Motivation and Emotion (2023) 47:323–332
https://doi.org/10.1007/s11031-023-10016-3

ORIGINAL PAPER

The interpersonal correlates of believing emotions are controllable

Angela M. Smith[1] · **Gerald Young**[2] · **Brett Q. Ford**[1]

Accepted: 1 April 2023 / Published online: 5 May 2023

Abstract
Our beliefs about whether emotions are controllable influence how we approach our own emotions – but what about *others'* emotions? Such beliefs should shape how we respond to others, but past literature suggests two competing hypotheses: if believing someone else's emotions are controllable has similar beneficial outcomes as believing one's own emotions are controllable, such beliefs may predict more *supportive* interpersonal responding. Alternatively, if believing someone else's emotions are controllable instead activates evaluative social judgments, such beliefs may predict more *unsupportive* interpersonal responding. Across two studies (Ns 309, 314), believing a depressed person's emotions were more (vs. less) controllable predicted more *unsupportive* interpersonal responses: more negative responses (e.g., more avoidance) and less positive responses (e.g., less support). These beliefs were also associated with a greater likelihood of trying to regulate the person's emotions across various emotion regulation tactics. Our results suggest that beliefs about emotion controllability have important implications for how we respond to others experiencing depression and distress.

Keywords Emotion · Beliefs · Emotion regulation · Depression · Mental health

The interpersonal correlates of believing emotions are controllable

Emotions are powerful experiences in our everyday lives and what we *believe* about emotions plays an integral role in how we respond to daily challenges. One particularly foundational belief centers on the extent to which people believe that emotions are controllable (vs. uncontrollable), which is typically viewed as a relatively adaptive belief to hold (Ford & Gross, 2019). Indeed, research consistently demonstrates that people fare better when they believe that emotions are controllable (De Castella & Byrne, 2015; De Castella et al., 2013; Schroder et al., 2015; Tamir et al., 2007). These benefits are consistent with a long history of therapists providing interventions to increase peoples' beliefs about their emotion controllability (Beck, 1976, 1991), and even companies (Lloyd, 2019) and schools (Smith et al., 2018) are now striving to train people to believe they can control their emotions.

Despite the numerous apparent benefits of believing emotions are controllable[1], we propose that two crucial, inter-related gaps in the empirical literature have limited our understanding of how these beliefs operate in daily life. First, people's beliefs do not solely affect themselves – beliefs should also affect *how people respond to others*, yet how these beliefs affect our responses to others have been given less attention. Second, people not only hold beliefs about themselves – they hold beliefs about *the people with whom they interact*, and these understudied beliefs should uniquely shape treatment of those people. The present research attempts to address these two gaps by examining how peoples' beliefs about emotion shape their responses to another person experiencing depression, a mental illness characterized by intense negative emotions and therefore an optimal context to examine how emotion controllability beliefs shape our interpersonal responses. By providing a preliminary examination of how these beliefs about

✉ Angela M. Smith
amoriah.smith@mail.utoronto.ca

[1] University of Toronto, Toronto, Canada

[2] University of California, Berkeley, CA, USA

[1] Although different terms have been used in the literature to refer to these beliefs (incremental/entity theories, malleability beliefs, controllability beliefs), we have chosen to refer to "controllability" because this term most closely matches our validated measurement tool, which has been used often in prior work (De Castella et al., 2013; Kneeland et al., 2016a, b, c; Tamir et al., 2007), and centers explicitly on the extent to which people believe they (or others) can control or change emotions.

ourselves and others affect our interpersonal responding, the present investigation extends research on emotion beliefs into the interpersonal realm and addresses competing hypotheses: Although it is possible that believing that others' emotions are relatively controllable may facilitate more *supportive* interpersonal responses, prior literature also suggests that believing that others' emotions are relatively controllable could actually facilitate more *unsupportive* interpersonal responses.

Believing emotions are controllable and supportive interpersonal responses

Several lines of research suggest that believing another person can (vs. cannot) control their emotions could facilitate more *supportive* interpersonal responses. The current literature strongly indicates that believing one's own emotions are controllable is beneficial for the individual (De Castella & Byrne, 2015; De Castella et al., 2013; Ford et al., 2018; Schroder et al., 2015.; Tamir et al., 2007) and a long history of psychological research indicates that people generally hold beliefs about other people that correspond to their own beliefs (e.g., false consensus, social projection; Mullen et al., 1985; Robbins & Krueger, 2005). For example, believing one's own emotions are controllable is consistently linked with greater emotional well-being (De Castella et al., 2013; Kneeland, Nolen-Hoeksema, Dovidio, & Gruber, 2016; Romero et al., 2014; Schroder et al., 2015). As a specific example, people who believe their own emotions are controllable are more likely to engage with (vs. avoid) their emotions, even when those emotions are distressing (De Castella et al., 2018; Kappes & Schikowski, 2013). Such findings suggest that if people's beliefs about the controllability of *others'* emotions functions similarly to their beliefs about their *own* emotions, people who believe another's emotions are controllable may also be more likely to engage with individuals who are emotionally distressed in supportive ways.

Relatedly, believing that one's own emotions are controllable also promotes the use of emotion regulation strategies like cognitive reappraisal, which is widely regarded to be a gold-standard form of emotion regulation. Reappraisal involves changing ones perspective on a situation to alter one's emotional response (Aldao et al., 2010) and empirical research has consistently demonstrated that believing emotions are controllable predicts greater reappraisal use including in longitudinal studies (Ford et al., 2018; Tamir et al., 2007) and experimental manipulations of beliefs about emotion (Kneeland et al., 2016a, b, c). If people's beliefs about the controllability of *others'* emotions functions similarly to their beliefs about their *own* emotions, people who believe another's emotions are controllable may also be likely to try to help them use such strategies through *extrinsic* emotion regulation (i.e., efforts to regulate the emotions of another person; Dixon-Gordon et al., 2015).

Believing emotions are controllable and unsupportive interpersonal responses

Although several lines of research suggest that believing another person can (vs. cannot) control their emotions may facilitate more supportive interpersonal responses, an alternative body of research suggests the opposite pattern: that these beliefs might facilitate more *unsupportive* interpersonal responses. Namely, believing someone else's emotions are relatively controllable may function similarly to other evaluative social judgments, which can lead to judging others more harshly and holding others more responsible for their actions (Ottati et al., 2005; Pronin, 2008).

Studies that have examined associations between believing that others' mental states (e.g., emotions) are relatively controllable have found that these beliefs are associated with unsupportive interpersonal responding such as judging and criticizing them (Cusimano & Goodwin, 2019; Martin, 2010). For example, parents who believe their child has greater control over their emotions behaved more negatively towards their child, punishing them when they expressed negative emotions (Halberstadt et al., 2013) and people who believed that happiness, specifically, is more controllable reported less empathy and more blame towards a stranger experiencing depression (Tullett & Plaks, 2016). Related research has also examined associations between peoples' beliefs about the controllability of depression or mental illnesses, typically focusing on the extent to which the person (or other factors) is to blame for their mental health condition and has found that blame generally predicts more unsupportive interpersonal responding (e.g., Corrigan et al., 2002, 2004). For example, in the context of post-partum depression, believing that a woman has more (vs. less) control over her depression predicted greater anger and less sympathy towards her, whether these beliefs were measured or manipulated in an experimental design (Ruybal & Siegel, 2017).

Believing that another person's emotions are controllable may also lead them to use extrinsic emotion regulation strategies when others are distressed. For example, evidence suggests that people who believe their close other's emotions are controllable are more likely to attempt to minimize that person's negative emotions (Halberstadt et al., 2013; Kammrath & Peetz, 2012), which can be perceived as invalidating and jeopardize rapport between people (Dixon-Gordon et al., 2015; Marigold et al., 2014). Although people

may engage in extrinsic emotion regulation with the best of intentions, such efforts can also be percevied as unsupportive by recipients.

Current investigation

The present work extends research on emotion controllability beliefs into the interpersonal realm by comparing beliefs about another person with beliefs about the self and considering how these beliefs are linked with interpersonal responses. For better or for worse, such beliefs should shape how we treat others – and to examine these competing hypotheses, we conducted two studies (total N = 622) in which participants reported their beliefs about the controllability of others and their own emotions and the specific ways in which they would respond to someone with depression. Depression is an ideal context to study associations between emotion controllability beliefs and interpersonal responses for three core reasons: First, depression is a context where beliefs about emotions can play a potent role given that emotions are so highly salient in the context of depression: for example, emotions are central to the diagnostic criteria of depression (e.g., increased negative emotions and/or decreased positive emotions; American Psychiatric Association, 2013), and many lay people believe that depression is caused by emotions and can be cured by changing emotional experiences (Godoy-Izquierdo et al., 2007). Second, given that depression is one of the most prevalent mental illnesses worldwide (Smith, 2014), understanding how emotion controllability beliefs affect interpersonal responding (supportive or unsupportive) towards people with depression will provide insights into common real world social interactions. Finally, the literature on beliefs about the controllability of depression has typically focused on the extent to which people are to blame for their depression, and the present work also contributes to this literature by parsing apart controllability from blame and providing insights into the open questions of whether believing others' emotions are controllable might lead to more unsupportive responses (like blame) or more supportive responses, and whether they lead individuals to engage in extrinsic emotion regulation.

To measure a wide range of interpersonal responding, we assessed a range of plausible responses, including both negative and positive responses that are cognitive (blame and perspective-taking), emotional (annoyance and empathy), and behavioral (avoidance and supportiveness). To examine associations between emotion controllability beliefs and emotion regulation, we also measured extrinsic regulation – participants' attempts to regulate the emotions of the depressed person – focusing on expressive suppression and cognitive reappraisal in Study 1 and then expanding our assessment to include specific reappraisal techniques in Study 2. While Study 1 took place in one session, Study 2 took place across two sessions which allowed us to assess people's beliefs about the controllability of their own emotions in a separate session from their emotion controllability beliefs about depressed persons. This temporal spacing reduces the risk that responding to items about one's own emotions unduly influenced (e.g., primed) responses about another's emotions. Taken together, these studies provide a robust preliminary examination of the associations between peoples' emotion controllability beliefs and their interpersonal responses to others in contexts in which their emotions are salient (i.e., in the context of someone suffering from depression).

Methods

Participants

We recruited 361 (Study 1) and 426 (Study 2) participants from Amazon's Mechanical Turk. Based on a priori exclusion criteria, participants were excluded from Study 1 for failing any of the three attention checks (n = 51) or withdrawing from the study (n = 1). For Study 2, participants were excluded for failing either of two attention checks in Phase 1 (n = 31), not responding to the invitation at Phase 2 (n = 50) or failing any of the three attention checks in Phase 2 (n = 31). Based on a priori power analyses conducted using effect sizes from prior research (e.g., Ford et al., 2018), both samples were sufficiently powered (i.e., having 80% power to detect an effect size of $r = .20$ required a minimum of 191 participants).

Study 1 participants (N = 309) ranged from 19 to 73 years old ($M = 37.33$, $SD = 11.84$), were 46% female, 53% male, 0.6% reported a different response ('agender' or 'nonbinary'); and were 9% African or African American, 7% Asian or Asian American, 77% European American/White/Caucasian, 6% Latino/Hispanic/Mexican American, 0.7% Native American, and 0.7% multiracial. The median annual household income across participants corresponded to the income bracket of $35,000 to $50,000 and varied widely.

Study 2 participants (N = 314) ranged from 20 to 67 years old ($M = 34.47$, $SD = 9.49$), were 42% female, 58% male, 0.3% declined to state; and were 6% African or African American, 7% Asian or Asian American, 77% European American/White/Caucasian, 8% Latino/Hispanic/Mexican American, 0.3% Native American, and 1% multiracial. The median annual household income across participants

corresponded to the income bracket of $35,000 to $50,000 and varied widely[2].

Procedure

In Study 1, participants reported their beliefs about the controllability of their own emotions. To equalize knowledge about depression across participants, they then read an informational sheet about clinical depression describing core symptoms and causes (which stated that, among others, negative emotionality is a core symptom), followed by a first-person vignette depicting a person's experiences with depression. Subsequently, participants were told "Now, we would like you to imagine that this person is an acquaintance of yours, someone like a co-worker, a classmate, or a neighbor. Please rate the likelihood that you would do or say each the following, using the scale provided." Participants then completed measures assessing beliefs about the emotion controllability of the depressed person, negative and positive responses towards them, and extrinsic emotion regulation efforts towards them. Participants were then debriefed and informed of websites where additional information about depression and crisis support could be obtained. Study 2 used a two-part paradigm in which participants reported their beliefs about the controllability of their own emotions in Phase 1 and then, 2–3 days later, they completed the rest of the protocol described in Study 1. The Institutional Review Board at the University of Toronto at Scarborough approved all study procedures for Study 1 and 2 (protocol #00033962). All study materials (including the wording of all specific items) can be found in the supplemental online materials and on OSF (https://osf.io/4zy78/).

Measures

Beliefs about the controllability of another's emotions. Beliefs about the controllability of another's emotions ("other-specific beliefs") were assessed with the Implicit Beliefs about Emotions-Self questionnaire (4 items; DeCastella et al., 2013), adapted to refer to another person (e.g., "*If she wants to, she could change the emotions that she has.*"). Responses were made on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*) and averaged together. See Table 1 for all descriptive statistics, including alpha reliabilities of all subscales.

Beliefs about the controllability of the self's emotions. Beliefs about the controllability of one's own emotions ("self-specific beliefs") were assessed with the Implicit Beliefs about Emotions-Self questionnaire (4 items; DeCastella et al., 2013) with items like "*If I want to, I can change the emotions that I have.*"). Responses were made on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*) and averaged together.

Negative and positive interpersonal responses. Negative and positive interpersonal responses were each assessed across three facets: cognitive responses, emotional responses, and behavioral responses. Negative responses included the cognitive facet of blame (7 items adapted from Tullett & Plaks 2016), the emotional facet of annoyance (2 face-valid items created for this study; e.g., "*I feel annoyed by her testimony.")*, and the behavioral facet of avoidance (4 face-valid items created for this study; e.g., "*I would try to avoid talking with her.*"). Positive responses included the cognitive facet of perspective-taking (3 items adapted from the Interpersonal Reactivity Index; Davis, 1983), the emotional facet of empathic concern (10 items adapted from the Interpersonal Reactivity Index), and the behavioral facet of support (6 face-valid items created for this study; e.g., *"I would reach out to her to offer support."*). Responses were made on a scale of 0 *(Not at all*) to 6 (*A great deal*) and were averaged together to create their corresponding composites. See the supplemental online material for all item wording.

Extrinsic emotion regulation. In both studies, two extrinsic emotion regulation strategies were assessed with items adapted from the Emotion Regulation Questionnaire (Gross & John, 2003): expressive suppression (3 items; e.g., "*I would try to act in ways that help her keep her emotions to herself.*") and cognitive reappraisal (3 items; e.g., "*I would try to help her feel less sad by changing the way she is thinking about her situation*.").

In Study 2, participants also responded to four specific cognitive reappraisal tactics: minimizing (3 items; e.g., "*I would tell her that things could be worse.*"), positive perspective (3 items; e.g., "*I would tell her to look on the bright side*."), meaning making (3 items; e.g., "*I would tell her that these experiences will help her grow to be a better person*."), and temporal distancing (3 items; e.g., "*I would tell her that her depression will pass.*"). Responses were made on a scale of 0 (*Not at all*) to 6 *(A great deal*), with each subscale's items averaged together to form composites. The reappraisal tactic items were written as face-valid items

[2] Given the wide variability in socioeconomic status and age, we examined whether socioeconomic status (which we assessed with annual household income here, but the results are comparable when additionally considering education and subjective social class) and age had any consistent associations with people's beliefs about emotion. We found weak associations with no consistent patterns of significance across studies and measures of beliefs. We also found that all the main results held when simultaneously controlling for the different measures of socioeconomic status and age.

Table 1 Descriptive statistics and correlations between all primary study variables and beliefs about emotion controllability in Study 1 and 2

Variable:	Study 1 (N = 309)						Study 2 (N = 314)					
	Descriptive Statistics		Correlation with Beliefs about Emotion Controllability				Descriptive Statistics		Correlation with Beliefs about Emotion Controllability			
	M (SD)	α	Another's emotions		Self's emotions		M (SD)	α	Another's emotions		Self's emotions	
			r	*p*	*r*	*p*			*r*	*p*	*r*	*p*
Beliefs about Emotion Controllability												
Another's emotions	3.73 (1.32)	0.82	-	-	-	-	3.86 (1.44)	0.88	-	-	-	-
Self's emotions	5.21 (1.45)	0.92	0.38	< 0.001	-	-	5.17 (1.45)	0.93	0.23	< 0.001	-	-
Negative Interpersonal Responses												
Cognitive facet: Blame	1.18 (1.23)	0.87	0.48	< 0.001	0.01	0.905	1.08 (1.16)	0.88	0.50	< 0.001	− 0.00	0.945
Emotional facet: Annoyance	0.55 (1.01)	0.83	0.14	0.012	− 0.16	0.004	0.45 (0.85)	0.87	0.12	0.042	− 0.21	< 0.001
Behavioral facet:Avoidance	1.03 (1.25)	0.89	0.16	0.007	− 0.19	0.001	0.93 (1.11)	0.86	0.15	0.007	− 0.25	< 0.001
Positive Interpersonal Responses												
Cognitive facet: Perspective Taking	4.34 (1.48)	0.90	− 0.15	0.010	− 0.05	0.354	4.62 (1.32)	0.87	− 0.11	0.049	0.10	0.080
Emotional facet: Empathic Concern	4.05 (1.32)	0.94	− 0.16	0.006	0.01	0.835	3.90 (1.23)	0.93	− 0.23	< 0.001	0.14	0.015
Behavioral facet: Support	4.32 (1.42)	0.94	− 0.16	0.006	0.08	0.153	4.37 (1.38)	0.93	− 0.16	0.004	0.19	0.001
Extrinsic Emotion Regulation												
Expressive Suppression	1.65 (1.42)	0.75	0.13	0.019	− 0.02	0.794	1.49 (1.56)	0.81	0.26	< 0.001	− 0.04	0.445
Cognitive Reappraisal	3.66 (1.53)	0.87	0.11	0.063	0.19	0.001	3.54 (1.56)	0.86	0.24	< 0.001	0.22	< 0.001
Minimizing	-	-	-	-	-	-	1.32 (1.46)	0.83	0.31	< 0.001	− 0.00	0.956
Positive Perspective	-	-	-	-	-	-	2.11 (1.83)	0.91	0.42	< 0.001	0.17	0.002
Meaning Making	-	-	-	-	-	-	2.62 (1.82)	0.87	0.35	< 0.001	0.19	0.001
Temporal Distancing	-	-	-	-	-	-	2.27 (1.77)	0.88	0.38	< 0.001	0.21	< 0.001

Note. The scale for all measures was 0–6 except for beliefs, which was 1–7

reflecting common phrases given in interpersonal contexts (e.g., *look on the bright side*) that map onto constructs that have been examined in the emotion regulation and coping literatures: minimizing (Mcrae, Ciesielski, Gross, 2012), positive perspective and meaning making (e.g., Carver et al., 1989), and temporal distancing (Bruehlman-Senecal & Ayduk, 2015).

Results

Preliminary Results. We first compared people's beliefs about another's emotions with their beliefs about their own emotions. On average, people believed their own emotions were relatively controllable (i.e., a full scale point above the scale midpoint in both studies) and believed that the depressed person's emotions were relatively uncontrollable (i.e., below the midpoint in both studies), with a significant difference between the two beliefs in both Study 1, $t(306) = -16.72$, $p < .001$, and Study 2, $t(313) = -12.94$, $p < .001$. Additionally, across Study 1 and 2, beliefs about another's emotions were only modestly correlated with beliefs about their own emotions ($r = .38$; $r = .23$, respectively).

Negative interpersonal responses. As summarized in Table 1, across both studies, participants who believed the depressed person's emotions were relatively controllable (vs. uncontrollable) displayed *more negative* responses towards that person across all facets of responding: they were more likely to blame them, feel annoyed by them, and avoid them. As summarized in Table 2, all of these associations held even when controlling for the extent to which people believed that their own emotions are controllable. Conversely, believing their own emotions are relatively controllable was associated with *less negative* responses towards the depressed person.

Positive interpersonal responses. Across both studies, participants who believed a depressed person's emotions were relatively controllable (vs. uncontrollable) also displayed *less positive* responses towards that person across all facets of responding: they were less likely to take the distressed person's perspective, felt less empathic concern towards the person, and intended to support them less (Table 1). All of these associations held even when

controlling for the extent to which people believed that their own emotions are controllable (Table 2). Conversely, believing their own emotions are relatively controllable was generally associated with *more positive* interpersonal responses.

Extrinsic emotion regulation. Across both studies, participants who believed a depressed person's emotions were relatively controllable (vs. uncontrollable) were more likely to try to help them suppress their emotions (Table 1). In Study 2's more in-depth assessment of particular reappraisal tactics, participants who believed a depressed person's emotions were relatively controllable (vs. uncontrollable) were not only more likely to try to help them use reappraisal in general, but also across each reappraisal tactic: minimization, positive perspective, meaning making, and temporal distancing (Table 1). All of these associations held in regression analyses that controlled for the extent to which people believe that their own emotions are controllable (Table 2). In contrast, while believing that one's *own* emotions were relatively controllable (vs. uncontrollable) was associated with more extrinsic reappraisal in general, it was weakly or non-significantly associated with extrinsic suppression and with the various reappraisal tactics.

Discussion

Research has consistently demonstrated that people fare better when they believe they can control their emotions. However, despite the numerous apparent benefits of believing emotions are controllable, we have proposed that two crucial, inter-related gaps in the empirical literature have limited our understanding of how these beliefs operate in daily life: people's beliefs do not solely affect themselves – they should also shape how people respond to others; and people also hold beliefs about the people with whom they interact – and these understudied beliefs should uniquely shape treatment of those people. The results of our studies begin to address these important gaps in the literature.

Emotion controllability beliefs and interpersonal responding

Across two studies, we found that believing another's emotions were relatively controllable was associated with interpersonal responses that were generally *unsupportive*: Across cognitive, emotional, and behavioral markers of responding, participants who believed that a depressed person's emotions were relatively controllable responded more negatively towards the person (i.e., felt more annoyed by that person, blamed them for their distress, and wanted to avoid them) and less positively towards the person (i.e., less likely to take the perspective of the person, felt less empathic concern for them, and wanted to support them less). Our results suggest that our beliefs about whether others' emotions are controllable have important implications for how we respond to others experiencing depression and emotional distress. Further, as we describe below, the beliefs people held about others demonstrated divergent patterns of interpersonal responding compared to the beliefs people held about themselves.

Individuals who believed that their own emotions were relatively controllable reported interpersonal responses towards the depressed person that were generally *supportive*. Specifically, when parsing out the unique contribution of each belief by entering them as simultaneous predictors, emotion controllability beliefs about the self were associated with fewer negative responses (i.e., less blame, less annoyance, less avoidance) and generally more positive responses (i.e., more support, more empathic concern) across both studies. This pattern of findings suggests that when people believe their own emotions are relatively controllable, they may be more likely to manage their *own* reactions to a depressed person more effectively (e.g., feeling less annoyed and more empathic).

Emotion controllability beliefs and extrinsic emotion regulation

Individuals who believed that a depressed person's emotions were relatively controllable were also more likely to engage in extrinsic emotion regulation: they were more likely to encourage the depressed person to use expressive suppression and more likely to encourage them to use reappraisal, including several specific tactics such as minimizing, taking a positive perspective, meaning making, and temporal distancing. These findings are consistent with the premise that believing someone can control their emotions translates into expecting them (and trying to help them) to control those emotions using whatever means necessary, including dampening the expression through suppression and changing the experience through reappraisal. These findings run partially contrary to the typical patterns observed when measuring beliefs that emotions are controllable in general (i.e., not in reference to someone in acute distress), which is typically associated with greater reappraisal but not suppression (e.g., Tamir et al., 2007; Ford et al., 2018), even when beliefs are experimentally manipulated (e.g., Kneeland et al., 2016b). Such a pattern suggests that believing a depressed person's emotions are controllable may result in a less tailored, more 'scattershot' approach to extrinsic regulation.

To understand the possible downstream consequences of this mixed pattern of extrinsic emotion regulation, it is useful to consider which regulation strategies may be perceived

Table 2 Regression analyses for Study 1 and 2 with beliefs about the controllability of another's emotions and one's own emotions as simultaneous predictors of interpersonal responding

Beliefs about Emotion Controllability												
	Beliefs about another person's emotions (*controlling for beliefs about the self*)						**Beliefs about the self's emotions (*controlling for beliefs about another*)**					
Outcome variables:	Study 1			Study 2			Study 1			Study 2		
	β	*p*	95% CI	β	*p*	95% CI	β	*p*	95% CI	β	*p*	95% CI
Negative Interpersonal Responses												
Cognitive facet: Blame	0.56	< 0.001	[0.43, 0.62]	0.53	< 0.001	[0.35, 0.51]	− 0.21	< 0.001	[-0.26, − 0.09]	− 0.13	0.011	[-0.18, − 0.02]
Emotional facet: Annoyance	0.24	< 0.001	[0.09, 0.27]	0.17	0.002	[0.04, 0.17]	− 0.25	< 0.001	[-0.26, − 0.10]	− 0.25	< 0.001	[-0.21, − 0.08]
Behavioral facet: Avoidance	0.27	< 0.001	[0.14, 0.36]	0.22	< 0.001	[0.09, 0.26]	− 0.29	< 0.001	[-0.35, − 0.15]	− 0.31	< 0.001	[-0.32, − 0.15]
Positive Interpersonal Responses												
Cognitive facet: Perspective Taking	− 0.15	0.016	[-0.30, − 0.03]	− 0.14	0.014	[-0.23, − 0.03]	0.00	0.964	[-0.12, 0.13]	0.13	0.022	[0.02, 0.22]
Emotional facet: Empathic Concern	− 0.19	0.002	[-0.32, − 0.07]	− 0.28	< 0.001	[-0.33, − 0.14]	0.08	0.175	[-0.03, 0.19]	0.20	< 0.001	[0.07, 0.26]
Behavioral facet: Support	− 0.22	< 0.001	[-0.36, − 0.11]	− 0.22	< 0.001	[-0.31, − 0.10]	0.17	0.007	[0.05, 0.28]	0.24	< 0.001	[0.12, 0.33]
Extrinsic Emotion Regulation												
Expressive Suppression	0.16	0.008	[0.05, 0.30]	0.29	< 0.001	[0.20, 0.44]	− 0.07	0.214	[-0.19, 0.05]	− 0.11	0.050	[-0.24, 0.00]
Cognitive Reappraisal	0.04	0.486	[-0.09, 0.19]	0.20	< 0.001	[0.10, 0.34]	0.17	0.006	[0.05, 0.31]	0.17	0.002	[0.06, 0.30]
Minimizing	-	-	-	0.33	< 0.001	[0.23, 0.45]	-	-	-	− 0.08	0.147	[-0.19, 0.03]
Positive Perspective	-	-	-	0.40	< 0.001	[0.38, 0.64]	-	-	-	0.08	0.140	[-0.03, 0.23]
Meaning Making	-	-	-	0.32	< 0.001	[0.27, 0.55]	-	-	-	0.11	0.044	[0.004, 0.27]
Temporal Distancing	-	-	-	0.35	< 0.001	[0.30, 0.56]	-	-	-	0.12	0.021	[0.02, 0.28]

as supportive vs. unsupportive. Interestingly, this is not a straightforward task. For example, there is some evidence that particular strategies that may appear unsupportive (e.g., minimizing) are indeed likely to result in worse outcomes for the regulation target (e.g., minimizing another's emotions can lead them to experience even more intense negative emotions, Zielinski et al., 2022). However, there is also evidence that strategies that appear supportive may actually backfire when used extrinsically, at least in some contexts. For example, when people provide positive reframing (e.g., 'looking on the bright side') to a friend who typically feels badly (i.e., individuals with low self-esteem), the friend feels less validated and reports worse relationship quality (Marigold et al., 2014). As such, believing someone's emotions are relatively controllable may promote forms of extrinsic emotion regulation that are unlikely to help, perhaps especially if that person has depression. These acts of extrinsic regulation may be perceived by someone with depression as additional forms of pressure and blame and further examples of not being understood or supported. Effective extrinsic emotion regulation for people with depression may be facilitated by acknowledging the depressed person's difficult emotional situation and attempting to support them by showing understanding, care, and sympathy, rather than by trying to directly change their emotions.

Broader implications

From a clinical perspective, the present results builds upon prior work examining people's beliefs about the controllability of depression and mental illness by considering the unique role of beliefs about emotion. Specifically, this prior work has generally conceptualized controllability as the extent to which the depressed or mentally ill person is to blame for their condition or the extent to which various other factors are to blame (e.g., Corrigan et al., 2002, 2004; Ruybal & Siegel, 2017). Our results build upon these findings by demonstrating that believing a depressed person's emotions are relatively controllable is associated with more unsupportive responses across a variety of different facets that are likely to exacerbate someone else's emotional distress (of which blame is just one form of response) and is also associated with less supportive responses that could be potentially ease someone's emotional distress (e.g., empathy, reaching out). It is worth noting, that effectively supporting someone with depression is not necessarily straightforward and some responses that may seem – or even be experienced as – unsupportive could still be helpful in the longer-term (e.g., holding someone accountable could motivate them to seek treatment), although such responses may also likely carry mixed outcomes (e.g., also jeopardizing relationship quality).

From a more applied perspective, these findings may speak to the potential power of our beliefs about others' emotions in high-stakes social judgments. For example, believing another person's (e.g., criminal victim) emotions are controllable could adversely influence the tone and content of media reports (Chen & Lawrie, 2017), resulting in coverage that might unintentionally shame or blame the victim. Additionally, given that many defendants in the criminal justice system suffer from mental illness, emotion controllability beliefs might also color a jury or judge's perspective of a defendant, potentially leading to harsher punishments.

Limitations and future directions

In addition to revealing new insights, this preliminary research also has limitations that highlight key future directions. First, the present research was correlational in nature and although prior experimental research demonstrates that beliefs about emotion controllability influence downstream behaviors (Kneeland et al., 2016a), future research should use experimental designs to verify the causal effects of believing another person's emotions are controllable. Second, we measured people's thoughts, feelings, and behavioral intentions towards a vignette-based depressed person. It will be important for future research to examine these associations during real-time interactions (e.g., in the lab or in daily life) to understand how these beliefs are linked to peoples' observable interpersonal behaviors. In addition, such work will allow researchers to examine the concrete downstream outcomes that result from holding different emotion beliefs, including possible costs for the target of the emotion belief (or for the individual holding the belief). Third, we focused on how beliefs predicted responses to someone experiencing depression. Although emotion is at the core of depression and many lay people acknowledge the important role of emotions in the onset and maintenance of depression (Godoy-Izquierdo et al., 2007), depression may be a unique context (Kvalle et al., 2013a, 2013b). Further, given that past research has generally shown strong correlations between peoples' emotion controllability beliefs about themselves and their emotion controllability beliefs about people in general (e.g., $r = .73$ in De Castella et al., 2013), our smaller-sized correlations between beliefs about themselves and beliefs about someone with depression (Study 1: $r = .38$, Study 2: $r = .23$) suggest that participants' ratings of someone with depression is likely different from how they view people in general. It will be important in future research to examine whether our results generalize to other situations and contexts outside of mental illness in which emotion and emotion controllability beliefs are relevant (e.g., negative emotions in response to general and typical life stressors).

Conclusion

Taken together, our results show that emotion controllability beliefs are consequential not only for how we respond to our own emotions, but how we respond to others' as well. As such, the present studies provide important caveats for the wide-spread interventions aimed at increasing people's controllability beliefs and serve as a foundation for future work that continues to consider the understudied interpersonal consequences of emotion controllability beliefs.

References

Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, *30*(2), 217–237. https://doi.org/10.1016/J.CPR.2009.11.004.

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

Bruehlman-Senecal, E., & Ayduk, O. (2015). This too shall pass: Temporal distance and the regulation of emotional distress. *Journal of Personality and Social Psychology*, *108*(2), 356–375.

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, *56*(2), 267–283.

Corrigan, P. W., Rowan, D., Green, A., Lundin, R., River, P., Uphoff-Wasowski, K., & Kubiak, M. A. (2002). Challenging two mental illness stigmas: Personal responsibility and dangerousness. *Schizophrenia Bulletin*, *28*(2), 293–309.

Corrigan, P. W., Watson, A. C., Warpinski, A. C., & Gracia, G. (2004). Stigmatizing attitudes about mental illness and allocation of resources to mental health services. *Community Mental Health Journal*, *40*(4), 297–307.

Cusimano, C., & Goodwin, G. P. (2019). Lay beliefs about the controllability of everyday mental states. *Journal of Experimental Psychology: General*, *148*(10), 1701–1732.

Davis, M.H. Measuring Individual Differences in Empathy: Evidence for a Multidimensional Approach. Journal of Personality and Social Psychology, vol. 44, no. 1, 1983, pp. 113–126. https://doi.org/10.1037/0022-3514.44.1.113.

De Castella, K., Goldin, P., Jazaieri, H., Ziv, M., Dweck, C. S., & Gross, J. J. (2013). Beliefs about emotion: Links to emotion regulation, Well-Being, and psychological distress. *Basic and Applied Social Psychology*, *35*(6), 497–505. https://doi.org/10.1080/01973533.2013.840632.

De Castella, K., Platow, M. J., Tamir, M., & Gross, J. J. (2018). Beliefs about emotion: Implications for avoidance-based emotion regulation and psychological health. *Cognition and Emotion*, *32*(4), 773–795. https://doi.org/10.1080/02699931.2017.1353485.

Dixon-Gordon, K. L., Bernecker, S. L., & Christensen, K. (2015). Recent innovations in the field of interpersonal emotion regulation. *Current Opinion in Psychology*, *3*, 36–42. https://doi.org/10.1016/j.copsyc.2015.02.001.

Ford, B. Q., & Gross, J. J. (2019). A Framework for examining emotion beliefs why beliefs about emotion matter: An emotion-regulation perspective. *Current Directions in Psychological Science*, *28*(1), 74–81. https://doi.org/10.1177/0963721418806697.

Ford, B. Q., Lwi, S. J., Gentzler, A. L., Hankin, B., & Mauss, I. B. (2018). The cost of believing emotions are uncontrollable: Youths' beliefs about emotion predict emotion regulation and depressive symptoms. *Journal of Experimental Psychology: General*, *147*(8), 1170–1190. https://doi.org/10.1037/xge0000396.

Godoy-Izquierdo, D., López-Chicheri, I., López-Torrecillas, F., Vélez, M., & Godoy, J. F. (2007). Contents of lay illness models dimensions for physical and mental diseases and implications for health professionals. *Patient Education and Counseling*, *67*(1–2), 196–213.

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.

Halberstadt, A. G., Dunsmore, J. C., Bryant, A., Parker, A. E., Beale, K. S., Thompson, J. A., & Thompson, J. A. (2013). Development and validation of the parents' beliefs about children's emotions Questionnaire. *Psychological Assessment*, *25*(4), 1195–1210. https://doi.org/10.1037/a0033695.

Kammrath, L. K., & Peetz, J. (2012). You promised you'd change: How incremental and entity theorists react to a romantic partner's promised change attempts. *Journal of Experimental Social Psychology*, *48*, 570–574. https://doi.org/10.1016/j.jesp.2011.10.015.

Kappes, A., & Schikowski, A. (2013). Implicit theories of emotion shape regulation of negative affect. *Cognition and Emotion*, *27*(5), 952–960. https://doi.org/10.1080/02699931.2012.753415.

Kneeland, E. T., Nolen-Hoeksema, S., Dovidio, J. F., & Gruber, J. (2016a). Beliefs about emotion's malleability influence state emotion regulation. *Motivation and Emotion*, *40*(5), 740–749. https://doi.org/10.1007/s11031-016-9566-6.

Kneeland, E. T., Nolen-Hoeksema, S., Dovidio, J. F., & Gruber, J. (2016b). Emotion malleability beliefs influence the spontaneous regulation of social anxiety. *Cognitive Therapy and Research*, *40*(4), 496–509. https://doi.org/10.1007/s10608-016-9765-1.

Kneeland, E. T., Dovidio, J. F., Joormann, J., & Clark, M. S. (2016c). Emotion malleability beliefs, emotion regulation, and psychopathology: Integrating affective and clinical science. Clinical Psychology Review, 45, 81–88. https://doi.org/10.1016/j.cpr.2016c.03.008.

Kvaale, E. P., Haslam, N., & Gottdiener, W. H. (2013b). The 'side effects' of medicalization: A meta-analytic review of how biogenetic explanations affect stigma. *Clinical Psychology review*, *33*(6), 782–794.

Lloyd, T. (2019). Adopting a Growth Mindset to Drive your Business. Retrieved August 26, 2019, from https://www.emotivebrand.com/growth-mindset-drives-business/

Marigold, D. C., Cavallo, J. V., Holmes, J. G., & Wood, J. V. (2014). You can't always give what you want: The challenge of providing social support to low self-esteem individuals. *Journal of Personality and Social Psychology*, *107*(1), 56.

Martin, A. (2010). Individual and contextual correlates of managers' attitudes toward depressed employees. *Human Resource Management*, *49*(4), 647–668. https://doi.org/10.1002/hrm.20370.

McRae, K., Ciesielski, B., & Gross, J. J. (2012). Unpacking cognitive reappraisal: Goals, tactics, and outcomes. *Emotion*, *12*(2), 250–255. https://doi.org/10.1037/a0026351.

Mullen, B., Atkins, J. L., Champion, D. S., Edwards, C., Hardy, D., Story, J. E., & Vanderklok, M. (1985). The false consensus effect: A meta-analysis of 115 hypothesis tests. *Journal of Experimental Social Psychology*, *21*(3), 262–283. https://doi.org/10.1016/0022-1031(85)90020-4.

Ottati, V., Bodenhausen, G., & Newman, L. (2005). Social Psychological Models of Mental Illness Stigma. In P. W. Corrigan (Ed.), *On the stigma of mental illness: Practical strategies for research and social change* (pp. 99–128). Washington, DC: American Psychological Society.

Pronin, E. (2008). How we see ourselves and how we see others. *Science*, *320*(5880), 1177–1180. https://doi.org/10.1126/science.1154199.

Robbins, J. M., & Krueger, J. I. (2005). Social Projection to Ingroups and Outgroups: A Review and Meta-Analysis.Personality and Social Psychology Review(Vol. 9).

Romero, C., Master, A., Paunesku, D., Dweck, C. S., & Gross, J. J. (2014). Emotion academic and emotional functioning in Middle School: The role of implicit theories. *Emotion*, *14*(2), 227–234. https://doi.org/10.1037/a0035490.

Ruybal, A. L., & Siegel, J. T. (2017). Increasing social support for women with postpartum depression: An application of attribution theory. *Stigma and Health*, *2*(2), 137–156.

Schroder, H. S., Dawood, S., Yalch, M. M., Donnellan, M. B., & Moser, J. S. (2015). The role of implicit theories in Mental Health symptoms, emotion regulation, and hypothetical treatment choices in College Students. *Cognitive Therapy and Research*, *39*(2), 120–139. https://doi.org/10.1007/s10608-014-9652-6.

Smith, K., & De Torres, I. B. C. (2014). A world of depression. *Nature*, *515*(181), 180–181.

Smith, E. N., Romero, C., Donovan, B., Herter, R., Paunesku, D., Cohen, G. L., & Gross, J. J. (2018). Emotion theories and adolescent well-being: Results of an online intervention. *Emotion*, *18*(6), 781–788. https://doi.org/10.1037/emo0000379.

Tamir, M., John, O. P., Srivastava, S., & Gross, J. J. (2007). Implicit theories of emotion: Affective and social Outcomes across a Major Life Transition. *Journal of Personality and Social Psychology*, *92*(4), 731–744. https://doi.org/10.1037/0022-3514.92.4.731.

Tullett, A. M., & Plaks, J. E. (2016). Testing the Link between Empathy and Lay Theories of Happiness. *Personality and Social Psychology Bulletin*, *42*(11), 1505–1521. https://doi.org/10.1177/0146167216665092.

Zielinski, M. J., Veilleux, J. C., Fradley, M. F., & Skinner, K. D. (2022). Perceived emotion invalidation predicts daily affect and stressors. *Anxiety Stress & Coping*, 1–15. https://doi.org/10.1080/10615806.2022.2033973.