

Does Interpersonal Emotion Regulation Effort Pay Off?

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Interpersonal emotion regulation shapes people's emotional and relational experiences. Yet, researchers know little about the regulation processes that influence these outcomes. Recent works in the *intrapersonal* emotion regulation space suggest that motivational strength, or *effort*, people invest in regulation might be the answer. We applied this motivated approach for the first time in the interpersonal space—looking at both intrinsic and extrinsic forms of interpersonal emotion regulation—in order to identify the potential emotional and relational outcomes of putting effort into regulating one's own emotions through others, and regulating others' emotions. In daily diary ($N = 171$) and experience sampling ($N = 239$) studies, we examined participants' interpersonal emotion regulation behaviors and socioemotional experiences in everyday social interactions over the course of 1 week. These methods allowed us to examine effort at both momentary and person levels. We found that people who habitually put in more intrinsic effort to feel better through others felt worse overall. People also felt worse on occasions when they put in more effort to extrinsically help others feel better, although at the person level extrinsic effort was associated with higher interaction quality. Together, our findings suggest that interpersonal emotion regulation success is not simply a matter of trying hard. This observation opens new research avenues to investigate the interplay of different factors that determine when, and for whom, investing effort in interpersonal emotion regulation pays off.

Keywords: interpersonal emotion regulation, emotion regulation effort, motivational strength, experience sampling methodology

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Most of the time, the experience, expression, and regulation of emotions do not occur in a vacuum, but with and around other people (Parkinson & Manstead, 2015). These social aspects of managing and changing emotional states are the purview of interpersonal emotion regulation. Existing research delineates interpersonal emotion regulation into two classes. The first class is *intrinsic* regulation, whereby we influence our own emotions by turning to other people. *Intrinsic interpersonal* emotion regulation is distinct from the more well-studied *intrapersonal* emotion regulation, because it includes the intent to regulate one's own emotions specifically through social means (Zaki & Williams, 2013). The second class of interpersonal

emotion regulation is *extrinsic* regulation, whereby we influence other people's emotions (Zaki & Williams, 2013). While there is a growing body of research highlighting the importance of both intrinsic and extrinsic interpersonal emotion regulation for people's emotional and social lives, researchers still know relatively little about what yields these benefits.

One emerging perspective from which to examine this question is the motivated approach to emotion regulation (Tamir et al., 2020). This approach posits that as a motivated self-regulation process, emotion regulation behaviors and outcomes are contingent on the content and strength of people's motivation to regulate. We put this perspective

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to the test in the interpersonal domain, investigating whether the motivational strength (e.g., effort) people invest in regulating emotions interpersonally was associated with emotional and relational experiences. Using daily diary (Study 1) and experience sampling methodology (ESM; Study 2), we surveyed people's everyday social interactions and assessed self-reported effort invested in intrinsic and extrinsic interpersonal emotion regulation, as well as the emotional tone and quality of the interaction. In investigating relationships between these variables, we sought to test whether interpersonal emotion regulation effort was associated with socioemotional outcomes in daily life.

The Outcomes of Interpersonal Emotion Regulation

Since interpersonal emotion regulation targets emotional states (Niven, 2017), much research interest has centered around the emotional outcomes of regulation. For intrinsic regulation, evidence suggests that individuals who have greater tendency to regulate their own emotions using others report experiencing more positive and less negative affect (Williams et al., 2018). In contrast, intrinsic interpersonal emotion dysregulation, such as excessive venting and reassurance seeking, can in fact exacerbate negative emotions and distress, and is overall harmful to emotional well-being (Bushman et al., 2001; Dixon-Gordon et al., 2018).

For extrinsic regulation, research has examined the emotional outcomes from two perspectives: the person whose emotions are being regulated (i.e., the target) and the person who offers regulation (i.e., the regulator). While much research has focused on the target, who may benefit emotionally from receiving regulation (e.g., Niven et al., 2010; Swerdlow & Johnson, 2022), it is also important to examine the emotional impacts that regulation has on the regulator. This is because how people make others feel can influence how they themselves feel (Niven, Totterdell, et al., 2012). However, evidence on whether this influence is beneficial or detrimental remains inconclusive, particularly regarding the short versus long-term impacts on the regulator's emotions (see N. Cohen & Arbel, 2020, for a review).

The social nature of interpersonal emotion regulation has also prompted research on the relational outcomes of regulation. On this front, converging evidence suggests both intrinsic and extrinsic regulation are crucial for relational well-being. They help build new relationships (Niven, Holman, & Totterdell, 2012), enhance the quality of existing relationships (Debrot et al., 2013), as well as increase popularity and social connectedness (Niven et al., 2015). Nevertheless, existing studies have focused on relationships, which are characterized by patterns of social interactions that are repeated, regular, and stable over time (Farooqi, 2014; Hinde, 1976). To understand how day-to-day interpersonal emotion regulation processes may be associated with relational outcomes, we need to examine these outcomes over a shorter time-course. In other words, we need to examine the building blocks for relationships: social interactions (Hinde, 1976). Because short-term social interaction outcomes can impact people's well-being (Kuczynski et al., 2022), it is important to investigate what is shaping them in the first place.

Factors That Can Shape the Outcomes of Interpersonal Emotion Regulation

Given the impact of interpersonal emotion regulation on emotional and relational well-being, research is needed to examine the

factors that help shape regulation outcomes. The benefits of doing so are threefold. First, understanding these factors will bring new insights and nuance to theoretical accounts of interpersonal emotion regulation processes, which have thus far focused primarily on the strategies people use to regulate, without looking at characteristics of the regulation process itself. Second, because successful approaches to identifying these factors have drawn on the comparatively older *intrapersonal* emotion regulation literature, employing these approaches in the current research will connect a hitherto unbridged gap between the literatures on intrapersonal and interpersonal emotion regulation. Finally, understanding the factors that yield payoffs to interpersonal emotion regulation will identify potential intervention targets to help people regulate emotions more effectively. Delivering on these potential benefits requires interrogation of what the field currently knows, and does not know, about interpersonal emotion regulation processes.

What We Know

Since interpersonal emotion regulation is social, previous works have examined the dynamics between people in a given interaction, including the level of responsiveness and nature of cognitive support offered (Maisel & Gable, 2009; Van Swol et al., 2017). They suggest people feel better when their interaction partner is responsive and gives solicited (vs. unsolicited) cognitive support. Researchers have also looked at factors at the individual levels, such as motives of the regulator (Niven et al., 2019a), and the target (Liu et al., 2021; Springstein et al., 2023). These relational and individual factors can all play a role in shaping regulation outcomes.

More prominently, research on the effectiveness of interpersonal emotion regulation has centered around habitual use of strategies to regulate emotions. For intrinsic regulation, some classes of strategies involve enhancing positive affect (e.g., sharing joy), perspective taking (e.g., seeking advice), soothing (e.g., seeking comfort), and social modeling (e.g., turning to others for their reactions; Hofmann et al., 2016). For extrinsic regulation, four classes of strategies involve positive engagement (e.g., giving advice), negative engagement (e.g., complaining), acceptance (e.g., making others feel valued), and rejection (e.g., invalidating others' feelings; Niven et al., 2009).

What We Don't Know

Both intrapersonal and interpersonal emotion regulation research are increasingly challenging the idea that strategies are inherently adaptive or maladaptive, instead highlighting the importance of flexible strategy use (e.g., Battaglini et al., 2023; Bonanno & Burton, 2013). However, researchers have yet to explore other features of the regulation process to better understand what makes regulation successful, even though there is more to emotion regulation than just strategy use (Tamir et al., 2020).

One framework that considers broader features of the emotion regulation process is the motivated approach, originally developed in reference to intrapersonal emotion regulation (Tamir et al., 2020). According to this model, emotion regulation is a motivated self-regulation process. As such, regulatory outcomes are shaped not only by strategies, but also by the *content* and *strength* of people's motivation to regulate (Atkinson, 1957; Gollwitzer, 2012). Motivational *content* concerns the type and level of emotion people want to achieve, as well as their motive for doing so

(Tamir et al., 2020). Motivational *strength*, on the other hand, is reflected in how hard people are willing to work and how much they persist in their effort to achieve their goals (Tamir, 2021). Such motivational strength should influence regulatory outcomes. Consistent with these ideas, there is evidence that goal desirability increases motivational strength in emotion regulation, which in turn facilitates regulatory success (Gutentag & Tamir, 2022). Furthermore, motivational strength in daily life facilitates regulatory behaviors and prospectively predicts greater success in emotion regulation (Gutentag et al., 2023). Motivational strength is often indexed by effort (Brehm & Self, 1989; Tamir, 2021). Effort is distinct from strategy use, because strategy use is reflective of the specific regulatory behavior, whereas effort refers to how intensely people employ that behavior (Tamir et al., 2020).

Despite recent works highlighting the importance of effort in regulation, effort has thus far been overlooked in extant theoretical frameworks of both intrapersonal and interpersonal emotion regulation. Indeed, both literatures tend to tacitly assume people always invest effort when they engage in emotion regulation (Gross, 2015; Zaki & Williams, 2013). Consequently, empirical research has been scant on whether differential levels of effort influence regulation outcomes. Few studies in this space have focused on intrapersonal emotion regulation, and by and large point to the beneficial role of effort in guiding emotion regulation success (cf., Wilms et al., 2020), including greater engagement in regulation strategies, as well as more positive and less negative emotional experiences (e.g., English et al., 2017; Gutentag et al., 2023).

The picture is less clear in the interpersonal emotion regulation space. It was not until recently that effort in emotion regulation has been formally operationalized as the “intensity of goal pursuit” (Tamir, 2021). In light of this definition, no prior research has examined interpersonal emotion regulation effort directly. Instead, effort can only be indirectly inferred from other constructs that are definitionally separate: trait tendency to engage in regulation (Dixon-Gordon et al., 2018; Williams et al., 2018), number of hours spent providing emotional support (Gunderson & Barrett, 2017), or participants’ endorsement of certain statements—some of which may confound regulation effort with strategy use—in daily surveys (e.g., “I tried to make my friend *feel cared for*,” “I tried to make my friend *feel understood*” [emphasis added]; Morelli et al., 2015). The lack of explicit measure for effort may in part lead to some conflicting findings. For instance, while some evidence indicates people with higher tendency to engage in intrinsic regulation also report better emotional and relational outcomes (Williams et al., 2018), others found that people who excessively engage in intrinsic regulation actually report more negative emotions and interpersonal problems (Dixon-Gordon et al., 2018). For extrinsic regulation, when people provide more emotional support, they report better (Morelli et al., 2015) but also worse (Gunderson & Barrett, 2017) emotional experiences. These inconsistent findings from related but disparate constructs calls for a more direct assessment of effort. Doing so would avoid confounding effort (i.e., how intensely people regulate) with other constructs (e.g., what strategies people use, how much time they spend regulating). As a result, we would get a clearer picture on the association between regulation effort and outcome.

The Current Research

Interpersonal emotion regulation is a building block of well-being, though research has yet to ask whether investing effort in these processes is associated with proportionate outcomes in everyday social interactions. In the current research, we sought answers to this question, investigating both (a) intrinsic interpersonal emotion regulation effort, and (b) extrinsic interpersonal emotion regulation effort.

Following the conceptualization of interpersonal emotion regulation as deliberate and conscious processes (Niven, 2017; Zaki & Williams, 2013), we chose to focus on intentional forms of interpersonal emotion regulation (i.e., when participants reported an intention to regulate). While people may engage in regulation with goals to either improve or worsen how they and others feel (e.g., Niven et al., 2009; Riediger et al., 2009), we focused specifically on affect-improving regulation. This decision was because affect-improving regulation tends to be more common in daily life (e.g., Kalokerinos et al., 2017; Springstein et al., 2023), and is more consistently linked to regulation outcomes (Riediger et al., 2009). To get at effort more directly, we explicitly asked participants to report how much effort they put into their regulation attempts. We operationalized emotional outcomes as the positive and negative emotions people felt about the interaction, and relational outcomes as the perceived interaction quality. Of note, these variables only reflected the experiences of the person who initiated interpersonal emotion regulation, since we did not collect dyadic or informant data. Nevertheless, they provide initial insight into the outcome of effort in the eyes of the person exerting that effort; a precursor to exploring the outcome of effort in the eyes of the person on the receiving end of that effort.

To answer our research questions, we used a combination of daily diary (Study 1) and ESM (Study 2) approaches. Both methodologies allow us to capture everyday social interactions, wherein people engage in and share personally meaningful and consequential emotional experiences which are critical for regulation processes (Kuppens et al., 2022). Further, daily diary and ESM designs, characterized by multiple measurement occasions nested within multiple participants, can disentangle momentary (within-person) differences in *state* effort from stable (between-person) differences in *trait* effort. This unique methodological merit allows us to investigate whether effort matters more for regulation outcomes on a moment-to-moment basis, or as a general tendency over time. On this front, previous work by Morelli et al. (2015) found that effort, conceptualized as level of emotional support provision, was associated with better emotional experiences for the provider at both the within- and between-person levels. However, this finding was not direct evidence for the role of effort, because of the way effort was conceptualized in the study. Our investigation would extend this work by examining within- and between-person effort more directly, as well as concurrently for both intrinsic and extrinsic regulation.

In addition, whereas daily diaries examine the most salient interaction of the day, ESM captures multiple interactions across the day. Together, they provide a more holistic picture of interpersonal emotion regulation effort and outcomes in everyday life. Though we made no formal directional hypotheses because of conflicting evidence in extant literature, we preregistered our research questions and analysis plans for Study 1 at <https://osf.io/7m3eg> and for Study 2 at <https://osf.io/a63k9>.

Study 1

Method

Participants

The sample consisted of 171¹ participants, aged 18–62 ($M = 28.96$, $SD = 11.81$, 79% women). Approximately half were single, and half were in a relationship. Recruitment occurred through an undergraduate research participation program and community advertising. For reimbursement, university participants received course credit, while community participants received gift cards. Reimbursement was dependent on their level of participation in the study.

We followed *Arend and Schäfer's* (2019) guidelines to post hoc determine the minimum detectable level-1 effect size for a two-level model using Monte Carlo simulation. The parameters comprised the final sample sizes included in analyses for intrinsic regulation ($n = 103$) and extrinsic regulation ($n = 133$), seven measurements, and medium-to-large intraclass correlation coefficients (ICCs .30–.50). We aimed for 80% power with $\alpha = .05$. These parameters allowed us to detect effect sizes of $\gamma_{10,\text{std}} = 0.14$ for intrinsic regulation, and $\gamma_{10,\text{std}} = 0.13$ for extrinsic regulation, both conventionally small effect sizes (*J. Cohen, 1988*).

Design and Procedure

The project received ethics approval from the University of Melbourne Human Research Ethics Committee (ID: 2056479.1). It comprised three parts: a baseline survey on Day 1, a 7-day daily diary portion from Days 2 to 8, and a follow-up survey on Day 9. All variables of interest were in the daily diaries. The full list of measures can be found on the project's Open Science Framework page at <https://osf.io/h7e6z/>.

Daily Diary Surveys. After completing the baseline survey assessing trait and demographic measures on Day 1, eligible participants proceeded to the daily diary portion, starting from Day 2. For seven consecutive days, daily surveys were sent out via Qualtrics at 5 p.m. and expired at 11:59 p.m. the same evening. Each survey contained 54 items (12 of which were relevant to the current study) assessing participants' most significant social interaction of the day. If participants did not have any interaction that day, they instead answered questions about a recent significant interaction, included to ensure participants were not incentivized to answer a certain way to finish the survey faster. Mean compliance rate to the daily diary protocol was 85.96% ($SD = 22.48$). Most of the sample (88.3%) had at least four diaries, yielding a total of 1,029 diaries. Of these, we analyzed 989 diaries (96.11%) in which participants indicated they had a social interaction during the day. Of the 171 initial participants, we analyzed data from 170 participants who had at least one social interaction over the course of the study.

Measures

Interpersonal Emotion Regulation Intention. Reflecting on their most significant interaction of the day, participants indicated if they tried to (a) "use other people to influence [their] own emotions" (intrinsic interpersonal emotion regulation), and (b) "influence the emotions of other people" (extrinsic interpersonal emotion regulation).

Interpersonal Emotion Regulation Goals. For both intrinsic and extrinsic regulation, regardless of their intention to regulate,

participants could select one or more options to indicate that they (a) had no goal, (b) wanted to increase/maintain positive emotions, (c) wanted to decrease negative emotions, (d) wanted to increase/maintain negative emotions, or (e) wanted to decrease positive emotions. This measure was adapted from *Kalokerinos et al. (2017)* and was included to subset the data for analysis.

Interpersonal Emotion Regulation Effort. Two questions adapted from *Gutentag et al. (2023)* asked participants, "How much effort did you put into using other people to influence your own emotions during this interaction?" and "How much effort did you put into influencing the emotions of other people during this interaction?" Participants responded using a slider scale from 0, *no effort at all*, to 100, *a lot of effort*.

Social Interaction Quality. To assess quality, we asked participants, "How would you rate the quality of this interaction?" from 0, *very negative*, to 100, *very positive*.

Social Interaction Emotions. Participants reported on how much they felt seven emotions (adapted from *Yik et al., 2011*) during the interaction. The selected emotions accounted for both the valence and arousal dimensions of the affective circumplex (*Posner et al., 2005*). Three emotions (happy, relaxed, hopeful) were averaged to form the positive emotions scale ($\omega_{\text{within}} = .81$, $\omega_{\text{between}} = .85$). The negative emotions scale ($\omega_{\text{within}} = .75$, $\omega_{\text{between}} = .93$) consisted of four averaged emotions (sad, nervous, angry, and stressed). Emotions were presented in a random order, and ranged from 0, *not at all*, to 100, *very much*.

Data Analytic Strategy

The analysis plan for this study was preregistered at <https://osf.io/7m3eg>. Analyses for each type of regulation were conducted using R (Version 4.2.1), on a subset of observations where participants (a) had a significant interaction that day (989 diaries/96.11% of total diaries completed), (b) had an intention to regulate (intrinsic: 277 diaries/26.91% of total diaries completed; extrinsic: 455 diaries/44.22% of total diaries completed), and (c) had a goal to increase/maintain positive emotions and/or decrease negative emotions (intrinsic: 262 diaries/25.46% of total diaries completed; extrinsic: 433 diaries/42.08% of total diaries). On the very rare occasion when participants reported having emotion regulation goal(s) and no goal simultaneously, we excluded that survey from analysis, as their response constituted an intention conflict and/or noisy data.

We performed multilevel modeling using the package *lme4* (*Bates et al., 2015*), fitting two-level mixed effects models with measurement occasions nested within participants. For both intrinsic and extrinsic regulation, we ran three separate linear mixed effects models for the three outcome variables: (a) positive emotions, (b) negative emotions, and (c) interaction quality, for a total of six models.

¹Fifty-five participants were screened from further participation or excluded prior to analysis for the following reasons (some participants failed multiple criteria): 16 were located outside the specified recruitment location, 22 completed the baseline in <10 min which indicated careless responding, five formally withdrew, two were under 18 years old, six did not complete any daily diary, and 17 displayed suspicious bot-like behaviors. Specifically, they shared similar emails, signed up to the study within seconds of one another, and their metadata indicated unfeasible geolocation changes with every survey. In addition, six participants completed the baseline survey twice, so we kept only the most complete entry.

Each model included within-person effort and between-person effort as predictor variables. Within-person effort was person-mean centered, which involved subtracting participants' effort rating on each survey from their own mean effort rating across all surveys (Hoffman, 2015). As such, higher values index people exerting effort more than they usually did. Between-persons effort was person averaged and grand-mean centered, which involved subtracting each participant's mean effort rating from the sample's mean effort rating (Enders & Tofghi, 2007). As such, higher values index people who exerted effort to a greater degree than others in the sample. We included a random intercept for participant, and a random slope for within-person effort (see the [online supplemental material A](#) for a plot of individual random slopes for all models). We conducted graphical checks for model assumptions, which included linearity of relationship between variables, independence of observations, normality of residuals, and homoscedasticity (Fife, 2020), using the R package sjPlot (Lüdtke, 2018). These checks revealed no major assumption violations.

Results

Descriptive statistics for all variables are presented in [Table 1](#). Within- and between-person correlations are in the [online supplemental material B](#). Overall, participants exerted moderate amounts of effort to regulate their own or others' emotions (just under 50 on a 0–100 point scale), and their effort varied slightly more within-person than between-person.

Intrinsic Interpersonal Emotion Regulation Effort

Three linear mixed-effects models examined intrinsic effort as a predictor of emotional and relational outcomes (see [Table 2](#)) on 282 occasions (27% of social interactions) where participants intended to improve their own emotions by turning to others during a significant interaction that they had that day. Results revealed that intrinsic effort was not a predictor of how positive people felt about that interaction, nor of how they rated the quality of that interaction. However, negative emotions were predicted by both within-person ($b = 0.18$, 95% CI [0.05, 0.32], $p = .009$) and between-person intrinsic effort ($b = 0.26$, [0.12, 0.40], $p < .001$), such that when people exerted more effort to influence their own emotions through other people—compared to how much effort they usually spent, or how much effort they spent relative to others—they also felt more negative about that interaction.

Extrinsic Interpersonal Emotion Regulation Effort

We examined extrinsic effort outcomes on 448 occasions (44% of social interactions) where participants intended to improve others' emotions during a significant interaction they had that day. [Table 3](#) presents the model results. Extrinsic effort did not predict how positive people felt about the interaction, but it did predict how negative people felt at the within-person level ($b = 0.17$, 95% CI = 0.09, 0.26, $p < .001$). In other words, when people exerted more effort to regulate others' emotions than they usually did, they also felt more negative about the interaction. Further, at the between-person level, people who spent more effort regulating others' emotions reported slightly better interaction quality ($b = 0.14$, [0.01, 0.27], $p = .031$).

Discussion

Study 1 found interpersonal emotion regulation effort was not always associated with beneficial outcomes. In fact, effort was associated with somewhat detrimental emotional experiences—both intrinsic and extrinsic efforts were associated with feeling more negative. The picture was more optimistic for relational outcomes: People who habitually exerted more extrinsic effort also reported higher interaction quality. We note, however, that since exclusion criteria were applied to focus on observations where participants intended to regulate with affect-improving goals, the final sample sizes were relatively small ($n = 103$ for intrinsic and $n = 133$ for extrinsic regulation), and therefore could only reliably detect small effect sizes of $\gamma_{10, \text{std}} = 0.13\text{--}0.14$. The fact that the model coefficients were around this threshold underscores the challenge in drawing definitive conclusions with small effect sizes using small samples. Study 1 therefore only provides a preliminary test of the relationships in question.

Study 2

Study 1 had participants reflect on their most important interaction on a particular day. In Study 2, we took a more fine-grained approach with a larger sample to examine the associations between regulation effort and outcomes on a shorter time scale. Specifically, in an ESM design, we had participants report on their most recent significant social interaction, the degree of regulation effort they exerted, and emotional and social experiences in that interaction. This approach allowed us to replicate Study 1 findings across a new methodology, as well as to explore a wider range of social interactions in the course of everyday life.

Method

Participants

An a priori power analysis conducted using the t -method for multilevel models (Murayama et al., 2022) indicated a target sample size of 200 participants to detect a t -value of 2.50 (corresponding to a small effect size of $d = .20$), at 80% power with an α level of .05.

The final sample consisted of 239² participants, aged 18–79 ($M = 29.74$, $SD = 10.85$, 71% women). Roughly 40% were single, while 60% were in a relationship.

Recruitment occurred through a combination of an undergraduate psychology research participation program, as well as university community advertising. For reimbursement, university participants received course credit, while community participants received gift cards. Reimbursement was dependent on their level of participation in the study.

Design and Procedure

The project received ethics approval from the University of Melbourne Human Research Ethics Committee (ID: 21316). It

² Thirty-two participants were excluded prior to analysis for the following reasons (some participants failed multiple criteria): nine failed attention checks, three were ineligible to continue to the ESM portion, one had technical issues, four withdrew from the study, six did not complete any ESM surveys, and nine had no baseline data. In addition, five participants completed the baseline survey twice, so we kept only the most complete entry.

Table 1
Descriptive Statistics

Variable	Study 1 (daily diary)				Study 2 (ESM)			
	<i>M</i>	<i>SD</i> _{within}	<i>SD</i> _{between}	ICC	<i>M</i>	<i>SD</i> _{within}	<i>SD</i> _{between}	ICC
Intrinsic effort	46.01	16.73	21.14	.40	45.20	16.35	17.71	.41
Extrinsic effort	49.96	16.18	21.24	.48	54.65	17.11	17.19	.38
Positive emotions	57.73	18.48	16.69	.30	51.20	16.18	13.71	.36
Negative emotions	14.49	10.73	11.74	.38	19.19	12.72	11.84	.39
Social interaction quality	73.21	16.32	14.60	.28	71.35	17.30	12.25	.25

Note. *M* = grand mean; *SD*_{within} = within-person standard deviation; *SD*_{between} = between-person standard deviation; ICC = intraclass correlation coefficient; ESM = experience sampling methodology.

comprised two parts: a baseline survey on Day 1, followed by a 7-day experience sampling period with seven ESM surveys and one end-of-day survey per day. All variables of interest were in the ESM surveys. The full list of measures can be found on the project's Open Science Framework page at <https://osf.io/h7e6z/>.

Baseline Survey. On Day 1 of the study, participants received an email with instructions to download the SEMA3 mobile application (Koval et al., 2019), and a link to the baseline survey on Qualtrics. After completing a battery of trait measures, participants then watched a video about the study explaining how to complete specific ESM items, and a video about the SEMA3 app. Comprehension checks were included after each video.

ESM Surveys. The following day, eligible participants began the 7-day ESM period. Each day, participants received notifications to complete seven ESM surveys from 9:30 a.m. to 7:00 p.m., for a total of 49 ESM surveys. We used a mixed sampling scheme, with each survey randomly scheduled within a fixed time window. These windows were evenly distributed across the day. Participants had 30 min to complete each survey from when they received the notification. ESM surveys occurred an average of 89.97 min apart (*SD* = 12.63).

Each ESM survey contained either 29 or 26 items depending on participants' responses to certain items. Thirteen items were relevant to this project. Participants reflected on their emotional experiences during a social interaction they had since the previous survey. If participants did not report having an interaction, they instead answered questions about their current emotional state, which were included to ensure participants were not incentivized to answer a certain way that resulted in a shorter survey.

To increase compliance, all participants received email reminders to complete surveys on Days 2 and 5 of the ESM period. Overall compliance was 74.49% (*SD* = 19.79). Participants completed on average 36 out of 49 ESM surveys, for a total of 8,678 surveys. In the current study, we analyzed 5,534 surveys (63.77% of surveys) in which participants had a social interaction since the previous survey.

Measures

Interpersonal Emotion Regulation Intention. We asked participants: "How did you use other people to change your emotions during this interaction?" (intrinsic regulation), and "How did you try to change the emotions of other people during this interaction?" (extrinsic regulation). Participants could select one or multiple options indicating that they (a) did not try to change their own/others' emotions, (b) tried to increase or maintain their own/others' positive emotion, (c) tried to increase or maintain their own/others' negative emotion, (d) tried to decrease their own/others' positive emotion, and (e) tried to decrease their own/others' negative emotion. Selecting only option (a) indicated no intention to regulate, and any of options (b)–(e) indicated an intention to regulate.

Interpersonal Emotion Regulation Effort. Participants who indicated an intention to engage in intrinsic and/or extrinsic interpersonal emotion regulation were asked how much effort they put into regulation. The effort questions and response options were the same as in Study 1.

Social Interaction Quality. Quality was assessed using the same item as Study 1.

Social Interaction Emotions. Reflecting on the interaction, participants then responded to the question, "Right now, when thinking about the interaction, how [emotion] do you feel?" using a slider scale of 0, *not at all*, to 100, *very much*. Peaceful, relaxed, excited, and enthusiastic were averaged to form the positive emotions scale ($\omega_{\text{within}} = .81$, $\omega_{\text{between}} = .89$). Sad, dull, anxious, and irritated were averaged to form the negative emotions scale ($\omega_{\text{within}} = .72$, $\omega_{\text{between}} = .90$).

Data Analytic Strategy

The analysis plan for this study was preregistered at <https://osf.io/a63k9>. Analyses were conducted using R (Version 4.2.1), on a subset of observations where participants (a) had a significant interaction

Table 2
Results From Generalized Linear Analyses to Examine Intrinsic Effort as a Predictor of Emotional and Relational Outcomes

Predictors	Model 1a: positive emotions			Model 1b: negative emotions			Model 1c: social interaction quality		
	Estimate (<i>SE</i>)	95% CI	<i>p</i>	Estimate (<i>SE</i>)	95% CI	<i>p</i>	Estimate (<i>SE</i>)	95% CI	<i>p</i>
Intercept	57.92 (1.73)	[54.49–61.35]	<.001	18.08 (1.41)	[15.29–20.87]	<.001	73.24 (1.81)	[69.64–76.84]	<.001
Within-person intrinsic effort	−0.11 (0.11)	[−0.32–0.11]	.314	0.18 (0.07)	[0.05–0.32]	.009	−0.12 (0.09)	[−0.31–0.08]	.232
Between-person intrinsic effort	−0.02 (0.09)	[−0.20–0.16]	.827	0.26 (0.07)	[0.12–0.40]	<.001	0.05 (0.09)	[−0.13–0.24]	.568
<i>N</i> _{ID} /observations		103/262			103/262			103/262	

Note. *SE* = standard error; CI = 95% confidence interval; *N*_{ID} = number of participants. Significant *p*-values bolded.

Table 3

Results From Generalized Linear Analyses to Examine Extrinsic Effort as a Predictor of Emotional and Relational Outcomes

Predictors	Model 2a: positive emotions			Model 2b: negative emotions			Model 2c: social interaction quality		
	Estimate (SE)	95% CI	<i>p</i>	Estimate (SE)	95% CI	<i>p</i>	Estimate (SE)	95% CI	<i>p</i>
Intercept	60.53 (1.53)	[57.51–63.55]	<.001	14.77 (1.14)	[12.50–17.03]	<.001	75.37 (1.32)	[72.75–77.99]	<.001
Within-person extrinsic effort	–0.14 (0.07)	[–0.29–0.01]	.063	0.17 (0.04)	[0.09–0.26]	<.001	–0.10 (0.06)	[–0.21–0.01]	.075
Between-person extrinsic effort	0.06 (0.07)	[–0.09–0.20]	.451	0.06 (0.06)	[–0.05–0.17]	.289	0.14 (0.06)	[0.01–0.27]	.031
<i>N</i> _{ID} /observations		133/433			133/432			133/433	

Note. SE = standard error; CI = 95% confidence interval; *N*_{ID} = number of participants. Significant *p*-values bolded.

since the previous survey (5,534 surveys/63.77% total surveys completed), (b) had an intention to regulate (intrinsic: 1,278 surveys/14.73% total surveys completed; extrinsic: 1,942 surveys/22.38% total surveys completed), and (c) had a goal to increase/maintain positive emotions and/or decrease negative emotions (intrinsic: 1,055 surveys/12.16% total surveys completed; extrinsic: 1,708 surveys/19.68% total surveys completed). Following the recommendations of Geeraerts (2020) regarding careless responding, we excluded prior to analysis items that were responded to in <650 ms, as well as surveys that had more than 50% of items responded to in under this time. As a result, 431 items (0.8% of all relevant items), and 62 surveys (0.7% of all surveys) were replaced with missing data.

Similar to Study 1, we performed multilevel modeling, fitting two-level mixed effects models with measurement occasions nested within participants. The model specifications for each of the six models in this study were identical to those in Study 1, with within-person and between-person effort predicting (a) positive emotions, (b) negative emotions, and (c) social interaction quality. The online supplemental material A presents a plot of individual random slopes for all models. Graphical checks revealed no major assumption violations in any models.

In a departure from our preregistered models, we did not include the outcome variable at the previous survey (i.e., lagged variable) as a control variable. This decision was because lagging variables relied on surveys being consecutive. However, consecutive surveys do not always appear in typical ESM data in which participants sometimes skip surveys (Sun et al., 2021), and this lack is more pronounced in our data, because we only examined regulation in observations where people reported having a social interaction and an intention to regulate. These inclusion criteria resulted in a large number of surveys being excluded from lagged analyses (e.g., there were 709 available observations to examine emotional outcomes for extrinsic effort when we included a lagged control vs. 1,705 observations when we did not). Nevertheless, to test the robustness of the effect of within-person effort, we conducted a series of supplemental

analyses where we included the lagged outcome variables as control variables in the corresponding models, which revealed no substantive differences from the main findings, with one exception which we note in the Results section (see the online supplemental material C).

Results

Table 1 presents descriptive statistics for all variables. Within- and between-person correlations are in the online supplemental material B. Similar to Study 1, participants exerted moderate amounts of effort in both intrinsic and extrinsic forms of interpersonal emotion regulation, which varied more within-person than between-persons.

Intrinsic Interpersonal Emotion Regulation Effort

Table 4 presents the model results for intrinsic effort as a predictor of socioemotional outcomes on 1,055 occasions (19% of social interactions reported) where participants intended to turn to others to improve their own emotions. We found that between-person intrinsic effort was associated with both positive (*b* = 0.14, 95% CI [0.01, 0.27], *p* = .036) and negative (*b* = 0.15, [0.05, 0.25], *p* = .003) emotions. In other words, people who exerted more effort to influence their emotions through others were also those who experienced more intense emotions.

Within-person intrinsic effort did not predict any of the outcome variables in the main analyses. However, in a series of supplemental analyses (see the online supplemental material C) which controlled for these outcome variables at the previous measurement occasion and thereby accounted for the fact that negative emotion persists across time, the association between within-person intrinsic effort and negative emotion became significant, such that in moments when people put in more intrinsic effort, they also felt more negative, controlling for their previous negative emotions. The effect was however only a modest 0.09-point increase on a 0–100 scale. Table 5 presents model results for intrinsic effort as a predictor of

Table 4

Results From Generalized Linear Analyses to Examine Intrinsic Effort as a Predictor of Emotional and Relational Outcomes

Predictors	Model 1a: positive emotions			Model 1b: negative emotions			Model 1c: social interaction quality		
	Estimate (SE)	95% CI	<i>p</i>	Estimate (SE)	95% CI	<i>p</i>	Estimate (SE)	95% CI	<i>p</i>
Intercept	56.36 (1.12)	[54.16–58.57]	<.001	18.00 (0.86)	[16.30–19.71]	<.001	77.43 (0.93)	[75.60–79.25]	<.001
Within-person intrinsic effort	0.03 (0.04)	[–0.05–0.10]	.520	0.06 (0.03)	[–0.00–0.12]	.062	–0.01 (0.04)	[–0.08–0.07]	.846
Between-person intrinsic effort	0.14 (0.07)	[0.01–0.27]	.036	0.15 (0.05)	[0.05–0.25]	.003	0.05 (0.05)	[–0.06–0.15]	.407
<i>N</i> _{ID} /observations		186/1,050			186/1,050			186/1,050	

Note. SE = standard error; CI = 95% confidence interval; *N*_{ID} = number of participants. Significant *p*-values bolded.

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Table 5
Intrinsic Effort as a Predictor of Negative Emotions, With and Without Controlling for Previous Negative Emotions

Predictors	Model 1b: negative emotions			Model S1b: negative emotions (controlling for previous negative emotions)		
	Estimate (SE)	95% CI	<i>p</i>	Estimate (SE)	95% CI	<i>p</i>
Intercept	18.00 (0.86)	[16.30–19.71]	<. .001	18.97 (1.31)	[16.37–21.57]	<. .001
Within-person intrinsic effort	0.06 (0.03)	[–0.00–0.12]	.062	0.07 (0.03)	[0.01–0.13]	.030
Between-person intrinsic effort	0.15 (0.05)	[0.05–0.25]	.003	—	—	—
Previous negative emotions	—	—	—	0.18 (0.06)	[0.06–0.30]	.005
<i>N</i> _{ID} /observations	186/1,050			135/431		

Note. SE = standard error; CI = 95% confidence interval; *N*_{ID} = number of participants. Significant *p*-values bolded.

negative emotions, with and without controlling for previous negative emotions.

Extrinsic Interpersonal Emotion Regulation Effort

Model results for extrinsic effort outcomes are presented in Table 6. Participants intended to improve others' emotions on 1,708 occasions (31% of social interactions reported). Within-person extrinsic effort was not associated with higher positive emotions, nor interaction quality, but it was associated with greater negative emotions, although this effect was quite small, amounting to a 0.07-point increase on a 0–100 scale. In contrast, between-person extrinsic effort was positively associated with heightened emotionality and interaction quality. That is, people who exerted more effort to improve others' emotions felt both more positive and negative themselves, and rated their interactions as better quality.

Discussion

Study 2 found that habitual use of effort to improve one's own and others' emotions was associated with feeling more positive and negative in the moment. However, consistent with the findings from Study 1, Study 2 revealed a more optimistic picture on the social dimension: people who habitually exerted more extrinsic effort also reported higher interaction quality.

General Discussion

Using a combination of daily diary and ESM techniques, the current research explored the association between effort invested in interpersonal emotion regulation and socioemotional experiences in the context of everyday social interactions. This investigation revealed that efforts to regulate one's own emotions (i.e., intrinsic regulation) or others' emotions (i.e., extrinsic regulation) in social interactions were associated with mixed emotional and social outcomes. In fact, on days (Study 1) or in moments (Study 2) when people invested more effort than usual into regulating emotions interpersonally, they reported feeling more negative emotions, but not more positive emotions or greater interaction quality. On a more optimistic note, people who put in more effort to regulate others' emotions on average also reported higher interaction quality. These preliminary findings (summarized in Table 7) suggest that effort may operate differently at the within- and between-person levels, and that more effort by itself may not always be associated with better results; more complex processes may be at play to shape the

emotional and relational outcomes of interpersonal emotion regulation.

Intrinsic Interpersonal Emotion Regulation Effort

Across both studies, people who invested more effort into feeling better through social means than others in the sample also reported feeling more negative emotions than others. This association is somewhat perplexing when considered in combination with research on intrapersonal emotion regulation, which finds that effort invested in adaptive goals to feel better can have emotional payoffs (e.g., English et al., 2017; Gutentag et al., 2023). However, some studies in the interpersonal space suggest that intrinsic effort may do more harm than good in certain contexts. Indeed, because effort reflects how intensely people employ regulatory behaviors, good and bad, putting effort into maladaptive behaviors may have negative consequences. For example, investing effort in strategies like venting and seeking reassurance can perpetuate negative emotions and burden the interaction partner (Dixon-Gordon et al., 2018). Investing effort into too many strategies at once can also lead to adverse outcomes, because it may indicate that a person does not know how to select and implement an effective strategy (Niven, Macdonald, & Holman, 2012). Thus, future research may explore the interplay between intrinsic effort and strategy use to see how it might be associated with greater negative emotionality.

Another possibility for why intrinsic effort is associated with worse emotional outcomes draws from the broader literature on social support. It might be the case that someone who puts in more conscious effort to recruit help to feel better is more likely to perceive the support they receive as visible (i.e., it is more obvious that the other person is trying to help). Visible support—as opposed to invisible support—can have unintended negative consequences for the support seeker's emotional well-being (Bolger & Amarel, 2007; Zee & Bolger, 2019). Regardless of mechanism, however, our findings build upon budding interpersonal work by providing the first direct assessment of effort, thereby providing a clearer picture of the association between effort and experienced negative emotion. In doing so, our research revealed a potential disconnect between the intrapersonal and interpersonal emotion regulation literatures: in social contexts, trying harder is not always associated with feeling better.

Extrinsic Interpersonal Emotion Regulation Effort

Across both studies, times when people exerted more effort to regulate others' emotions were also times when they themselves felt

Table 6
Results From Generalized Linear Analyses to Examine Extrinsic Effort as a Predictor of Emotional and Relational Outcomes

Predictors	Model 2a: positive emotions			Model 2b: negative emotions			Model 2c: social interaction quality		
	Estimate (SE)	95% CI	<i>p</i>	Estimate (SE)	95% CI	<i>p</i>	Estimate (SE)	95% CI	<i>p</i>
Intercept	54.98 (1.01)	[52.99–56.97]	<.001	17.58 (0.79)	[16.02–19.13]	<.001	75.75 (0.81)	[74.16–77.33]	<.001
Within-person extrinsic effort	−0.06 (0.03)	[−0.12–0.01]	.102	0.07 (0.03)	[0.02–0.12]	.011	−0.00 (0.03)	[−0.06–0.06]	.941
Between-person extrinsic effort	0.14 (0.06)	[0.02–0.26]	.024	0.17 (0.05)	[0.07–0.26]	.001	0.11 (0.05)	[0.01–0.21]	.025
<i>N</i> _{ID} /observations		215/1,705			215/1,705			215/1,705	

Note. SE = standard error; CI = 95% confidence interval; *N*_{ID} = number of participants. Significant *p*-values bolded.

more negative. Due to the cross-sectional nature of our models, these findings can be interpreted in three ways: effort leading to negativity, negativity prompting greater effort, or effort as a proxy for the need to regulate negativity.

Effort Leading to Negativity

Previous literature is conflicted in how exerting effort to regulate others’ emotions is associated with the regulator’s emotional experiences. On the one hand, past work suggests that the more people try to make others feel better by offering emotional support, the better their own emotional experiences are (Morelli et al., 2015). On the other hand, other work has shown that putting more hours into providing emotional support can take a negative emotional toll on the person offering that support (Gunderson & Barrett, 2017). Our study, which was the first to explicitly assess the role of extrinsic effort, lends support to the latter direction of association. This finding, while disheartening, is not unfounded. Indeed, the broader social support literature indicates that support provision can be harmful to the emotional well-being of support providers in close relationships if that support goes unnoticed or unappreciated (e.g., Biehle & Mickelson, 2012; Marini et al., 2021). As such, potential moderators like relationship closeness and perceived support level may have played a role in explaining our finding. Future studies can explore these variables to better understand how effort to provide emotion regulation support may help or harm the regulators themselves.

Negativity Leading to Effort

Alternatively, it could be the case that the relationship between more effort and more negative emotions operate in the opposite direction: That it is in fact people’s negative emotions that are

driving their effort to regulate others’ emotions. Effortful emotion regulation may arise because of a mismatch between actual and desired emotions (Tamir, 2021). In the context of extrinsic interpersonal emotion regulation, this mismatch is in the target’s actual and desired emotions, as perceived by the regulator. The regulator may in turn feel negative in response to the target’s negative emotion (Hatfield et al., 1993), which subsequently signals the need for effortful emotion regulation (Tamir, 2021).

To get closer to this potential relationship, we ran lagged supplemental models in Study 2 that controlled for previous experiences of negative emotions when assessing the relationship between effort and negativity. These findings revealed that the association between extrinsic effort and negative emotions remained significant even after controlling for previous level of negative emotions (the online supplemental material C). While this result does not support the idea that negative emotions drive effort, their temporal dynamics should be more systematically tested in the future as they carry important implications for emotion regulation intervention designs.

Effort as a Proxy for Need to Regulate Negativity

Another explanation for our findings may be that rather than temporally preceding or following negativity, extrinsic effort may index the concurrent need to regulate negative emotions. In other words, effort may reflect how much people feel they need to regulate in a given moment. For instance, when a child comes to a parent with more negative emotions than usual, the parent may feel greater need to invest more extrinsic effort to regulate their child’s emotions. In this case, effort is likely greater when the need to regulate negativity is greater, and this additional effort may in turn feel more negative to the parent. To determine whether this dynamic is concurrent or temporal, however, requires an experimental or more temporally fine-grained design than our current design.

Another finding of the current research suggests that people who put in more effort to regulate others’ emotions also reported higher interaction quality. Because patterns of positive social interactions over time build positive relationships (Farooqi, 2014), this result provides additional support that extrinsic regulation to make others feel better is associated with improved relationship quality over time (e.g., Debrot et al., 2013). Of note, while between-person extrinsic effort seemed to be associated with beneficial social experiences in our study, we did not observe the same association at the within-person level. That is, in moments when people invested more effort to regulate others’ emotions than they usually did, they did not report the interaction being of higher quality. This difference not only highlights the theoretical importance of examining effort at both the within- and between-person levels, but also implies that despite

Table 7
Summary of Results Across Studies

Predictors	Outcomes		
	Positive emotions	Negative emotions	Interaction quality
Intrinsic effort			
Within-person	✗	?	✗
Between-person	?	✓	✗
Extrinsic effort			
Within-person	✗	✓	✗
Between-person	?	?	✓

Note. ✓ consistently positive and significant associations; ✗ consistently nonsignificant associations; ? inconsistent results across analyses.

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the lack of short-term benefits, investing effort to regulate others' emotions may be associated with long-term relational rewards.

Limitations and Future Directions

Effort is a key feature of emotion regulation processes, with its perceived cost playing a role in the initiation of emotion regulation, and its exertion influencing regulation outcomes (Tamir, 2021). We are among the first to investigate effort on the interpersonal level, thereby bridging the gap between the intrapersonal and interpersonal emotion regulation literatures, and providing early evidence for an association between effort and socioemotional outcomes. While this work provides a starting point for further insights, our studies are not without flaws.

First, the daily diary design in Study 1, as well as the low number of observations available for lagged analysis in Study 2, preclude us from comprehensively assessing the temporal dynamics of effort and socioemotional outcomes. Researchers who wish to explore the potential interdependence of effort and outcomes may employ a more intensive sampling frequency to capture more observations.

Second, the different methodologies necessitated using different wording to assess the same constructs, to balance between minimizing noise and making contextual sense for participants. Participants reflected on their emotional experiences *during* the most significant interaction of the day in Study 1, and *right now* when thinking about their most significant interaction since the last survey in Study 2. The different wording may have resulted in inconsistent findings across studies. In this discussion, we focus on findings that replicate across studies to show where the association between effort and outcome is most consistent. However, we note that different methodologies with different timeframes do not provide the same information, and researchers should consider the pros and cons of each method depending on their research question and the timeframe they are most interested in (Lucas et al., 2021).

Third, interpersonal emotion regulation involves more than one person, but the current research looks at only one side of the interaction. This design is particularly limiting for the examination of extrinsic effort outcomes, since we did not have data from the person(s) whose emotions were being regulated. Capturing both sides of the dyad, or using informant reports, would help researchers better understand whether investing effort to regulate others' emotions is actually effective in doing so.

Another methodological limitation concerns the use of single-item measures in our studies. While single-item measures are often necessary to reduce participant burden in daily life research (Allen et al., 2022), their reliability and validity can be difficult to ascertain. A single-item measure for regulation intention or effort may be misconstrued by participants, especially in Study 1 where there was no comprehension check. These items may thus be prone to measurement error, and should be improved by using either a multiple-item validated scale or by including other variables to examine the items' predictive, convergent, and discriminant validity (Kuppens et al., 2022).

Our study also has two major theoretical limitations. First, interpersonal emotion regulation, as conceptualized and assessed in our study, is intentional and explicit (Niven, 2017; Zaki & Williams, 2013). Regulation effort, in turn, reflects this intentionality (Lewczuk et al., 2022). However, the regulation of one's own emotions through others can also happen automatically without conscious effort (van Dellen et

al., 2012). Thus, factoring in these automatic processes may give us a clearer understanding of what is driving the outcomes of intrinsic interpersonal emotion regulation. Second, because affect-worsening regulation was extremely rare both in existing literature (e.g., Kalokerinos et al., 2017; Springstein et al., 2023) and in our data, we chose to focus on effort invested in affect-improving regulation, where people have goals to either increase/maintain positive emotions and/or decrease negative emotions. Our findings therefore cannot be generalized to affect-worsening regulation, where people have goals to either increase/maintain negative emotions and/or decrease positive emotions. Future research can examine how effort is associated with emotional and relational outcomes when people regulate to achieve either affect-improving or affect-worsening goals.

Further, while effort is an important feature of interpersonal emotion regulation to investigate, we also acknowledge that effort alone gives an incomplete picture. As a motivated process (Tamir et al., 2020), emotion regulation behaviors and outcomes may depend on the content and strength of people's motivation (Atkinson, 1957; Gollwitzer, 2021). In this project, we investigated regulation effort, an index of motivational strength (e.g., Brehm & Self, 1989). Future research may focus on the other part of the puzzle, which is the motivational content, or the motive to regulate, as there is evidence to suggest that the interplay between motive and effort may predict differential outcomes in intrapersonal regulation (Gutentag & Tamir, 2022; Wong et al., 2017). The exploration of motives in intrinsic (e.g., Liu et al., 2021) and extrinsic interpersonal regulation (e.g., Niven et al., 2019a) is still in its nascent stage, with preliminary evidence pointing to the differential association between various motives and regulation outcomes both in organizational and everyday contexts (Niven et al., 2019b; Springstein et al., 2023). Nevertheless, interpersonal emotion regulation motives remain a relatively uncharted territory, which we believe is worthy of exploration.

Conclusion

While existing evidence points to the importance of both intrinsic and extrinsic interpersonal emotion regulation in shaping emotional and relational well-being, researchers still know little about whether investing effort in interpersonal emotion regulation pays off. Through a combination of daily diary and ESM studies, we examined the relationship between effort and socioemotional outcomes of everyday social interactions. We found people who habitually put in more effort to feel better through others tended to experience greater negative emotion. Moreover, on occasions when people tried harder to make others feel better, they also felt more negative themselves. The picture was not all grim, however, as people who habitually tried harder to make others feel better also reported having better quality social interactions. Together, these findings suggest that successful interpersonal emotion regulation may not always be a matter of simply trying hard. Instead, further investigation is required to gain a deeper understanding of what factors can be leveraged to most effectively harness effort for better socioemotional well-being.

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