

You Need to Calm Down: Investigating the Effect of Goals on the Perceived Effectiveness of Interpersonal Suppression and Reappraisal

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Abstract

People often rely on others to regulate their emotions through different strategies. The aim of this study was to investigate whether goals change the perceived effectiveness of interpersonal cognitive reappraisal and suppression. While research on interpersonal emotion regulation has been increasing, little focus has been given to the role of goals in this process. It was hypothesized that reappraisal would be perceived more helpful for hedonic than instrumental goals. Suppression was hypothesized to be more perceived as more helpful for instrumental than hedonic goals. This was investigated through an experimentally designed survey (N = 986). Participants were randomly assigned to one of two conditions: hedonic or instrumental goals. Participants rated the strategies perceived helpfulness while thinking of their romantic partner. A repeated measures ANOVA was conducted to analyze the hypotheses. Interpersonal cognitive reappraisal was found to be perceived more effective than suppression regardless of participants' goals. Additionally, suppression was found to be perceived significantly more helpful for instrumental goals than hedonic goals. Therefore, it may be good to have a closer look at the role of goals and their effect on perceived effectiveness of emotion regulation strategies in future studies. This study showed that goals have differential effects on strategies perceived helpfulness. The findings highlighted the importance of a partner's understanding of the target's goals before choosing the interpersonal emotion regulation strategy.

Keywords: interpersonal emotion regulation, interpersonal cognitive reappraisal, interpersonal suppression

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Humans are inherently social creatures. We seek out connection with others, and place a lot of importance on nurturing relationships, especially romantic ones. As social beings, we frequently rely on people close to us to help regulate our emotions (Barthel et al., 2018; Temel and Dawd, 2023). Accordingly, as romantic partners, when we see that the other person is upset, we attempt to regulate their emotions. This process is also known as interpersonal emotion regulation (IER; Barthel et al., 2018). Particularly when experiencing negative emotions, we try to reduce or change these into positive emotions (Richards et al., 2003).

Until now, emotion regulation strategies have been researched quite extensively from the intrapersonal perspective. Even though there is a growing body of research investigating IER, little research has taken into account the role of goals. Whether someone prefers to feel better or wants to focus on an important task can influence their preference in the support they receive. Additionally, as already found by several previous studies, emotion regulation is a predictor of people's mental and emotional well-being, but also of relationship satisfaction (Cameron and Overall, 2018; Haga et al., 2007; Temel and Dawd, 2023).

The present study will investigate IER and the effect of goals by focusing on two common emotion regulation strategies: cognitive reappraisal and suppression. The specific question the current study aims to answer is: "How does the perceived effectiveness of interpersonal reappraisal and interpersonal suppression vary between instrumental and hedonic-goals?". Since romantic relationships have a big impact on our lives, the research question will be investigated from the perspective of the person receiving support from their romantic partner. The aim of this research is to provide a deeper understanding of how goals and emotion regulation strategies interact and therefore influence the perceived helpfulness.

Importance of IER and Goals

More times than not, people are within a social situation where people are influencing each other, meaning that frequently individuals are not alone when regulating their emotions (Loskot, 2019). This means that in most cases our emotion regulation does not only depend on ourselves. In IER, the person who is receiving assistance in regulating their emotions is referred to as a target. The person who is attempting to regulate the target's emotions is referred to as the regulator (Levi-Gigi and Shamay-Tsoory, 2017). The helpfulness of IER depends not only on the

target but also on a regulator's skills (Levi-Gigi and Shamay-Tsoory, 2017). Two skills are important to consider in regulators: their emotion regulation skills and their ability to identify the target's goals (Levi-Gigi and Shamay-Tsoory, 2017). Levi-Gigi and Shamay Tsoory (2017) found that the ability of regulators to understand their partner's perspective allowed them to choose more effective IER strategies to reduce negative emotions. Thus, it is important that the regulator adapts to the target's goals in order to choose the most effective ER strategy. The wrong ER strategy could lead to decreased emotional, relational, and general well-being (Gross and John, 2003; Nyklíček et al., 2010).

Target's frequently turn toward their romantic partners when in need of support. The level of responsiveness and validation a partner provides allows target's to feel heard and understood (Maisel et al., 2008). When individuals receive a bit of support, it can provide them with a lot of comfort. This comfort can help them cope better with stressful events and decrease emotional distress, as well as positively affect the quality of their relationships (Cunningham and Barbee, 2000; Maisel et al., 2008).

Partners can respond in different ways using different strategies, which have differential effects on well-being. Two strategies that have been compared frequently in research are reappraisal and suppression. Cognitive reappraisal is linked to increased positive emotions, reduced negative emotions, and increased mutual understanding (Gross and John, 2003; Haga et al., 2007; Temel and Dawd, 2023). Instead, suppression is associated with heightened negative emotions and decrease in relationship quality over time (Gross and John, 2003; Haga et al., 2007; Velotti et al., 2015). Different contexts and factors influence the effectiveness of IER strategies (Preston et al., 2021). One important factor in emotion regulation is flexibility. People who switch between different strategies depending on situational demands benefit more from the strengths of each strategy (Aldao et al., 2015). In fact, Nyklíček and colleagues (2010), showed that the ability to flexibly suppress and express emotions predicts long-term reduction of distress.

Another factor which may influence the effectiveness of IER strategies that has been slightly overlooked, is the influence of goals. Intrapersonal research largely identifies reappraisal as an adaptive strategy and suppression as a maladaptive strategy (Gross and John, 2003; Haga et al., 2007). However, the effectiveness of these two strategies may differ depending on the target's goal in the moment that they are experiencing emotions (Levi-Gigi and Shamay-Tsoory, 2017). Goals influence when, how and why individuals regulate their emotions (English et al., 2016).

This points towards the fact that regulators can only identify the most suitable strategy if they know the target's goal. One assumption about emotion regulation is that people only regulate their emotions in the pursuit of feeling better (Tamir, 2009). However, individuals regulate their emotions not only for pleasure, but also to maximize utility (Tamir, 2009). In order to achieve an instrumental goal such as completing a task, it requires people to prioritize emotions that are useful and not just pleasurable. Therefore, a strategy may be considered helpful even though it does not evoke immediate positive emotions. Tamir (2009) proposed that when immediate pleasure outweighs long-term goals, people will pursue hedonic goals. Hedonic goals refer to people's desire to feel better and experience positive emotions (English et al., 2016). In support of Tamir (2009), English and colleagues (2016) found that people frequently regulate their emotions to feel better, but not exclusively. Given the potential role of goals in emotion regulation as outlined by Tamir (2009), the next section provides relevant findings regarding reappraisal and suppression.

Cognitive Reappraisal

Within intrapersonal emotion regulation research, cognitive reappraisal and suppression have been found to have opposite effects on well-being. The first strategy, cognitive reappraisal, occurs when an individual changes how they think about a given situation, thereby changing its emotional impact (Gross and John, 2003). An example of cognitive reappraisal would be finding out you did not get an offer for a job and being upset about this. First, you view this as failure. After thinking about it, you reinterpret the situation as a learning opportunity to use for future interviews. This was also highlighted through the meta-analysis by Webb et al (2012), who found that reappraisal is one of the most effective emotion regulation strategies. One reason why cognitive reappraisal has been linked to increased positive emotions is that it targets the expression of emotion (e.g. crying) and the experiential aspect (how we feel about a distressing event; Gross and John, 2003).

Reappraisal's ability to take a negative situation and maximize the positive emotions from it indicates that this strategy will be more effective for hedonic rather than instrumental goals (English et al., 2016). Consequently, targets may perceive reappraisal attempts by the regulator as more effective than suppression when pursuing hedonic goals. Previous research has shown that the use of emotion regulation strategies is context-dependent (Eldesouky and English, 2018; English et al., 2016). Goals, specifically hedonic ones, were found to be predictive of the

use of reappraisal. Although these findings come from intrapersonal emotion regulation research, it gives an indication of people's preferences depending on the goal. Additionally, Batenburg and Das (2014) investigated people's IER response preferences. They found that participants preferred it when a computer provided them with a reappraisal response, instead of a socio-affective response. When participants received reappraisal responses, it led to a faster decrease in negative emotions (Batenburg & Das, 2014). Lastly, Martini (2011) found that social context also plays a role in the use of emotion regulation strategies and participants' perception of these. When thinking of close others, participants favored reappraisal because they were not as concerned with the detrimental effects of displaying negative emotions (Martini, 2011). Considering reappraisal's effectiveness in down regulating negative emotions and the interaction partners of the present study, participants will likely favor reappraisal for hedonic goals.

Nevertheless, reappraisal is likely perceived as ineffective when individuals have instrumental goals. A psychological process is almost never adaptive and effective in all situations (Kobylinska and Kusev, 2019; Troy et al., 2018). Reappraisal requires the use of several different mental skills. Using various cognitive processes during emotion regulation while also attempting to focus on a task requires significant cognitive effort and energy (Troy et al., 2018). As demonstrated by Troy and colleagues (2018), people perceive reappraisal as an overall more effective strategy for fast emotional relief, but also link it to increased cognitive costs. Therefore, while cognitive reappraisal is effective for long-term mental health and hedonic goals, it does not seem to be the best fit for instrumental goals. Drawing from these results, the first hypothesis formulated is: *Interpersonal reappraisal will be perceived as more effective by participants when they have hedonic goals as compared to when they have instrumental goals*.

Suppression

The second strategy, suppression, leads individuals to inhibit their emotions and emotion-expressive behavior (Gross and John, 2003). When using suppression, an individual would inhibit their elicited emotions when getting rejected from a job. For instance, counting to 10 to stop themselves from crying. Instead of targeting the experiential aspect of emotions an individual is processing, suppression only targets the behavioral aspect. In other words, the expression of emotion is inhibited while the emotional impact remains the same (Webb et al., 2012). In contrast with cognitive reappraisal, suppression is associated with heightened negative emotions due to feelings of inauthenticity (Gross and John, 2003; Haga et al., 2007). This was

again underscored by Webb et al (2012), who found that suppression was harmful for individuals well-being and increased psychopathology symptoms.

In line with the ideas of Tamir (2009), instrumental goals likely require suppression more than reappraisal because in this case the individual's priority is to focus on a task. Suppression can help in focusing on a task because it helps disengage from the emotion-eliciting situation and reduces the expression of emotion (Webb et al., 2012). Additionally, when individuals have an instrumental goal, they may need immediate relief from certain negative emotions. In this case response-focused strategies such as suppression have the potential to deliver better results (Sheppes et al., 2014). Therefore, targets may experience suppression attempts by their partner as more effective than reappraisal when having instrumental goals.

In line with this notion, earlier work has shown that people are more inclined to suppress their emotions when having instrumental goals. For example the aforementioned study by Eldesouky and English (2018), found that having an instrumental goal, participants were more likely to use suppression. Some IER research also shows that under certain conditions, regulators are more likely to use suppression to help targets. Additionally, Pauw et al (2019), found that when regulators did not have a lot of time to reduce the intensity of emotions, they were 2.92 times more likely to employ suppression than when there was no urgency. To investigate this, participants were asked to respond to their (imaginary) upset friend the way they normally would. The situation either required participants to downregulate the emotions of their friend within 30 minutes or with plenty of time. This finding supports that context affects which IER strategy regulators will use (Pauw et al., 2019). Although regulators are more likely to choose suppression when they are under time pressure, the question remains whether targets also perceive these as helpful in those same situations. Based on these findings, the second hypothesis that was formulated was the following: Interpersonal suppression will be perceived as more effective by participants when they have instrumental goals as compared to when they have hedonic goals.

The Present Study

The current study aims to address the gap in research regarding the influence of goals on the perceived helpfulness of emotion regulation strategies in IER. Generally, research has found that cognitive reappraisal is inherently adaptive, while suppression is inherently maladaptive for

regulating emotions and outcomes on well-being such as self-esteem, life satisfaction, and relationship satisfaction (Cameron and Overall, 2018; Gross and John, 2003; Haga et al., 2007). However, as several researchers have highlighted, this may not be necessarily true when the role of goals is considered (Eldesouky and English, 2018; English et al., 2016; Tamir, 2009). The present study attempts to provide clarity on the effect of goals on the perceived helpfulness of reappraisal and suppression, specifically when provided by romantic partners. This will be investigated through the following research question: "How does the perceived effectiveness of interpersonal reappraisal and interpersonal suppression vary between instrumental and hedonic goals?". In accordance with this research question two hypotheses will be investigated. The first hypothesis is related to interpersonal reappraisal, which is hypothesized to be perceived as more helpful for hedonic goals than instrumental goals. The second hypothesis will look at interpersonal suppression, which is hypothesized to be perceived as more effective for instrumental than hedonic goals.

Methods

Participants

An a priori G*Power analysis was conducted using G*Power version 3.1.9.7 (Faul et al., 2007) to calculate sample size. The results for a repeated measures ANOVA with a within-between interaction indicated a minimum sample size of 580 participants (F = 0.25, $1-\beta = 0.95$, $\alpha = .05$, 2 groups, 2 measurements). In total, 1017 participants took part in the study. 30 participants had to be excluded due to failing the attention checks or not fulfilling eligibility criteria. Additionally, one participant had to be excluded because they indicated that they are three years old. The final number of participants included in the data analysis of the present study was 986. Therefore, the obtained sample size was more than sufficient to test the present study's hypotheses.

Participants were recruited via Prolific, an online research platform. Eligibility criteria included: being 18 years or older, fluent in English, and being in a romantic relationship for six months or longer. 62.6% of participants were females and 36.5% were males. Participants were between 20-78 years old, with the mean age of the sample being 44.1 with a standard deviation of 13.1.

Procedure

The survey itself was created and administered through Qualtrics. Participants were recruited via Prolific, where they found the link to the survey. First, participants read an information letter regarding the content of the survey and goals of the study. Next, the survey asked for participants' informed consent. Afterwards, participants were asked about their relationship status and duration of their current relationship, since these were related to the eligibility criteria. If participants did not fulfill eligibility criteria, participants were informed that they could not proceed to the next part of the survey. Three attention checks were included throughout the survey (see Appendix C). It took participants an average of 6 minutes and 37 seconds to complete the survey.

In the next part, a 2x2 between-subjects design was used where participants were randomly assigned to the instrumental or hedonic condition. Participants evaluated the effectiveness of reappraisal and suppression provided by their partner while thinking of either instrumental goals or hedonic goals. On a Likert scale of 1-7, participants rated how helpful examples of reappraisal or suppression are. Once participants completed the emotion regulation scale, a manipulation check was conducted. Next, two more questionnaires were administered, but these are beyond the scope of the present study. At the end of the survey, participants were asked demographic questions concerning their age, gender, ethnicity, and education. The last question of this survey asked participants about their level of honesty throughout the survey. Following these questions, participants received a debriefing. All participants received financial compensation for participating as long as they passed at least two out of three attention checks. Prolific compensates participants £8 per hour. Prolific calculated the average time it took participants to calculate the final compensation. The study was approved by the Ethical Review Board of the Faculty of Social and Behavioral Sciences of Utrecht University (UU-SER reference number: 24-0383).

Measures

Goal-Dependent Emotion Regulation Scale

These questions were created based on prior emotion regulation questionnaires. Each emotion regulation strategy included three statements portraying behavior used during reappraisal or suppression. The following three examples of suppression were presented in the emotion regulation scale: tells me not to feel bad (e.g. "don't cry, don't be sad, don't worry"),

discourages me from expressing my emotions, and tells me not to think about what is bothering me.

For reappraisal, the following three examples were presented in the emotion regulation scale: tries to make me look at things from a different perspective, tries to make me think differently about the situation, and tries to make me look at the situation in a more positive way. Participants were instructed to rate how helpful each example of suppression or cognitive reappraisal was on a Likert scale from 1-7, where one represented "completely disagree" and seven represented "completely agree". The items measuring the effectiveness of strategies were randomized in the survey.

Internal consistency and reliability of the items assessing interpersonal reappraisal and suppression was assessed via Cronbach's alpha. The Cronbach's alpha for the scale assessing the effectiveness of cognitive reappraisal was as follows: $\alpha = .80$, indicating good internal consistency. The score for suppression was $\alpha = .60$, indicating unsatisfactory internal consistency.

Goals

Goals were manipulated by placing participants randomly in one of two conditions. Condition one instructed participants to think of "moments when you're upset and want to feel better". Condition two instructed participants to think of "moments when you're upset and want to get work done" (see Appendix B).

Manipulation Check

To check that the manipulation was successful, a manipulation check was conducted. This was done through two questions after participants completed the emotion regulation scale. The first question asked "When answering the questions on the previous page, I tried to think of situations in which I'm upset and want to feel better." to measure the extent to which participants thought of hedonic goals. For instrumental goals participants were asked "When answering the questions on the previous page, I tried to think of situations in which I'm upset and want to get work done." These questions were rated on a seven-point Likert scale.

Data Analytic Procedure

Before analyzing the data and the hypotheses, the data was cleaned to exclude participants who did not fulfill the eligibility criteria, who failed two or more attention checks,

outliers, and incomplete surveys. The statistical analysis was conducted through IBM SPSS Statistics version 27. Assumptions were checked, but none were violated. A repeated measures ANOVA was performed with one within-subject and one between-subject variable, each with two levels. The within-subject variable was IER strategy: suppression and reappraisal. The between-subject variable was type of goal: hedonic or instrumental. Finally, the dependent variable was perceived effectiveness of IER strategies.

Results

Descriptive Analysis

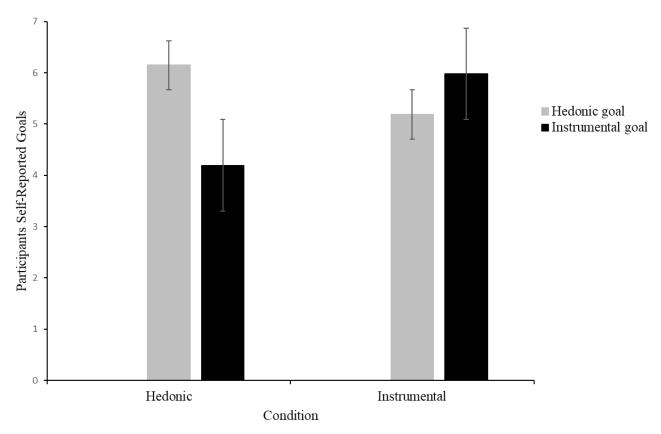
Out of 986 participants, 493 participants were randomly assigned to the hedonic condition and 493 were assigned to the instrumental condition. Concerning their living situation, 88.7% of participants indicated that they are living with their partner. The remaining 11.3% of participants were either considering living together, did not have any plans to live with their partner, used to live together but currently don't, or had other reasons for not living together. Furthermore, 67.6% of participants were either married or engaged to be married and 61.5% had children. The education level among participants was quite diverse, but the majority of participants (61.6%) completed a vocational degree or higher educational qualification. Results showed that the sample was predominantly White with 90.2%. The rest of the participants were Asian (4.7%), Black (2.2%), mixed ethnic groups (2.1%) or from another ethnic group or preferred not to say (0.8%).

Manipulation Check

To check whether participants thought of the assigned goals, a manipulation check was conducted through a repeated measures ANOVA. Within-subject variables were the manipulation check questions. Between-subject variables was the condition. There was a significant main effect of the manipulation check questions, F(1, 984) = 82.54, p < .001, showing that participants had overall more hedonic goals (M = 5.66, SD = 1.48) than instrumental goals (M = 5.09, SD = 1.73). Furthermore, a significant interaction effect between condition and the manipulation check questions was found, F(1, 984) = 464.79, p < .001. This shows that depending on what condition participants were in, their responses to the manipulation check questions differed (see Figure 1). Participants in the hedonic condition thought of significantly more hedonic goals than instrumental goals. Participants in the instrumental condition thought of significantly more instrumental goals than hedonic goals. Parameter estimates underline the

interaction effect by showing that participants in the hedonic condition thought more of hedonic goals than participants in the instrumental condition, t(984) = 10.80, p < .001. Participants in the instrumental condition thought more of instrumental goals than participants in the hedonic condition, t(984) = -18.87, p < .001. The results show that the manipulation was successful.

Figure 1 *Manipulation Check: Effects of Condition on Participants Goals*



Hypothesis Testing

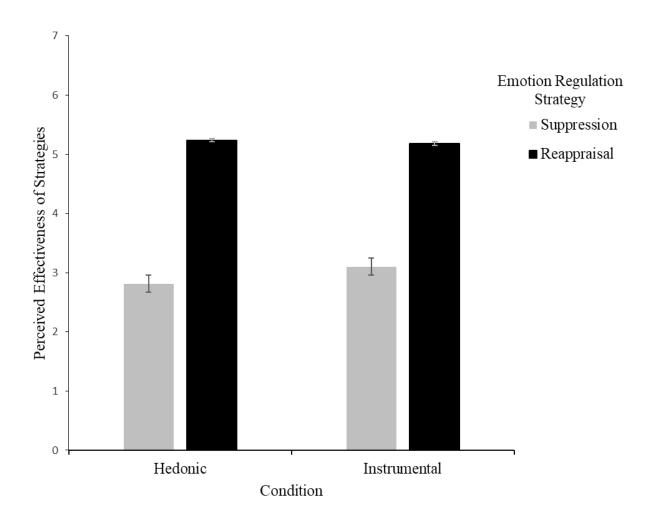
A repeated measures ANOVA was conducted to investigate whether strategies are experienced as differentially helpful depending on goals. The mean score of suppression and reappraisal items were used as the within-subject variables, while the condition was used as the between-subjects variable.

There was a significant main effect of emotion regulation strategy, F(1, 984) = 2485.90, p < .001. Therefore, regardless of condition, there is an overall difference in the perceived

effectiveness of emotion regulation strategies. Reappraisal (M = 5.20, SD = 1.04) was perceived as more effective than suppression (M = 2.96, SD = 1.15). Second, there was a significant main effect of goal type on perceived effectiveness of strategies, F(1, 984) = 4.50, p = 0.034. Participants with hedonic goals perceived IER strategies as more effective than participants with instrumental goals. Most importantly and in line with the hypotheses, a significant interaction effect between condition and emotion regulation strategies was observed, F(1,984) = 15.03, p < .001 (see Figure 2).

The first hypothesis entailed that interpersonal reappraisal would be rated higher in the hedonic condition than in the instrumental condition. This hypothesis was not supported. The mean was slightly higher in the hedonic condition (M = 5.24, SD = 1.03) than in the instrumental condition (M = 5.20, SD = 1.06), but no significant difference. This was also shown through the parameter estimate, t(984) = .95, p = .343. The second hypothesis proposed that interpersonal suppression will be perceived more effective in the instrumental than in the hedonic condition. This hypothesis was supported. Suppression was rated significantly higher in the instrumental condition (M = 3.10, SD = 1.16) than in the hedonic condition (M = 2.81, SD = 1.12). The parameter estimates further underline this effect, t(984) = -3.95, p < .001.

Figure 2Goal-Dependent Perceived Effectiveness of Suppression and Reappraisal



Discussion

The main aim of this study was to investigate whether the perceived effectiveness of interpersonal suppression and cognitive reappraisal changes depending on targets' goals. How we regulate our emotions affects numerous aspects of our life, including mental health, relationship satisfaction, and adaptive functioning (Cameron and Overall, 2018; Haga et al., 2007), making this research important. To this end, a survey was administered during which participants were randomly assigned to think of either hedonic or instrumental goals, and rated the perceived helpfulness of emotion regulation strategies provided by their current romantic partners. The first hypothesis proposed that interpersonal reappraisal will be perceived as more effective when people have a hedonic (rather than instrumental) goal. This hypothesis was not supported: participants perceived reappraisal as similarly effective for hedonic and instrumental goals. Reappraisal was perceived as the more effective IER strategy regardless of participants'

goals. The second hypothesis states that interpersonal suppression is perceived as more effective when having instrumental (rather than hedonic) goals. This hypothesis was supported.

Hedonic Goals and Interpersonal Cognitive Reappraisal

Contrary to the first hypothesis, interpersonal cognitive reappraisal was not found to be perceived as significantly more effective for hedonic goals than for instrumental goals. Instead, interpersonal cognitive reappraisal was found to be the more effective strategy overall for both goals. One reason that can explain this finding is related to participants rating the perceived helpfulness of these strategies while thinking of their romantic partners. Unlike interpersonal suppression, which can create distance between partners, interpersonal cognitive reappraisal promotes communication and understanding during interactions (Richards et al., 2003). Reappraisal allows individuals to share emotions openly and leads to better mutual understanding, which is a key component in social interactions (Richards et al., 2003). Considering that participants were thinking of their romantic partners when rating the helpfulness of suppression and cognitive reappraisal, it makes sense that they would rate higher the strategy that not only allows them to achieve their emotion regulation goal, but also promotes emotional intimacy.

Furthermore, another reason that may explain reappraisal being perceived as more effective overall regardless of the goals is its higher level of adaptiveness (Haga et al., 2007). Consequently, people will prefer reappraisal to other strategies such as suppression, no matter what their goal is. For example, Batenburg and Das (2014) investigated the positive effects of reappraisal by giving participants reappraisal responses from a computer. Through this conversational partner, they found that reappraisal helped reduce negative emotions. According to Batenburg and Das (2014), a reduction in negative emotions occurred because a conversational partner can help view the situation from a more positive perspective, especially when someone is highly emotional. Consequently, this process leads targets to overcome their negative emotions and rumination (Batenburg and Das, 2014) for the short and long-run. Reappraisal allows people to maximize positive experiences even when finding themselves in a seemingly negative one (Gross & John, 2003). This increases people's overall satisfaction and their resilience, making reappraisal a highly adaptive strategy. Additionally, another study that highlights the adaptiveness of reappraisal was conducted by Troy and colleagues (2018). By showing participants three sad film clips, they found that those who used reappraisal (instead of

acceptance) reported faster emotional relief (Troy et al., 2018). Considering that immediate emotional relief is highly relevant for instrumental goals, it is understandable that participants found reappraisal to be similarly effective for both hedonic and instrumental goals. However, although reappraisal was linked to more immediate emotional relief, it was also perceived as having higher cognitive costs than acceptance (Troy et al., 2018). Due to the present research investigating reappraisal from an interpersonal perspective, perhaps these cognitive costs were not perceived as high.

Instrumental Goals and Interpersonal Suppression

Based on previous research, it was expected that suppression would be perceived as more effective when targets have instrumental goals. In line with this expectation, suppression was found to be perceived as more helpful for instrumental goals than for hedonic goals. This finding matches previous observations. Eldesouky and English (2018) found increased spontaneous use of suppression when participants had instrumental goals. Furthermore, Webb et al (2012) conducted a meta-analysis where the focus was on the individual effectiveness of emotion regulation strategies. One of the findings from the meta-analysis was that suppression can be effective in situations where individuals need focus and concentration to achieve instrumental goals. Therefore, the findings of the present study are congruent with past research, since participants found suppression to be significantly more helpful for instrumental goals (Eldesouky and English, 2018; English et al., 2016).

There are a few possible explanations for these findings. One explanation is that context affects the choice of emotion regulation strategies. As highlighted by Sheppes et al (2014) and Tamir (2009), depending on context, emotion regulation strategies have differing effects.

Individuals first choose an emotion regulation goal. Based on that goal, they choose a strategy. When disengagement is needed from high intensity emotions and a short term goal needs to be achieved, suppression is perceived as more helpful (Sheppes et al., 2014; Tamir, 2009; Webb et al., 2012). Even though generally, suppression is a less adaptive emotion regulation strategy (Haga et al., 2007), interpersonal suppression is more helpful when the priorities of the target are to focus and be productive. To achieve concentration and productivity, it can be more efficient to disengage from one's emotions rather than add to the cognitive load through reappraisal (Tamir, 2009; Troy et al., 2018).

Another explanation for the findings of this study is that individuals do not judge emotion regulation strategies solely based on their level of pleasantness. Tamir (2009) theorized that individuals choose based on their goals. Based on these goals, individuals do not always choose the most pleasant emotion regulation strategy, but rather the strategy that will help them achieve their goal more efficiently. Thus, it seems that participants went through the same decision-making process in the present study, when rating the helpfulness of suppression from their partners.

Finally, there are two reasons that can help explain why interpersonal suppression is rated significantly lower on perceived effectiveness when individuals have hedonic goals. First, when individuals want to feel better, suppression is generally a detrimental strategy because it does not change the emotions the target is experiencing (Gross and John, 2003). It only changes the behavioral expression of emotion (e.g. crying; Gross and John, 2003). Repeatedly suppressing emotions when one wants to feel better requires a lot of energy and leads to unresolved negative emotions (Gross and John, 2003). This explains why interpersonal suppression is unlikely to be perceived as helpful for hedonic goals.

Secondly, it is important to consider the fact that in the present study, participants rated the helpfulness of interpersonal suppression they receive from their romantic partners. Possibly, when individuals decide to suppress their own emotions, it is perceived as more helpful than when a partner attempts to help them suppress their emotions. During *intra*personal suppression, individuals are aware of their goals, and therefore the reason for using suppression. However, in IER, suppression leads individuals to feel their emotions are not accepted and feel increased emotional distance to others (Cameron & Overall, 2018). According to the findings of Cameron and Overall (2018), interpersonal suppression compromises the connection with partners and pushes them away. Therefore, interpersonal suppression clashes with the nature of romantic relationships, which are based on feelings of closeness and emotional intimacy (Temel and Dawd, 2023).

Theoretical Implications

There are a few theoretical implications from the results of the current study concerning goals' effect on the perceived helpfulness of emotion regulation strategies. Firstly, the significant interaction effect between goals and emotion regulation strategies reveals that the effect of goals

on perceived effectiveness differs depending on the emotion regulation strategy. For both hedonic and instrumental goals, the higher perceived effectiveness of cognitive reappraisal than suppression highlights its effectiveness in leading participants towards positive emotions and feeling better (Haga et al., 2007). It also emphasizes the higher adaptiveness and feeling of support reappraisal provides (Haga et al., 2007). However, hedonic and instrumental goals had differential effects on the perceived effectiveness of suppression. Suppressions' increased effectiveness in the instrumental condition highlights its situational usefulness. This is true specifically in moments where decreased expression of emotion is required or when long-term benefits outweigh the short-term benefits of feeling pleasurable emotions (Tamir, 2009). The findings from the current study imply that goals have a central role in emotion regulation. While reappraisal is the preferred strategy in terms of increasing positive emotions, suppression has specific situational usefulness. Thus, whether suppression is perceived as a helpful strategy not only depends on its adaptiveness, but on the type of goal too.

Secondly, the present study suggests that there might be a mismatch in IER between what strategies regulators and targets think are effective. Prior work showed that when people try to regulate others' emotions, they choose emotion regulation strategies depending on context. When regulatory demand was high, meaning that immediate down regulation was needed, regulators provided disengaging strategies such as suppression and distraction more often (Pauw et al., 2019). The present findings show the other side of the IER process, namely targets perception when receiving reappraisal and suppression. According to the present study, the target's perceived effectiveness of strategies changes depending on goals. However, the target's perception of interpersonal suppression does not seem to be favorable in general, regardless of their goals and especially when compared to reappraisal. Despite the instrumental goal increasing the perceived effectiveness of suppression in the present study, targets generally did not favor this strategy. This might be due to their negative perceptions of the impact of suppression on relationships. Thus, taken together, these findings imply that there may be a mismatch between what strategies regulators employ and believe to be effective versus what targets' would prefer or need given their goals and situational demands. Who the regulator is (romantic partner, friend, colleague), can also affect targets' perceptions of effectiveness. At least in intrapersonal research, researchers have found that when surrounded by close others, people preferred to express their emotions through strategies such as reappraisal. Instead, when

surrounded by non close others, individuals preferred to control their emotions through strategies such as suppression (Martini, 2011). Thus, while the present study contributes to the understanding of the target's perspective on IER, it also highlights an important direction for future research.

Strengths & Limitations

The findings of the current study should be considered in light of its strengths and limitations. First, this study measured the perceived helpfulness of two emotion regulation strategies in relation to hedonic and instrumental goals. This provided important insights into how goals affect the targets' perceived helpfulness of cognitive reappraisal and suppression. While prior work has investigated intrapersonal emotion regulation and the strategies effects on well-being, little research has focused on IER and how emotion regulation goals influence strategies perceived helpfulness. Some studies, such as the one conducted by Pauw et al (2019), have looked at what strategies regulators prefer depending on situational context. However, the success of IER depends on two people: the regulator and the target (Levi-Gigi and Shamay-Tsoory, 2017). The present study extended previous research by focusing on the target's perspective.

Second, participants were instructed to think of a real person relevant to many of their life experiences, namely their romantic partner. This meant that participants' answers were based on actual behavior they have experienced from their partners rather than hypothetical scenarios. This increased the ecological validity as well as the study's generalizability because participants' responses are more likely to be grounded in authentic emotions, interactions, and experiences.

Third, previous studies examined emotion regulation based on undergraduate samples who were highly educated, such as English and colleagues (2016) and Haga and colleagues (2007). The present study included a sample of participants with not only a wide age range but also with diverse educational backgrounds. This ensured that results were not biased due to specific age ranges and educational backgrounds.

Lastly, the experimental approach of the present study combines several strengths. First, each participant was exposed to one condition only. Therefore, the risk of participants guessing the real purpose of the study and this leading to response bias was reduced. Additionally,

carryover effects were eliminated as participants were exposed only to one condition. They could not transfer the emotions from one condition into their responses in the second condition.

Together, these characteristics of the study allow for causal inferences of the results. For example, the significant difference in perceived effectiveness of suppression can be attributed to the different goals participants had based on the condition they were in.

However, there are some limitations that should be considered. One limitation of the present study is external validity. Although the sample was diverse in terms of age and educational backgrounds, all participants were residents in the UK. Additionally, the majority of the sample consisted of women. Women have been found to generally express more emotion than men, and men to suppress more emotions than women (Preston et al., 2021). If the sample had consisted of an equal number of men and women, a higher perceived helpfulness of suppression might have been detected. Thus, this restricts the generalizability of the current studies' findings to some extent.

Furthermore, regarding the Cronbach's alpha, while it was found to be good for cognitive reappraisal, for suppression $\alpha < .70$, indicating low internal consistency (Tavakol and Dennick, 2011). Whether this was due to low variability in responses was checked in the analysis and was not the cause. A low Cronbach's alpha may be due to a number of reasons, hence the results on suppression should be interpreted with caution. Future research might consider increasing the number of items measuring IER strategies, which could be one of the factors causing the low score.

Recommendations for Future Research

This study found that the type of goal can affect the target's perception of the effectiveness of emotion regulation strategies when given by their romantic partner. Future studies should investigate the effect of goals in relation to different interaction partners such as colleagues and friends. From the present study we know that reappraisal is perceived overall as the more effective strategy in relation to both types of goals and suppression is perceived as more effective for instrumental goals. These findings are in relation to participants' romantic partners. Future studies should investigate whether this same effect is found when participants' are thinking of friends or colleagues, who are not as close to the target as a romantic partner. As found by Martin (2011), people prefer disengaging strategies such as suppression when with

non-close others. Therefore, it might be possible that in a study where participants are thinking of a colleague, interpersonal suppression may be perceived as more effective.

In addition, deeper insight into the dynamics of IER between targets and regulators might be achieved through a dyadic study design. Future studies could have dyads of participants who know each other already e.g. friends, colleagues, romantic partners. At this moment, there are studies such as Pauw et al (2019) who focused on the regulator's choice of IER strategy, and the present study which focused on the target's perspective during IER. A dyadic study design would give researchers the chance to collect data on whether regulators correctly infer targets' goals and subsequently choose the right strategy. Second, in the same study, targets' perceptions and expectations from their IER partner can be measured. This would provide greater understanding into the process of IER and whether regulators' provision of IER and targets' expectations match. Even though Levi-Gigi and Shamay-Tsoory (2017) conducted a study with a dyadic design, their focus was on the effectiveness of IER, rather than on how goals influence the perception of IER strategies.

A third direction for future research may be to replicate the current study, but giving more specific instrumental or hedonic situations (e.g. work environments, academic settings, sports performance). Instead of merely telling participants to think of one type of goal, external validity may be increased if participants receive clearer instructions on what to think of when rating ERS effectiveness. From the current study, we cannot be sure what specific situations and emotions participants thought of. Some participants may have thought of failing an exam while some thought of losing a loved one. These situations have varying degrees of upsetness and may have influenced participants' answers. Giving participants specific scenarios to think of would ensure that participants' base their answers on the same context and emotion. Therefore, future research should provide more specific situations for participants to think of when rating the strategies. For instance, researchers could provide contrasting situations where short term benefits outweigh long term benefits and vice versa (Tamir, 2009). This research would also have the potential for increased generalizability, as well as provide a more comprehensive understanding of the effectiveness of not only cognitive reappraisal and suppression, but other emotion regulation strategies too.

Conclusion

The goal of the current study was to examine how goals affect targets' perception of the effectiveness of two emotion regulation strategies: interpersonal suppression and cognitive reappraisal. The importance of the current research is due to the fact that people frequently rely on others for support in stressful situations, especially their romantic partners. Furthermore, the emotion regulation strategy chosen to help someone else regulate can affect their emotional, relational, and general well-being (Gross and John, 2003; Nyklíček et al., 2010).

The findings suggest that goals differentially affect emotion regulation strategies. While reappraisal was perceived similarly effective across goal type, suppression was perceived as significantly more effective for instrumental goals. Additionally, these findings suggest that suppression may not inherently be ineffective or maladaptive, but that its helpfulness depends on context and goals. Therefore, from the current study it can be concluded that depending on the goal people have during IER, their perception of the effectiveness of emotion regulation strategies changes. The present study highlights that emotion regulation strategies are not necessarily black or white. Rather, IER strategies can have varying effects on well-being depending on the goals people have. Finally, in the context of romantic relationships, it is important that partners are aware of the target's goals so that the most effective strategy can be chosen.

References

- Aldao, A., Sheppes, G., & Gross, J. J. (2015). Emotion Regulation Flexibility. *Cognitive Therapy* and Research, 39, 263–278.
- Barthel, A. L., Hay, A., Doan, S. N., & Hofmann, S. G. (2018). Interpersonal emotion regulation:

 A Review of Social and Developmental Components. *Behaviour Change*, *35*(4), 203–216. https://doi.org/10.1017/bec.2018.19
- Batenburg, A., & Das, E. (2014). An experimental study on the effectiveness of disclosing stressful life events and support messages: When cognitive reappraisal support decreases emotional distress, and emotional support is like saying nothing at all. *PLoS ONE*, *9*(12). https://doi.org/10.1371/journal.pone.0114169
- Cameron, L. D., & Overall, N. C. (2018). Suppression and expression as distinct emotion-regulation processes in daily interactions: Longitudinal and meta-analyses. *Emotion*, 18(4), 465–480. https://doi.org/10.1037/emo0000334
- Cunningham, M. R., & Barbee, A. P. (2000). Social Support. In C. Hendrick & S. Hendrick (Eds.), *Close Relationships*. Sage Publications.
- Eldesouky, L., & English, T. (2018). 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., Lee, I. A., John, O. P., & Gross, J. J. (2016). 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

- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: a flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods*, *39*(2), 175–191. https://doi.org/10.3758/bf03193146
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348–362. https://doi.org/10.1037/0022-3514.85.2.348
- Haga, S. M., Kraft, P., & Corby, E.-K. (2007). Emotion regulation: Antecedents and well-being outcomes of cognitive reappraisal and expressive suppression in cross-cultural samples.
 Journal of Happiness Studies, 10(3), 271–291. https://doi.org/10.1007/s10902-007-9080-3
- Levy-Gigi, E., & Shamay-Tsoory, S. G. (2017). Help me if you can: Evaluating the effectiveness of interpersonal compared to intrapersonal emotion regulation in reducing distress.

 Journal of Behavior Therapy and Experimental Psychiatry, 55, 33–40.

 https://doi.org/10.1016/j.jbtep.2016.11.008
- Loskot, T. (2019). Interpersonal emotion regulation: Strategies, behaviors, and goals. *Berkeley Undergraduate Journal*, 32(2). https://doi.org/10.5070/b3322046903
- Maisel, N. C., Gable, S. L., & Strachman, A. (2008). Responsive behaviors in good times and in bad. *Personal Relationships*, *15*(3), 317–338. https://doi.org/10.1111/j.1475-6811.2008.00201.x

- Martini, T. S. (2011). Effects of target audience on emotion regulation strategies and goals. Social Psychology, 42(2), 124–134. https://doi.org/10.1027/1864-9335/a000052
- Nyklíček, I., Vingerhoets, A., & Zeelenberg, M. (2010). Emotion regulation and well-being: A view from different angles. *Emotion Regulation and Well-Being*, 1–9. https://doi.org/10.1007/978-1-4419-6953-8_1
- Pauw, L. S., Sauter, D. A., van Kleef, G. A., & Fischer, A. H. (2019). Stop crying! the impact of situational demands on Interpersonal Emotion Regulation. *Cognition and Emotion*, *33*(8), 1587–1598. https://doi.org/10.1080/02699931.2019.1585330
- Preston, T., Carr, D. C., Hajcak, G., Sheffler, J., & Sachs-Ericsson, N. (2021). Cognitive reappraisal, emotional suppression, and depressive and anxiety symptoms in later life:

 The moderating role of gender. *Aging & Mental Health*, 26(12), 2390–2398.

 https://doi.org/10.1080/13607863.2021.1998350
- Sheppes, G., Scheibe, S., Suri, G., Radu, P., Blechert, J., & Gross, J. J. (2014). Emotion regulation choice: A conceptual framework and supporting evidence. *Journal of Experimental Psychology: General*, *143*(1), 163–181. https://doi.org/10.1037/a0030831
- Tamir, M. (2009). What do people want to feel and why? *Current Directions in Psychological Science*, 18(2), 101–105. https://doi.org/10.1111/j.1467-8721.2009.01617.x
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

Temel, A., & Dawd, A. (2023). Predictors of Romantic Relationship Quality: Exploring the Role of Emotion Regulation, Attachment, and Parenting styles. *Current Research and Reviews in Psychology and Psychiatry*, 3(2), 67–80.

- Troy, A. S., Shallcross, A. J., Brunner, A., Friedman, R., & Jones, M. C. (2018). Cognitive reappraisal and acceptance: Effects on emotion, physiology, and perceived cognitive costs. *Emotion*, *18*(1), 58–74. https://doi.org/10.1037/emo0000371
- Velotti, P., Balzarotti, S., Tagliabue, S., English, T., Zavattini, G. C., & Gross, J. J. (2015).

 Emotional suppression in early marriage: Actor, partner, and similarity effects on marital quality. *Journal of Social and Personal Relationships*, *33*(3), 277–302.

 https://doi.org/10.1177/0265407515574466
- Webb, T. L., Miles, E., & Sheeran, P. (2012). Dealing with feeling: A meta-analysis of the effectiveness of strategies derived from the process model of emotion regulation.

 *Psychological Bulletin, 138(4), 775–808. https://doi.org/10.1037/a0027600

Appendix A Information Letter and Consent

Information letter Can you help me regulate my emotions?

Dear participant,

First, thank you for your interest in the research project, "Can you help me regulate my emotions?". Before the study starts, it is important that you are informed about the procedure. Therefore, we would like you to read this information letter carefully.

Purpose of the investigation

The goal of this study is to investigate the ways in which romantic partners can best help you manage your emotions.

Procedure and compensation

This study requires you to be in a committed romantic relationship since at least 6 months. In this study, you will be asked to report how helpful you find various forms of support from your romantic partner when you experience negative emotions. After that, you will be asked some questions related to your relationship and demographic information. On average, this study will take about 5-10 minutes to complete. You will be paid.

Confidentiality of data processing

This study requires us to collect some of your personal data (regarding age, gender, sexual satisfaction). This information will not allow us to identify you. We need this data to be able to answer the research question properly, as we are also examining relationship satisfaction. We never ask for more of this data than is necessary to answer the specific question. You can also decide to skip these personal questions if you feel uncomfortable answering them. Your data will be stored for at least 10 years. This is according to the appropriate guidelines of the Universities of the Netherlands (formerly VSNU). Anonymized data from this research might eventually be included in a so-called open access database (Open Science Framework), which means that other

researchers will also be able to view these data. Any personal information that could in any way identify you will be removed or modified before the files are shared with other researchers or the results are made public. Other researchers can access this data only if they agree to maintain the confidentiality of the information as requested in this form. Please refer to the website of the Authority for Personal Data: https://autoriteitpersoonsgegevens.nl/nl/onderwerpen/avg-europese-privacywetgeving, for more information about privacy.

Voluntary participation

If you decide now not to participate in this study, there are no consequences. You can end your participation in the study at any time, without any explanation, and without any negative consequences simply by closing the browser window.

Independent contact and complaints officer

At any moment, if you have questions about this study, please contact the responsible researcher: dr. Lisanne Pauw (l.s.pauw@uu.nl), or an independent employee of the department: dr. Chris Harris (c.a.harris@uu.nl). If you have an official complaint about the study, you can send an email to the complaints officer at klachtenfunctionaris-fetcsocwet@uu.nl. If, after reading this information letter, you decide to take part in the research, please click to go to the next page to begin the study!

With kind regards,

Dr. Lisanne Pauw

Consent Statement

I hereby declare that I have read the information letter about the study "Can you help me regulate my emotions?" and agree to participate in the study. I understand that the research data, without any personal information that could identify me (not linked to me), may be shared with others with the condition that further research is in line with this research in terms of design and purpose. This means that I agree to:

- (1) Participation in the study
- (2) The research data collected for the study being published or made available, provided that my name or other identifying information is not used.

Appendix B Instructions Depending on Condition

Condition 1 (hedonic):

People often try to manage (or regulate) their partner's emotions, including what their partners are feeling on the inside and what they are showing on the outside. The questions below are focused on ways in which your partner might try to regulate your emotions.

We would like to ask you to think of moments when you're upset and want to feel better. To what extent do you find it helpful when your partner responds in the following ways:

When I want to feel better, I find it helpful when my partner...

Condition 2 (instrumental):

People often try to manage (or regulate) their partner's emotions, including what their partners are feeling on the inside and what they are showing on the outside. The questions below are focused on ways in which your partner might try to regulate your emotions.

We would like to ask you to think of moments when you're upset and want to get work done. To what extent do you find it helpful when your partner responds in the following ways:

When I want to get work done, I find it helpful when my partner..

Appendix C

Attention Checks

To ensure participants were paying attention during the survey and that the data we gathered was reliable, three attention checks were included as well as a question at the very end of the survey regarding their level of honesty.

Attention Check Questions

- 1. Please select 'Completely agree' to show you are paying attention to this question.
- 2. Please select 'Rarely' to show you are paying attention.
- 3. Please select 'Agree' to show you are paying attention.

Do you think that we should discard your data because you did not reply honestly and accurately to our questions?

- (1) Yes discard my data because I gave some random responses and/or responses that were not completely honest
- (2) No I took the study seriously and provided reliable data