



Emotion goals, emotion regulation, and mental health: a mediational hypothesis

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ABSTRACT

Objective: Until recently, studies have focused their attention on the different ways individuals regulate their emotions. What remains to be known are the reasons underlying individuals' emotion regulation choices and their consequences. In this cross-sectional study, we aimed to provide preliminary evidence on individual differences in how emotion goals, emotion regulation strategy choice, and individuals' mental health are associated.

Method: A sample of 400 Portuguese adults from the community was used.

Results: Pro-hedonic goals were associated with the use of less suppression, more emotion communication, and more positive reappraisal, which in turn were associated with better mental health. Contra-hedonic goals were associated with the use of more suppression and less positive reappraisal, which in turn were associated with worse mental health. Finally, impression management goals were associated with the use of more suppression and more rumination, and less emotion communication, which in turn were associated with worse mental health.

Conclusions: Overall, our findings seem to suggest that emotion goals are linked to individuals' mental health via emotion regulation strategies.

KEY POINTS

What is already known about this topic:

- (1) Emotion regulation has important implications for the individuals' psychological well-being.
- (2) Emotion goals are likely to influence emotion regulation strategy choice.
- (3) Emotion goals seem to influence individual's psychological well-being.

What this topic adds:

- (1) Pro-hedonic goals were associated with the use of less suppression, more emotion communication, and more positive reappraisal which in turn were associated with better mental health.
- (2) Contra-hedonic goals were linked to depression and anxiety via the use of more suppression and less positive reappraisal.
- (3) Impression management goals were linked to depression, anxiety, and stress via the use of more suppression, more rumination, and less emotion communication.

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Emotion regulation (ER) refers to the process “by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (Gross, 1998, p. 275). For many years, the literature on ER focused its attention on individual differences in ER strategies use and on how effective they are in terms of its intra and inter-personal consequences (e.g., Cheung et al., 2015; DeSteno et al., 2013; English & Eldesouky, 2020). More recently, however, researchers started to pay attention to the factors that influence ER strategy choice with a focus on emotion goals (i.e., how individuals want to feel). Indeed, some recent studies

have suggested that the way individuals want to feel seems to influence the strategies they choose to regulate their emotions (e.g., English et al., 2017; Millgram et al., 2019; Wilms et al., 2020). What remains to be known are the consequences of ER even when it contributes (or does not) to the successful attainment of emotion goals. Little evidence exists on the association between emotion goals and well-being, but the available studies suggest that they are linked, with hedonic and eudaimonic motives being associated with higher psychological well-being (Huta & Ryan, 2010; López-pérez & McCulloch, 2021; Ortner et al., 2018).

As Mauss and Tamir (2014) highlighted, ER and its impact on individuals' well-being can only be understood in the context of emotion goals. This is precisely the aim of this study: to explore the links between emotions goals, ER choice, and psychological functioning in terms of depression, anxiety, and stress symptoms.

Emotion goals

According to Mauss and Tamir (2014) emotion goals are a type of affect goals and refer to “the cognitive representation of a particular emotional state that is the desired endpoint” (p. 361) being essential to ER since they “determine whether people engage in emotion regulation, which emotions they attempt to regulate, when they cease their emotion regulatory efforts, and people’s satisfaction with their emotion regulation attempts” (p. 361). For these reasons, it is essential to understand emotion goals in terms of their implications for ER and their impact on individuals’ well-being.

Contrary to expectations, emotion goals are not limited to pleasant emotions. While most studies have found that individuals desire to attain hedonic goals (i.e., maximize positive emotions and minimize negative ones), in some cases they can desire to attain contra-hedonic goals, aiming to maximize negative emotion or minimize positive emotions (Riediger et al., 2009; Tamir & Ford, 2009, 2012; Tamir, 2016). Thus, both types of goals (hedonic or contra-hedonic) involve the selection of an ER strategy that increases or decreases a specific emotion. For instance, research has shown that if individuals want to decrease their emotions, they will be more likely to use distraction or suppression strategies to regulate their emotions; on the contrary, if they want to increase their emotions (whether positive or negative), they will be more likely to use rumination to regulate their emotions (Millgram et al., 2019).

Emotion goals are of high importance because they set the target for ER (e.g., excitement or calmness), shape the direction of ER (i.e., increase or decrease an emotion), and influence ER choice (as previously described) (Millgram et al., 2020). They can take different forms: how individuals are trying to change an emotion (increasing or decreasing a specific emotion) and the reasons underlying that regulation that are not necessarily emotional (English et al., 2017). Regarding the underlying reasons for regulating emotions, two types of goals were proposed by Tamir (2009, 2016): hedonic goals and instrumental goals. Hedonic goals target a momentary emotional experience and are

usually linked to the desire of maximizing pleasure and minimizing pain (*pro-hedonic goals*) or the contrary (*contra-hedonic goals*); and instrumental goals target future potential benefits (non-emotional outcomes) that will be achieved by regulating emotion in a specific way (Tamir, 2009, 2016). These instrumental goals can be of different nature according to the motives underlying them. Tamir (2016) identified four types of instrumental goals – performance goals (the desire to successfully perform an activity), epistemic goals (the desire to attain desirable information), social goals (the desire to influence social interactions), and eudaimonic goals (the desire to attain autonomy, competence, and sense of meaning in life). Additionally, Eldesouky and English (2019a) proposed that social goals should be divided into two categories – social goals for the self and social goals for others. The first would include *impression management goals* (i.e., appearing in a certain way to others) and the second would include *pro-social goals* (i.e., influencing relationships for the sake of others).

Some authors considered that individuals may have a typical profile of emotion regulation goals (Eldesouky & English, 2019b). However, evidence from daily emotion regulation studies has suggested that emotion goals can vary across situations (English et al., 2017; Wilms et al., 2020, 2021). Additionally, some studies have suggested that individuals with psychopathologies are likely to differ in how much they want to feel certain emotions, being especially motivated to feel more negative emotions (Arens & Stangier, 2020; Millgram et al., 2020). For example, in one study Millgram et al. (2015) found that more depressed individuals wanted to feel less happy and sadder in comparison to non-depressed individuals. Yet, authors also recognize that these individual differences in emotions goals have consequences not only for ER but also for individuals’ mental health since emotion goals can contribute to either triggering or maintaining psychopathology (Millgram et al., 2020).

Emotion regulation and emotion goals

The (extended) process model of ER proposed by Gross (2001, 2015a) highlights the role of goals in ER, by proposing the existence of a valuation system that allows individuals to evaluate situations according to their internal or external world and resolve discrepancies between their actual state and their desired state by taking an action. The model considers that ER unfolds over time and has different stages (in which are presented different emotion goals) namely *identification* (with a focus on whether to regulate emotion),

selection (with a focus on what strategy to use), and *implementation* (with a focus on the process and outcomes of implementing a particular tactic) (Gross, 2015a). Several strategies can be used to regulate emotions. They have been grouped into five categories: situation selection, situation modification, attentional deployment, cognitive changes, and response modulation (Gross, 1998). The first four are *antecedent focused* since they act before a response is generated, and the last one is *response focused* since it occurs after a response is generated (Gross, 1998, 2015b). In our study, we used ER strategies from the three last categories: attentional deployment, namely rumination; cognitive change, namely positive reappraisal; and response modulation, namely expressive suppression, and emotion communication. Situation selection and situation modification were not included due to the paucity of studies about these types of strategies and the lack of instruments to assess it through self-report.

Expressive suppression and emotion communication were chosen because they have important social-communicative and affiliative functions that are essential for individuals' psychological functioning (Ben-Naim et al., 2013; Butler et al., 2003). Also, they do not represent opposite sides of the same construct and have different consequences for intrapersonal outcomes (Cameron & Overall, 2018). Rumination and positive reappraisal were chosen because they have different effects on individuals' psychological functioning (rumination is considered a less adaptive strategy to regulate emotions and is considered a transdiagnostic factor for anxiety and depression; McLaughlin & Nolen-Hoeksema, 2011). Positive reappraisal, on the other hand, is considered a more adaptive strategy to regulate emotions and is considered a key resilience mechanism moderating the relationship between stressors and negative outcomes (Riepenhausen et al., 2022)

Recently, a few studies started to explore the links between emotion goals and ER choice. Eldesouky and English (2019b) found that individuals who pursue pro-hedonic goals or pro-social goals are more likely to use antecedent-focused strategies such as reappraisal and distraction, while individuals who pursue impression management goals or contra-hedonic goals are more likely to use response-focused strategies such as suppression. English et al. (2017) found that instrumental goals are linked to the use of suppression, pro-hedonic goals are linked to the use of distraction and reappraisal, and contra-hedonic goals are linked to the use of suppression. Finally, Wilms et al. (2020) found that social goals are linked to the use of suppression, and

that strategies that can change the emotional experience (i.e., antecedent-focused) are important for attaining pro-hedonic goals.

The present study

It is now widely recognized that ER has important implications for individuals' psychological well-being (e.g., Dawel et al., 2021; Hu et al., 2014; Saxena et al., 2011). However, less is known about the factors that predict the choice of ER strategies as well as about the consequences of that choice. Recently, emotion goals emerged as an important factor associated with the use of specific ER strategies (e.g., Eldesouky & English, 2019b; English et al., 2017; Greenaway et al., 2021; Wilms et al., 2020). Also, there is some evidence that goals are associated with psychological well-being (Huta & Ryan, 2010; López-pérez & McCulloch, 2021; Ortner et al., 2018) and psychopathology (e.g., Millgram et al., 2020). For this reason, in this cross-sectional study, we aimed to provide preliminary evidence on individual differences about how emotion goals, emotion regulation strategies choice, and individuals' mental health are associated.

In this study, we examined the associations between emotion goals, ER, and mental health because our focus was to identify the role played by malleable targets of interventions (such as emotion goals and ER) in individuals' mental health and because our sample included adults from the community. Specifically, we aimed to examine the potential mediating role of ER on the link between emotion goals and mental health. Yet, we acknowledge that alternative models could also be tested since some previous studies have suggested that the links between ER and mental health are likely to be bidirectional (e.g., Dawel et al., 2021; De France et al., 2019), and that those with poor mental health may choose to regulate their emotions towards specific negative emotions (e.g., Arens & Stangier, 2020; Millgram et al., 2015).

Thus, we expected that specific emotion goals will be linked to mental health through specific ER strategies. Specifically, we expected that pro-hedonic goals and pro-social goals would be associated with the use of more positive reappraisal while impression management goals and contra-hedonic goals would be associated with the use of more expressive suppression, more rumination, and less emotion communication (Eldesouky & English, 2019b; English et al., 2017; Wilms et al., 2020). Consequently, we expected that emotion communication and positive reappraisal would be associated with better mental

health (in terms of less depression, anxiety, and stress) while expressive suppression and rumination would be associated with poor mental health (more depression, anxiety, and stress) (Cheung et al., 2015; DeSteno et al., 2013; English & Eldesouky, 2020; McLaughlin & Nolen-Hoeksema, 2011; Riepenhausen et al., 2022).

Method

Participants

Participants were 568 Portuguese adults from the community recruited through social networks. However, only 400 participants (75.5% women) were included in this study since 168 were excluded because they did not finish the questionnaire. Women had a mean age of 34.93 (SD = 12.10) and men of 37.05 (SD = 13.50). Most of the participants were involved in a romantic relationship (69%) for, on average, 10.74 years (SD = 11.30). More than half of the participants held a university degree (67.2% of women and 58.2% of men) and most were professionally active (71%). The remaining participants were students (13%), unemployed (10%), under sick leave (3%), or answered: “in other situation” (2%).

Measures

Emotion goals

Emotion goals were measured using the *Emotion Regulation Goals Scale* (ERGS) developed by Eldesouky and English (2019b). The ERGS has 18 items and assesses individual differences in emotion regulation goals through 5 subscales: pro-hedonic goals (3 items; item example “To keep feeling positive emotion (e.g., joy, contentment)?”), contra-hedonic goals (3 items; item example: “To feel more negative emotion (e.g., anger, sadness)?”), performance goals (3 items; item example: “To stay focused on a task you’re working on?”), pro-social goals (5 items, item example: “To make someone else feel good?”), and impression management goals (4 items; item example: “To have others approve of you?”). Items are rated on a Likert scale ranging from 1 (*never*) to 7 (*always*).

In this study, a 16-item version of the scale was used. Confirmatory factor analysis and item response theory analysis showed that item 1 and item 7 should be removed since they presented low factor loadings and low discrimination – thus the 5-factor structure with 16 items presented a moderate to good fit (as reported in Brandão et al., 2022). Cronbach’s alpha for

this study was .81 for contra-hedonic goals, .78 for pro-social goals, and .87 for impression management goals. The Spearman-Brown coefficient (that is here reported because these dimensions have only two items) was .81 for pro-hedonic values and .86 for performance goals indicating good internal consistency.

Emotion regulation strategies

Emotion suppression was measured with the *Emotion Regulation Questionnaire* (ERQ) developed by Gross and John (2003). It has 10 items that are rated on a Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). It measures two emotion regulation strategies: expressive suppression and cognitive reappraisal. For this study, we only used the expressive suppression subscale, composed of 4 items (item example: *I keep my emotions to myself*). Cronbach’s alpha was .80.

Emotion communication was measured with the *Stanford Emotional Self-Efficacy Scale* (SESES) developed by Giese Davis et al. (2004). It has 15 items scored on a 10-point scale ranging from 1 (*not at all confident*) to 10 (*completely confident*). In this study, we used only the subscale communicating emotions in relationships (5 items) and we adapted the instructions as well as Likert scale options to measure individuals’ use of communication to deal with their emotions (as used in previous studies, e.g., Brandão et al., 2020). For example: “Ask for the emotional support I need from my spouse/partner or closest friend” – 1 (*strongly disagree*) to 7 (*strongly agree*). Cronbach alpha was .69.

Rumination and *positive reappraisal* were measured with the *Cognitive Emotion Regulation Questionnaire* (CERQ) developed by Garnefski and Kraaij (2006). The CERQ has 36 items scored on a 5-point Likert scale ranging from 1 (*(almost) never*) to 5 (*(almost) always*) that evaluates nine dimensions: Self-blame, Blaming others, Acceptance, Refocusing on planning, Positive refocusing, Rumination, Positive reappraisal, Putting into perspective, and Catastrophizing (each one with 4 items). In this study, we used only the subscale rumination (item example “I dwell upon the feelings the situation has evoked in me) and the subscale positive reappraisal (item example: “I think that the situation also has its positive sides”). Cronbach alpha was .89 for rumination and .87 for positive reappraisal.

Depression, anxiety, and stress

Depression, anxiety, and stress were measured using the *Depression, Anxiety, and Stress Scale-21* (DASS-21) developed by Lovibond and Lovibond (1995). The DASS-21 has 21 items scored on a Likert-type scale ranging from 0 (did not apply to me at all) to 4 (applied

to me very much, or most of the time). It measures depression (item example “I felt that I had nothing to look forward to”, anxiety (item example “I experienced trembling (e.g., in the hands)”), and stress (item example “I felt that I was using a lot of nervous energy”) (each dimension is composed of 7 items). Cronbach’s alpha in this study was .91 for depression, .89 for anxiety, and .90 for stress.

Procedure

This study was approved by the Ethics Committee of CIP – Universidade Autónoma de Lisboa (reference number: 01–2020). Data was collected online using Limesurvey – a secure online survey system hosted by the university. The link of the survey was shared and posted on the authors’ personal networks and on specific groups (e.g., university’s Facebook page; students’ Facebook pages) (between February 2020 and February 2021 – data collection was suspended during some months after the covid lockdown). The initial page of the survey depicted the main goals of the study (i.e., to explore motives underlying ER choice), participants’ tasks, assurance of confidentiality and anonymity, and an informed consent box, mandatory to proceed with the survey. Participants did not receive any type of incentive to participate in the study.

Data analysis

The IBM SPSS Statistics (version 26.0) was used to conduct preliminary analysis namely means, standard deviations, and bivariate Pearson correlations among study variables. Structural equation modelling was used to test the proposed model. This

analysis was conducted using AMOS (version 26.0). The maximum-likelihood estimation (ML) method was used. The model fit evaluation was based on the following indicators: the Comparative fit index (CFI), the Goodness of Fit Index (GFI), the Tucker-Lewis index (TLI), the root-mean-square error of approximation (RMSEA), and the standardized root mean residual (SRMR). CFI, GFI, and TLI values were considered adequate when higher than .90; RMSEA and SRMR values were considered adequate when smaller than .08 (Browne & Cudeck, 1992; Hu & Bentler, 1999).

Mediation was examined by considering direct and indirect effects using bootstrap resampling procedures (MacKinnon et al., 2004). The bias-corrected bootstrap 90% confidence interval (CI) for the unstandardized effects was reported. Bootstrap tests for all indirect effects were obtained by following the procedure presented by Sadler et al. (2011).

Measurement invariance (configural, metric, and scalar invariances) between women ($n = 302$) and men ($n = 98$) was examined using multi-group invariance. We ran an unconstrained model and a model with cross-group constraints. The fit of both models in terms of the chi-square difference test value and the CFI and RMSEA difference values were compared. Invariance was established if we found non-significant $\Delta\chi^2$ tests between the two models (Bollen, 1989) and if we found a value of the change in CFI and RMSEA smaller than (or equal) to 0.01 (Chen, 2007).

Results

Preliminary results

Table 1 included the means, standard deviations, and bivariate correlations of all study variables. Pro-

Table 1. Means, standard-deviation, and bivariate correlations among study variables ($N = 400$).

	M (SD)	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
Emotion Goals													
1. Pro-hedonic	4.98 (1.33)	-											
2. Contra-hedonic	2.49 (1.16)	-.186**	-										
3. Performance	5.10 (1.21)	.460**	-.051	-									
4. Pro-social	4.77 (1.08)	.532**	.093	.465**	-								
5. IM	4.19 (1.42)	.204**	.217**	.226**	.589**	-							
ER													
6. Suppression	3.60 (1.59)	-.136**	.241**	.041	.110*	.191**	-						
7. EC	5.07 (1.26)	.284**	-.116*	.090	.080	-.091	-.514**	-					
8. Rumination	3.20 (1.03)	-.012	.126*	.035	.191**	.292**	.108*	-.116*	-				
9. PR	3.51 (.99)	.446**	-.202**	.178**	.228**	.030	-.179*	.205**	.208**	-			
Symptomatology													
10. Depression	1.68 (.66)	-.275**	.313**	.130	.069	.258**	.348**	-.378**	.357**	-.271**	-		
11. Anxiety	1.46 (.53)	-.169**	.280**	-.025	.100*	.251**	.281**	-.269**	.401**	-.222**	.682**	-	
12. Stress	1.96 (.64)	-.177**	.308**	.004	.062	.221**	.236**	-.261**	.377**	-.237**	.725**	.739**	-

Note. M = mean; SD = standard-deviation; ER = emotion regulation; IM = impression management; EC = emotion communication; PR = positive reappraisal; * $p < .05$; ** $p < .01$.

hedonic goals were negatively associated with suppression, depression, anxiety, and stress, and positively associated with emotion communication and putting into perspective. Contra-hedonic goals were positively associated with suppression, rumination, depression, anxiety, and stress, and negatively associated with emotion communication and positive reappraisal. Performance goals were only positively associated with positive reappraisal. Pro-social goals were positively associated with suppression, rumination, positive reappraisal, and anxiety. Impression management goals were positively associated with suppression, rumination, depression, anxiety, and stress.

In terms of emotion regulation strategies, suppression and rumination were positively associated with depression, anxiety, and stress; emotion communication and positive reappraisal were negatively associated with depression, anxiety, and stress.

Mediational model

The proposed model did not provide a good fit to the data ($\chi^2(5) = 34.75$; $p < .001$; $\chi^2/df = 6.95$; CFI = .98; GFI = .99; SRMR = .03; RMSEA = .12, $p_{close} < .001$, 90% CI .086, .162). Thus, we examined a more parsimonious model in which non-significant paths were removed (because pro-social goals and performance goals were not significantly related to either emotion regulation strategies and depression,

anxiety, and stress, they were not included in the model). This final model provided a good fit to the data ($\chi^2(14) = 50.55$; $p < .001$; $\chi^2/df = 3.61$; CFI = .97; GFI = .98; SRMR = .05; RMSEA = .08, $p_{close} = .016$, 90% CI .058, .108) and accounted for 37%, 32%, 31% of the total variance of individuals' depression, anxiety, and stress, respectively. Standardized direct effects are presented in Table 2. The final model is presented in Figure 1.

We found a negative association between pro-hedonic goals and depression and suppression, and a positive association between pro-hedonic goals and emotion communication and positive reappraisal. We found a positive association between contra-hedonic goals and depression, anxiety, stress, and suppression and a negative association between contra-hedonic goals and positive reappraisal. We found a positive association between impression management goals and depression, emotion communication, positive reappraisal, and a negative association between impression management goals and suppression.

Also, we found a positive association between suppression and depression and anxiety; a negative association between emotion communication and depression, anxiety, and stress; a positive association between rumination and depression, anxiety, and stress; and, finally, a positive association between positive reappraisal and depression, anxiety, and stress.

Table 2. Significant direct associations between emotion goals, emotion regulation strategies, and depression, anxiety, and stress ($N = 400$).

Effect predictor-> outcome	<i>B</i>	SE	<i>p</i>
Pro-hedonic -> depression	-.111	.02	.003
Pro-hedonic -> suppression	-.144	.06	.004
Pro-hedonic -> EC	.316	.05	.000
Pro-hedonic -> PR	.423	.03	.000
Contra-hedonic -> suppression	.164	.06	.000
Contra-hedonic -> PR	-.124	.04	.006
Contra-hedonic -> depression	.149	.02	.001
Contra-hedonic -> anxiety	.146	.02	.001
Contra-hedonic -> stress	.191	.02	.001
IM -> suppression	.186	.06	.000
IM -> EC	-.156	.04	.001
IM -> rumination	.292	.04	.000
IM -> depression	.080	.02	.020
Suppression -> depression	.094	.02	.014
Suppression -> anxiety	.081	.01	.035
EC -> depression	-.197	.02	.000
EC -> anxiety	-.113	.02	.014
EC -> stress	-.142	.02	.000
Rumination -> depression	.327	.03	.000
Rumination -> anxiety	.409	.02	.000
Rumination -> stress	.386	.03	.000
PR -> depression	-.208	.03	.000
PR -> anxiety	-.240	.02	.000
PR -> stress	-.248	.03	.000

Note. *B* = Standardized estimate; *S* = standard error; EC = emotion communication; PR = positive reappraisal; IM = impression management.

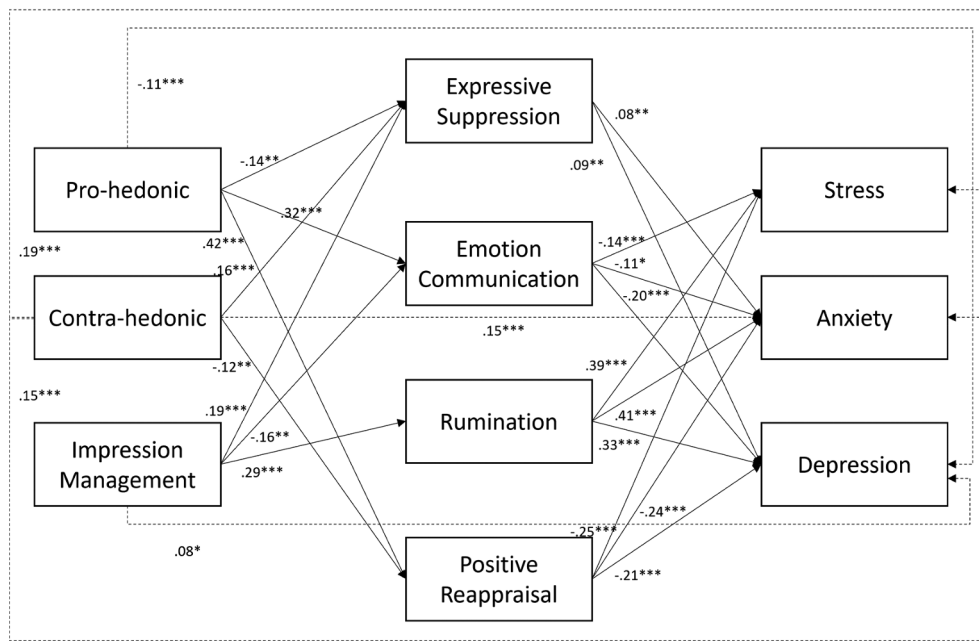


Figure 1. Mediation model without non-significant paths. Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 3. Bootstrap test for indirect associations for the model with emotion goals as independent variables, emotion regulation strategies as mediators, and depression, anxiety, and stress as outcomes ($N = 400$).

Effect	B	SE	p	Bias-corrected 90% CI for mean indirect effect	
				Lower	Upper
Pro-hedonic -> suppression -> depression	.13	.03	.006	.089	.191
Pro-hedonic -> EC -> depression	-.06	.02	.010	-.085	-.032
Pro-hedonic -> PR -> depression	-.09	.02	.008	-.134	-.051
Pro-hedonic -> suppression -> anxiety	.15	.03	.012	.103	.197
Pro-hedonic -> EC -> anxiety	-.03	.02	.017	-.066	-.011
Pro-hedonic -> PR -> anxiety	-.10	.02	.009	-.143	-.066
Pro-hedonic -> EC -> stress	.13	.03	.006	.097	.190
Pro-hedonic -> PR -> stress	.13	.03	.007	.087	.181
Contra-hedonic -> suppression -> depression	.14	.03	.006	.106	.200
Contra-hedonic -> PR -> depression	.15	.03	.005	.111	.209
Contra-hedonic -> suppression -> anxiety	.15	.03	.012	.112	.203
Contra-hedonic -> PR -> anxiety	.16	.03	.014	.113	.206
Contra-hedonic -> PR -> stress	.03	.01	.015	.009	.054
IM -> suppression -> depression	.02	.01	.009	.004	.032
IM -> EC -> depression	.03	.01	.020	.012	.055
IM -> rumination -> depression	.10	.02	.004	.066	.152
IM -> suppression -> anxiety	.01	.01	.000	.029	.093
IM -> EC -> anxiety	.02	.01	.040	.003	.038
IM -> rumination -> anxiety	.12	.02	.004	.090	.170
IM -> EC -> stress	.02	.01	.014	.007	.045
IM -> rumination -> stress	.11	.03	.006	.077	.159

Note. B = Standardized estimate; S = standard error; p = bootstrap bias corrected p values. EC = emotion communication; PR = positive reappraisal; IM = impression management.

In terms of indirect effects (presented in Table 3), we found that: pro-hedonic goals were associated with depression and anxiety through suppression, emotion communication, and positive reappraisal, and with stress through emotion communication and positive reappraisal. Specifically, pro-hedonic goals were associated with less suppression which in turn was associated with less depression and less anxiety; pro-

hedonic goals were associated with more emotion communication and positive reappraisal which in turn were associated with less depression, anxiety, and stress.

Additionally, contra-hedonic goals were associated with depression and anxiety through suppression and positive reappraisal, and with stress through positive reappraisal. Specifically, contra-hedonic goals were associated with more

Table 4. Test of measurement invariance across sex.

Sex	$\Delta\chi^2$	ΔDf	p	CFI	RMSEA	ΔCFI	$\Delta RMSEA$
Configural	16.51	24	.869	.976	.038	-	-
Metric	30.30	30	.450	.970	.041	.006 ¹	-.003 ¹
Scalar	42.34	41	.413	.969	.038	.001 ²	.003 ²

Note. ¹configural vs metric; ²metric vs scalar. Δ = change in model fit in relation to the reference model (i.e., unconstrained).

suppression which in turn was associated with more depression and anxiety; contra-hedonic goals were negatively associated with positive reappraisal, which in turn was associated with more depression, anxiety, and stress.

Finally, impression management goals were associated with depression through suppression, emotion communication, and rumination, and with anxiety and stress through emotion communication and rumination. Specifically, impression management goals were associated with more suppression which in turn was associated with more depression; impression management goals were associated with less emotion communication which in turn was associated with more depression, anxiety, and stress; impression management goals were associated with more rumination which in turn was associated with more depression, anxiety, and stress.

Measurement invariance

Fit indices for invariance tests are presented in Table 4. Non-significant $\Delta\chi^2$ between the two models and ΔCFI and $\Delta RMSEA$ smaller than 0.01 were found, suggesting invariance (i.e., that model is similar across men and women).

Discussion

The aim of this study was to provide preliminary evidence on individual differences about how emotion goals, emotion regulation strategies choice, and individuals' mental health are associated. While some studies have shown that emotion goals are likely to be associated with well-being (Huta & Ryan, 2010; López-pérez & McCulloch, 2021; Ortner et al., 2018) as well as ER choice (Eldesouky & English, 2019b; English et al., 2017; Wilms et al., 2020), to our knowledge this is the first study that explored the mediating role of ER strategies on the link between emotion goals and individuals' mental health.

Our results provide support for some of our hypotheses. Pro-hedonic goals were associated with the use of less suppression, more emotion communication, and more positive reappraisal, which in turn were associated with better mental health. Because pro-

hedonic goals aim to improve emotional experiences by maximizing positive emotions and minimizing negative ones, they are likely to be associated with the use of less suppression that is less effective in reducing the experience of negative emotions (English et al., 2017; Gross & Levenson, 1997). In fact, this association between pro-hedonic goals and the use of less emotion suppression was in accordance with previous studies (Eldesouky & English, 2019b; English et al., 2017).

Pro-hedonic goals were also associated with the use of more positive reappraisal. Indeed, similar cognitive ER strategies that allow reappraising the events in a more positive light are effective in down-regulating emotional experience and response to negative events (e.g., McRae et al., 2008). Pro-hedonic goals were also associated with more emotion communication. This result is supported by previous studies showing that the expression of emotions can increase the experience of the associated positive emotional states (e.g., Gable et al., 2004). Thus, these strategies seem to contribute to attaining pro-hedonic goals, and, as expected, to improve individuals' mental health since they are likely to experience less depressive and anxiety symptoms (and in some cases less stress). As pointed out by previous studies (Eldesouky & English, 2019b; English et al., 2017; Riediger et al., 2009), the use of more adaptive strategies to regulate emotions is likely to contribute to promoting better psychological functioning since they help to improve positive affect and reduce negative affect.

Regarding contra-hedonic goals, we found that they were linked to depression and anxiety via the use of more suppression and less positive reappraisal. As expected, contra-hedonic goals were associated with greater use of suppression, a pattern found in previous studies (Eldesouky & English, 2019b; English et al., 2017). As pointed out by Gross and Levenson (1997), suppression can be ineffective in reducing negative emotions, but it is useful for reducing the experience of positive emotions, something that individuals with contra-hedonic goals desire to achieve. Contra-hedonic goals were also linked to less positive reappraisal. This was expected since reappraisal is usually effective in reducing negative emotional experiences (Gross & Levenson, 1997), which is not consistent with

the desires of individuals with contra-hedonic goals (i.e., to experience more negative emotions). Surprisingly, contra-hedonic goals were not associated with rumination, a strategy that allows for increasing negative emotion (Nolen-Hoeksema, 2000). A previous study (Heiy & Cheavens, 2014) found that the use of rumination did not predict negative mood – thus it is possible that rumination is not usually used to decrease pleasure and increase negative mood – only under specific circumstances or depending on the frequency and/or intensity of rumination (English et al., 2017). However, more research is needed to better understand this lack of association.

Overall, we found that emotions goals seem to be associated with ER strategy choice. However, even when suppression or rumination are selected in accordance with individuals' goals, those strategies may not be "effective" since they seem to be associated with higher levels of depression and anxiety symptoms. Also, the associations between contra-hedonic goals and depression, anxiety, and stress showed that other factors may be involved in these associations and not only the ER strategies used. Thus, contra-hedonic goals seem to be associated with costs, as reported in previous studies (e.g., they were linked to lower average working memory performance in comparison to pro-hedonic goals; Riediger et al., 2011). More studies are needed to better understand the potential costs of contra-hedonic goals.

Finally, impression management goals were linked to depression, anxiety, and stress via the use of more suppression, more rumination, and less emotion communication. Again, the link between impression management goals and suppression is in accordance with previous studies (Eldesouky & English, 2019b; English et al., 2017) but the link with less emotion communication is new. These associations were expected because emotional expression has an important role in managing others' impressions (Leary & Kowalski, 1990). Suppression or avoiding emotion communication can be effective strategies to cause a positive impression on others since they allow to protect self-image and cause a positive image on others. As some studies suggest, the expression of some emotions (including positive emotions) can have social costs (e.g., Greenaway & Kalokerinos, 2017). However, and despite the effectiveness of these strategies to attain impression management goals, our results suggest that these goals and the use of these strategies can lead to intra-personal costs (in terms of depression, anxiety, and stress symptoms). With regards to rumination, while no previous study has explored these associations, it is possible to hypothesize that because individuals aim

to control information to influence the impression formed by others, they can engage in ruminative thoughts about themselves and their emotions. Because rumination is a strategy that tends to increase negative emotions (Nolen-Hoeksema, 2000), it is not surprising that when used for impression management goals it leads to worse mental health.

In sum, our results align with the idea that emotion goals guide ER strategy choice (Eldesouky & English, 2019b; English et al., 2017; Mauss & Tamir, 2014) but they also add to the literature by showing that emotion goals are linked to individuals' mental health through ER strategies, in a similar way to men and women, as shown by measurement invariance. It is important to note, however, that this study focused on individual differences in the use of specific emotion goals and ER strategies. Like what happens with ER strategies, emotion goals seem to vary across contexts, as suggested by previous studies that employed different designs to examine emotion goals (e.g., ecological momentary assessment) (English et al., 2017; Wilms et al., 2020, 2021). Consequently, its impact on ER choice as well as on individuals' psychological functioning may also vary across contexts.

Emotion goals are critical to understanding not only why individuals regulate their emotions in a specific way but also how that impacts their mental health. However, because this is a cross-sectional study, caution is needed in interpreting these results. Indeed, it is possible that other causal pathways are just as likely given the non-recursive nature of this model. Indeed, some studies have found that the associations between ER and mental health are likely to be bidirectional (e.g., Dawel et al., 2021; De France et al., 2019). Additionally, studies have shown that more depressed or anxious individuals are more likely to experience low positive affect and exhibit more deficits in processing and responding to emotions (Dryman & Heimberg, 2018) or are more likely to regulate their emotions towards specific negative emotions (e.g., Arens & Stangier, 2020; Millgram et al., 2015). In a recent review (Dryman & Heimberg, 2018), a specific type of anxiety (social anxiety) was associated with an overreliance on expressive suppression and with ineffective use of cognitive reappraisal while depression was associated with an underutilization of cognitive reappraisal. Thus, future studies are needed, especially longitudinal ones, to better understand causality among these variables.

Limitations and future research

This study has some limitations that are worth noting. First, the cross-sectional nature of the study does not

allow us to infer causality among study variables. Second, data were collected using self-report data which can lead to some bias (e.g., cognitive processes, social desirability, or survey conditions; Bound et al., 2001). Also, in terms of ER strategies, self-report only allows collecting data regarding explicit forms of ER leaving understudied emotion processes that occur outside of individuals' consciousness. Future studies should consider using other types of measures and include other types of informants.

Third, we focused on the impact of emotion goals and ER strategies choice on mental health, but other outcomes should be further explored (e.g., interpersonal outcomes). Additionally, emotion regulation flexibility was not considered in this study. As highlighted by some authors inflexible responses are generally maladaptive for mental health and the adaptiveness of ER flexibility may also depend on the specific context-strategy pairings in question (Aldao et al., 2015; Bonanno et al., 2004). While our results suggested that suppression and rumination were linked to more negative outcomes and positive reappraisal and emotion communication were linked to more positive outcomes, it is important to better understand if these patterns of associations remain across different contexts, considering emotion goals, since studies have suggested that individuals' goals and ER strategies used do vary according to context (e.g., Wilms et al., 2020) but they have not explored the consequences of that for the individual's psychological functioning. Thus, future studies should continue to employ ecological momentary assessment (e.g., daily diaries) to better understand the patterns of associations between emotion goals, ER, and individuals' psychological functioning.

Finally, our sample is composed mostly of well-educated women, so studies with more heterogeneous samples in terms of sex and education should be conducted. For example, some studies have suggested that individuals from higher socioeconomic status (a proxy for education) may be more capable of regulating their emotions (e.g., Côté et al., 2010), but other studies have suggested that ER may be more beneficial for those from low socioeconomic status (Troy et al., 2017). Thus, it is possible that the associations between emotion goals, ER, and mental health could be stronger for those with less education, income, or socioeconomic status.

Additionally, while measurement invariance was obtained across sex, the number of men included in this study is small. Thus, a larger sample of men is needed to further determine measurement invariance.

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Consent

Informed consent was obtained from all individual participants included in the study.

Ethics approval

Approval was obtained from the Ethics Committee of CIP-UAL from Universidade Autónoma de Lisboa. The procedures used in this study adhere to the tenets of the Declaration of Helsinki.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author, TB. The data are not publicly available due to ethical reasons.

Author contributions

All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by Tânia Brandão and Rute Brites. The first draft of the manuscript was written by Tânia Brandão and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

References

- Aldao, A., Sheppes, G., & Gross, J. J. (2015). Emotion regulation flexibility. *Cognitive Therapy and Research*, 39(3), 263–278. <https://doi.org/10.1007/s10608-014-9662-4>
- Arens, E. A. & Stangier, U. (2020). Sad as a matter of evidence: The desire for self-verification motivates the pursuit of sadness in clinical depression. *Frontiers in Psychology*, 11, 238. <https://doi.org/10.3389/fpsyg.2020.00238>
- Ben-Naim, S., Hirschberger, G., Ein-Dor, T., & Mikulincer, M. (2013). An experimental study of emotion regulation

- during relationship conflict interactions: The moderating role of attachment orientations. *Emotion*, 13(3), 506–519. <https://doi.org/10.1037/a0031473>
- Bollen, K. A. (1989). *Structural equations with latent variables*. John Wiley & Sons. <https://doi.org/10.1002/9781118619179>
- Bonanno, G. A., Papa, A., Lalande, K., Westphal, M., & Coifman, K. (2004). The importance of being flexible: The ability to both enhance and suppress emotional expression predicts long-term adjustment. *Psychological Science*, 15(7), 482–487. <https://doi.org/10.1111/j.0956-7976.2004.00705.x>
- Bound, J., Brown, C., & Mathiowetz, N. (2001). Measurement error in survey data. In J. J. Heckman & E. Leamer (Eds.), *Handbook of econometrics* (Vol. 5, pp. 3705–3843). Elsevier.
- Brandão, T., Brites, R., Hipólito, J., & Nunes, O. (2022). The emotion regulation goals scale: Advancing its psychometric properties using item response theory analysis. *Journal of Clinical Psychology*, 78(9), 1940–1957. <https://doi.org/10.1002/jclp.23343>
- Brandão, T., Matias, M., Ferreira, T., Vieira, J., Schulz, M. S., & Matos, P. M. (2020). Attachment, emotion regulation, and well-being in couples: Intrapersonal and interpersonal associations. *Journal of Personality*, 88(4), 748–761. <https://doi.org/10.1111/jopy.12523>
- Browne, M. W. & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research*, 21(2), 230–258. <https://doi.org/10.1177/0049124192021002005>
- Butler, E. A., Egloff, B., Wilhelm, F. H., Smith, N. C., Erickson, E. A., & Gross, J. J. (2003). The social consequences of expressive suppression. *Emotion*, 3(1), 48–67. <https://doi.org/10.1037/1528-3542.3.1.48>
- Cameron, L. D. & Overall, N. C. (2018). Suppression and expression as distinct emotion-regulation processes in daily interactions: Longitudinal and meta-analyses. *Emotion*, 4(4), 465–480. <https://doi.org/10.1037/emo0000334>
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling*, 14(3), 464–504. <https://doi.org/10.1080/10705510701301834>
- Cheung, E. O., Gardner, W. L., & Anderson, J. F. (2015). Emotionships: Examining people’s emotion-regulation relationships and their consequences for well-being. *Social Psychological & Personality Science*, 6(4), 407–414. <https://doi.org/10.1177/1948550614564223>
- Côté, S., Gyurak, A., & Levenson, R. W. (2010). The ability to regulate emotion is associated with greater well-being, income, and socioeconomic status. *Emotion*, 10(6), 923–933. <https://doi.org/10.1037/a0021156>
- Dawel, A., Shou, Y., Gulliver, A., Cherbuin, N., Banfield, M., Murray, K., Calear, A. L., Morse, A. R., Farrer, L. M., & Smithson, M. (2021). Cause or symptom? A longitudinal test of bidirectional relationships between emotion regulation strategies and mental health symptoms. *Emotion*, 21(7), 1511–1521. <https://doi.org/10.1037/emo0001018>
- De France, K., Lennarz, H., Kindt, K., & Hollenstein, T. (2019). Emotion regulation during adolescence: Antecedent or outcome of depressive symptomatology? *International Journal of Behavioral Development*, 43(2), 107–117. <https://doi.org/10.1177/0165025418806584>
- DeSteno, D., Gross, J. J., & Kubzansky, L. (2013). Affective science and health: The importance of emotion and emotion regulation. *Health Psychology*, 32(5), 474. <https://doi.org/10.1037/a0030259>
- Dryman, M. T. & Heimberg, R. G. (2018). Emotion regulation in social anxiety and depression: A systematic review of expressive suppression and cognitive reappraisal. *Clinical Psychology Review*, 65, 17–42. <https://doi.org/10.1016/j.cpr.2018.07.004>
- Eldesouky, L. & English, T. (2019a). Individual differences in emotion regulation goals: Does personality predict the reasons why people regulate their emotions? *Journal of Personality*, 87(4), 750–766. <https://doi.org/10.1111/jopy.12430>
- Eldesouky, L. & English, T. (2019b). Regulating for a reason: Emotion regulation goals are linked to spontaneous strategy use. *Journal of Personality*, 87(5), 948–961. <https://doi.org/10.1111/jopy.12447>
- English, T. & Eldesouky, L. (2020). We’re not alone: Understanding the social consequences of intrinsic emotion regulation. *Emotion*, 20(1), 43–47. <https://doi.org/10.1037/emo0000661>
- English, T., Lee, I. A., John, O. P., & Gross, J. J. (2017). Emotion regulation strategy selection in daily life: The role of social context and goals. *Motivation and Emotion*, 41(2), 230–242. <https://doi.org/10.1007/s11031-016-9597-z>
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality & Social Psychology*, 87(2), 228–245. <https://doi.org/10.1037/0022-3514.87.2.228>
- Garnefski, N. & Kraaij, V. (2006). Cognitive emotion regulation questionnaire—development of a short 18-item version (CERQ-short). *Personality & Individual Differences*, 41(6), 1045–1053. <https://doi.org/10.1016/j.paid.2006.04.010>
- Giese Davis, J., Koopman, C., Butler, L. D., Joss, J., Classen, C., Roberts, J., Rosenbluth, R., Morrow, G. R., & Spiegel, D. (2004). The stanford emotional self-efficacy scale—Cancer. In I. Nyklíček, L. Temoshok, & A. Vingerhoets (Eds.), *Emotional expression and health: Advances in theory, assessment and clinical applications* (pp. 204–221). Routledge.
- Greenaway, K. H. & Kalokerinos, E. K. (2017). Suppress for success? Exploring the contexts in which expressing positive emotion can have social costs. *European Review of Social Psychology*, 28(1), 134–174. <https://doi.org/10.1080/10463283.2017.1331874>
- Greenaway, K. H., Kalokerinos, E. K., Hinton, S., & Hawkins, G. E. (2021). Emotion experience and expression goals shape emotion regulation strategy choice. *Emotion*, 21(7), 1452–1469. <https://doi.org/10.1037/emo0001012>
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271–299. <https://doi.org/10.1037/1089-2680.2.3.271>
- Gross, J. J. (2001). Emotion regulation in adulthood: Timing is everything. *Current Directions in Psychological Science*, 10(6), 214–219. <https://doi.org/10.1111/1467-8721.00152>
- Gross, J. J. (2015a). Emotion regulation: Conceptual and empirical foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation* (2nd ed., pp. 3–20). The Guilford Press.
- Gross, J. J. (2015b). The extended process model of emotion regulation: Elaborations, applications, and future directions. *Psychological Inquiry*, 26(1), 130–137. <https://doi.org/10.1080/1047840X.2015.989751>
- Gross, J. J. & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality & Social Psychology*, 84(6), 790–801. <https://doi.org/10.1037/0022-3514.84.6.790>

- Psychology*, 85(2), 348–362. <https://doi.org/10.1037/0022-3514.85.2.348>
- Gross, J. J. & Levenson, R. W. (1997). Hiding feelings: The acute effects of inhibiting negative and positive emotion. *Journal of Abnormal Psychology*, 106(1), 95–103. <https://doi.org/10.1037/0021-843X.106.1.95>
- Heij, J. E. & Cheavens, J. S. (2014). Back to basics: A naturalistic assessment of the experience and regulation of emotion. *Emotion*, 14(5), 878. <https://doi.org/10.1037/a0037231>
- Hu, L.-T. & 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>
- Hu, T., Zhang, D., Wang, J., Mistry, R., Ran, G., & Wang, X. (2014). Relation between emotion regulation and mental health: A meta-analysis review. *Psychological Reports*, 114(2), 341–362. <https://doi.org/10.2466/03.20.PR0.114k22w4>
- Huta, V. & Ryan, R. M. (2010). Pursuing pleasure or virtue: The differential and overlapping well-being benefits of hedonic and eudaimonic motives. *Journal of Happiness Studies*, 11(6), 735–762. <https://doi.org/10.1007/s10902-009-9171-4>
- Leary, M. R. & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin*, 107(1), 34–47. <https://doi.org/10.1037/0033-2909.107.1.34>
- López-pérez, B. & McCulloch, S. (2021). General and contextualized emotion goals and its link with well-being across late, middle, and young adulthood. *The British Journal of Developmental Psychology*, 39(2), 299–311. <https://doi.org/10.1111/bjdp.12343>
- Lovibond, S. H. & Lovibond, P. F. (1995). *Manual for the depression anxiety & stress scales* (2nd ed.). Psychology Foundation.
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39(1), 99–128. https://doi.org/10.1207/s15327906mbr3901_4
- Mauss, I. B. & Tamir, M. (2014). Emotion goals: How their content, structure, and operation shape emotion regulation. In J. J. Gross (Ed.), *The handbook of emotion regulation* (2nd ed., pp. 361–375). Guilford Press.
- McLaughlin, K. A. & Nolen-Hoeksema, S. (2011). Rumination as a transdiagnostic factor in depression and anxiety. *Behaviour Research and Therapy*, 49(3), 186–193. <https://doi.org/10.1016/j.brat.2010.12.006>
- McRae, K., Ochsner, K. N., Mauss, I. B., Gabrieli, J. J., & Gross, J. J. (2008). Gender differences in emotion regulation: An fMRI study of cognitive reappraisal. *Group Processes & Intergroup Relations*, 11(2), 143–162. <https://doi.org/10.1177/1368430207088035>
- Millgram, Y., Huppert, J. D., & Tamir, M. (2020). Emotion goals in psychopathology: A new perspective on dysfunctional emotion regulation. *Current Directions in Psychological Science*, 29(3), 242–247. <https://doi.org/10.1177/0963721420917713>
- Millgram, Y., Joormann, J., Huppert, J. D., & Tamir, M. (2015). Sad as a matter of choice? Emotion-regulation goals in depression. *Psychological Science*, 26(8), 1216–1228. <https://doi.org/10.1177/0956797615583295>
- Millgram, Y., Sheppes, G., Kalokerinos, E. K., Kuppens, P., & Tamir, M. (2019). Do the ends dictate the means in emotion regulation? *Journal of Experimental Psychology: General*, 148(1), 80–96. <https://doi.org/10.1037/xge0000477>
- Nolen-Hoeksema, S. (2000). The role of rumination in depressive disorders and mixed anxiety/depressive symptoms. *Journal of Abnormal Psychology*, 109(3), 504–511. <https://doi.org/10.1037/0021-843X.109.3.504>
- Ortner, C. N., Corno, D., Fung, T. Y., & Rapinda, K. (2018). The roles of hedonic and eudaimonic motives in emotion regulation. *Personality & Individual Differences*, 120, 209–212. <https://doi.org/10.1016/j.paid.2017.09.006>
- Riediger, M., Schmiedek, F., Wagner, G. G., & Lindenberger, U. (2009). Seeking pleasure and seeking pain: Differences in prohedonic and contra-hedonic motivation from adolescence to old age. *Psychological Science*, 20(12), 1529–1535. <https://doi.org/10.1111/j.1467-9280.2009.02473.x>
- Riediger, M., Wrzus, C., Schmiedek, F., Wagner, G. G., & Lindenberger, U. (2011). Is seeking bad mood cognitively demanding? Contra-hedonic orientation and working-memory capacity in everyday life. *Emotion*, 11(3), 656–665. <https://doi.org/10.1037/a0022756>
- Riepenhausen, A., Wackerhagen, C., Reppmann, Z. C., Deter, H. C., Kalisch, R., Veer, I. M., & Walter, H. (2022). Positive cognitive reappraisal in stress resilience, mental health, and well-being: A comprehensive systematic review. *Emotion Review*, 14(4), 310–331. <https://doi.org/10.1177/17540739221114642>
- Sadler, P., Ethier, N., & Woody, E. (2011). Tracing the interpersonal web of psychopathology: Dyadic data analysis methods for clinical researchers. *Journal of Experimental Psychopathology*, 2(2), 95–138. <https://doi.org/10.5127/jep.010310>
- Saxena, P., Dubey, A., & Pandey, R. (2011). Role of emotion regulation difficulties in predicting mental health and well-being. *Journal of Projective Psychology & Mental Health*, 18(2), 147–155.
- Tamir, M. (2009). What do people want to feel and why?: Pleasure and utility in emotion regulation. *Current Directions in Psychological Science*, 18(2), 101–105. <https://doi.org/10.1111/j.1467-8721.2009.01617.x>
- Tamir, M. (2016). Why do people regulate their emotions? A taxonomy of motives in emotion regulation. *Personality & Social Psychology Review*, 20(3), 199–222. <https://doi.org/10.1177/1088868315586325>
- Tamir, M. & Ford, B. Q. (2009). Choosing to be afraid: Preferences for fear as a function of goal pursuit. *Emotion*, 9(4), 488–497. <https://doi.org/10.1037/a0015882>
- Tamir, M. & Ford, B. Q. (2012). When feeling bad is expected to be good: Emotion regulation and outcome expectancies in social conflicts. *Emotion*, 12(4), 807–816. <https://doi.org/10.1037/a0024443>
- Troy, A. S., Ford, B. Q., McRae, K., Zorola, P., & Mauss, I. B. (2017). Change the things you can: Emotion regulation is more beneficial for people from lower than from higher socioeconomic status. *Emotion*, 17(1), 141–154. <https://doi.org/10.1037/emo0000210>
- Wilms, R., Lanwehr, R., & Kastenmüller, A. (2020). Emotion regulation in everyday life: The role of goals and situational factors. *Frontiers in Psychology*, 877. <https://doi.org/10.3389/fpsyg.2020.00877>
- Wilms, R., Lanwehr, R., & Kastenmüller, A. (2021). Always look on the bright side of life? Exploring the between-variance and within-variance of emotion regulation goals. *Motivation and Emotion*, 45(2), 235–247. <https://doi.org/10.1007/s11031-021-09867-5>