, consequentemente, influenciar estratégias de coping cq1om o conflito conjugal. Paralelamente, variáveis diádicas (e.g., ajustamento diádico, comunicação) fornecem informações fundamentais sobre as estratégias de coping nas relações íntimas. Parece existir uma lacuna na literatura no que concerne ao papel das variáveis diádicas na promoção/prevenção de relações íntimas saudáveis, e os modelos tradicionais focados em diferenças de género têm limitado o estudo dos conflitos e estratégias de coping nas relações íntimas. Este estudo tem como objetivo testar um modelo preditivo de base evolucionária abrangendo o impacto das variáveis evolucionárias e diádicas supramencionadas, clarificando a adaptação psicológica, comportamental e relacional dos homens, à luz de uma perspetiva diádica, constituindose como um estudo pioneiro. Os participantes consistiram em 152 homens num relacionamento conjugal, recrutados de um grupo de casais da comunidade. As seguintes medidas de autorrelato foram incluídas: Early Memories of Warmth and Safeness Scale; Other as Shamer Scale – 2; Compass of Shame Scale; Submissive Behavior Scale; Revised Conflict Tactics Scale; ENRICH Marital Satisfaction Scale – Communication Subscale; Revised Dyadic Adjustment Scale. **Resultados**: as memórias precoces de calor e afeto foram negativa e diretamente relacionadas à vergonha e negativa e indiretamente (por meio da vergonha) relacionadas à submissão. A vergonha foi positiva e diretamente associada à submissão. Todas as estratégias desadaptativas de coping com a vergonha foram positiva e diretamente associadas à vergonha. Por último, withdrawal foi a única estratégia de coping positiva e diretamente associada ao comportamento submisso. Conclusões: ao regularem fisiológica e psicologicamente, as memórias precoces de calor e afeto têm um efeito amortecedor nas consequências nefastas das experiências de vergonha e estão inversamente associadas a respostas defensivas, como emoções (e.g., vergonha) e comportamentos (e.g., submissão, withdrawal). Além disso, nos homens, a presença/ausência de memórias precoces de calor e afeto foi considerada um preditor fraco quanto às estratégias de *coping* com o conflito conjugal.

Palavras-chave: memórias precoces de calor e afeto, vergonha, conflito conjugal, coping com a vergonha, coping com o conflito conjugal, regulação emocional.

#### Introduction

The study of the mechanisms that underline intimate partner conflict and coping strategies to deal with this kind of conflict has been limited by the influence of the traditional gender-focused models. Different authors have been arguing the need to promote the resort to new evidence-based interventions (Babcock et al., 2007; Capaldi & Kim, 2007; Dutton & Nicolls, 2005), following conceptual models that take into consideration interpersonal variables and the inherent processes of the dyad (e.g., dyadic adjustment, communication). There is a lack of intervention strategies aimed at the promotion/prevention of healthy intimate relationships focusing on dyadic variables. In order to bridge this scientific gap, it seems that evolutionary models can contribute to a better understanding of intimate partner conflict, from a dyadic point of view (Gilbert, 2009, 2010; Gilbert & Miles, 2000). Evolutionary variables (e.g., early memories of warmth and safeness, shame and shame coping strategies) seem to be impactful on vulnerabilities to emotional (dys)regulation and, therefore, on behavioral outputs of the dyad (Gilbert, 2010; Matos et al., 2015). However, there is a lack of literature focused on the study of intimate partner conflict from an evolutionary-based perspective, which is crucial not only to enhance the scientific knowledge about the intrapersonal and dyadic processes but also to support the development of empirical-based intervention programs capable of providing evidence-based interventions to prevent/promote healthy relationships.

Humans' evolution as socially interacting mammals predisposed social relationships, including intimate relationships, to have a significant role in psychophysiological regulation (Gilbert, 2015). A selection of evolved human motivational and emotional systems led to survival, avoidance of harm, and seeking or approaching resources (Gilbert, 2020). Social contexts are tracked in basic terms of risks/threats, opportunities/prosperity, and support/affiliation (Gilbert, 2015, 2020). However, excessive, inhibited, or dysregulated motives are usually difficult to manage and can be the source of several psychopathological difficulties (Gilbert, 2020).

Different motives can be regulated by different emotion-regulation systems, as emotions regularly and repeatedly fluctuate with regards to how successfully/unsuccessfully motives and biosocial goals are pursued (Gilbert, 1989). According to Gilbert (2009), emotions are regulated through three emotion-regulation systems related to their evolved functions: the threat and protection system; the drive

system; and the soothing and safeness system. Emotional regulation comes from the balance between the three systems. The threat and protection system, through attentionfocusing and attention-biasing, quickly perceives internal and external threats (real or imagined) and activates strong bursts of alerting feelings, motivating humans to seek protection (e.g., fight, flight, or freezing/submission) according to a "better safe than sorry" principle (Gilbert, 2001, 2010). Despite being the source of painful and difficult feelings, it evolved as a protection system, crucial to survival (Gilbert, 2009). The amygdala and the hypothalamic-pituitary-adrenal axis seem to be the brain structures through which the threat system operates, and the genetic and synaptic regulation of serotonin also seems to have a major influence in its functionally (Caspi & Moffitt, 2006; Gilbert, 2009, 2010; LeDoux, 1998). The threat system functioning is usually the result of how early life events might have sensitized the individual's threat protection system, resulting in the development of automatic and conditioned safety strategies. When this system is ultra-sensitive to threats it becomes hyper reactive, leading to imbalances with the other systems. In turn, the drive system and the soothing and safeness system may become underdeveloped and/or dysregulated (Gilbert 2009, 2010).

The drive system is an incentive and resource-seeking system, tied to essential goods and life goals (short, medium, and long-term goals) leading to prosperity (Gilbert, 2015). It seems that, by increasing the level of dopamine in the brain, this system activates positive feelings that motivate resource-seeking behavior, to survive and prosper. When balanced with the other systems, through motivation, energy, or desires, it guides humans towards important life goals. However, when dysregulated and/or colligated with the threat system, it may lead individuals to be self-focused on short-term goals and wants to avoid rejection, frustration, or anxiety. However, it often results in the increase of these emotions as well as in an unrestrained pursuit as an undesirable consequence (Gilbert, 2009).

The soothing and safeness system is linked with feelings of warmth, peacefulness and contentment and not simply with the absence of threat or low activity in the threat-protection system nor the absence of striving and wanting or low activity in the drive system. When active, it is comforting and provides feelings of calmness and connectedness (Gilbert, 2009). Attachment behavior is considerably important in the development of this affect system (Depue & Morrone-Strupinsky, 2005), once it is linked to affection and kindness (Gilbert, 2009). Through the release of chemicals (e.g., oxytocin and endorphins), caring-affiliation seems to be engaged, reducing stress and sensitivity

(Gilbert, 2010; Depue & Morrone-Strupinsky, 2005), and proving feelings of social safeness and a sense of well-being (Gilbert, 2009).

According to the evolutionary and biopsychosocial model of shame (Gilbert, 2010), humans have evolved with the desire to create positive feelings about the self in the mind of others, with innate needs to be accepted and cared for. The desire to socially connect with others (i.e., being socially wanted and valued) is linked with these innate needs and, when group belonging is perceived, the genesis of healthy relationships is facilitated (Gilbert, 1989; Gilbert, 2010). When relationships fulfill basic needs to socially connect, emotional regulation is impacted: group belonging provides a sense of safeness, settling the threat system, while perceived social rejection instigates this same system (Gilbert, 2010). The experience of the self in the minds of others is affected by how intimate and peer relationships are experienced as either caring/accepting or neglectful/rejecting and abusive: positive feelings/thoughts about the self in the minds of others foster the safeness system, while vulnerabilities to shame (i.e., perceiving oneself as devalued, excluded or socially inadequate) and negative feelings/thoughts about the self in the minds of others undermines this system (Gilbert, 2010).

Following an evolutionary approach, when there is vulnerability to shame, it is possible to engage in various involuntary defensive strategies: on the one hand, the internalizing shaming response where one adopts a submissive strategy, related to self-blaming; on the other hand, the externalizing shaming response where one adopts a predominantly aggressive strategy, related to attacking potential rejecters (Gilbert, 2010).

Early positive social relationships, by encouraging a sense of social acceptance and validation, help with the development of the soothing system (Gilbert, 2005, 2010). These feelings lower the activation of the threat system and provide adaptive coping skills when dealing with conflict (Cacciopo et al., 2000; Masten, 2001; Matos et al., 2015; Porges, 2003, 2007). The presence or absence of these positive memories influences the development of internal working models of self (e.g., as lovable or defective) and others (e.g., as loving or rejecting) (Bowlby, 1969, 1973; Gilbert, 1989; Mikulincer & Shaver, 2005, 2007). These self-other schemata conduct emotional and cognitive processing about the self and others, and have repercussions on one's social behavior (Bowlby, 1969, 1973; Gilbert, 1989; Matos et al., 2015; Mikulincer & Shaver, 2005, 2007). Early memories of warmth and safeness have been associated with feelings of soothing and emotional warmth. They foster one's ability to be self-compassionate and self-reassuring when suffering (Capinha et al., 2021). These positive memories seem to have a major

impact in emotion regulation (Matos et al., 2015) and on the ability to build and sustain healthy intimate relationships (Mikulincer & Shaver, 2020). Therefore, there might be a connection between this kind of memories and better functioning in intimate relationships.

Shame, a self-conscious emotion linked to one's perception of being inferior and flawed, is usually rooted in early interactions with significant others (Gilbert, 2017) and functions as a social barometer to regulate thoughts, feelings, and behaviors (Mills, 2005; Paulo et al., 2019; Tangney & Tracy, 2012). This way, shame can be seen as a caution that the self (i.e., personal characteristics, attributes, or behaviors) is seen negatively in the minds of others, risking criticism or rejection (Gilbert, 2010), which seems important when analyzing intimate partner conflict. The experience of shame, when temporary, is universal, necessary, and predominantly adaptive (Mills, 2005; Tangney & Tracy, 2012). However, when feelings of inadequacy and worthlessness are constant, difficulties can arise, leading to maladaptive outcomes and possible psychopathological symptoms or disorders. (Gilbert, 2017; Goss et al., 1994; Paulo et al., 2019).

Shame-prone individuals seem to have an exacerbated sensitivity of the threat system and an unbalanced drive system, while the soothing system seems to be insufficiently accessible to them, since the latter may have been consistently understimulated during early life (Gilbert et al., 2006). Once social processing is threat-driven, one becomes prone to feelings of inferiority and beliefs of others perceiving him/her negatively. Shame appears as a social response to the perceived threat that one exists negatively in the mind of others (Gilbert, 1998, 2007). These negative judgements predispose one to adopt defensive strategies in social and intimate relationships. The involuntary defensive strategies may be relevant when examining strategies to deal with intimate partner conflict, as intimate contexts seem to create the conditions to magnify and rigidify these vulnerabilities.

Neglect, shaming and rejecting early experiences impact the development of brain structures, instigating the threat system and impairing the development of the affiliative-soothing system (Gilbert et al., 2006). Indeed, early negative experiences seem to jeopardize the development of secure attachments and leave infants in a threatened state, overstimulating safety-defensive behaviors (Bowlby, 1969, 1973; Matos et al., 2015; Mikulincer & Shaver, 2005). Early shame experiences can be registered in autobiographical memories as central emotional memories, conducting emotional,

attentional, and cognitive processing (Matos et al., 2013), acting as a life navigator to attribute significance to events (Matos & Pinto-Gouveia, 2010).

Shame can be translated into emotional information, and comprehending this information is mostly adaptive (Elison, 2019). However, when one is not capable to process it, difficulties may arise. Rather than the shame experience *per se*, how one copes with shame seems to have an important impact in mental health functioning (Elison et al., 2006). Nathanson's (1992) compass of shame model argued that individuals can cope with shame in an adaptive way, by recognizing it as part of the human condition, emphasizing the individual choice of addressing or not the origin of that shame experience (Elison, 2019; Nathanson, 1992). In the dark side, the compass of shame model also recognizes that individuals can cope with shame through four maladaptive shame coping strategies: withdrawal, attack-self, attack-other and avoidance. Elison et al. (2006) argued that withdrawal and attack-self are the coping strategies with higher levels of internalization of shame, while attack-other and avoidance imply higher levels of externalization of shame. These coping strategies are described as maladaptive because shame message is not accepted and/or its source is ignored (Elison et al., 2006).

Withdrawal is the coping strategy where one shifts away from shameful situations motivated to limit one's exposure. The phenomenological experience is negative and includes emotions like shame and anxiety. Cognitions involve an awareness of one's shameful actions or faults and discomfort with others (Elison et al., 2006; Nathanson, 1992).

The attack-self coping strategy is based on self-criticism, self-blame, or being submissive to others. The experience of anger is turned inwards, and the impact of shame is increased by emotions such as disgust. Cognitively, there is a consciousness of one's shameful actions, faults, and rumination about them (Elison et al., 2006; Nathanson, 1992).

The attack-other coping strategy usually doesn't recognize the shame message, not accepting it. The experience is negative, and the anger is directed towards others. Behaviorally there is a predisposition to attack others to make them feel badly (Elison et al., 2006; Nathanson, 1992).

The avoidance coping strategy is linked to little awareness or denial of one's shameful actions or faults. Motivation consists in minimizing the conscious experience of shame and distracting the self and others (Elison et al., 2006; Nathanson, 1992).

Literature has stereotyped women to be more emotional than men, as well as to experience more shame (Else-Quest et al., 2012; Plant et al., 2000). A meta-analysis (Else-Quest et al., 2012) has shown that, although women are more favorable to experience shame, the effect size is small. Therefore, gender differences regarding shame seem to be negligible. Shame is apparently equally experienced across gender (Else-Quest et al., 2012; Szentágotai-Tătar & Miu, 2016; Paulo et al., 2019). Although the way females and males experience shame seem to be invariant (Else-Quest et al., 2012; Szentágotai-Tătar & Miu, 2016), internalization/externalization of symptomatology may point out gender differences in the resort to different coping strategies when feeling shame. Early gender socialization patterns, along with cultural facets, influence how emotional expression is differently reinforced across gender and the adoption of genderrole consistent behaviors seem to be encouraged (Elison et al., 2015). Boys are socialized to exhibit a slender emotional range, accentuating anger, and physical attack (Kret & De Gelder, 2012; Nyström & Mikkelsen, 2018; Paulo et al., 2019) and there seems to be a higher complacency regarding male aggressive behavior in comparison to girls (Paulo et al., 2019). This way, men and women receive different social reinforcement for emotional expression (Brown, 2012; Elison et al., 2015; Szentágotai-Tătar & Miu, 2016; Paulo et al., 2019). Unlike women, men are usually less taught to openly communicate emotions (e.g., sadness, shame), which may lead to increased difficulties in recognizing these unpleasant emotions (Merten, 2005) and/or when these emotions are experienced, there seems to be a restraint in their expression due to a socially-valued masculinity status that leads to fear of criticism or rejection if conscious emotions are shown (Burris et al, 2015; Heflin, 2015). In fact, while women report shame triggers regarding to physical appearance, body image and motherhood, male shame triggers are mostly related to being perceived as weak (Brown, 2012). Girls are socialized to do no harm to others, a cue for internalizing strategies (Elison et al., 2015; Paulo et al., 2019). While women generally express emotions through facial expression and interpersonal communication, men tend to express emotion through actions (e.g., engaging in aggressive behavior) (Kret & De Gelder, 2012). This may explain some important gender predispositions in emotional expression and behavioral response tendencies along with evolutionary effects (Kret & De Gelder, 2012; Szentágotai-Tătar & Miu, 2016).

This is in line with evidence showing that while withdrawal and attack-self seem to be the predisposed coping strategies used by females, men tend to preferably use externalizing shame coping strategies, mostly physically attack-other (Nyström &

Mikkelsen, 2012; Paulo et al., 2019). Gender differences do not seem to be found regarding the avoidance coping strategy (*idem*). These findings may be important when analyzing the resort to intimate partner conflict strategies.

Conflict is an integral part of all human relationships (Straus, 1979). What sets apart violent couples from non-violent couples is not intimate partner conflict *per se*, but rather the adaptive or maladaptive strategies that are used to cope with it, as well as the frequency regarding their usage (Straus, 1990). Within the strategies to respond to conflict, negotiation and violent tactics can be distinguished. When using negotiation tactics, the aim is to resolve conflict based on rational argument, communication, or the expression of feelings of care and respect for the partner; conversely, when using violent tactics, the intention is to cause harm to others. Different abusive forms of conflict resolution have been highlighted: sexual coercion, psychological aggression, physical assault, and injury (Paiva & Figueiredo, 2006; Straus, 1990).

Studies with forensic samples argue that most intimate partner violence victims are women (RASI, 2017). However, literature on community samples reveals that intimate partner violence looks to be often encountered as a mutual and bidirectional strategy to resolve conflict (Capaldi et al., 2012; Costa et al., 2015; Lövestad & Krantz, 2012; Machado et al., 2019). A study made with a multi-country community sample found women and men to be both victims and perpetrators of intimate partner violence (Costa et al., 2015). Nevertheless, gender-asymmetries appear to be found regarding the type of aggression used: less severe violence is usually attributed to female preparators, while men are mostly responsible for sexual coercion (Costa et al., 2015; Machado et al., 2019).

The presence of shame and maladaptive shame coping strategies might contribute to jeopardize the genesis of satisfactory intimate relationships. Shame has been linked to poorer quality in relationships and increased fear of intimacy (Black, 2013). Shame-prone individuals experience more sadness in intimate relationships and more relationship insecurity (Cheung et al., 2004). Notwithstanding, the influence of early memories of warmth and safeness can foster feelings of connectedness and a sense of belonging in relationships (Gilbert, 2010). When present, these positive emotional memories seem to have a buffering effect on the disturbing early experiences such as shame (Matos et al., 2015), and are expected to influence how shame-prone individuals cope in intimate relationships.

Shame is expected to be strongly related to dyadic variables as well (e.g., dyadic adjustment and communication). Consequently, these variables can impact how the elements of the dyad cope with shame and cope with intimate partner conflict. The dyadic adjustment consists of an ever-changing process of shifting on a continuum. It can be decomposed into four components: dyadic satisfaction, dyadic consensus, dyadic cohesion, and affectional expression (Spanier, 1976). Dyadic consensus refers to the perceived agreement of the couple regarding the intimate partner quotidian and the experienced affection in the relationship. Dyadic satisfaction evaluates the judgment of each member of the dyad concerning the intimate relationship in comparison to other social relationships. Dyadic cohesion measures the awareness of intimacy and connection sensed by the couple as well as the recognition of emotional sharing. Affectional expression adverts to agreement or disagreement referring to demonstrations of affection, love, or sexual desire within the dyad. All processes are significant once they determine the outcome of the adjustment of the dyad, approximating the intimate relationship to good or poor adjustment (Spanier, 1976). Thus, when better dyadic adjustment is present, more adaptive coping strategies are expected to be used to deal with intimate partner conflict. In a similar vein, efficient communication skills may contribute to the usage of adaptive coping strategies with intimate partner conflict. Overtime relationship satisfaction is proven to be associated with constructive communication patterns (Simth et al., 2008), while more dysfunctional patterns predict declines in satisfaction. Better relationship quality has been associated with dyadic coping and greater communication skills (Bodenmann, 2005). Therefore, when dealing with intimate partner conflict, it seems that more adaptive coping strategies may be used when better and more constructive communication happens within the couple.

It is important to highlight that there seems to be a lack of literature concerning gender predispositions and tendencies with reference to dyadic variables. Overlook the impact of gender-asymmetries/gender-symmetries regarding dyadic variables may withhold important scientific knowledge, vital to the understanding of the processes underlying intimate partner conflict.

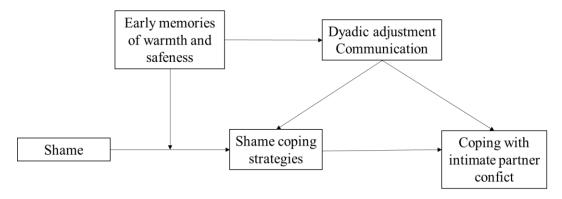
This study aims to understand the influence of the aforementioned evolutionary (early memories of warmth and safeness, shame and shame coping strategies) and dyadic variables (dyadic adjustment, communication) on maladaptive/adaptive coping strategies with intimate partner conflict.

# This study

The goal of the present study is to test, in a community sample of men, a predictive evolutionary-based model encompassing the impact of evolutionary variables (early memories of warmth and safeness, shame and shame coping strategies) and dyadic variables (dyadic adjustment, communication) on coping strategies with intimate partner conflict, in the explanation of males' psychological, behavioral, and relational adaptation, from a dyadic perspective (see Figure 1). Considering the latter, it is paramount to: 1) explore the association between early memories of warmth and safeness and dyadic adjustment and communication; 2) assess the impact of the association between shame and shame coping strategies on intimate partner conflict coping strategies; 3) assess the impact of early memories of warmth and safeness in the association between shame and shame coping strategies; 4) assess the effect of dyadic adjustment and communication on the association between shame coping strategies and intimate partner conflict coping strategies.

It is expected that a higher presence of early memories of warmth and safeness would increase the use of adaptive strategies to cope with shame. On the contrary, the absence of these memories may increase the use of maladaptive coping with shame (H1). The existence of early memories of warmth and safeness is also expected to have a positive association with better dyadic adjustment and greater communication capacity, when shame is present. In turn, the absence of these memories is expected to be associated with worse dyadic adjustment and communication capacity, when shame is present (H2). Furthermore, better dyadic adjustment and better levels of communication within the couple are expected to be positively associated with the use of adaptive coping with intimate partner conflict, when shame is present; while worse dyadic adjustment and worse communication may increase the use of maladaptive coping strategies with intimate partner conflict, when shame is present (H3).

Figure 1: Conceptual Diagram of the Baseline Model



#### Method

# **Participants**

Participants in this study were 152 men in a marital relationship recruited from a pool of community couples. Data of these couples was collected with another researcher that focused on the female partners only. Most participants are married, live in an urban zone, are employed, and considered themselves to be financially independent from their partner. Concerning consumptions habits, most participants does not reveal alcohol abuse and when it is reported it seems to be a one-off situation. Regarding violence, most of recruited men did not report victimization, perpetration, or observation of violent behavior. Sociodemographic and clinical characteristics of the participants are presented in Table 1.

*Table 1: Sociodemographic and Clinical Characteristics of the Participants (N* = 152)

Sociodemographic characteristics			
	M	DP	Min-Max
Age	44.88	11.43	22-77
Duration of the relation (years)	18.78	11.56	2-51
Number of children	1.34	.944	0-5
	$\overline{N}$		%
Civil status			
Marriage	109	109	
Common-law	43	43	
School enrollment			
University	83	}	55%
Professional/technical education	20	)	13.2%
High school	29	)	19.2%
Elementary school (7 <sup>th</sup> to 9 <sup>th</sup> grade)	11		7.3%
Elementary school (5 <sup>th</sup> to 6 <sup>th</sup> grade)	5		3.3%

Sociodemographic characteristics		
Q 1	N	%
Elementary school (1st to 4th grade)	3	2%
<b>Employment status</b>		
Employed	136	92.5%
Unemployed	2	1.4%
Student	1	0.7%
Retired	8	5.4%
Financial dependent on the partner		
Yes	18	11.9%
No	133	88.1%
Nationality		
Portuguese	149	98%
Other	3	2%
Residence	-	
Urban	107	70.4%
Rural	45	29.6%
Health issues		
	N	%
Psychiatric/psychologic diagnosis		/0
Yes	9	6%
No	142	94%
COVID-19 infection	142	9 <del>4</del> /0
Yes	12	8.1%
No	136	91.9%
Influence of COVID-19	130	91.9%
	122	20/
Didn't influence	132	89.2%
Worsen the relationship	7	4.7%
Improved the relationship	9	6.1%
Consumption habits	<b>N</b> 7	0/
Alaskal assumundian	<i>N</i>	%
Alcohol consumption	10	7.00/
Never	12	7.9%
Once a month or less	26	17.2%
Two to four times a month	39	25.8%
Two to three times a week	33	21.9%
Four times or more a week	41	27.2%
Alcohol abuse	0.4	50.20
Never	91	60.3%
Once a month or less	47	31.1%
Two to four times a month	10	6.6%
Two to three times a week	3	2%
<b>Regular smoking</b> (at least one cigarette a day)		
Yes	32	21.2%
No, I quit smoking	50	33.1%
No, never smoked	69	45.7%
Drug use in the last year		
Yes	5	3.3%
No	146	96.7%
Violence		
	N	%
Victimization (not by intimate partner)		
Yes	15	9.9%
No	136	90.1%

Violence		
	N	%
Observation		
Yes	36	23.7%
No	115	75.7%
Victimization (by intimate partner)		
No	147	98.7%
Yes (1 partner)	2	1.3%
Usage of victim support structures		
No	151	100%
<b>Prosecution for domestic violence</b> (as a perpetrator)		
No	150	100%
<b>Prosecution for domestic violence</b> (as a victim)		
No	151	100%
Participation in a program for aggressors or		
victims of domestic violence		
No	151	100%
Signalized children by CPCJ		
No	117	77%
Don't have children	35	23%

#### Measures

The **questionnaire of sociodemographic and legal data** designed for this study was used to collect data on sociodemographic, psychological, and relational characteristics.

The **Early Memories of Warmth and Safeness Scale** (EMWSS) (Richter et al., 2009; Portuguese version by Capinha et al., 2021) 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 safe and protected."), each rated on a five-point *Likert* type scale (0 = "No, never" to 4 = "Yes, most of the time"). Both in its original study ( $\alpha$  = .97) (Richter et al., 2009) and the Portuguese version ( $\alpha$  = .96) (Capinha et al., 2021), the EMWSS presented excellent internal consistency. In the present study, the EMWSS presented excellent internal consistency ( $\alpha$  = .97).

The **Other as Shamer Scale** -2 (OAS2) (Matos, 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. Higher scores on this scale indicate high external shame. Each item (e.g., "I feel other people see me as not good enough") is rated on a five-point *Likert* type scale (0 = "Never" to 4 = "Almost always").

The OAS2 revealed excellent internal consistency ( $\alpha$  =.91) (Matos, 2015b). In the present study, the OAS2 presented good internal consistency ( $\alpha$  = .88).

The Compass of Shame Scale (CoSS-5) (Elison et al., 2006; Portuguese version by Capinha et al., 2021) was developed to assess the four maladaptive shame coping strategies described by Nathanson (1992): withdrawal (e.g., "I withdraw from the activity"); attack-self (e.g., "I get mad at myself for not being good enough"); attack-other (e.g., "I get irritated with other people"); and avoidance (e.g., "I act as if it isn't so"). It also assesses the adaptive shame coping style (e.g., "When I feel lonely or left out, I talk to a friend"). It comprises 58 items, each rated on a five-point *Likert* type scale (0 = "Never" to 4 = "Almost always"). 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. The last 10 items refer to adaptive response to a shameful event. Both in its original version (withdrawal,  $\alpha = .89$ ; attackother,  $\alpha = .85$ ; attack-self,  $\alpha = .91$ ; avoidance,  $\alpha = .74$ ) (Elison et al., 2006) as in the Portuguese version (withdrawal,  $\alpha = .89$ ; attack-other,  $\alpha = .82$ ; attack-self,  $\alpha = .90$ ; avoidance,  $\alpha = .79$ ; adaptive,  $\alpha = .84$ ) (Capinha et al., 2021), CoSS subscales achieved at least acceptable internal consistency values. In the present study, the CoSS-5 presented an internal consistency between acceptable and good (withdrawal,  $\alpha = .87$ ; attack-other,  $\alpha$ =.84; attack-self,  $\alpha$  =.86; avoidance,  $\alpha$  =.79; adaptive,  $\alpha$  =.82).

The **Submissive Behavior Scale** (SBS) (Allan & Gilbert, 1997; Portuguese version by Castilho, 2011) measures the submissive behavior frequency. The SBS is a unidimensional, self-report questionnaire that comprises 16 items (e.g., "I avoid direct eye contact"), rated on a five-point *Likert* type scale (0 = "Never to 4 = "Always"). This scale revealed good internal consistency both in a sample of undergraduate students ( $\alpha$  =.82) and in a clinical sample ( $\alpha$  =.85) (Allan & Gilbert, 1997). The Portuguese version revealed good internal consistency in a sample of students ( $\alpha$  =.81), in a community sample ( $\alpha$  =.84) and revealed excellent internal consistency in a clinical sample ( $\alpha$  =.90) (Castilho, 2011). In the present study, the SBS presented acceptable internal consistency ( $\alpha$  = .78).

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 (perpetration) and the respondent's

partner (victimization). The CTS2 is a 78-item (39 pairs) self-report questionnaire that comprises five scales: negotiation (e.g., "I showed my partner I cared even though we argued"); psychological aggression (e.g., "Called my partner fat or ugly"); physical assault (e.g., "Threw something at my partner that could hurt"); sexual coercion (e.g.," Made my partner have sex without a condom"); and injury (e.g., "Had a broken bone from a fight with my partner"). Each item is rated on an 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"). The CTS2 achieved at least acceptable internal consistency (Cronbach's alpha ranging from  $\alpha$  = .79 to  $\alpha$  = .95) in the original study (Straus et al., 1996). The Portuguese version revealed internal consistency between poor and acceptable (Cronbach's alpha ranging from  $\alpha$  = .50 to  $\alpha$  = .78) (Paiva & Figueiredo, 2006). For the purposes of the current work, we decided to look at how often each act was perpetrated in the last year (chronicity). The CTS2 presented an internal consistency between acceptable and excellent (perpetration of aggressive acts,  $\alpha$  = .98; perpetrated negotiation,  $\alpha$  = .79).

The **ENRICH Marital Satisfaction Scale** (EMS) (Fowers & Olson, 1989; Portuguese version by Lourenço, 2006) is a brief but valid and reliable measure of marital quality. In this study only the communication subscale was used, which comprises 10 items (e.g., "It is very easy for me to express my true feelings to my partner"), rated on a five-point *Likert* type scale (0 = "Strongly disagree" to 4 = "Strongly agree"). The EMS presented good internal consistency ( $\alpha$  =.82) (Fowers & Olson, 1989). The Portuguese version revealed acceptable internal consistency ( $\alpha$  =.78) (Lourenço, 2006). In the present study, the EMS presented poor internal consistency ( $\alpha$  = .53).

The **Revised Dyadic Adjustment Scale** (RDAS) (Bubsy et al., 1995; Portuguese version by Pereira et al., 2017) measures the adjustment in romantic relationships regarding consensus (e.g., "Religious matters"), satisfaction (e.g., "Regret being married"), and cohesion (e.g., "Work together on a project"). The RDAS is a self-report questionnaire that comprises 14 items, rated on four different *Likert* type scales (5 = "Always agree" to 0 = "Always disagree") (0 = "Always" to 5 = "Never") (4 = "Everyday" to 0 = "Never") (0 = "Never" to 5 = "Frequently"). The RDAS revealed excellent internal consistency ( $\alpha$  = .90) (Bubsy et al., 1995). The Portuguese version revealed good internal consistency ( $\alpha$  = .89) (Pereira et al., 2017). In the present study, the RDAS presented good internal consistency ( $\alpha$  = .81).

#### **Procedures**

The current study is part of a larger project named "Intimate partner violence: A dyadic approach from an evolutionary perspective" (SFRH/BD/137335/2018). Approval was requested from the Ethics Committee of the Faculty of Psychology and Educational Sciences of the University of Coimbra. Participants were recruited in couples from community, during March and April 2021. For the present study, only the men sample was used.

Eligibility criteria included: 1) being over 18 years old, 2) not having a history of psychiatric disorder (in order not to introduce biases once relationship outcomes can be impacted by the presence of psychiatric disorder in members of the couple), 3) not having a cognitive deficit (in order to ensure that measures were adequately understood and answered), 4) being part of a heterosexual couple with a marriage/common-law marriage  $\geq$  3 months (Wittenborn et al., 2013), 5) at least one member of the couple must have Portuguese nationality (and the other one must have a good mastery of the language to avoid communication issues).

For each couple, a sealed envelope with a written informed consent form and the self-report instruments was delivered and collected. All participants provided oral and written consent for their participation in the study, after being informed of its aims and all ethical considerations. Participants autonomously responded to all the self-report measures. Due to the length of the study protocol, there were two versions (version A and version B) so that the scales were presented in reverse orders. This helped to control the fatigue effect on the responses. Version A goes as following: EMWSS, OAS2, CoSS-5, SBS, CTS2, ENRICH, RDAS. The version B is presented the reverse way: RDAS, ENRICH, CTS2 SBS, CoSS-5, OAS2, EMWSS.

A random pairing code was assigned to each protocol to ensure the total confidentiality of the collected data, while the protocols were identified as belonging to the same dyad.

# **Data analysis**

Data were analyzed with the IBM SPSS Statistic 25 (Statistical Package for the Social Sciences version 25) and Mplus v8.3 software. The IBM SPPS Statistic 25 software was used for initial statistical analysis: missing value analysis, descriptive analysis, assessing scale's internal consistency and correlations, and Mplus was used for

structural equation modelling (SEM), as for testing the mediating and moderating effects. This allowed to test the model fit, as well as explore relations between all assessed variables.

Initially, 188 participants were recruited. Missing values were found for 52 participants. Missing data were examined by incidence and distribution, both by subject and per item. The missing values were missing completely at random (MCAR) on the following measures: EMWSS ( $\chi^2(80) = 68.900, p = .81$ ), CoSS-5 ( $\chi^2(276) = 290.970, p = .81$ ) .26), SBS ( $\chi^2(44) = 47.187$ , p = .34), CTS2 ( $\chi^2(834) = 506.763$ , p = 1.00), EMS ( $\chi^2(9) = .26$ ) 8.640, p = .471), RDAS ( $\chi^2(38) = 33.294$ , p = .687) (Little, 1988). Little's (1988) MCAR tests revealed that data in OAS2 were not missing completely at random ( $\chi^2(21) = 37,661$ , p = .014) (Little, 1988). However, in the present study, the missing rate was less than 1.2% and a missing rate of 5% or less is considered to be inconsequential (Schafer, 1999). Seventeen participants presented more than 20% of missing values and were excluded from the sample (i.e., not included in the description of participants or in the data to be analyzed) (Peng et al., 2006). In the assessed self-report measures CTS2 and CoSS-5 the imputation method could be disturbing to the internal consistency of the scales (Çokluk & Kayri, 2011). As CTS2 ( $\chi^2(834) = 506,763$ , p = 1,000) and CoSS-5 ( $\chi^2(276) = 290,970$ , p = .256) are missing completely at random, on average, data observed in cases with and without missing values are comparable with each other. Thus, we opted for a listwise approach bearing consistency and stability of the results, and participants with missing values in CTS2 and CoSS-5 (nineteen participants) were excluded from the sample of the current work (i.e., included neither in the description of participants nor in the data to be analyzed). Considering that deletion of cases would lead to a substantial loss of subjects, the remaining missing values were dealt via linear interpolation imputation method (Meyers et al., 2006), in order not to lose analytical power. The final sample was, therefore, constituted by 152 males.

In addition, only the chronicity was assessed in CTS2, that is, how often each act was perpetrated in the last year, for both maladaptive tactics and negotiation tactics. Thus, the value of the original scale was transformed into the midpoint of each category and then added for each scale (Straus et al., 1996).

Internal consistency indices were calculated for each instrument using Cronbach's alpha as it is the most frequent and global measure to test internal consistencies, considering Cronbach's values of .5 as unacceptable, between .5 and .6 as poor, between .6 to .7 as questionable, between .7 and .8 as acceptable, between .8 to .9 as good and

between .9 and 1 as excellent (George & Mallery, 2003). Normality was assessed using Kolmogorov-Smirnov's test of normality, considering that the sample was reasonably normally distributed if p > .05. Spearman correlation coefficients were conducted to analyze associations between variables, following the proposed hypothesis. Descriptive statistics of measures on interest for the current work, as well as correlations between those variables are presented at Table 2.

Once data were found to deviate from univariate normal distribution, the Maximum Likelihood Robust estimator was used for the SEM, because it is viable when analyzing nonnormal data with no missing values.

The baseline model (see Figure 1) included shame experience (as measured by OAS2) as an independent variable directly associated with shame coping strategies (as measured by CoSS), coping with intimate partner conflict (as measured by CTS2) as a dependent variable, early memories of warmth and safeness (as measured by EMWSS) as a moderator variable, and dyadic adjustment (as measured by RDAS and SBS) and communication (as measured by ENRICH) as mediator variables. Also, the impact of early memories of warmth and safeness was entered as an independent variable directly associated with dyadic adjustment and communication. Regarding the SEM, a model generation approach was followed, in which an *a priori* model was tested on the data (this model is depicted in Figure 1) and it was sequentially improved, based on theoretical considerations and statistical indicators, until good fit values were obtained.

In judging for the SEM overall adjustment, we considered the guidelines provided by Hu & Bentler (1999), and so considered a standardized root mean square residual (SRMR) value  $\leq$  .09 combined either with a comparative fit index (CFI) value  $\geq$  .95 or with a root mean square error of approximation (RMSEA) value  $\leq$  .06.

Finally, according to Bentler & Chou (1987), SEM samples must have a minimum of five subjects for each free parameter (5:1 ratio). Following this, 395 men 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 SEM (Ding & Harlow, 1995).

#### Results

The baseline model (see Figure 1) did not achieve acceptable fit and the moderation effect was not verified (cf. Table 3). Based on theoretical considerations and statistical indications, subsequent changes were sequentially made to the model. Once we verified that early memories of warmth and safeness did not have a moderating effect on the association between shame and shame coping strategies, the same model was tested but with early memories of warmth and safeness (as measured by EMWSS) included as an independent variable. Model fit indicators improved but the model did not achieve good fit (cf. Table 3). We noticed that the mediating variables seemed to be mostly dependent variables, thus, we tested a new model. Data analyses then relied on SEM positing early memories of warmth and safeness (as measured by EMWSS) as independent variable and communication (as measured by ENRICH), dyadic adjustment, (as measured by RDAS, SBS) and coping with intimate partner conflict (as measured by CTS2) as dependent variables. Indirect effects between the independent and dependent variables were also considered, through shame (as measured by OAS2) and shame coping strategies (as measured by CoSS-5). This resulted in a model that achieved good fit indicators (Hu & Bentler, 1999) (cf. Table 3) and is depicted in Figure 2.

Table 3: Fit Indicators for Structural Equation Models

	χ2	df	RMSEA	90% CI for RMSEA	CFI	SRMR
Structural equation models						
Baseline with						
moderation and	852.263	55	.309	[.291, .327]	.000	.477
mediation						
Baseline with mediation	71.729	29	.098	[.070, .127]	.906	.099
Final model	31.580	9	.128	[.082, .179]	.955	.056

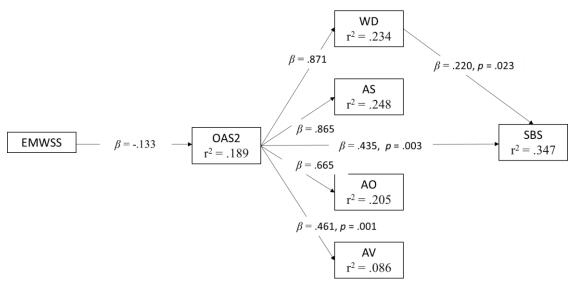
*Note*. RMSEA = root mean square error of approximation; CI = confidence interval; CFI = comparative fit index; SRMR = standardized root mean square residual.

Early memories of warmth and safeness were negatively and directly linked to shame ( $\beta = -.133$ , p < .001) and negatively and indirectly (through shame) linked to submissive behavior ( $\beta = -.058$ , p < .05); that is, individuals with higher levels of early memories of warmth and safeness, when shame is present, tend to be less likely to engage in submissive behavior.

Shame was positively and directly associated with submissive behavior ( $\beta$  = .435, p < .01); that is, higher levels of shame are linked to higher levels of submissive behavior.

All maladaptive coping strategies were positively and directly associated with shame ( $\beta_{WD} = .871$ , p < .001;  $\beta_{AS} = .865$ , p < .001;  $\beta_{AO} = .665$ , p < .001;  $\beta_{AV} = .461$ , p < .01). Finally, withdrawal was the only coping strategy found to be positively and directly linked to submissive behavior ( $\beta = .220$ , p < .05); that is, the more one tends to withdrawal when experiencing shame, the more likely one is to engage in submissive behavior. There were no significant associations of the model with the other dependent variables (i.e., coping with intimate partner conflict (as measured by CTS2), dyadic adjustment (as measured by RDAS), communication (as measured by ENRICH)).

Figure 2: Final Model



Note. EMWSS = Early Memories of Warmth and Safeness Scale; SBS = Submissive Behavior Scale; OAS2 = Other as Shamer Scale; CoSS = Compass of Shame Scale (CoSS(WD)— Withdrawal; CoSS(AS)— Attack-Self; CoSS(AO)—Attack-Other; CoSS(AV)—Avoidance. All pathways were significant at p < .001, unless stated otherwise.

Table 2: Correlations Between Variables and Descriptive of Measures (N = 152)

	1	2	3	4	5	6	7	8	9	10	11	12	M	SD
1. EMWSS	_												68.099	15.123
2. SBS	341**	_											18.431	7.203
3. OAS2	495**	495**	_										6.609	4.614
4. CoSS(WD)	382**	.465**	.457**	_									14.954	8.309
5. CoSS(AS)	405**	.442**	.468**	.724**	_								16.053	8.019
6. CoSS(AO)	290**	.281**	.402**	.557**	.540**	_							16.856	7.246
7. CoSS(AV)	174*	.284**	.287**	.567**	.596**	.436**	_						9.711	6.776
8. CoSS(ADP)	.160*	017	143	.075	.134	.061	.261**						24.777	6.069
9. RDAS	.285**	241**	266**	189*	151	190*	093	.053					53.658	7.233
10. ENRICH	326**	.207*	.186*	.093	.154	.157	.095	074	393**				25.043	7.817
11. CTS2(P) 12. CTS2(N)	045 .155	.119 029	.119 217**	.073 188*	.194* 177*	.138 224**	.214** 128	.055 .011	029 .320**	.072 029	.078	_	74.053 60.803	83.899 37.521

Note. EMWSS = Early Memories of Warmth and Safeness Scale; SBS = Submissive Behavior Scale; OAS2 = Other as Shamer Scale; CoSS = Compass of Shame Scale (CoSS(WD)—Withdrawal; CoSS(AS)—Attack Self; CoSS(AO)—Attack Other; CoSS(AV)—Avoidance; CoSS(ADP)—Adaptive); RDAS = Revised Dyadic Adjustment Scale; ENRICH = ENRICH Marital Satisfaction Scale (Communication subscale); CTS2(P) = Revised Conflict Tactics Scales (Chronicity of perpetration of maladaptive tactics); CTS2(N) = Revised Conflict Tactics Scales (Chronicity of perpetration of negotiation). Descriptive of measures are presented as M = mean, SD = standard deviation. \*p < .05. \*\*p < .01. \*\*\*p < .001.

#### **Discussion**

There seems to be a literature gap regarding the influence of dyadic variables on the promotion/prevention of healthy intimate relationships and traditional gender-focused models have been narrowing the study of both intimate partner conflict and conflict coping strategies. The present study aimed to bridge this gap by testing, in a community sample of men, an evolutionary model encompassing dyadic and evolutionary variables, testing associations between the impact of early memories of warmth and safeness (EMWSS) on communication (ENRICH), dyadic adjustment (RDAS, SBS) and intimate partner coping strategies (CTS2), and the indirect effect of shame (OAS) and shame coping strategies (CoSS-5) in that association.

As expected, early memories of warmth and safeness were negatively and directly associated with shame. This is in line with evidence that states that positive memories can have a buffering effect on the harshness of shameful experiences and a protective role against the negative effects of adverse life events (Cacciopo et al., 2000; Gilbert et al., 2006; Masten, 2001; Matos et al., 2015; Richter et al., 2009). An affiliative environment associated to the recalling of feeling loved and nurtured, bears the conditions for reconnectedness to others, even in the presence of a central shame memory (Matos et al., 2015). This way, the recalling of shameful memories is attenuated by the recalling of affiliative memories (*idem*). Consistent with previous research, shame was directly and positively associated to all maladaptive shame coping strategies (Gilbert, 2017; Nathanson, 1992; Paulo et al., 2019).

In the current study, early memories of warmth and safeness were negatively and indirectly (through shame) associated with submissive behavior; that is, the more one recalls positive affiliative memories, the less likely one is to endorse submissive behavior when shame is present. Inversely, the less positive affiliative memories one recalls, the more likely one is to present lower levels of dyadic adjustment, through a submissive behavior, when shame is present. This is in line with evidence that states recalling early positive emotional and relational experiences as crucial physiological and psychological regulators, promoting feelings of safeness and soothing (Gilbert, 2010; Mikulincer & Shaver, 2012). The presence of positive affiliative memories (e.g., affection, reassurance, acceptance, and warmth), plausibly supports adaptive emotional states (Richter et al., 2009). Specifically, early memories of warmth seem to be associated with increased current feelings of social safeness (Kelly & Dupasquier, 2016; Silva et al., 2019). As

previously stated, positive memories promote the development/activation of the affiliative-soothing system, impairing the overactivation of the threat system and its consequences (i.e., distress) (Gilbert, 2009, 2010, 2020). Ultimately, social safeness seems to be positively linked with feelings of calmness and contentment, reducing the tendency to endorse behaviors and strategies focused on threat and competition (Kelly & Dupasquier, 2016). Inversely, the absence of positive affiliative experiences may guide maladaptive emotional and cognitive processing, leading to shame-proneness, maladjustment, stimulation of the threat system and the promotion of defensive responses (Cunha et al., 2012; Matos & Pinto-Gouveia, 2010; Gilbert, 2010). Because shame is known to be a self-conscious emotion linked to feelings of inferiority and inadequacy, in the absence of the buffering effect of early affiliative memories of warmth and safeness, one reasonably becomes more prone to feel alone and withdraw from others (Gilbert, 2003, 2007). Shame acts as an adaptive response in the social barometer by being conceptualized as a defensive response to deal with social threats (Mills, 2005; Tangney & Tracy, 2012). However, shame becomes maladaptive when leads to a crystallized subsequent resort to defensive strategies such as trying to gain others' desirability, by adopting a submissive behavior to lessen negative consequences (i.e., rejection) (Gilbert et al., 2011). Also, the absence of feelings of warmth, soothing and caring makes it harder for one to learn to be self-reassuring and trusting of others, and may trigger defeat/threatrelated negative emotional states and/or defensive behaviors, promoting detrimental effects on the experience of the self and others (i.e., one as inferior to others; others as hostile and judgmental) (Cunha et al., 2012; Gilbert, 2003). This way, and because during emotional development children often establish a sense of identity in the context of relating to others and learn emotional coping strategies (Collins & Steinberg, 2006), the lack of memories of one being soothed and reassured later translates into a lack of examples of safe intimate contexts and acceptance of oneself. As such, the less positive affiliative memories one recalls, the more likely it is that there was a conditioning learning process of others as threatening and subsequential emission of submissive responses in order to appease and increase the perceived safety. This way, the absence of early memories of warmth and safeness is associated with emotional defensive responses (Cunha et al., 2012; Marta-Simões et al., 2018), rooted in an overly developed threat system easily triggered in social and/or intimate contexts. The threat system encompasses defensive feelings (i.e., anxiety, sadness, shame) and behaviors (i.e., submission,

withdrawing), conducting involuntary defeat responses when suffering (i.e., being rejected by a lover) (Sloman et al., 2003).

Results regarding the other dependent variables were, unexpectedly, nonsignificant. Coping with shame is gendered in the endorsement of shame coping strategies (Tangney & Dearing, 2002) and most studies associate males with externalizing shame coping strategies, specially attack-other (Paulo et al., 2019; Nyström & Mikkelsen, 2012). Surprisingly, significant results in the resort to externalizing strategies to cope with shame and with intimate partner conflict were not found. Considering that early memories of warmth and safeness were the independent variable in this study, results point that due to the lack of positive memories men do not tend attack but to defend themselves instead (withdrawing from the situation) which, as previously stated, agrees with literature. Even so, one hypothesis that might explain the non-significant results obtained regarding externalizing strategies, specifically attack-other, is the fact that as the male recruited are from a community sample, a wide range of behaviors is difficult to be collected, therefore, considerable maladaptive behaviors and aggressiveness were not expected to be significantly found. It would be interesting for future studies to replicate this in a larger sample, so that more variance in responses can be analyzed and possible comparative means between groups (e.g., community sample versus forensic sample; community sample versus clinical sample) can be computed. One other hypothesis, when considering avoidance strategies, rests in the assumption that, when using avoidance as a coping strategy, shameful and painful emotions are usually denied and/or not recognized, and there is an intention to minimize the conscious emotional experience. Thus, when using self-report measures, avoidance strategies become a difficult construct to evaluate accurately. Following this perspective, present results should be interpretated carefully.

The same model was tested in the female partner sample (Sarmento, 2021). Interestingly, apart from the results also founded in the current study, using the female partner, early memories of warmth and safeness were also negatively and indirectly (through shame and shame coping strategies) associated with perpetration of aggressive behavior and negotiation tactics as well as positively and indirectly associated with dyadic adjustment. Some hypotheses concerning these differences are as follows. It may be plausible that the non-significant results found in the current study are mostly not due to a wrongly conceptualized model, but to gender differences regarding emotional expression and tendencies to (under)report it (Burris et al., 2015). Although literature points to no gender differences in the experience of self-conscious emotions (Brown,

2012; Else-Quest et al., 2012; Paulo et al., 2019), early gender socialization patterns, combined with cultural facets, result in that emotional expression is organized by gender, and men and women are differently reinforced in society for emotional expression (Brown, 2012; Elison et al., 2015; Paulo et al., 2019; Szentágotai-Tătar & Miu, 2016). Once responding to the measures of the present work may involve recognizing/recalling unpleasant emotions, and men are known in literature to control or conceal emotional displays (Kret & De Gelder, 2012), the fact that boys are socialized to adopt gender-role undeviating behaviors may be an important notion to sustain when analyzing the results of the current study. It seems plausible to consider the hypothesis that male respondents, in order to give little emphasis to uncomfortable vulnerabilities, might have restrained emotional expression through less emotive responses and not so varied emotional displays, in order to keep a socially-valued masculine status (Burris et al., 2015; Heflin, 2015).

The aforementioned roles of gender socialization and gender differences may also impact socially desirable responding. A study by Elison and colleagues (2015) argued that traditional gender-based socialization roles influence the usage of social desirability strategies in that impression management (i.e., making a desired impression of oneself in interpersonal contexts and relationship-enhancing tendencies) is typically associated with female responses, and self-deception (i.e., making a desired impression on agency-related contexts and ego-enhancing tendencies) is typically associated with male responses. Masculinity was found to be related to dominance, assertiveness, achievement, and selffavoring as values, liking men to greater egoistic responses. Conversely, femininity was found to be associated with warm interpersonal relationships and quality of life as values, linking women to a greater moralistic response tendency (Elison et al., 2015). Once the current study used both individual and dyadic variables, and the only significant dependent variable relates to the self and not to the relationship, it seems possible that gender-based social desirable responses might have influenced the results. It is possible to consider the hypothesis that, perhaps for this reason, the results point that men respond more towards individual behavior and women respond more towards variables related to the couple.

In addition, one other hypothesis to explain these differences relays in that, as male results point in the direction that when shame is experienced, men adopt a more submissive posture and tend to withdraw, it seems valid to suppose that, in the current study, men may have not adequately assessed dyadic adjustment, since they may be evaluating a dyadic construct from an *a priori* defensive individual posture.

Regarding communication (as measured by ENRICH), as the scale does not seem to perform well in the sample of the current study, the fact that this variable is not included in the final model may be a result of the lack of internal consistency that the scale revealed and not so much the fact that it does not have a relation with the variables under study. Future studies should explore the studied associations with a scale that presents better psychometric properties.

More importantly, the association between early memories of warmth and safeness (as measured by EMWSS) and intimate partner coping strategies (as measured by CTS2), in the current study, seems to be questionable. Although the direction of the results was in agreement with the hypothesis, that is, the more one recalls positive affiliative memories, the more likely one is to use negotiation to cope with intimate partner conflict, and the less positive affiliative memories one recalls, the more likely one is to perpetrate aggressive conflict coping strategies to deal with intimate partner conflict, this relation revealed to be non-significant (cf. Table 2). This way, it seems that, in men, the presence/absence of positive memories is not a strongly enough predictor with regards to intimate partner conflict coping strategies. In detail, in this study, difficulties in coping with intimate partner conflict don't seem to be rooted in the influence of the presence/absence of early memories of warmth and safeness. Future studies should investigate whether other variables influence this association and/or constitute stronger predictors of the resort of strategies to deal with intimate partner conflict. For instance, future research may target the role other variables (e.g., self-compassion, traumatic experiences) play in the studied associations.

# **Limitations and implications**

These findings cannot be interpreted without considering important limitations. Firstly, sample size was small, jeopardizing comparisons between different groups (e.g., aggressive tactics to deal with conflict and negotiation tactics to deal with conflict; clinical sample and community sample). It could also be interesting for future studies to investigate the studied associations in a wider sample. Secondly, the current study only used self-report measures which can compromise the validity of the results due to possible social desirability-based responses. Future research should attempt to include a measure

to control for social desirability. Another limitation is related to the time period in which the sample was collected, since in March and April 2021 mandatory confinement was in vigor due to the COVID-19 pandemic. Thus, and since an external stressor might have been affecting dyadic and family processes and individual adaptation during this phase, this is a limitation to be considered when interpreting the results. Although we have tried to control the fatigue effect counterbalancing the order of the measures, the extension of the present protocol is also a limitation to mention since fatigue may have influenced the responses. Lastly, internal consistency of scales, especially ENRICH, deserves some caution when interpreting the results.

Despite these limitations, the present study represents an important and innovative contribution to research and clinical practice. The proposed model adds to existent literature by suggesting that, in men, the presence/absence of early memories of warmth and safeness, because they are linked to the soothing system, seem to have an important role and influence on the resort to defense mechanisms (i.e., submission) when threat is present (i.e., shame). Alongside with this, it adds to the existing body of literature by showing that, in men from the community, early memories of warmth and safeness do not seem to predict and/or influence the resort to strategies to deal with intimate partner conflict (i.e., perpetration of aggressive acts versus negotiation tactics). As a pioneer study regarding the integration of evolutionary and dyadic variables on the assessment of intimate partner conflict, it is our hope that future research can branch out of the present findings with new hypothesis and conceptualizations. The study of the influence of both dyadic and individual variables can contribute to a better understanding of the usage of different coping strategies with intimate partner conflict. Understanding what constitutes a vulnerability to intimate partner conflict and coping with it has major practical implications. It can help to design new intervention strategies aimed at decreasing the number of intimate relationships with impaired functioning, some of which may culminate in violence. Ultimately, studying dyadic and evolutionary factors that may influence coping with intimate partner conflict could also play a major role in prompting higher levels of relationship satisfaction, and consequently, mental health overall.

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