

In press at: Psychotherapy (date of acceptance: January 9, 2015)

**Practicing psychotherapists are more skilled at down-regulating negative emotions than
other professionals**

Jan Luca Pletzer¹, Xavier Sanchez², & Susanne Scheibe³

¹ Jacobs University Bremen & VU University Amsterdam

² University of Cumbria

³ University of Groningen

Author Note

Jan Luca Pletzer, School of Humanities and Social Sciences, Jacobs University Bremen & Social and Organizational Psychology, VU University Amsterdam. Xavier Sanchez, Faculty of Health and Science, Department of Medical and Sport Sciences, University of Cumbria. Susanne Scheibe, Department of Psychology, University of Groningen.

We thank Paul Miller for his valuable comments on an earlier version of this manuscript.

Please address correspondence concerning this article to Jan Luca Pletzer, School of Humanities and Social Sciences, Jacobs University Bremen, Campus Ring 1, 28759 Bremen, Germany. Email: j.pletzer@jacobs-university.de

Abstract

Lay people and psychotherapists alike tend to assume that psychotherapists are more effective than the average population in regulating negative emotions. Being receptive to patients' distress and being able to down-regulate negative emotions are important skills for psychotherapists to provide effective help and sustain their own well-being. We investigated whether psychotherapists react to negative material differently, and down-regulate emotions more effectively, than individuals working in other, non-therapeutic, professions. Practicing psychotherapists ($n = 21$) and a control group of non-therapists ($n = 18$) were exposed to pictures designed to elicit negative emotions in varying intensities and were asked to rate their emotional response, first after viewing them naturally and then after choosing, and applying, one of two given regulation strategies (i.e., distraction and reappraisal). Both groups responded similarly in terms of emotional reactivity and strategy choices, but psychotherapists were more effective than non-therapists in reducing their emotional response after applying emotion regulation strategies. We suggest that psychotherapists' comparable emotional reactivity and more effective emotion regulation makes them well-prepared to provide effective help to patients and safeguards their own well-being.

Keywords: distraction, therapist emotion regulation, therapist emotional reactivity, therapist empathy, psychotherapy, reappraisal

Practicing psychotherapists are more skilled at down-regulating negative emotions than other professionals

People primarily turn to psychotherapists to seek help in addressing their mental health problems. In doing so, they reasonably assume that psychotherapists will be able to cope with negative, emotion-laden situations more effectively than they can themselves. As such, it is essential that psychotherapists are not seen to be overwhelmed by frequent exposure to their patients' distress (Greenberg, Constantino, & Bruce, 2006). Psychotherapists themselves share these perceptions. For instance, when peer-nominated master therapists were asked what makes them effective in their roles, key characteristics named were being emotionally receptive, mentally healthy, and attentive to their own emotional well-being (Jennings & Skovholt, 1999). However, while the perception that psychotherapists deal with negative emotions more successfully than others appears to be widely shared, it remains unclear whether psychotherapists *actually* regulate emotions more effectively than non-therapists. Moreover, it is unclear whether daily exposure to patients' distress over time diminishes psychotherapists' emotional reactivity, leading them to react to negative situations less strongly than others. To explore these issues, we examined differences in emotional reactivity and regulation between experienced psychotherapists and non-therapists, using an experimental task that confronted them with negative emotional stimuli of varying intensity.

Our focus on emotional reactivity and regulation ability is conversant with a long-standing attention to psychotherapists' empathy as a key ingredient of therapy success (Rogers, 1957; for more recent discussions, see Elliott, Bohart, Watson, & Greenberg, 2011; Markowitz & Milrod, 2011). Displaying empathy requires that a psychotherapist mirrors patients' personal distress and their perspective (Eisenberg & Eggum, 2009). The reflection on and subsequent facilitation of patients' emotions through the psychotherapist are important for therapy outcome and success (Diener, Hilsenroth, & Weinberger, 2007). When the psychotherapist has an observable emotional reaction in the therapy session, patients are

reassured that they are being accorded attention, understood, and cared about (Markowitz & Milrod, 2011). Additionally, when patients lack awareness of their own emotions, a psychotherapist's emotional reactions to patients' struggles can aid perspective-taking (Racker, 2012). Although some individuals may develop reduced reactivity upon repeated exposure to others' distress (e.g., Decety, Yang, & Cheng, 2010), it is unlikely that psychotherapists can afford such "dampening" of emotional responding because this may interfere with their empathic response and more generally with their effective psychotherapy practice.

If psychotherapists do not have lower initial emotional reactivity to patients as compared to non-therapists, it is conceivable that they are more effective at regulating their emotions than non-therapists. Showing empathy requires the ability to effectively down-regulate negative emotions when necessary (Eisenberg & Eggum, 2009), otherwise psychotherapists may become less willing to explore the patients' struggles and less able to offer helpful interventions (Elliott et al., 2011). Besides facilitating empathy, effective emotion regulation has additional benefits for psychotherapists. Given that dysfunctional emotion regulation is thought to underlie the etiology of many mental health problems (Berking & Wupperman, 2012), a psychotherapist's role often involves modeling more effective emotion regulation for their patients (Paivio, 2013). Furthermore, ineffective emotion regulation makes the psychotherapist vulnerable to vicarious traumatization, which can result from repeated exposure to narratives about negative life events, such as abuse and victimization (Pearlman & Mac Ian, 1995). These considerations suggest that, besides the necessity of sustained emotional reactivity in response to frequent exposure to others' emotional distress, working as a psychotherapist demands an enhanced ability to regulate negative emotions. Psychotherapists who lack the required abilities to perform effectively might be released or self-select out of their profession (Wilk, Desmarais, & Sackett, 1995).

Previous research using global self-report measures has demonstrated that psychotherapists, when compared to non-therapists, report to be equally emotionally responsive to others' distress (Hassenstab, Dziobek, Rogers, Wolf, & Convit, 2007), but better at regulating those emotions (Hassenstab et al., 2007; Martin, Easton, Wilson, Takemoto, & Sullivan, 2004). In the current study, we extend this research by examining group differences in emotional reactivity and regulation upon *actual exposure* to emotional material, and by studying two specific cognitive emotion regulation strategies. We also tested whether psychotherapists choose the same regulation strategies as non-therapists.

According to contemporary approaches to emotion regulation (Gross, 2011), two common cognitive strategies are *reappraisal*, which involves engaging with the emotional information and positively reinterpreting it, and *distraction*, which entails disengaging from the emotional information by thinking about something unrelated and neutral. Both strategies have been shown to effectively reduce negative responses to emotion-eliciting stimuli compared to using no deliberate regulation (Webb, Miles, & Sheeran, 2012), and both should help psychotherapists safeguard their own effectiveness and well-being. Because reappraisal involves considering emotional events in different ways, it likely helps psychotherapists to express empathy and to model effective emotion regulation for their patients. Distraction is likely to be crucial out-of-session to help psychotherapists detach from their patients' distress and avoid vicarious traumatization (Sonnentag, Mojza, Binnewies, & Scholl, 2008).

An open question regarding strategy use is whether psychotherapists differ from non-therapists in their regulation strategy choice when being able to choose between reappraisal and distraction. In a variety of experiments, healthy young adults were found to adapt their strategy use to stimulus intensity, choosing reappraisal predominantly for low-intensity negative situations and distraction predominantly for high-intensity negative situations (Sheppes et al., 2014; Sheppes, Scheibe, Suri, & Gross, 2011). Such a choice-pattern is generally adaptive, based on findings that reappraisal – but not distraction – loses

effectiveness at higher levels of stimulus intensity (Sheppes & Gross, 2011). So far, it is unknown whether psychotherapists make different regulatory choices than non-therapists.

Based on the reviewed literature, we hypothesized that psychotherapists react as strongly to negative stimuli of varying intensity as non-therapists, but are more effective at regulating negative emotions of low and high intensity via distraction and reappraisal. We examined this with an experimental task, in which subjective negativity ratings in natural viewing trials were used as an indicator of emotional reactivity, and the reduced negativity in regulation trials as an indicator of emotion regulation effectiveness. Additionally, we explored whether psychotherapists differ from non-therapists in their strategy choice between distraction and reappraisal to down-regulate negative responding.

Method

Participants

Psychotherapists and other professionals personally acquainted with the first author residing in Germany were invited via phone to participate in a study investigating emotional experiences in relation to work; they were also asked to refer other colleagues for participation in the study. There was no mention of examining differences between psychotherapists and non-therapists. This way, 21 state-licensed, self-employed psychotherapists (seven male; $M_{age} = 55.9 \pm 8.7$ years) with an average work experience in psychotherapy of 22.4 (± 7.1) years, and a control group of 18 non-therapists (12 male; $M_{age} = 52.8 \pm 5.4$ years) were recruited.

Participating psychotherapists were trained in and practiced either psychodynamic psychotherapy ($n = 6$), cognitive-behavioral therapy (CBT; $n = 6$), or both ($n = 8$; one psychotherapist did not disclose his therapeutic approach). Control group participants matched psychotherapists in age ($t(37) = 1.299, p = .20$) and education level (they also possessed a university degree; e.g., in law, architecture, physics). Since the group of psychotherapists comprised more women than the control group, $X^2(1, N = 39) = 4.311, p = .04$, we tested for gender effects in all analyses, but found none; gender is thus not discussed further. Ethical

approval from the authors' university and informed consent from all participants were gathered prior to data collection.

Materials and Procedure

Pictures from the standardized International Affective Picture System (IAPS; Lang, Bradley, & Cuthbert, 2008) were chosen based on their emotional content and available normative ratings for valence and arousal (IAPS codes and ratings per intensity are available upon request). The IAPS is widely used in studies on emotions (Sheppes et al., 2014; Thiruchselvam, Blechert, Sheppes, Rydstrom, & Gross, 2011), is valid in eliciting emotional reactions in varying intensities, and the elicited emotional reactions have been shown to correlate highly with physiological measures (e.g., skin conductance, heart rate) of emotional arousal (Lang & Bradley, 2007). The overall picture set comprised 10 neutral pictures, 30 low-intensity and 30 high-intensity negative pictures, categorized based on normative valence ratings (Lang et al., 2008). More specifically, neutral pictures showed everyday scenes (e.g., family pictures, chess players). Low- and high-intensity negative pictures depicted different negative situations and elicited various negative emotions (e.g., anxiety, sadness, disgust). Examples of low-intensity pictures include sad individuals, frightening animals, or slight injuries, whereas examples of high-intensity negative pictures include corpses, war images, or severe injuries.

The first author, who had extensive experience with the study procedures, met all participants individually at their workplace. Participants first answered questions regarding their personal and work characteristics and then completed an emotion task on a 15-inch laptop. The task comprised two parts, for which low-intensity and high-intensity negative picture sets were counterbalanced. The first part measured *emotional reactivity* and was modeled after Thiruchselvam et al. (2011). Each participant viewed 21 pictures (7 neutral, 7 low-intensity, and 7 high-intensity; all randomly drawn from the larger picture sets) for 10 seconds each and after each picture indicated how negative it had made him/her feel on a scale from 1 (*not negative at all*) to 9 (*very negative*). Participants were instructed to react naturally and spontaneously to the

pictures and practiced this on three pictures prior to actual testing. For the analyses, we computed mean negativity ratings per stimulus type (neutral, low-intensity negative, high-intensity negative), and compared these between groups.

The second part of the task, adapted from Sheppes et al. (2011), assessed *emotion regulation effectiveness* via reappraisal and distraction. Participants were instructed to use *positive reappraisal*, which entails imagining a positive outcome of the depicted scene, or *active neutral distraction*, which entails thinking about something neutral and unrelated to the emotional stimulus (verbatim instructions are available upon request; Webb et al., 2012). Examples of effective ways to implement the different strategies were given (order counterbalanced), and the implementation was practiced aloud on two pictures each, prior to actual testing. Participants were corrected as needed, though everyone was able to provide appropriate applications of the strategies. Participants further practiced choosing between strategies with four pictures. It was stressed to participants that they should choose the strategy which best helped them to feel less negative about a given picture. If no questions remained, they began the second part of the task, which comprised 10 low-intensity and 10 high-intensity trials (pictures differed from those used in the first part, to rule out habituation effects). In each trial, participants saw a fixation cross for 1000ms, followed by a 500ms preview of the picture, and then chose between reappraisal and distraction by pressing one of two keys (position of strategies counterbalanced). Subsequently, their choice was shown again for 500ms and the picture then appeared for 10 seconds during which participants implemented the chosen strategy. Afterwards, participants indicated how negative the picture had made them feel on the same 9-point rating scale used in the first part. Per trial, we logged both participants' strategy choice (coded 0 for reappraisal and 1 for distraction) and negativity rating. We computed the percentage of distraction choices and the mean negativity rating per stimulus type (low- vs. high-intensity) and compared these between groups. After finishing the testing, all participants were debriefed and thanked for their participation.

Results

To compare emotional reactivity between groups, negativity ratings in the emotional reactivity part of the task were subjected to a 2 (group: psychotherapists, control) x 3 (stimulus type: neutral, low-intensity negative, high-intensity negative) Repeated Measures Analysis of Variance (RM-ANOVA). The pictures elicited significantly different negativity ratings as a function of stimulus type, $F(2, 74) = 697.88, p < .01$, with ratings, as to be expected, increasing from the neutral ($M = 1.52 \pm 0.46$) to the low-intensity negative ($M = 4.09 \pm 1.02; d = 3.25$) to the high-intensity negative stimulus type condition ($M = 7.17 \pm 0.96; d = 3.11$). The main effect of group was non-significant, $F(1, 74) = 0.65, p = .43$. The interaction between stimulus type and group was non-significant as well, $F(2, 74) = 0.64, p = .53$, indicating that psychotherapists and control participants did not differ in emotional reactivity (see Figure 1; neutral $d = 0.05$; low-intensity negative $d = 0.13$; high-intensity negative $d = 0.38$). Thus, as expected, we found evidence for a comparable emotional reactivity in the two groups.

To compare emotion regulation effectiveness between groups, negativity ratings in the emotion regulation part of the task were subjected to a 2 (group) x 2 (stimulus intensity: regulated low-intensity negative, regulated high-intensity negative) RM-ANOVA. The pictures, again, elicited different ratings as a function of stimulus type, $F(1, 37) = 204.81, p < .001, d = 2.09$, with ratings being lower in the low-intensity negative than in the high-intensity negative stimulus type condition (see Figure 1). The main effect of group was significant, $F(1, 37) = 6.31, p = .02$, suggesting that psychotherapists reduced negativity when applying regulation strategies more effectively than non-therapists. The interaction between stimulus intensity and group was not significant, $F(1, 37) = 3.44, p = .07$. Given that similar levels of emotional reactivity were observed between the two groups, these results indicate that psychotherapists regulated their emotions more effectively than non-therapists, providing

support for our hypothesis. That is, psychotherapists consistently reached lower negativity levels when regulating emotions.

Differences in strategy choice between groups were tested using a 2 (group) x 2 (stimulus type) RM-ANOVA. The main effect for stimulus type, $F(1, 37) = 24.18, p < .001$, was significant; on average, participants chose distraction 28% ($\pm 19\%$) of the time for low-intensity and 51% ($\pm 20\%$) of the time for high-intensity negative pictures. The group effect was non-significant, $F(1, 37) = 0.50, p = .49$, nor was the stimulus type by group interaction, $F(1, 37) = 0.11, p = .75$, indicating no differences in strategy choice between psychotherapists (low-intensity: $M = 29\% \pm 17\%$; high-intensity: $M = 53\% \pm 22\%$) and non-therapists (low-intensity: $M = 27\% \pm 21\%$; high-intensity: $M = 49\% \pm 17\%$).

Discussion

Our findings show that, while there were no differences in emotional reactivity, psychotherapists were more effective in reducing negativity in response to pictures when applying active emotion regulation strategies. This is consistent with widely held beliefs that psychotherapists are adept and skillful in personal emotion regulation (e.g., Phillips & Power, 2007). It also validates prior research comparing psychotherapists and non-therapists on global self-report scales of emotional reactivity and regulation (Hassenstab et al., 2007; Martin et al., 2004).

Results from the present study suggest that psychotherapists, as a group, seem well prepared to provide effective help to patients. More precisely, emotional reactivity and the ability to down-regulate negative emotions are needed to show empathy, a key ingredient for therapy success (Elliott et al., 2011; Markowitz & Milrod, 2011; Rogers, 1957). Besides facilitating empathy, effective emotion regulation helps psychotherapists to model effective emotion regulation to patients (Paivio, 2013) and to safeguard their own well-being and mental health (Berking & Wupperman, 2012), which are prerequisites for effective functioning at work (Wright & Cropanzano, 2000). The latter aspect is critical, as

psychotherapists are at risk of mental health problems and vicarious traumatization (Pearlman & Mac Ian, 1995), which, if not avoided, might interfere with their therapeutic effectiveness (Sherman, 1996). The advantages of emotional reactivity paired with effective regulation may be particularly apparent in those forms of treatment that expose psychotherapists to high amounts of intense negative emotions, such as prolonged exposure therapy for treatment of posttraumatic stress disorder (Foa, Hembree, & Rothbaum, 2007).

The absence of differences in strategy choice speaks against the possibility that the current finding of psychotherapists' more effective emotion regulation is due to the use of different regulatory strategies. Both psychotherapists and control participants reacted in the same way to stimulus intensity when choosing between distraction and reappraisal; they preferred reappraisal over distraction for low-intensity pictures and showed no clear preference for either strategy for high-intensity pictures. The finding that strategy choice shifts in response to variations in stimulus intensity is consistent with earlier studies (Sheppes et al., 2014, 2011). Accordingly, the current study suggests that it may not be a potentially more adaptive strategy choice which prepares psychotherapists for their job, but rather the more effective implementation of those regulatory strategies. Notably, before firm conclusions regarding this issue can be made, it is important to demonstrate that the current finding is not contingent on the limited choice of regulation strategies provided in the present study.

A number of limitations of the current study exist. The sample was recruited through personal contacts in Germany, which might limit the generalizability of results. Future studies should replicate findings with a more diverse and representative sample of psychotherapists. The use of a controlled laboratory task has important merits for the study of emotions in psychotherapists. Contrasting research in the field, our paradigm allowed holding the number and nature of emotional stimuli and the employed regulation strategies constant across participants. By recording participants' emotional experiences as they occur, we were able to

reduce the bias associated with *retrospective* self-reports of emotional reactivity and regulation effectiveness (Robinson & Clore, 2002) – though we still relied on self-report of emotions. Adding physiological measures such as skin conductance and heart rate in future work will help to corroborate current findings. While the IAPS validly elicits negative emotions (Lang & Bradley, 2007), emotions elicited through pictures in a laboratory experiment might differ from those elicited through the repeated exposure to negative life experiences of patients in therapy. Complementary research should assess emotions in psychotherapists in a more realistic setting. Another drawback of the present study is that participants were restricted in the set of strategies they could use; people, and especially psychotherapists, may use different and more diverse strategies in daily life than those considered here (e.g., social sharing, suppression).

Future research may examine how the use and effectiveness of different strategies varies in and out of therapy sessions. Possibly, reappraisal is most advantageous when treating patients, as it maintains the focus on the session, whereas distraction is most advantageous outside a session in order to both detach and recover from work (Sonnentag et al., 2008). Future research might further examine whether emotional reactivity and regulation effectiveness distinguish effective from less effective psychotherapists, by establishing links with measures of therapy success, such as patient ratings of the working alliance, and measures of patients' symptoms before and after treatment. Studies might also investigate whether psychotherapists are drawn to their job because they regulate emotions more effectively, or whether they learn to regulate emotions effectively while practicing their job. It might also be that they leave the profession as a result of realizing that their emotional reactivity and regulation effectiveness fail to meet the demands of that job. A more comprehensive understanding of these issues will have important implications for selection, training, and retention in the profession, of qualified psychotherapists, as well as for securing

a sense of self-efficacy and mental well-being amongst them in the emotionally-intense work environment they inhabit.

References

- Berking, M., & Wupperman, P. (2012). Emotion regulation and mental health: Recent findings, current challenges, and future directions. *Current Opinion in Psychiatry*, 25, 128–134. doi:10.1097/YCO.0b013e3283503669
- Decety, J., Yang, C.-Y., & Cheng, Y. (2010). Physicians down-regulate their pain empathy response: An event-related brain potential study. *NeuroImage*, 50, 1676–82. doi:10.1016/j.neuroimage.2010.01.025
- Diener, M. J., Hilsenroth, M. J., & Weinberger, J. (2007). Therapist affect focus and patient outcomes in psychodynamic psychotherapy: A meta-analysis. *The American Journal of Psychiatry*, 164, 936–941. doi:10.1176/appi.ajp.164.6.936
- Eisenberg, N., & Eggum, N. D. (2009). Empathic responding: Sympathy and personal distress. In J. Decety & W. Ickes (Eds.), *The Social Neuroscience of Empathy* (pp. 71–83). London, England: MIT Press.
- Elliott, R., Bohart, A. C., Watson, J. C., & Greenberg, L. S. (2011). Empathy. *Psychotherapy*, 48, 43–49. doi:10.1037/a0022187
- Foa, E., Hembree, E., & Rothbaum, B. (2007). *Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences therapist guide*. Oxford, United Kingdom: Oxford University Press.
- Greenberg, R. P., Constantino, M. J., & Bruce, N. (2006). Are patient expectations still relevant for psychotherapy process and outcome? *Clinical Psychology Review*, 26, 657–678. doi:10.1016/j.cpr.2005.03.002
- Gross, J. J. (2011). *Handbook of emotion regulation*. New York City, United States: Guilford Press.
- Hassenstab, J., Dziobek, I., Rogers, K., Wolf, O. T., & Convit, A. (2007). Knowing what others know, feeling what others feel: A controlled study of empathy in

- psychotherapists. *The Journal of Nervous and Mental Disease*, 195, 277–281.
doi:10.1097/01.nmd.0000253794.74540.2d
- Jennings, L., & Skovholt, T. M. (1999). The cognitive, emotional, and relational characteristics of master therapists. *Journal of Counseling Psychology*, 46, 3–11.
doi:10.1037/0022-0167.46.1.3.
- Lang, P., & Bradley, M. (2007). The International Affective Picture System (IAPS) in the study of emotion and attention. In J. Coan & J. Allen (Eds.), *Handbook of emotion elicitation and assessment* (pp. 29–47). Oxford, United Kingdom: Oxford University Press.
- Lang, P. J., Bradley, B. N., & Cuthbert, B. N. (2008). *International Affective Picture System (IAPS): Affective ratings of pictures and instruction manual (Technical Report No. A-8)*. Gainesville: University of Florida.
- Markowitz, J. C., & Milrod, B. L. (2011). The importance of responding to negative affect in psychotherapies. *The American Journal of Psychiatry*, 168, 124–128.
- Martin, W., Easton, C., Wilson, S., Takemoto, M., & Sullivan, S. (2004). Salience of emotional intelligence as a core characteristic of being a counselor. *Counselor Education and Supervision*, 44, 17–30. doi:10.1002/j.1556-6978.2004.tb01857.x
- Paivio, S. C. (2013). Essential processes in emotion-focused therapy. *Psychotherapy*, 50, 341–345. doi:10.1037/a0032810
- Pearlman, L. A., & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional Psychology: Research and Practice*, 26, 558–565. doi:10.1037/0735-7028.26.6.558.
- Phillips, K. F. V., & Power, M. J. (2007). A new self-report measure of emotion regulation in adolescents: The Regulation of Emotions Questionnaire. *Clinical Psychology & Psychotherapy*, 14, 145–156. doi:10.1002/cpp.523
- Racker, H. (2012). *Transference and countertransference*. London, England: Karnac Books.

- Robinson, M. D., & Clore, G. L. (2002). Belief and feeling: Evidence for an accessibility model of emotional self-report. *Psychological Bulletin*, 128, 934–960.
doi:10.1037//0033-2909.128.6.934
- Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, 21, 95–103. doi:10.1037/h0045357
- Sheppes, G., & Gross, J. J. (2011). Is timing everything? Temporal considerations in emotion regulation. *Personality and Social Psychology Review*, 15, 319–331.
doi:10.1177/1088868310395778
- Sheppes, G., Scheibe, S., Suri, G., & Gross, J. J. (2011). Emotion-regulation choice. *Psychological Science*, 22, 1391–1396. doi:10.1177/0956797611418350
- Sheppes, G., Scheibe, S., Suri, G., Radu, P., Blechert, J., & Gross, J. J. (2014). Emotion regulation choice: A conceptual framework and supporting evidence. *Journal of Experimental Psychology: General*, 143, 163–181. doi:10.1037/a0030831
- Sherman, M. D. (1996). Distress and professional impairment due to mental health problems among psychotherapists. *Clinical Psychology Review*, 16, 299–315. doi:10.1016/0272-7358(96)00016-5
- Sonnentag, S., Mojza, E. J., Binnewies, C., & Scholl, A. (2008). Being engaged at work and detached at home: A week-level study on work engagement, psychological detachment, and affect. *Work & Stress*, 22, 257–276. doi:10.1080/02678370802379440
- Thiruchselvam, R., Blechert, J., Sheppes, G., Rydstrom, A., & Gross, J. J. (2011). The temporal dynamics of emotion regulation: An EEG study of distraction and reappraisal. *Biological Psychology*, 87, 84–92. doi:10.1016/j.biopsycho.2011.02.009
- Webb, T. L., Miles, E., & Sheeran, P. (2012). Dealing with feeling: A meta-analysis of the effectiveness of strategies derived from the process model of emotion regulation. *Psychological Bulletin*, 138, 775–808. doi:10.1037/a0027600

- Wilk, S. L., Desmarais, L. B., & Sackett, P. R. (1995). Gravitation to jobs commensurate with ability: Longitudinal and cross-sectional tests. *Journal of Applied Psychology, 80*, 79–85. doi:10.1037/0021-9010.80.1.79.
- Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of Occupational Health Psychology, 5*, 84–94. doi:10.1037//1076-8998.5.1.84

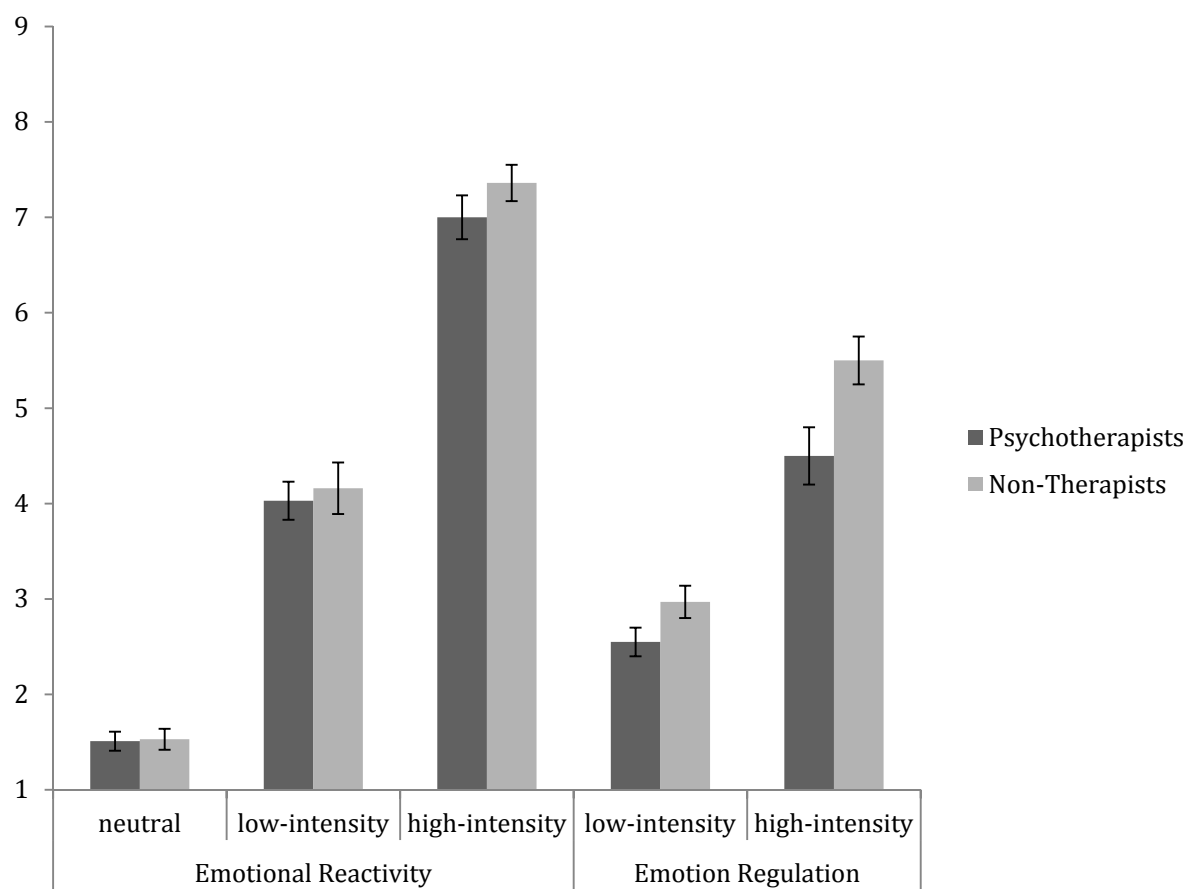


Figure 1. Negativity ratings for emotional reactivity and emotion regulation trials (per stimulus type and group). Note that neutral stimuli were included in the emotional reactivity trials only. Error bars represent standard errors.