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CoachMotivation: Leveraging Motivational Interviewing Methodology to Increase Emotion Regulation Ability in the Workplace

Michael R. Nelson
Seattle Pacific University

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CoachMotivation: Leveraging Motivational Interviewing Methodology to Increase Emotion

Regulation Ability in the Workplace

Michael R. Nelson, M.A.

A dissertation submitted in partial fulfillment

of the requirements for the degree of

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In

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Approved by:

Joey A. Collins, Psy.D.

Assistant Professor,

Industrial-Organizational Psychology

Seattle Pacific University

Dissertation Chair

Mark North, Ph.D.

Principal Consultant, Founder

Pathways Paver

Committee Member

Jacob Redding, Ph.D.

Learning and Development Partner

Meta (formerly Facebook)

Committee Member

Reviewed by:

Paul Yost, Ph.D.

Chair, Industrial-Organizational

Psychology

Seattle Pacific University

Kathleen Tangenberg, Ph.D.

Dean, School of Psychology, Family, &

Community

Seattle Pacific University

Dedication

Dad,

You showed me how to successfully navigate the world of work with unwavering resilience, focus, and passion all the while preaching the importance of managing one's emotions. You have been preparing this dissertation since I was a child; therefore, this doctorate is as much yours as it is mine.

Love,
Michael

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Abstract

Emotions are complex, powerful states that both positively and negatively impact personal and professional human experiences. One's ability to regulate their emotions has been related to desirable organizational outcomes such as (a) decreased counterproductive work behaviors (CWBs), stress, and negative emotions and (b) increased well-being, coping abilities, and job satisfaction. However, appropriate workplace interventions that increase perceived emotion regulation (PER) abilities continue to be limited. Stemming from Motivational Interviewing (MI), CoachMotivation (CM) is a modified form of organizational coaching that translates core practices of clinical MI interventions (i.e., OARS: open questions, affirmations, reflections, summary statements) into coaching conversations in the workplace. The current study examined if CM increased PER abilities and how Extraversion and Neuroticism (personality) traits affected baseline PER abilities. Results indicated the following: (a) CM training increased perceived abilities on a partial total emotion regulation (ER) scale ($N = 148$; $t[147] = 8.98$, $p < .001$, $d = .66$) as well as subscales of *positive reappraisal* ($t[147] = 10.32$, $p < .001$, $d = .76$) and *refocus on planning* ($t[147] = 5.17$, $p < .001$, $d = .42$), (b) both Extraversion ($b = -.17$; $p < .001$; $R^2 = .08$) and Neuroticism ($b = .15$; $p < .05$; $R^2 = .04$) predicted partial total ER at baseline, and (c) after controlling for personality, the CM training accounted for changes in partial total ER ($b = .57$; $p < .001$; $R^2 = .35$), *positive reappraisal* ($b = .50$; $p < .001$; $R^2 = .37$), and *refocus on planning* ($b = .50$; $p < .001$; $R^2 = .26$) scales. Overall, this study supports future research on CM as a workplace intervention for increasing PER abilities.

Keywords: emotion regulation, Motivational Interviewing, CoachMotivation, OARS, Extraversion, Neuroticism

CHAPTER I

Introduction

Emotions permeate across all boundaries that frame and compose the human experience. They paradoxically operate simply and complexly, slowly and swiftly, noticeably and invisibly, predictably and sporadically, and meticulously and recklessly as they impact the individual structures that makeup humanity (Gross, 2014). For example, these singularities may cause us to laugh at others' missteps and cry from our own or, conversely, laugh at our own mistakes and cry for those of others. Evidently, emotion's multi-faceted nature interacts with one's subjective interpretation of reality and consequent actions. Simply put, emotions are complex, powerful states that influence the human experience.

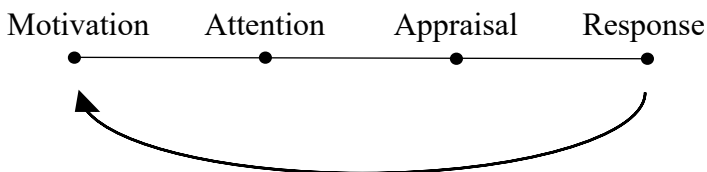
Emotions are omnipresent and affect our behaviors and mindsets. They evolve to motivate us to adapt, behave, and engage other internal systems (Al-Shawaf et al., 2016; Beall & Tracy, 2017; Hareli & Parkinson, 2008). From stimulating humans, selecting and reproducing with mates, and to activating critical memory functions, emotions have evolved with the human race to assist as motivating, survival-oriented processes to address a variety of adaptive problems (e.g., avoiding predators, reproducing, gathering resources; Al-Shawaf et al., 2016). For example, when viewing emotions as a means to survive, positive emotional well-being has been related to higher rates of recovery, survival, and physical illness prognoses (Lamers et al., 2012).

Prior to further unraveling the intricacies of emotionality, it is important to understand the sequence of a general model of emotion to better understand the complex nature of emotionality. For the purpose of this dissertation, Gross' (Figure 1; 1998a) modal model of emotion was used as the primary model for understanding emotions since the model views emotion regulation as an organic, accidental outcome of emotionally responding to emotional stimuli instead of an

intentional, premeditated choice. Overall, Gross' model reflects that emotions include internal or external "person-situation transactions that compel attention, have meaning to an individual in light of currently active goals, and give rise to coordinated yet flexible multisystem responses that modify the ongoing person-situation transaction in critical ways" (Gross, 2014, p. 5). In short, emotional sequences include a relevant situation, compelling attention, meaningful appraisal, and dynamic responses (e.g., neurological, biological, behavioral, experiential). Upon responding to the situation, one then loops back to and further reacts to the modified situation at hand by re-running through the modal model of emotion. For example, think about a situation when you shared exciting news with a friend, and they did not react with the same level of excitement. What did you immediately think of when appraising their reaction? What emotions did you experience? Anger? Worry? How did you then react as a result of their reaction? Chances are that you were probably confused, concerned, and/or upset by their lack of excitement and so you then adjusted and downplayed your excitement in response. Such a modification of one's emotionality in response to an interpersonal interaction is a basic example of emotional regulation, which can be an essential ability when navigating workplace situations.

Figure 1

Gross' (1998a) Modal Model of Emotion.



The Importance of Emotion Regulation

In relation with managing the complex effects of emotions, emotion regulation (ER) is generally defined as a set of both automatic and conscious between-individual processes by

which people systematically manage the emotions they experience and how they express such emotions (Aldao et al., 2010; Gross, 1998b, 2014; Matta et al., 2014; Thompson, 1994). Both emotionality and one's ability to regulate how they experience and respond to emotions evolves and develops across time and situations. For example, during formative years, children use parents as a primary source for the development of one's abilities to emotionally regulate (Morris et al., 2017). From elementary school to the workplace, humans continue to practice their emotion regulation abilities through various intra- and interpersonal situations as they refine their abilities to both understand and respond to emotions. However, what happens when one falters to regulate their emotions? Though ER is an interesting construct to continue to unravel, emotional dysregulation may help one to further understand the importance of ER.

Emotional Dysregulation and the Costs of Workplace Violence

Broadly, emotion dysregulation is considered to be one's inability to change or control one's emotional experiences and responses in a desired way (Linehan et al., 2007). When we consider emotional dysregulation (ED) in the contexts of work, there are wide range of variables (e.g., age, personality, motivation, affective workplace valence; Scheibe & Zacher, 2013) that impact an employee's ability to regulate, or dysregulate, their emotions, which in turn lead to subsequent outcomes on one's stress and well-being at work. What may be most concerning with ED is that it is broadly associated with risky behaviors (e.g., physical, behavioral, financial, mental; Weiss et al., 2015) that display not just in personal circumstances but professional environments. Thus, ED and its ensuing negative consequences can happen anytime and anywhere inside and outside the office.

Regarding undesirable workplace behaviors, "workplace incivility is low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for

mutual respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others.” (Andersson & Pearson, 1999, p. 457). Over a fourteen-year period, 98% of polled workers stated that they had experienced incivility in the workplace while 50% stated they experienced such incivility on a weekly basis (Porath & Pearson, 2013). Financially, this deviant behavior has been estimated to cost roughly \$14,000 per employee each year due to job-related delays and consequent mental distraction (Pearson & Porath, 2009). Researchers also report high financial estimates related to violence in the workplace: \$400 million from assault in 2002 (Liberty Mutual, 2004) and \$1.2 million annually from productivity deficits experienced by direct care employees for one hospital (Hutton & Gates, 2008). Given the extreme financial and mental costs of such adverse workplace behaviors, it is important to consider how managing emotionality prior to, during, and after experiencing corporate incivility, and similar behaviors, that can impact the employee experience.

Relating to behavioral dysregulation, emotional dysregulation, or the inability to understand and appropriately regulate one’s emotions (e.g., difficulties with awareness of emotions, understanding of emotions, and access to effective emotion regulation interventions; Gratz & Roemer, 2004), has been observed to maintain moderating effects on the relationship between experiencing workplace incivility and specific well-being outcomes (e.g., daily fatigue, positive affect outside of the workplace; Blanco-Donoso et al., 2019). While one’s level of ability to emotionally regulate and dysregulate have been analyzed in various studies, applying appropriate business interventions (e.g., coaching) to the workplace experience to increase appropriate emotion regulation behaviors and prevent dysregulation have not been robustly studied to-date.

CoachMotivation: Motivational Interviewing, Emotion Regulation, and Personality

The current study seeks to address this overall need for understanding how training specific emotion regulation skills may impact one's perceptions of their abilities to emotionally regulate and whether personality predicts said perceived emotion regulation abilities (e.g., Neuroticism; Gross, 2014). By leveraging base components of Motivational Interviewing (MI; Miller & Rollnick, 1991), a clinically robust method for improving one's emotional awareness and understanding, this study reviews the impact of open-ended questions, affirmations, reflections, and summary statements (OARS) on participant's perceived emotional regulation effectiveness. Thus, the current study is based on this OARS subset of MI skills and is referred to the novel workplace coaching intervention, CoachMotivation (CM) throughout this review.

Emotion Regulation in the Workplace: An Example

Consider another example of a workplace situation between a manager and their consultant. After hearing constructive feedback from their manager, the consultant begins to cry, in part, from internalizing the provided feedback. This emotional response from the consultant alters the interpersonal situation and may then prompt the manager to adjust by no longer focusing on what they perceived to be areas for growth for their employee, but rather affirm the direct report due to feeling guilty and/or empathy for the consultant's new emotional response to the feedback session. While the direct report may feel better in part from their manager's switch to affirmation-based feedback, they continue to cry because they are also cognizant of other negative events that happened in the past week that also included them receiving critical feedback. From this initial interaction with their supervisor, the employee has now experienced cascading emotional events that may have ripple effects on their work-life selves. This scenario relays the notion that emotions may produce a series of subsequent reactions and behaviors that

can continue to impact one's behaviors cross-time and contexts, which supports the notion that emotions are complex and have the ability to cause lingering effects on our actions. Therefore, if emotions influence our behaviors (Al-Shawaf et al., 2016; Aldao et al., 2010; Beall & Tracy, 2017; Gross, 2014; Hareli & Parkinson, 2008) then how might we control for or, more practically, regulate the confounding effects that emotions have on our thoughts and actions?

Dissertation Study Purpose

The purpose of this exploratory investigation was to understand how the application of core practices of Motivational Interviewing (MI) to organizationally based coaching contexts could be a novel way to appropriately enhance perceived emotion regulation (PER) ability in the workplace. Through teaching participants CoachMotivation (CM), a recently developed coaching intervention that stems from MI, participants were trained to apply core practices of MI called OARS (i.e., open questions, affirmations, reflections, and summary statements), during conversations in the workplace. This study focused on the relationship between CM and PER ability.

Literature Review

The following literature review attempts to better understand the relationship between CM and ER. First, emotion regulation (ER) and emotion regulation therapy (ERT) are discussed. Second, MI and its outcomes as they relate to ER is unraveled. Next, coaching outcomes in the workplace and how they tie to ER is reviewed. Then, the predictive nature of Extraversion and Neuroticism to general affect and one's ability to emotionally regulate is discussed. Lastly, this study's key hypotheses are highlighted.

Defining Emotion Regulation Across Time

Though it is important to understand the effects of dysregulation in the workplace, it is important to understand the history of emotion regulation (ER) as a construct over time. Thus, to better understand the current definition of ER, it is crucial to review how ER is different from historically similar psychological constructs. An antecedent of ER is anxiety regulation (e.g., reality-based, id- and superego-based; Freud, 1959), which presents as the physical avoidance of anxiety-inducing events (Gross, 1998b). Another precursor of ER is coping (e.g., problem-focused, emotion-focused; Bond & Bunce, 2000; Lazarus & Folkman, 1984), or one's efforts to manage environmental problems, adverse thoughts, or negative emotions (Gross, 1998b). In comparison to ER, coping differs as it is more strictly an individual's ability to utilize problem-solving responses or more conscious attempts to change environmental stressors (Aldao, et al., 2010). Additionally, ER is contemporarily denoted by neither the repression nor the overexpression of emotion, but rather the balance between the two (Petrides, 2009). Additionally, when considering the mixed model of emotional intelligence's (EI) facets (e.g., EI = emotion perception, understanding, and regulation; Joseph & Newman, 2010) in relation to job performance (e.g., task performance, self-efficacy, task motivation; Tsai et al., 2007), Joseph and Newman's (2010) meta-analytical review highlights ER as the conscious mediating effects between one's ability to recognize and understand emotion and then control related emotionality. Therefore, I followed this understanding of ER as it relates with job performance and organizational coaching for the purpose of this dissertation. Additionally, concerning the balance between overall emotional suppression and expression, ER might be better understood when considering how the regulator uses it as a function of fulfilling one's goals (Thompson, 1994).

Operationalizing Emotion Regulation Unlike its precursors, ER is defined as the following: a set of both automatic and conscious between-individual processes by which people systematically manage the emotions they experience and how they express such emotions (Aldao et al., 2010; Gross, 1998b, 2014; Matta et al., 2014; Thompson, 1994). However, for this study, the metrics used are self-report measures that focus only on conscious, non-automatic processes, that can be both between- and within-subjects (e.g., both intraindividual and interindividual). Therefore, ER maintained the aforementioned definition with the exclusion of unconscious processes and inclusion of both intraindividual and interindividual emotional experiences.

Emotion Regulation Therapy (ERT)

Upon analyzing the ever-evolving history of mental disorders, clinical psychology has traditionally underplayed the role of emotion regulation in adult psychopathology (Mennin & Farach, 2007). For example, clinical intervention (e.g., cognitive-behavioral therapy [CBT]; Borkovec & Ruscio, 2001), treatments for a variety of mental disorders (e.g., generalized anxiety disorder, major depressive disorder) are not as efficacious long-term (e.g., quality of life, interpersonal relationships; Borkovec & Ruscio, 2001; Mennin, 2004; Mennin & Fresco, 2014; Renna et al., 2017) due to a possible lack of emphasis on developing an individual's ability to regulate emotionally (Mennin, 2004; Mennin & Fresco, 2014; Renna et al., 2017). An individual's lack in ability to regulate their emotions, is also related to mood and personality disorders (Aldao et al., 2010). Research suggests that managing one's emotions may be associated with the better management of both behavioral and cognitive disorders (Gross, 2014).

Emotion regulation therapy (ERT) is an integrative treatment that aims to reduce certain psychopathologies (e.g., GAD, MDD; Mennin & Fresco, 2009; Renna et al., 2017). ERT's framework targets more than emotionality; specifically, ERT goes past traditional Cognitive

Behavioral Therapy (CMT) to address both affect and motivation (Mennin, 2004; Mennin & Fresco, 2009; Renna et al., 2017). Mennin and Fresco (2014) review how affect adult psychopathology particularly focuses on “motivational mechanisms” (p.471), such that successfully achieving goals aligns with both one’s motivational salience and values. Overall, there is an interplay between emotions and motivations.

Motivational Interviewing

Under the umbrella of clinical psychology, Motivational Interviewing (MI), is summarized as “collaborative conversation style for strengthening a person’s own motivation and commitment to change” (Miller & Rollnick, 2013, p. 12). This behavioral, change-oriented intervention has exhibited efficacious moderate effects for managing nutrition, exercise, and a variety of stimulant use (e.g., drugs, alcohol; Burke et al., 2003). Stemming from a Rogers’s (1951) client-centered approach to therapy, MI scopes in on the notion that:

- a) people approach changes at differing levels of readiness,
- b) individuals benefit from having a professional versed in MI that provides guidance as to what happens if one changes or does not change, and
- c) the individual is the owner of both talking through and determining the criteria for change while the MI-versed professional helps guide the person towards change or lack thereof (Lundahl et al., 2010; Miller & Rollnick, 2013).

Essentially, MI acts as a set of resources for such change-oriented, dyadic relationships between an individual seeking change and the person helping guide them through change (Arkowitz et al., 2008; Miller & Rollnick, 2013). Overall, there are four main principles an MI professional upholds: exhibiting empathy, supporting discrepancy (e.g., helping people analyze the gap between their current state and ideal state), rolling with resistance (e.g., it is natural for the

individual to be reluctant to change), and bolstering self-efficacy (Arkowitz et al., 2008; Burke et al., 2003; Lundahl et al., 2010; Miller & Rollnick, 2013). Additionally, four key skills to help MI professionals effectively support these four main principles in sustaining change talk are as follows: open questions, reflections, affirmations, and summaries as abbreviated as OARS (Magill et al., 2014). Essentially, by using these active listening, MI-related skills and principles, one may help others identify their reasons for change and commit to desirable change.

MI Strategies and Outcomes

Overall, MI is an elevated process for active listening. Foundationally, it's concepts are more persuasive in nature than coercive by assisting participants navigate their change journeys instead of aggressively ushering them into a transitional stage from current to future state. Throughout any given interaction where MI is leveraged, the clinician's or coach's motivations should be centered on supporting the participant while bolstering the recipient's internal motivation as the primary goal (Miller & Rollnick, 2002). Magill et al.'s (2014) review examined 12 studies that observed outcomes related to MI skills, which were operationalized as conversational tools for performing MI interactions. Such interactions were comprised of MI's core four basic principles as previously mentioned: Open questions, Affirmations, Reflections, and Summaries, or OARS as abbreviated in research and application. Let's review them further:

- **Open-ended questions:** How one evokes the participant to provide additional insights and information beyond "yes or no" questions. Open-ended questions are applied to mine information from the client from below surface-level thoughts. In comparison to closed questions, open-ended questions are judgement free and increase perceptions of curiosity instead of assumption.

- Affirmations: How one validates the client by positively confirming and praising their emotions, thoughts, and behaviors, which further enables a positive outlook and sense of support. Well-executed affirmations help decrease one's feelings of defensiveness and increase their openness to change.
- Reflections: How one shows they are actively engaged with the MI conversation at-hand. Reflecting on the participant's comments helps the interviewer to clarify their understanding of the client's content and context, demonstrate one's recognition of the subject's emotions, thoughts, and behaviors, and support the client's autonomy in further unraveling the underlying story of their stated thoughts.
- Summaries: How one consolidates the client's various comments and reasoning relating to a specific topic and then relays said understanding back to the participant. Summary statements provide novel perspectives by collecting all of the information an interviewer has heard throughout a discussion pertaining to a specific topic with a person. By leveraging this fourth principle, the interviewer helps summarize a specific conversational topic and then initiate the next stage of the engagement.

Generally, the consistent application of MI skills (e.g., OARS) is related to (a) increased change talk from the client, and (b) language that signifies desirable behavior modifications (Magill et al., 2014). Therefore, by applying MI's OARS fundamentals to business contexts through the CoachMotivation process, I expect to provide personnel with MI-related skills and its underlying framework to apply to managerial conversations and assist them with developing their coaching ability to emotionally regulate while operating inside the workplace.

Clinical Use

MI is a comprehensively studied process in the realm of clinical psychology. Over time and contexts, MI has continued to display its methodology's strength in stimulating change in participants. For example, a meta-analysis of 30 controlled clinical trials comparing adaptations of MI experimental groups to no treatment and/or placebo groups indicate moderate effects for MI efficacy throughout many populations addressing behavioral modifications, such as alcohol use, drug abuse, and motivation around diet and exercise (Burke et al., 2003). In a review of four meta-analyses, Lundahl and Burke's (2009) review of four meta-analyses discovered that MI is 10-20% more effective than not implementing any form of therapy in relation to behavioral modification methodology. Another meta-analysis that reviewed about 120 MI studies indicates that the format or role of MI does not significantly influence outcomes (Lundahl et al., 2010), which supports the notion that the execution of MI's core principles may be enough to enable change alone and across contexts. Additionally, a meta-analysis completed by Hettema et al. (2005) showed that studies using no manual to direct MI implementation maintained twice observed effect size as observations in which an MI therapist manual was used. Based on both Lundahl et al.'s (2010) and Hettema et al.'s (2005) reviews, MI is debatably a malleable method, as indicative by its use as both a supplemental intervention addition and stand-alone method for influencing behavioral changes in people. Thus, MI's flexible format and associated outcomes suggests that MI can be applied to environments outside of clinical settings, which specifically warrants me to investigate its ability to be applied within the workplace through the CoachMotivation training.

ERT and MI

A primary focus of ERT is to help individuals develop skills to help accurately focus on motivational signals (e.g., enhancing individual ability to identify motivational cues; Mennin & Fresco, 2014). Mennin and Fresco (2014, p. 476) state, "...ERT helps clients develop motivational awareness intravitality through psychoeducation aimed at increasing understanding of emotions and underlying motivations in the context of personally relevant historical and proximal events." When relating regulatory focus theory (RFT) (e.g., reward versus prevention; Higgins, 1997) to ERT, Lanaj et al.'s (2012) meta-analytic study incorporates RFT into organizational psychology's workplace motivation-performance model (i.e., focusing on promotion to fulfill reward motivation or focusing on job security to fulfill prevention motivations). One's motivational focuses (reward or prevention) may significantly influence how they regulate in the workplace. Understanding the interplay between one's emotion-motivation interactions may help employees experience desirable workplace outcomes (e.g., task performance, innovation, decreased counterproductive workplace behaviors; Lanaj et al., 2012). Therefore, if motivation may have significant impacts on one's ability to regulate in the workplace, how might we appropriately strengthen individual emotion-motivation ability?

As reviewed, motivational interviewing (MI) aids individuals with enhancing their motivation and commitment to change (Millner & Rollnick, 2013). At its base function, MI provides awareness of one's motivations in relation to goal achievement and readiness for change (Mennin & Fresco, 2014). Beyond clinical psychology's formal domain, MI has been applied in a variety of business contexts: employment (e.g., increasing motivation for employment and retention; Britt et al., 2018), organizational change (Grimolizzi-Jensen, 2018), conceptual business operations frameworks (e.g., energy-saving practices; Endrejat et al., 2017),

facilitating meetings (Klonek et al., 2015), and career counseling for students (Klonek et al., 2016). Thus, since MI's efficacy has been developed past clinical settings, it is critical to determine how best to implement its fundamental principles in the workplace so that MI's validity and associated positive benefits may be further extended beyond non-clinical settings. Explicitly, it may be pragmatic and effective to apply MI's core fundamentals (e.g., OARS) to an organizationally based coaching format since coaching in corporations has been applied to enhance personal outcomes in the workplace (e.g., individual performance; Jones, et al., 2016).

Coaching Outcomes in the Workplace

Across time, contexts, and individuals, developing better employees has continued to be a key focus of organizations. Specifically, coaching in organizational settings has been associated with positive outcomes for personnel, such as increased job performance, skills, and personal development (Bozer & Jones, 2018; Jones, et al., 2016). The Collins Research Vertical Team (RVT) at Seattle Pacific University maintains a research focus on organizational development, leadership and team development, and organizationally based coaching. Over the past four years, the Collins RVT has worked to create, develop, and distribute a novel type of coaching, CoachMotivation (CM), that is derived from Motivational Interviewing (MI). MI is an evidence-based counseling approach from clinical psychology that aims to change an individual's behaviors by enhancing intrinsic motivation and bolstering goal commitment (Miller & Rollnick, 2013). By repurposing certain aspects of MI and adapting them to workplace demands, CM is meant to provide organizations with a form of personnel development that addresses behavioral changes by "eliciting and exploring the person's own reasons for change within an atmosphere of acceptance and compassion" (Miller & Rollnick, 2013, p. 29).

Regarding coaching in the workplace, a general outcome of coaching may be an increased ability to self-regulate (Theeboom et al., 2014) as a result of developing an employee's mindfulness and well-being through coaching (Hülshager et al., 2013; Jones et al., 2016; Virgili, 2013). When unraveling different aspects of self-regulation, emotion regulation (ER) is the process by which one detects, assesses, and adjusts their emotional responses (Thompson, 1994). A significant differentiator of ER versus general self-regulation is that it focuses heavily on the functional processes that relate one's emotionality to others in the environment. For example, when considering dyadic relationships in athletics, the ER abilities of both a coach and their athlete can affect both the physical and mental components of performance (Davis & Davis, 2016). Although there is limited research specifically on ER in the workplace as an outcome of coaching, studies suggest the following outcomes of ER: (a) decreased counterproductive work behaviors (CWBs), stress, and negative emotions (Matta et al., 2014), (b) increases in general well-being and coping abilities (Buruck, et al., 2016), and (c) increases in self-regulation abilities, modified emotional expression, and job satisfaction (Hülshager et al., 2013). Based on these potential effects of ER in the workplace, it might be beneficial to further explore the connection between coaching and ER.

Similar Organizational Constructs: Coping and Self-Regulation

Behavioral self-regulation is influenced by the level of control an employee perceives to have in the workplace (Morgeson et al., 2013). Every day, the business environment brings new tasks, stressors, and obstacles that impact personnel's lives. Implementing self-regulation measures in business practices allow individuals to identify and isolate problematic behaviors while addressing novel behavioral implementations through goal setting. Frayne and Latham (1987) discussed how training personnel in self-analysis led to increased coping abilities (e.g.,

goal setting, increased self-efficacy, increased autonomy) and decreased personal, workday absences. Thus, beneficial behaviors can be established and allow for better self-regulation in the workplace.

Predictors of Emotion Regulation

When applying personality research to studies, Costa and McCrae's (1985) Five-Factor Model (FFM), or "Big Five", is the top framework cross-contextually. OCEAN, a commonly used acronym for the Big Five, is described as the following:

1. Openness to Experience: Both the extent to which one shows a preference for variety (e.g., variable, novel experiences) and the degree to which one is curious (e.g., cognitively).
2. Conscientiousness: One's tendency to be careful, abide by rules, ability to be organized, and hardworking.
3. Extraversion: An individual's levels of sociable, talkative, and active behaviors.
4. Agreeableness: The extent to which one agrees with and/or goes along with other people's thoughts and actions.
5. Neuroticism: The extent to which one experiences negatively charged emotions and the degree to which one responds sensitively during interpersonal interactions.

Overall, years of research and application have provided robust validity and reliability for the FFM's personality dimensions being the base personality components for humans across cultures, languages, and other differentiating individual characteristics (McCrae, 2002; Schmitt et al., 2007). Given the nature of the FFM's cross-contextual and individual applicability, it is important to continue to study its influence on humanity, especially how it impacts one's ability to emotionally regulate. While the FFM is reliable across human populations, Extraversion and

Neuroticism have been most commonly studied in relation to one's general affect (Larsen & Ketelaar, 1989, 1991; Lucas & Baird, 2004; Rusting & Larsen, 1997) and their ability to regulate (Gohm, 2003; Gross, 2014; Kokkonen & Pulkkinen, 2001a; 2001b).

Extraversion, Neuroticism, and Affect

Individual relationships between (a) Extraversion and positive affect and (b) Neuroticism and negative affect have been reviewed in both clinical and field settings (Larsen & Ketelaar, 1989, 1991; Lucas & Baird, 2004; Rusting & Larsen, 1997). Differences in these trait relationships can be impacted from unit-level reactivity (e.g., individual differences in reactions to environmental stimuli) and baseline affect (e.g., internal individual differences in average mood; Ng & Diener, 2009). Overall, the reactivity model describes trait differences in reaction to emotional, environmental stimuli (Eysenck, 1967; Eysenck & Eysenck, 1985); specifically, one's level of Extraversion relates to positive environmental stimuli and individual levels of Neuroticism react to negative stimuli (Larsen & Ketelaar, 1991) when considering imaginary situations. Simply, people higher in Extraversion tend to react more positively to positive interpersonal interactions and individuals that are naturally higher in Neuroticism react more negatively to negative events.

Relating to the reactivity model, the affect-level model (Gross et al., 1998), which builds upon Gray's multi-dimensional personality model, surmises that there are trait differences in one's baseline affect such that those who are extroverted naturally maintain a more positive affect and those who are neurotic tend to maintain a more negative affect regardless of external interactions and emotionally charged cues from one's environment (Lucas & Baird, 2004). For example, those higher in Extraversion feel more positive and those higher in Neuroticism feel more negative regardless of a positive (Extraversion), negative (Neuroticism), and/or neutral stimulus from a given situation. Gross et al. (1998) also reviewed both the reactive and affect-

level models in their study and (a) positively correlated Extraversion with positive tonic mood and with positive emotions from positive environmental stimulus and (b) positively related Neuroticism with negative baseline affect and with negative emotions from negative circumstantial events. Overall, these two models suggest the following: (a) the reactivity model posits that extraverts are happier than introverts in pleasant situations and inversely neurotic individuals are less happy in response to negative events in the environment and (b) the affect-level model suggests that, due to individual baseline differences in one's personality levels, extraverts will be happier than introverts and neurotic individuals will be less happy than non-neurotic people regardless of context or environmental stimuli. While one's levels in base personality impact experienced emotion, trait differences can also impact how one manages their emotionality.

Trait Differences and Emotion Regulation

Generally, base personality impacts how people experience their emotionality and how they attempt to regulate their emotions. As stated, this study defines emotion regulation (ER) as the conscious processes by which people systematically manage the emotions they experience and how they express such emotions from both intraindividual and interindividual emotional events (Aldao et al., 2010; Gross, 1998b, 2014; Matta et al., 2014; Thompson, 1994). According to Gross (1998b) ER strategies can be simplified as positive (e.g., reinforcing or increasing experience positive affect and/or diminishing experienced negative feelings) and negative (e.g., reducing experienced negative affect and/or enhancing negative feelings from environmental interactions). Again, Extraversion and Neuroticism have been most commonly related to one's ability to regulate their emotions (Gohm, 2003; Gross, 2014; Kokkonen & Pulkkinen, 2001a; 2001b). Davies et al. (1998) also positively correlated Extraversion with tendencies to leverage

positive ER strategies and inversely with Neuroticism. Using positive reappraisal (Gross & John, 2003), a positive sub-facet of ER, is specifically related positively with both Extraversion and positive emotions and negatively with both Neuroticism and negative emotions. When predicting future ER abilities and one's future applications of ER strategies, Extraversion forecasted adaptive ER tactics and Neuroticism related to (a) maladaptive ER strategies and (b) decreased likelihood of applying positive ER strategies in adulthood. Thus, due to observed, correlated, and longitudinally studied effects of trait differences in individuals in relation to emotionality, baseline affect, and ER, both Extraversion and Neuroticism are therefore focal traits for the purpose of this study.

Hypotheses & Model

For this study, four principal hypotheses were proposed. First, the study tested if participation in the CoachMotivation training (IV) increased perceived emotion regulation ability (DV) based on changes in pretest and posttest scores (see Figure 2). Emotion regulation ability was assessed using two subscales of the Cognitive Emotion Regulation Questionnaire: *positive reappraisal* and *refocus on planning* (CERQ; Garnefski et al., 2001). The subscales were tested both individually as discrete strategies from the CERQ and combined as a partial total CERQ score. Second, it was posited that, after controlling for age and gender, participation in the CoachMotivation training would predict one's perceived ability to emotionally regulate (see Figure 3). Third, it was hypothesized that Extraversion and Neuroticism would predict perceived emotional regulation ability on pretest scores (see Figure 4). Fourth, after controlling for Extraversion and Neuroticism, participation in the CoachMotivation (CM) training would predict change in one's ability to emotionally regulate based on posttest perceived emotion regulation scores (see Figure 5). The full model and hypotheses are shown in Figure 6.

- *Hypothesis 1*: After participating in the CM training, there will be an increase in perceived emotion regulation ability across participants.
 - *Hypothesis 1a*. Total perceived emotion regulation abilities will increase after completing the CoachMotivation training.
 - *Hypothesis 1b*. There will be an increase in perceived emotion regulation abilities for the *positive reappraisal* CERQ subscale upon completing the CoachMotivation training.

- *Hypothesis 1c.* There will be an increase in perceived emotion regulation abilities for the *refocus on planning* CERQ subscale upon completing the CoachMotivation training.
- *Hypothesis 2:* After controlling for gender and age, the CM training will predict one's perceived ability to emotionally regulate after completing the training.
- *Hypothesis 3:* Personality traits (FFM) will predict pretest perceived emotion regulation ability prior to completing the CoachMotivation training.
 - *Hypothesis 3a.* Extraversion will positively predict one's perceived ability to emotionally regulate.
 - *Hypothesis 3b.* Neuroticism will negatively predict one's perceived ability to emotionally regulate.
- *Hypothesis 4:* After controlling for Extraversion and Neuroticism (personality), the CoachMotivation training will predict one's perceived ability to emotionally regulate after completing the training.
 - *Hypothesis 4a.* There will be an increase in overall perceived emotion regulation ability after controlling for Extraversion and Neuroticism.
 - *Hypothesis 4b.* There will be an increase in perceived emotion regulation ability for the *positive reappraisal* CERQ subscale after controlling for Extraversion and Neuroticism.
 - *Hypothesis 4c.* There will be an increase in perceived emotion regulation ability for the *refocus on planning* CERQ subscale after controlling for Extraversion and Neuroticism.

Figure 2

Theoretical Model of the Relationships in Hypothesis 1.

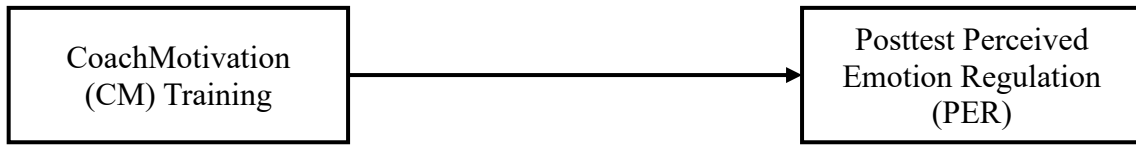


Figure 3

Theoretical Model of the Relationships in Hypothesis 2.



Figure 4

Theoretical Model of the Relationships in Hypothesis 3.

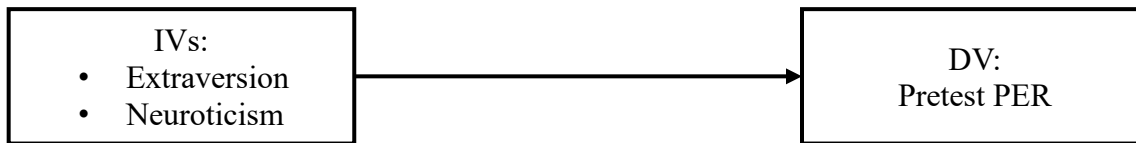


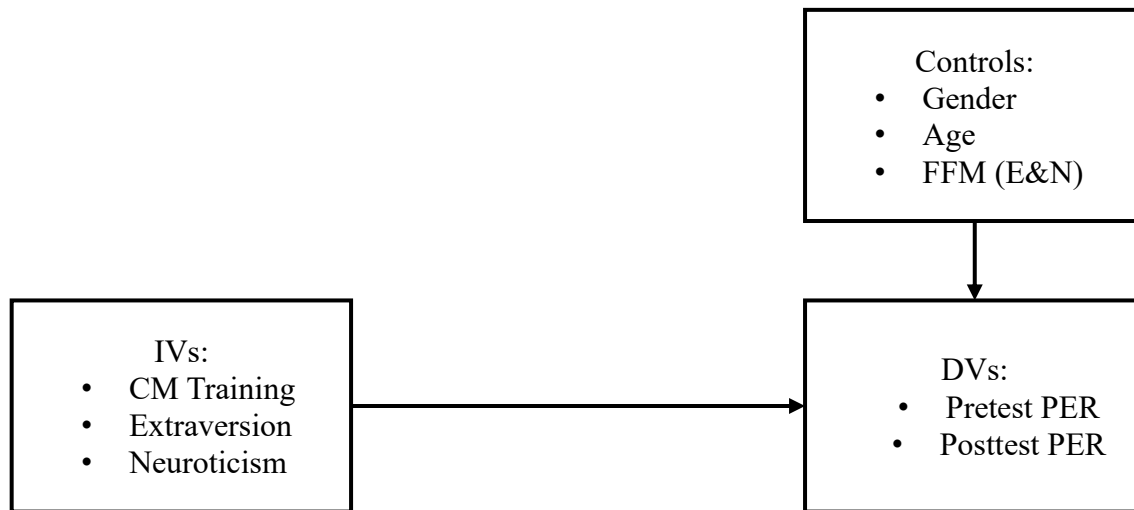
Figure 5

Theoretical Model of the Relationships in Hypothesis 4.



Figure 6

Full Proposed Model of the Hypothesized Links Between Key Variables in this Study.



CHAPTER II

Method

Participants and Sampling

The original sample included 153 participants with the age range of 18 to 68 years of age ($M = 28.54$, $SD = 11.15$) and nearly equal representation of males and females (53% and 46%, respectively, with two participants who declined to answer). After testing for and managing missing data, five participants were excluded from analysis since they recorded 50% or more missing and/or 'N/A' values for the CERQ items asked. All results presented in the following sections are calculated for the remaining 148 participants, which maintained nearly identical demographics with an age range from 18-68 years of age ($M = 28.73$, $SD = 11.26$) and nearly equal representation of males and females (53.4% and 45.3%, with two participants who declined to answer).

Inclusion Criteria

The focus of the current study was to assess the impact of CoachMotivation on the respondent's perceived ability to emotionally regulate. For this study, participants were required to be at least 18 years of age and live in the United States.

Recruitment

Data was collected by an independent consulting firm, Collins Alliance, and provided to the researcher as archival data. Collins Alliance collected data through Prolific, a crowdsourcing platform that is often used for psychological research (Palan & Schitter, 2018). Using Prolific allows researchers to post computerized tasks that can then be completed by participants who meet the minimum requirements for the study (Paolacci & Chandler, 2014). In this case, Collins

Alliances posted the CoachMotivation training, pretest survey, and posttest survey on Prolific. Participants are paid by the researcher for completion of the task(s).

Collins Alliance chose Prolific as the designated crowdsourcing platform over other options, such as Amazon's Mechanical Turk (MTurk), due to the platform's more advanced ability in alleviating issues relating to dishonest participants. For example, in MTurk, data collection relies on the participant to self-report their qualifications for any given study. This means that they could distort responses to gain access to a study in which they wish to participate (Wessling et al., 2017). Alternatively, Prolific gathers participant characteristics independently of specific studies and then all studies are pre-filtered for the individual based on this one-time input of criteria (Palan & Schitter, 2018). Prolific also allows the researcher to post pre-screening questions based on study qualifications, ensuring participants match study criteria prior to gaining entry. These attributes made Prolific a robust, feasible crowdsourcing platform for the CoachMotivation study.

Procedure

Prior to deploying the study on Prolific, prescreen criteria (location and age) was selected in the platform's settings to filter eligible participants. After the study was activated, Prolific sent an email to a random subset of eligible participants to notify them that the study was available. Those who chose to participate were then directed to Qualtrics, an online survey platform, where they could complete the training and associated pre- and post-survey.

The study was available on Prolific for less than one week and subsequently removed when the sample size of 153 was collected. Overall, the study was estimated to take one hour: 45 minutes for the video and 7.5 minutes for each survey. Prior to proceeding with the pre-survey

and the training, participants needed to confirm they met the inclusion criteria and provide their informed consent. On average, the study took 1 hour and 4 minutes to complete.

After participants completed the screening questions by confirming they were (a) 18 or older and (b) resided in the US, the participants completed the pre-survey. Upon the conclusion of the pre-survey, participants were immediately directed to a screen to watch the CoachMotivation training. This screen was timed for the length of the training, meaning that participants did not have the ability to move forward to the post-survey until the entire video had elapsed. Once the video concluded, participants were directed to the post-survey. Participants were compensated only after completion of the pre-survey, training video, and post-survey. Compensation was determined by the amount of time spent in the study ($M = 63.89$ minutes, $SD = 22.4$ minutes) at a rate of \$10 per hour. Additionally, a criterion was set so that any individual who took longer than 120 minutes would time out. If a participant timed out, then their results were expunged to mitigate people playing the video and doing another task, thereby not paying attention. No individuals exceeded the time limit.

Sample Size, Power, and Precision

G*power version 3.1.9.4 was used to confirm adequate sample size, (Cohen, 1992; Faul et al., 2007). A test for the minimum sample size needed to detect a medium effect size ($f^2 = .15$) at .80 power ($\alpha = .05$) with 3 parameters in the model was conducted. Results indicated a sample size of $N = 119$ participants was required. This was below this study's analyzed sample of 148 participants.

Measures and Data Sources

Participants were asked to complete two surveys: (a) directly before (pretest) and (b) directly after the training (posttest). Both surveys are a compilation of several research-validated

measures, described below. The pre-survey consisted of 53 questions regarding communication (Quality of Communication Experience Scale; Liu et al., 2010), emotion regulation (Cognitive Emotion Regulation Questionnaire; Garnefski et al., 2001), and personality (BFI-2-Short; Soto & John, 2017). For the current study, only the CERQ and BFI-2-Short were analyzed. At the conclusion of the session, participants were sent the posttest survey consisting of the same 23 questions assessing communication and emotion regulation, as well as questions asking for demographic information (age, gender, and professional field).

When presented with the pretest survey, participants were instructed to think of a recent interpersonal work situation (i.e., where they worked with one or more others) and consider that experience while responding to the pretest items. For the posttest survey, participants were asked to consider the same situation they reflected on for the pretest survey and how, if they had been equipped with the skills learned during the training, if that same situation occurred in the future how they might feel. This difference in pre- and posttest survey items was structured to assist one in contextualizing their responses to a specific experience.

Cognitive Emotion Regulation Questionnaire (CERQ)

The Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski et al., 2001) is a 36-item paper and pencil self-report questionnaire that consists of nine theoretically discrete subscales (factors): positive reappraisal, refocus on planning, self-blame, blaming others, rumination, catastrophizing, putting into perspective, positive refocusing, and acceptance. Additionally, this measure was later developed to create a condensed version of the CERQ (CERQ-short; Garnefski & Kraaij, 2006) for faster patient screenings. The CERQ aims to measure the cognitive strategies that one uses as their style for responding to threatening or stressful life events. Each subscale has four items that refer to the cognitions one has after

distressing life events and/or one's cognitive strategies they use during specific stressful situations. Responses are measured on a 5-point Likert scale that ranges from 1 (*(almost) never*) to 5 (*(almost) always*). Subscale items are added together to obtain a total subscale score, which range from 4-20. Therefore, higher subscale scores indicate stronger use of specific mental tactics compared to others.

The 36-item questionnaire was initially fielded on 547 students from the Netherlands who received the questionnaire while at school. The sample size decreased to 487 students during the retest measurement 5 months later. From the second measurement, on average, the students were (a) 13 years and 11 months old, (b) female (58.9%), (c) attending higher secondary schools (41%), and (d) living in intact family environments (91.6%). Internal consistency for each subscale was presented as Cronbach's alpha values (Clark & Watson, 1995; Cortina, 1993), which ranged from $\alpha = .68$ (blaming others) to $\alpha = .83$ (rumination). Then, the items with the highest "alpha if item deleted" were left out. Two principal component analyses (PCAs) with varimax rotation were respectively completed to determine factor correlations for (a) the first measurement and (b) the second measurement. Seven items were replaced after conducting the first PCA prior to distributing the second CERQ measurement due to the items having eigenvalues > 1 , which explained over 60% of the variance. Communalities (h^2) from the second measurement ranged from .46 to .73; also, all loadings on the a priori factors were greater than .57 for all but 2 items in positive reappraisal. Convergent and discriminant validity was assessed such that the subscales of rumination (.44, .44), self-blame (.31, .23), and catastrophizing (.21, .10) were highly correlated to depression and anxiety ($P < .001$) whereas positive reappraisal (-.16, -.10), positive refocusing (-.17, -.07), and refocus on planning (-.03, .01) were far less related to these outcome measures (Campbell & Fiske, 1959). Additionally, the authors have

reported similarly sufficient psychometric properties (i.e., good factorial validity and reliabilities) for the CERQ during later studies for ages ranging from 18-65 (Garnefski & Kraaij, 2007).

BFI-2-Short

In summary, the Big Five Inventory-2-Short (BFI-2-S; Soto & John, 2017) is a 30-item questionnaire designed to assess five personality domains: extraversion, openness to experience, neuroticism, agreeableness, and conscientious. Each domain consists of three unique facets for a total of 15 facets. For example, openness to experiences is comprised of intellectual curiosity, aesthetic sensitivity, and creative imagination. For each item, participants are asked to rate various statements on a 5-point Likert scale (1 = *Disagree Strongly* to 5 = *Agree Strongly*) with 30 items (6 per domain) being reversely coded.

The BFI-2-S (Soto & John, 2017) was fielded with two samples: an internet sample ($N = 1000$) and student sample ($N = 416$). Alpha reliabilities of the BFI-2-S domain scales averaged .77 and .78 in each sample. The scales' retest reliabilities averaged .76 in the internet sample and .83 in the college sample. This suggests adequate reliability for the short form. In the present study, domain scales averaged .81 (Extraversion, $\alpha = .80$; Agreeableness, $\alpha = .80$; Conscientiousness $\alpha = .85$; Neuroticism $\alpha = .86$; Openness $\alpha = .76$).

CHAPTER III

Analyses

Research Design

This study was a non-experimental, one-group pre-posttest design (Shadish et al., 2002) and was used to test the aforementioned hypotheses.

Analytics Strategy

Prior to conducting analyses to test the study's hypotheses, the data set was prepared and cleaned. The degree of missingness in the data was assessed by using available item analysis (AIA; Parent, 2013) to determine which cases and variables had too much missingness and needed to be removed. In the current study, each survey question was forced entry, meaning that the participant needed to answer the previous question to move forward. Additionally, for participants acquired via Prolific to be compensated for their time, they were required to finish the study in its entirety. While it was initially confirmed that there was no missing data after reviewing the data, due to the original research team providing a sixth option, "Not Applicable", as an available choice for the CERQ item responses, some participants responses were required to be coded as blank (missing). Thus, participants that recorded more than one "Not Applicable" response (i.e., would record as more than 50% missingness when analyzed) were removed when analyzing missingness since variable and case scores could not be determined. Managing missingness is reviewed in-depth in the following section. Also, internal consistency reliability estimates were calculated with Cronbach's alpha for each variable in the study, as well as descriptive statistics and correlations (see Table 1). Lastly, aggregate scales were created for each variable and coded the binary item of gender as 1 (*male*) and 2 (*female*).

Hypothesis 1 was tested conducting paired-samples t-tests between pretest and posttest scores. A paired samples t-test is an inferential statistic used to determine if there is a significant difference between the means of two groups. In the current study, the paired samples t-test were used to determine if the group means increased from pretest to posttest after participating in CM training. Simply, this test analyzed if participation in training resulted in increased perceived emotion regulation scores. Three paired samples t-tests were conducted: (a) both subscales combined as a partial total CERQ score for a composite scale, (b) positive reappraisal as an individual, discrete indicator of perceived emotion regulation, and (c) refocus on planning as an individual, discrete indicator of perceived emotion regulation.

Regarding Hypothesis 2, a hierarchical regression was completed for the composite cognitive emotion regulation scale. Hierarchical regression is a series of Ordinary Least Squares (OLS) regression that allows examination of model variance explained by multiple predictors. It is a series of successive linear regression models, whereby adding each predictor, or set of predictors, separately into the equation, one can examine whether each variable of interest predicts the dependent variable above and beyond the effect of the others. For Hypothesis 2, age and gender (covariates) were controlled for simultaneously by adding them to the first block. Posttest scores were added to the second block to determine that participation in the CoachMotivation training predicted perceived emotion regulation abilities when controlling for age and gender.

Hypothesis 3 was analyzed by conducting a simple linear regression. For this study, the relationship between perceived pretest emotion regulation ability and personality traits was examined using linear regression. A linear regression analyzes the value of an outcome based on

knowledge of a predictor value. Two separate simple regressions were used by regressing pretest scores on extraversion and then neuroticism.

Like Hypothesis 2, separate hierarchical regressions were conducted to analyze Hypothesis 4 for both the composite cognitive emotion regulation scale and each of the two subscales: *positive reappraisal* and *refocus on planning*. The test for Hypothesis 4 examined whether the CoachMotivation training was predictive of perceived emotion regulation ability after controlling for Extraversion and Neuroticism. To analyze Hypothesis 4, Extraversion and Neuroticism (covariates) were controlled for as simultaneous predictors by adding them to the first block. Posttest scores were added to the second block to determine that participation in the CoachMotivation training predicted perceived emotion regulation abilities when controlling for Extraversion and Neuroticism.

Results

All analyses were conducted in RStudio version 2022.02.0+443 "Prairie Trillium" Release for Mac.

Data Preparation and Cleaning

Data was collected from a total of 153 participants through Prolific. All individuals satisfied prescreening criteria. There were no duplicate cases, but some missingness was identified. Therefore, the final sample size consisted of 148 individuals.

Missing Data

Available item analysis (AIA; Parent, 2013) is leveraged for managing missing data. AIA uses available data for analysis and excludes cases with missing data points only for analyses in which the data points would be directly involved. Parent (2013) recommended that AIA is equivalent to more complex methods (e.g., multiple imputation) across several variations of

sample size, magnitude of associations among items, and degree of missingness. Thus, Parent's (2013) suggestions were leveraged to manage missing data. Missing data analyses were conducted with the R packages mice (v. 3.14.0) and Amelia (v. 1.8.0). First, cases that maintained 50% or more missingness were deleted, which resulted in 5 cases being deleted and a new sample size of 148 participants. Of the 148 cases that met the first criteria, 3.3% of cases maintained partially missing data whereas 96.7% of the cases had no data missing. Visual inspection of a missing value patterns chart suggested that the missing patterns resembled haphazard responding. Therefore, it was observed that the missingness structure most resembles the general missingness pattern (Enders, 2010).

Regarding mechanisms of missingness, it could not be concluded that the data was missing completely at random. Considering the general missingness pattern of the data, that the sample sizes were reasonable for the planned analyses, and the degree of missingness was low, AIA (pairwise deletion) was specified at the scale level. Scales were calculated using Parent's recommendation that some reasonable amount of missingness be allowed. Missingness was permitted up to (a) 25% missingness for both the partial total CERQ scale and sub-scales and (b) 20% missingness for all other scales.

Assumption Testing and Preliminary Analyses

Prior to executing this study's primary analyses, assumptions were checked. Paired samples t-test assumptions include: (a) having a continuous dependent variable, (b) independent observations, (c) normal distribution, and (d) no outliers. Regression assumptions include: (a) normally distributed predictors and outcome variables, (b) normal distribution of residuals in the relationships between predictors and outcome variables, (c) linearity between the predictors and outcome variables, and (d) homoscedasticity in the relationships between predictors and

outcome variables.

First, no multivariate outliers were detected when screening the data. The dependent variable, perceived emotion regulation (PER) as measured by the partial total Cognitive Emotion Regulation Questionnaire (CERQ), was continuous and all observations were plausibly independent. The assumptions of normal distribution, nonexistence of outliers, linearity, and homoscedasticity were assessed visually by examining histograms of predictors and outcome variables, plots of residual values (unstandardized residuals were plotted on the y-axis, and the predictor variables on the x-axis), and scatterplots between predictors and outcome variables. Visual inspections revealed sufficiently normal distribution, nonexistence of outliers, and linear relationships. Visual inspections were also used to assess homoscedasticity, which is the spread of the distribution of the errors around the best fitting line across all values of the predictor. Visual inspection indicated insufficient reason to suspect that there were problematic levels of heteroscedasticity between predictors and outcomes. Descriptive statistics, internal consistencies, and significant correlations for the full sample size ($N = 148$) are reported below in Table 1.

Table 1

Means, Standard Deviations, Correlations, and Internal Consistencies

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	28.73	11.26	(-)									
2. Gender	1.48	0.53	-0.05	(-)								
3. CERQ_T1	3.98	0.66	.15	-0.00	(.86)							
4. CERQ_T2	4.42	0.65	-0.05	.08	.59**	(.92)						
5. PRA_T1	3.89	0.81	.08	.00	.89**	.55**	(.86)					
6. PRA_T2	4.46	0.68	-0.05	.10	.57**	.93**	.61**	(.89)				
7. ROP_T1	4.07	0.70	.19*	-0.01	.85**	.48**	.52**	.38**	(.78)			
8. ROP_T2	4.37	0.72	-0.04	.05	.53**	.93**	.43**	.73**	.51**	(.86)		
9. Extraversion	2.85	0.90	.29**	-0.09	.21*	.20*	.19*	.21*	.18*	.16	(.81)	
10. Neuroticism	2.84	1.05	-.40**	.36**	-.28**	-.20*	-.24**	-.20*	-.24**	-.18*	-.51**	(.88)

Note. $N = 148$. Gender is coded 1 = Male, 2 = Female. M and SD are used to represent mean and standard deviation, respectively. Internal consistencies are noted in the diagonal.

* indicates $p < .05$. ** indicates $p < .01$.

Primary Analyses

Hypothesis 1

For Hypothesis 1, it was hypothesized that there would be an increase in perceived emotion regulation (PER) after participating in the CoachMotivation training on the partial total cognitive emotion regulation scale, as well as for each subscale of *positive reappraisal* and *refocus on planning*. Paired samples t-tests were used to test this hypothesis. Hypothesis 1 was supported. The findings indicated that the participation in the CM training resulted in increased PER for the partial total PER scale, $t(147) = 8.98, p < .001, d = .66$. The results also indicated that the participation in the CM training resulted in increased PER for the two PER subscales: *positive reappraisal*, $t(147) = 10.32, p < .001, d = .76$ and *refocus on planning*, $t(147) = 5.17, p < .001, d = .42$. Regarding the Cohen's d effect sizes, $d = .2$ signifies a small effect size, $.5$ indicates a medium effect size, and $.8$ is denotes a large effect size (Cohen, 1992). Thus, the effect sizes for the partial total PER scale, *positive reappraisal* subscale, and *refocus on planning* subscale were medium, medium, and small, respectively.

Hypothesis 2

Hypothesis 2 (H2) proposed that, after controlling for age and gender, participation in the CoachMotivation training would predict one's perceived emotion regulation (PER) ability. Hierarchical regression was used to determine if the CM training predicted change in PER on the posttest based on the partial total cognitive emotion regulation scale. Age, gender, and PER pretest scores were entered as simultaneous predictors in the hierarchical regression. H2 was supported; overall, findings indicated a significant change in PER scores as a function of the CM training, $b = .61, p < .001$. Moreover, results indicated that the effect size for the model was R^2

= .38, suggesting that the CM training explains 35% of the variance in changes in PER after controlling for age and gender (see Table 2).

Table 2

Hierarchical Regression Analysis Summary for the Relationship Between CoachMotivation Training, Age, Gender, and Posttest Perceived Emotion Regulation Ability as the Criterion.

Predictor	<i>b</i>	<i>b</i> 95% CI [LL, UL]	<i>beta</i>	<i>sr</i> ²	<i>sr</i> ² 95% CI [LL, UL]	<i>r</i>	Fit 95% CI [LL, UL]
(Intercept)	2.08**	[1.49, 2.67]					
Age	-0.01*	[-0.02, -0.00]	-0.14	.02	[-.02, .05]	-.05	
Gender	0.09	[-0.07, 0.25]	0.07	.01	[-.01, .02]	.08	
CERQ_T1	0.61**	[0.48, 0.74]	0.62	.37	[.25, .49]	.59**	
							<i>R</i> ² = .379** [.25,.47]

Note. *N* = 148. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *beta* indicates the standardized regression weights. *sr*² represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. * indicates *p* < .05. ** indicates *p* < .01.

Hypothesis 3

Next, Hypothesis 3 posited that Extraversion and Neuroticism would predict pretest perceived emotion regulation (PER) on the partial total CERQ scale. Two separate linear regression analyses were conducted to test the sub-hypotheses. Hypothesis 3 was supported. Results are displayed in Tables 3 and 4 below and revealed the following:

Testing prediction of Extraversion on total cognitive emotion regulation scale.

Hypothesis 3a predicted that Extraversion would positively predict one's perceived ability to emotionally regulate on the pretest. Results indicated a significant positive relationship between Extraversion and pretest PER, *b* = .15, *p* < .05. Moreover, results indicated that the effect size for

the model was $R^2 = .04$, suggesting that Extraversion explains 4% of the variance in pretest PER scores; see Table 3.

Testing prediction of Neuroticism on total cognitive emotion regulation scale.

Hypothesis 3b predicted that Neuroticism would negatively predict one's perceived ability to emotionally regulate on the pretest. Results indicated a significant negative relationship between Neuroticism and pretest PER, $b = -.17$, $p < .001$. Moreover, results indicated that the effect size for the model was $R^2 = .08$, suggesting that Neuroticism explains 8% of the variance in pretest PER scores; see Table 4.

Table 3

Linear Regression Analysis Summary for the Relationship Between Extraversion and Pretest Perceived Emotion Regulation Ability as the Criterion.

Predictor	b	b 95% CI [LL, UL]	β	sr^2	sr^2 95% CI [LL, UL]	r	Fit 95% CI [LL, UL]
(Intercept)	3.54**	[3.20, 3.89]					
Extraversion	0.15*	[0.04, 0.27]	0.21	.04	[.00, .12]	.21*	
							$R^2 = .044*$ [.00,.12]

Note. $N = 148$. A significant b -weight indicates the beta-weight and semi-partial correlation are also significant. b represents unstandardized regression weights. β indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. r represents the zero-order correlation. LL and UL indicate the lower and upper limits of a confidence interval, respectively. * indicates $p < .05$. ** indicates $p < .01$.

Table 4

Linear Regression Analysis Summary for the Relationship Between Neuroticism and Pretest Perceived Emotion Regulation Ability as the Criterion.

Predictor	<i>b</i>	<i>b</i>		<i>beta</i>	<i>sr</i> ²	<i>sr</i> ²		<i>r</i>	Fit	
		95% CI [LL, UL]				95% CI [LL, UL]			95% CI [LL, UL]	
(Intercept)	4.48**	[4.18, 4.77]								
Neuroticism	-0.17**	[-0.27, -0.08]		-0.28	.08	[.02, .17]		-.28**		
									<i>R</i> ² = .079**	
									[.02,.17]	

Note. *N* = 148. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *beta* indicates the standardized regression weights. *sr*² represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. * indicates *p* < .05. ** indicates *p* < .01.

Hypothesis 4

Lastly, Hypothesis 4 proposed that, after controlling for Extraversion and Neuroticism, participation in the CoachMotivation training would predict one's perceived emotion regulation (PER) ability. Hierarchical regression was used to determine if the CM training predicted change in PER on the posttest, looking first at the partial total cognitive emotion regulation scale, and then individually for the two subscales: *positive reappraisal* and *refocus on planning*. Both personality traits and pretest scores of cognitive emotion regulation were entered as simultaneous predictors in the hierarchical regression. Hypothesis 4 and sub-hypotheses were supported. Results are displayed in Tables 5-7 below, which revealed the following:

Testing prediction of personality on total cognitive emotion regulation scale. After controlling for Extraversion and Neuroticism, findings indicated a significant change in PER scores as a function of the CM training, *b* = .57, *p* < .001; see Figure 7. Moreover, results indicated that the effect size for the entire model was *R*² = .36, suggesting that the CM training

explains 35% of the variance in changes in PER upon controlling for these two personality traits (see Table 5).

Testing prediction of personality on positive reappraisal scale. After controlling for Extraversion and Neuroticism, findings indicated a significant change in positive reappraisal subscale scores as a function of the CM training, $b = .50, p < .001$. Moreover, results indicated that the effect size for the entire model was $R^2 = .38$, suggesting that the CM training explains 37% of the variance in changes in PER upon controlling for personality (see Table 6).

Testing prediction of personality on refocus on planning scale. After controlling for Extraversion and Neuroticism, findings indicated a significant change in refocus on planning subscale scores as a function of the CM training, $b = .50, p < .001$. Moreover, results indicated that the effect size for the entire model was $R^2 = .26$, suggesting that the CM training explains 26% of the variance in changes in PER upon controlling for personality (see Table 7).

Table 5

Hierarchical Regression Analysis Summary for the Relationship Between CoachMotivation Training, Personality, and Posttest Perceived Emotion Regulation Ability as the Criterion.

Predictor	b	b		β	sr^2	sr^2		r	Fit	
		95% CI [LL, UL]				95% CI [LL, UL]			95% CI [LL, UL]	
(Intercept)	2.00**	[1.23, 2.77]								
Extraversion	0.05	[-0.06, 0.16]		0.07	.00	[-.01, .02]		.20*		
Neuroticism	-0.00	[-0.10, 0.09]		-0.01	.00	[-.00, .00]		-.20*		
CERQ_T1	0.57**	[0.44, 0.71]		0.58	.31	[.18, .43]		.59**		
									$R^2 = .359^{**}$	
									[.23, .45]	

Note. $N = 148$. A significant b -weight indicates the beta-weight and semi-partial correlation are also significant. b represents unstandardized regression weights. β indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. r represents the zero-order correlation. LL and UL indicate the lower and upper limits of a confidence interval, respectively. * indicates $p < .05$. ** indicates $p < .01$.

Table 6

Hierarchical Regression Analysis Summary for the Relationship Between CoachMotivation Training, Personality, and Posttest Perceived Emotion Regulation Ability as the Criterion – Positive Reappraisal

Predictor	<i>b</i>	<i>b</i>		<i>beta</i>	<i>sr</i> ²	<i>sr</i> ²		<i>r</i>	Fit	
		95% CI				95% CI			95% CI	
		[LL, UL]	[LL, UL]			[LL, UL]	[LL, UL]		[LL, UL]	
(Intercept)	2.36**	[1.66, 3.07]								
Extraversion	0.07	[-0.05, 0.18]		0.09	.01	[-.01, .03]		.21*		
Neuroticism	-0.01	[-0.11, 0.09]		-0.01	.00	[-.00, .00]		-.20*		
PRA_T1	0.50**	[0.38, 0.61]		0.59	.32	[.20, .44]		.61**		
									<i>R</i> ² = .377**	
									[.25,.47]	

Note. *N* = 148. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *beta* indicates the standardized regression weights. *sr*² represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. * indicates *p* < .05. ** indicates *p* < .01.

Table 7

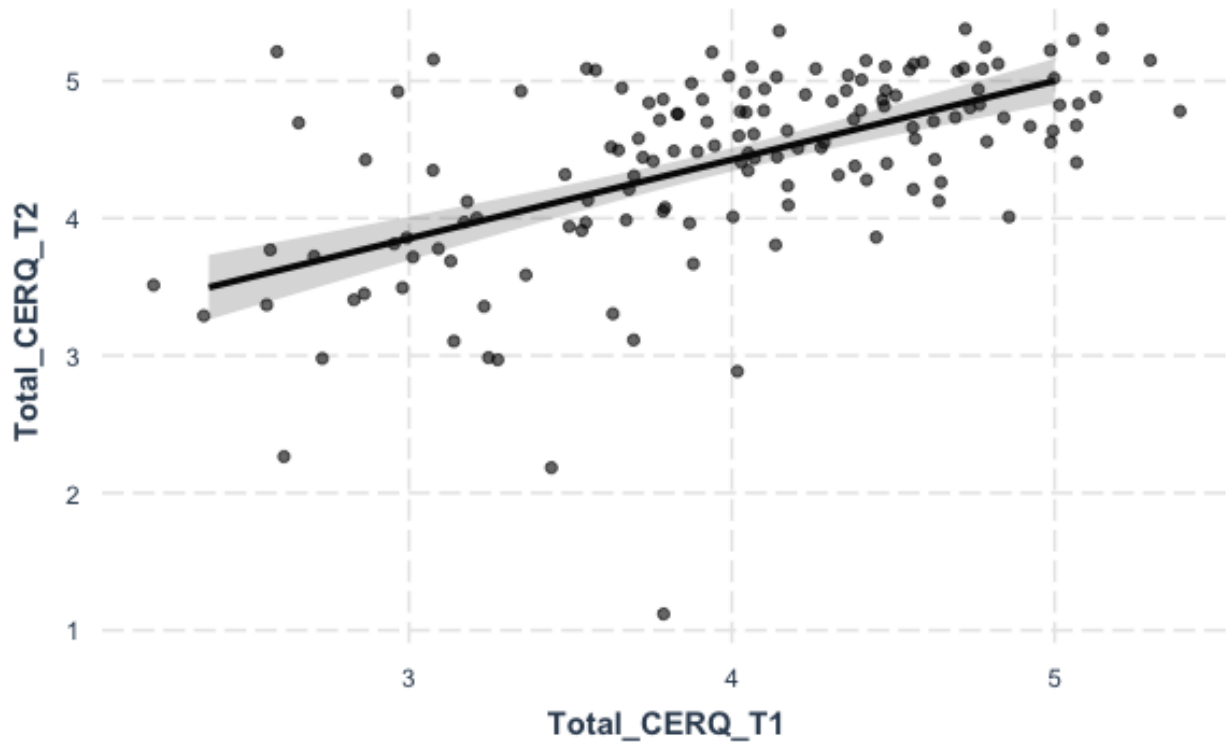
Hierarchical Regression Analysis Summary for the Relationship Between CoachMotivation Training, Personality, and Posttest Perceived Emotion Regulation Ability as the Criterion – Refocus on Planning

Predictor	<i>b</i>	<i>b</i>		<i>beta</i>	<i>sr</i> ²	<i>sr</i> ²		<i>r</i>	Fit	
		95% CI				95% CI			95% CI	
		[LL, UL]	[LL, UL]			[LL, UL]	[LL, UL]		[LL, UL]	
(Intercept)	2.25**	[1.37, 3.13]								
Extraversion	0.04	[-0.09, 0.17]		0.05	.00	[-.01, .02]		.16		
Neuroticism	-0.02	[-0.13, 0.09]		-0.03	.00	[-.01, .01]		-.18*		
ROP_T1	0.50**	[0.36, 0.65]		0.49	.23	[.11, .34]		.51**		
									<i>R</i> ² = .264**	
									[.14, .36]	

Note. *N* = 148. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *beta* indicates the standardized regression weights. *sr*² represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. * indicates *p* < .05. ** indicates *p* < .01.

Figure 7

Visual Inspection of Changes in PER as a Result of the CM Training



CHAPTER IV

Discussion

The purpose of this study was to understand how the application of core practices of Motivational Interviewing (MI) to organizationally based coaching contexts could be a novel way to enhance perceived emotion regulation (PER) ability in the workplace. Through teaching participants CoachMotivation (CM), a recently developed coaching intervention that stems from MI, participants were taught to apply core practices of MI called OARS (i.e., open questions, affirmations, reflections, and summary statements; Miller & Rollnick, 2013), during conversations in the workplace. This study focused on the relationship between CM on PER ability as the focal outcome. The following section summarizes this study's key findings and their implications.

Summary of Findings

CoachMotivation Training and Perceived Emotion Regulation Ability

Hypothesis 1 (H1) examined whether perceived emotion regulation (PER) ability would increase after participating in CoachMotivation (CM) training. This hypothesis was supported, with the CM training being associated with an increase in pre- to posttest scores on the partial total PER scale and each PER subscale (*positive reappraisal* and *refocus on planning*). All changes in scores from pre- to posttest were highly significant with almost medium ($d = .42$) to almost large ($d = .76$) effects. Such results suggest CM training effectiveness in increasing PER, especially given (a) the intervention's feasible delivery (virtual), (b) short duration (45 minutes), and (c) immediacy of the posttest following the training.

While this exploratory study shows a strong connection between CM training and PER, it did not evaluate results extended over time (i.e., follow-up tests to determine reliability of results

to determine how long intervention effects last; Shadish et al., 2002). Additionally, while the study's PER measure was intentionally used to gauge cognitive PER strategies to evaluate one's own perceptions, a lack of behaviorally evaluated PER strategies prevented collecting others' perceptions of a trainee's abilities to emotionally regulate. Expanding PER beyond self-reported cognitions through additional measures would further determine if emotion regulation (ER) ability was enhanced behaviorally or if recorded changes from the CM training are limited to the perceptions of one's ability to regulate their emotions. Another key constraint of this study was that only two out of nine subscales of the Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski et al., 2001) were used to determine participant PER. Therefore, future studies relating MI, CM, or other coaching interventions in relation to ER should include (a) longitudinal studies with multiple posttests, (b) additional ER measures that extend beyond self-reported perceptions (i.e., manager and/or peer pre- and post-evaluations), and (c) utilize the full CERQ to measure participant PER. Regardless, this study's significant results warrant further investigation into the application of CM training to help employees emotionally regulate in the workplace.

Age, Gender, and Perceived Emotion Regulation

Hypothesis 2 (H2) inspected the predictive nature of participating in the CoachMotivation (CM) training increasing participants' perceived emotion regulation (PER) ability after controlling for age and gender. H2 was significantly supported such that the CM training accounted for over a third ($R^2 = .35$) of changes in PER upon controlling for age and gender. The purpose of H2 was to parse out as much variance in the model that might be attributed to the two key demographics (age and gender) that were recorded in the study. Consequently, this finding warrants the need for further conversation and investigation centered around the plausibility that CM training effects can be generalized (i.e., external validity;

Shadish et al., 2002) to broader samples regardless of participant age, gender, and other demographics not surveyed.

Extraversion, Neuroticism, and Perceived Emotion Regulation

Hypothesis 3 (H3) investigated the predictive nature of Extraversion and Neuroticism on one's baseline perceived emotion regulation (PER) based on partial total CERQ pretest scores. H3 was significantly supported; however, while significant, both personality traits only accounted for small changes in pretest scoring: Extraversion = 4% variance and Neuroticism = 8% variance in pretest scores.

Hypothesis 4 (H4) then examined the predictive nature of participating in the CoachMotivation (CM) training increasing participants' perceived emotion regulation (PER) ability after controlling for personality (Extraversion and Neuroticism). H4 was significantly supported. After controlling for both personality traits, the CM training accounted for over a third of changes in both the partial total PER scale ($R^2 = .35$) and the *positive reappraisal* PER subscale ($R^2 = .37$), while also accounting for over a quarter of changes in the *refocus on planning* PER subscale ($R^2 = .26$).

Based on past research regarding Extraversion and Neuroticism and their individual relationships with affect (Larsen & Ketelaar, 1989, 1991; Lucas & Baird, 2004; Rusting & Larsen, 1997) and self-regulation (Gohm, 2003; Gross, 2014; Kokkonen & Pulkkinen, 2001a; 2001b), the results from H3 were slightly surprising given the small changes that personality accounted for in pretest scores. However, since H3 only regressed one predictor (personality trait) on one outcome variable (pretest PER), it is possible that a variety of other participant characteristic variables (i.e., baseline and trait affect; Ng & Diener, 2009) could account for variance in baseline PER ability more than one's personality traits. Given personality's small

effect in pretest scores, H4's results were not surprising beyond finding the same change in posttest scores (i.e., after controlling for covariates, the CM training accounted for over a third of changes in PER scores). While affect, or mood, can be understood similarly to emotions, one's personality traits may not be as significantly related to emotions as they are to affect. Therefore, future research that observes the relationship to coaching and emotion regulation (ER) would do well to also measure affect in relation to PER. Further investigation into the relationship between personality, affect, and ER could provide additional clarity around short-term coaching outcomes being impacted by trait-like (personality and/or demographics) and state-like (affect and/or emotion) differences among participants.

Implications

The primary focus of this exploratory study was to determine if CoachMotivation (CM), a recently developed coaching intervention that stems from Motivational Interviewing (MI), could increase one's perceived emotion regulation (PER) ability. This study's findings contribute to both research and practice topics that pertain to developing one's emotion regulation (ER) abilities. Overall, the significant, positive relationship between CM and PER found in this study suggest that CM may be a useful intervention in increasing ER abilities.

Implications for Practice

As highlighted, emotions influence our behaviors (Al-Shawaf et al., 2016; Aldao et al., 2010; Beall & Tracy, 2017; Gross, 2014; Hareli & Parkinson, 2008). Given the results from this study, organizational coaching outcomes may go beyond broad increases in an employee's ability to self-regulate (i.e., coaching methodology increasing self-regulation through mindfulness and well-being; Hülshager et al., 2013; Jones et al., 2016; Virgili, 2013) and further support specific outcomes related to ER such as (a) decreased counterproductive work behaviors

(CWBs), stress, and negative emotions (Matta et al., 2014), (b) increases in general well-being and coping abilities (Buruck, et al., 2016), and (c) job satisfaction gains attributed to self-regulation (Hülshager et al., 2013). For example, if employees were trained to cognitively reframe negative emotional experiences in the workplace (i.e., positive reappraisal, refocus on planning, putting into perspective; Garnefski et al., 2001) then they could execute adaptive ER strategies and mitigate undesirable work outcomes while also capitalizing on desirable work outcomes. Essentially, employees who use CM training could identify and then benefit from their emotional experiences by turning negative emotions into more positive, developmental opportunities. Thus, since a company is the sum of its people, organizations that desire to increase employee emotion regulation abilities to achieve desirable people outcomes may benefit from leveraging this type of coaching in the workplace.

Second, a practical implication of this study was the impact, or lack thereof, that personality traits of Extraversion and Neuroticism had on perceived emotion regulation (PER) ability. While both personality traits maintained statistically significant effects on pretest PER scores, changes attributed to personality in pretest scores were small. For decades, researchers have debated whether personality is inherently constant or influenced by the environment (Briley & Tucker-Drob, 2014). Moving beyond personality's innately developed versus cross-situationally influenced debate, Briley and Tucker-Drob's (2014) meta-analytical review supports the notion that phenotypic personality (i.e., observable personality characteristics) is (a) genetically influenced across one's life and (b) heavily environmentally influenced by midlife in human development. Plainly, the development and stability of observable personality characteristics continues to relay the message of "it depends" as it is a combination of both state- and trait-like characteristics. Therefore, since personality is variable across time, both researchers

and practitioners should focus on study-dependent personality scores and reliability estimates when including personality in studies. Since the effects of personality were small in this study, it is logical to assume that personality would continue to have little effect on CM training outcomes. Thus, based on this study's results, personality should not limit one's ability to learn from the CM training and experience resulting in general increases in PER as an outcome.

Another practical implication of CM is its application as a coaching intervention as derived from MI's core practices of leveraging OARS (i.e., open questions, affirmations, reflections, and summary statements). Comparatively, Van Quaquebeke and Felps's (2018) research pertaining to leader-follower interactions found follower outcomes when leaders used respectful inquiry to communicate with followers (i.e., open questions paired with active listening). Beyond open questions and active listening, CM purposefully equips participants with targeted skills for asking eliciting open questions, providing genuine affirmations, sharing precise reflections, and summarizing comprehensive statements for a coachee. Additionally, using affirmations (i.e., self-reassurance; Stanley et al., 2012) as a form of regulating emotions has been related to increased athletic performance. By applying CM methodology to dyadic interactions, individuals can expand beyond eliciting responses from others and bolster another's motivational awareness and commitment to change. Simply, if one uses CM during conversations with others, then they can help others more clearly understand what deeply motivates them and then use this insight to change their behaviors that better meet their true motivations. Eliciting motivational awareness is also a primary focus of emotion regulation therapy (ERT; Mennin & Frisco, 2014). Consequently, by leveraging CM training in the workplace, practitioners can aid employee development programming to bolster skills relating to

motivational awareness (i.e., stimulating behavioral change), navigating change, and subsequently regulate one's emotions more adaptively.

Lastly, CM's virtual, self-study nature is especially practical given the workplace's migration to remote hybrid and/or virtual settings because of the Coronavirus (COVID-19)'s global pandemic. Today, organizations are progressing more towards virtual solutions, both internally and externally, that allow for companies to enable both employee and client solutions alike. As a brief, virtual learning and development activity, the CM training provides companies and their people with a quick and easy way to apply employee development with immediate, positive effects (i.e., increased emotion regulation). Again, upon reviewing this study's significant findings after utilizing a brief intervention, significant changes from pre- to posttest PER scores support the notion that emotion regulation training strategies do not require significant resources from organizations to positively impact their personnel. Beyond the study's focal outcome of PER, this training's impacts have yet to explore distal outcomes from increases in PER. Objectively, the CM training's current and prospective benefits are strengthened upon considering how the training is easily implemented and distributed for both organizations and their people.

Implications for Future Research

In addition to this study's practical implications, this exploratory study also provides the foundation for future research related to emotion regulation (ER).

First, future studies could review the relationship between personality and ER, especially in the workplace. While significant, the current study found little change associated between personality, specifically Extraversion and Neuroticism, and one's perceived emotion regulation (PER) ability. However, personality-performance studies in the workplace (i.e., personality and

adaptive performance; Huang et al., 2014) have found that ambition (related to Extraversion) is most predictive of proactive forms of adaptive performance and emotional stability (measured as Adjustment and related to Neuroticism) is most predictive of reactive forms of adaptive performance in workplace contexts as measured by the Hogan Personality Inventory (HPI; Hogan & Hogan, 2007). Since this study only reviewed the predictive nature that personality has on pretest PER ability, future research could test personality as a moderating factor of CM to examine if one's personality traits strengthen or weaken CM training effects on PER.

Relating to personality's possible unmeasured effects on the CM training-PER ability relationship in the workplace, future research should use the full Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski et al., 2001) measure. Similar to Huang et al.'s (2014) review on proactive and reactive forms of adaptive performance strategies in the workplace, the CERQ is grouped by (a) more adaptive cognitive emotion regulation subscale strategies (positive refocusing, positive reappraisal, putting into perspective, refocus on planning, and acceptance) and (b) less adaptive cognitive emotion regulation subscale strategies (rumination, self-blame, blaming others, and catastrophizing). This study only measured two of nine CERQ subscale strategies and both subscales only measure more adaptive cognitive emotion regulation strategies. Primarily, future CM training studies should leverage the full CERQ to replicate the findings between personality and PER. Additionally, subsequent studies should also utilize both the full CERQ and Pulakos et al.'s (2002) adaptive performance measure, as studied in Huang et al.'s (2014) meta-analytical review and evaluate the relationship between both measures and their possible impacts on CM training effectiveness. This could provide new insights into if Extraversion leads to both more adaptive CERQ and adaptive performance tactics and if

Neuroticism relates to both less adaptative CERQ and adaptive performance strategies in relation to PER.

Expanding beyond personality, future research could strengthen the CM training's benefits by also measuring additional emotion regulation (ER) related outcomes in the workplace. Given this study's findings, organizationally based coaching outcomes may impact specific results related to ER such as (a) decreased counterproductive work behaviors (CWBs), stress, and negative emotions (Matta et al., 2014), (b) increases in general well-being and coping abilities (Buruck, et al., 2016), and (c) job satisfaction gains attributed to self-regulation (Hülshager et al., 2013). Based on these organizational outcomes, one might also record such interpersonal benefits when experiencing negative emotional experiences in their personal lives. For example, if the CM training were to also relate to decreased levels of stress and increased levels of coping abilities, then an employee may also experience such desirable outcomes in their relationships outside of the workplace. To better develop CM's utility, subsequent studies should review the aforementioned outcomes related to increases in ER by providing measures that gauge additional outcome variables in both workplace and personal settings, such as CWBs, stress, well-being, and job satisfaction.

From a study design perspective, future studies could consider practical ways to increase the study's validity and reliability. For example, this study only recorded a few demographic variables. To increase the generalizability of the CM training and its outcomes, researchers should record additional demographic information (i.e., race, ethnicity, education, generation) to determine if the training is broadly effective or more helpful for specific participants. Researchers could also increase the study's internal validity by (a) adding a control and/or cohort group to the study and (b) randomly assigning participants to each group (i.e., experimental or

control groups). This would better allow causal inferences to be made if the group that was trained in CM methodology experienced significant increases in ER ability while the group that did not receive the CM training did not exhibit significant increases in ER. Additionally, studies that build off this research could add additional posttest surveys to determine how long the effects of the CM training last over time.

Lastly, as discussed as an implication for practice, using CM methodology during conversations with others can help others to both (a) understand what deeply motivates individuals and (b) use this knowledge to experience desirable behavioral change(s). While leader-follower implications were not a focal consideration in this study, based on the notion that CM methodology can help others change their behaviors to better fulfill their workplace motivations, future research could evaluate the impacts of CM on leader-follower outcomes. For example, leaders' ER ability has been related to the following: (a) deep acting (i.e., the act of bringing oneself to experience their emotionality; Hochschild, 1983), observed positive affect, and leadership effectiveness (Edelman & van Knippenberg, 2017), (b) variances in leadership performance (Torrence & Connelly, 2019), and (c) follower task performance and affect (Vasquez et al., 2020). Specifically for leaders, when investigating the relationship between leadership styles (i.e., transformational, transactional, laissez faire) and leaders' ER strategies and burnout, transformational leaders are more likely to engage in ER strategies that enable them to express how they are truly feeling (deep acting), display behaviors that are viewed as authentic, and reduce burnout as a leader (Arnold et al., 2015). Given the implications between leaders' ER abilities for both leaders and followers alike, future research surrounding CM should evaluate CM training effectiveness in both increasing leader ER abilities and the theoretically related impacts that the CM training may have on followers (i.e., increased follower

performance, increased leadership effectiveness) as an outcome from increasing ER ability in participants of the CM training. Ideally, by relating CM training to distal leadership outcomes, future research could support the notion of the CM training as a robust methodology for increasing both participant ER and leadership abilities, which could subsequently provide organizations and individuals with a robust, feasible training to further increase desirable workplace outcomes.

Limitations

Several limitations should be considered when reviewing this study's results. First and foremost, this study did not apply an experimental design such that causal conclusions could not be made (Shadish et al., 2002). Without causality, the study's findings are inconclusive as to if the CoachMotivation (CM) training resulted in an increase in posttest perceived emotion regulation (PER) scores or if other variables accounted for more influence in the observed results. Fortunately, when considering adverse impacts, if this study's results substantiate false causality (i.e., results reflecting type 1, false positive, error), then, at worst, the training does not aid in an increase in PER and is strictly a waste of time. To remedy this possible limitation, future studies should leverage randomized trials that include a control group to better determine the effects of the CM training on PER.

A second concern with the nature of this study is that it was conducted virtually, which limited the researcher's ability to be present with participants and ensure both (a) participant engagement was visually confirmed and (b) participant questions relating to the study were answered. Similar to organizations using online, self-report measures for trainings to determine participant learning effectiveness, Prolific increases experimental implementation efficacy by providing participants with the same user experience. While this study utilized training

engagement screening tools (i.e., time spent on pretest, training, and posttest) to determine participant engagement, the study's setup did not allow for researchers to ensure full participant engagement throughout the duration of the study.

Lastly, all measures completed in this study were self-report, which could have influenced this study's outcomes (i.e., mono-method bias; Shadish et al., 2002). Simply, when all constructs are measured using the same method, said method becomes part of the construct. Additionally, while the Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski et al., 2001) was utilized based on its practicality for the workplace, only two of nine subscales were measured, which could decrease its ability to fully measure the focal construct of emotion regulation (i.e., construct validity; Shadish et al., 2002). Though using the full CERQ could have increased the CERQ's construct validity, leveraging additional measures of emotion regulation could have further increased this study's validity (i.e., behavioral emotion regulation scales). Emotion regulation is both cognitive and behavioral in nature and the CERQ only measures one's mental strategies for managing emotionality. Future research should consider multiple methods for measuring emotion regulation to fully capture the construct.

Conclusion

Emotions are omnipresent states that react to both internal and environmental signals. Along with emotionality, or how people express their emotions, emotions impact the human experience and how one interacts with the world around them at any given moment. Given the powerful, pervasive nature of emotions, learning how to adaptively regulate one's emotions is imperative for both personal and professional contexts. Emotion regulation (ER) is a set of both automatic and conscious between-individual processes by which people systematically manage the emotions they experience and how they express such emotions (Aldao et al., 2010; Gross,

1998b, 2014; Matta et al., 2014; Thompson, 1994). Overall, ER research continues to support general, desirable outcomes for individuals (i.e., decreased stress, negative emotions, and counterproductive workplace behaviors; Matta et al., 2014).

This exploratory study found that participating in CoachMotivation (CM) training significantly and positively predicted perceived emotion regulation (PER) ability regardless of (a) age and gender and (b) Extraversion and Neuroticism personality traits. Additionally, it supported the positive relationship between brief, virtual training interventions and focal training outcomes in an increasingly virtual workplace environment. By implementing intentional, feasible interventions that target ER in the workplace, such as the CM training, organizations can further enable their people to ease the omnipresent impacts that their emotions can have on their workplace experiences.

References

- Al-Shawaf, L., Conroy-Beam, D., Asao, K., & Buss, D. M. (2016). Human emotions: An evolutionary psychological perspective. *Emotion Review*, 8(2), 173–186.
<https://doi.org/10.1177/1754073914565518>
- Aldao, A., Nolen-Hoeksama, 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>
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24(3), 452-471.
<https://doi.org/10.5465/amr.1999.2202131>
- Arkowitz, H., Westra, H. A., Miller, W. R., & Rollnick, S. (2008). *Motivational interviewing in the treatment of psychological problems*. Guilford.
- Arnold, K. A., Connelly, C. E., Walsh, M. M., & Martin Ginis, K. A. (2015). Leadership styles, emotion regulation, and burnout. *Journal of Occupational Health Psychology*, 20(4), 481-490. <https://doi.org/10.1037/a0039045>
- Beall, A. T., & Tracy, J. L. (2017). Emotivational psychology: How distinct emotions facilitate fundamental motives. *Social and Personal Psychology Compass*, 11(2), 1-17.
<https://doi.org/10.1111/spc3.12303>
- Blanco-Donoso, L. M., Amutio, A., Moreno-Jiménez, B., Yeo-Ayala, M. d. C., Hermosilla, D., & Garrosa, E. (2019). Incivility at work, upset at home? Testing the cross-level moderation effect of emotional dysregulation among female nurses from primary health care. *Scandinavian Journal of Psychology*, 60, 267– 276.
<https://doi.org/10.1111/sjop.12535>

- Bond, F. W., & Bunce, D. (2000). Mediators of change in emotion-focused and problem-focused worksite stress management interventions. *Journal of Occupational Health Psychology, 5*, 156–163. <https://doi.org/10.1037/1076-8998.5.1.156>
- Borkovec, T. D., & Ruscio, A. M. (2001). Psychotherapy for generalized anxiety disorder. *Journal of Clinical Psychiatry, 62*(Suppl. 11), 37-42.
- Bozer, G., & Jones, R. (2018). Understanding the factors that determine workplace coaching effectiveness: A systematic literature review. *European Journal of Work and Organizational Psychology, 27*(3), 342-361.
<http://dx.doi.org/10.1080/1359432X.2018.1446946>
- Briley, D. A., & Tucker-Drob, E. M. (2014). Genetic and environmental continuity in personality development: A meta-analysis. *Psychological bulletin, 140*(5), 1303–1331.
<https://doi.org/10.1037/a0037091>
- Britt, E., Sawatzky, R., & Swibaker, K. (2018). Motivational interviewing to promote employment. *Journal of Employment Counseling, 55*(4), 176-189.
<https://doi.org/10.1002/joec.12097>
- Buruck, G., Dörfel, D., Kugler, J., & Brom, S. S. (2016). Enhancing well-being at work: The role of emotion regulation skills as personal resources. *Journal of Occupational Health Psychology, 21*(4), 480–493. <https://doi.org/10.1037/ocp0000023>
- Burke, B. L., Arkowitz, H., & Menchola, M. (2003). The efficacy of motivational interviewing: A meta-analysis of controlled clinical trials. *Journal of Consulting and Clinical Psychology, 71*(5), 843-861. <https://doi.org/10.1037/0022-006X.71.5.843>

- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56(2), 81-105.
<https://doi.org/10.1037/h0046016>
- Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, 7(3), 309-319. <https://doi.org/10.1037/1040-3590.7.3.309>
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.
<https://doi.org/10.1037/0033-2909.112.1.155>
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78(1), 98-104. <http://doi.org/10.1037/0021-9010.78.1.98>
- Costa, P. T., & McCrae, R. R. (1985). *The NEO personality inventory*. Psychological Assessment Resources.
- Davies, M., Stankov, L., & Roberts, R.D. (1998). Emotional intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology*, 75, 989–1015.
<https://doi.org/10.1037/0022-3514.75.4.989>
- Davis, P. A., & Davis, L. (2016). Emotions and emotion regulation in coaching. In P. A. Davis (Ed.), *Sports and athletics preparation, performance, and psychology. The psychology of effective coaching and management* (pp. 285-306). Nova Science Publishers.
- Edelman, P. J., & van Knippenberg, D. (2017). Training leader emotion regulation and leadership effectiveness. *Journal of Business and Psychology*, 32(6), 747-757.
<https://doi.org/10.1007/s10869-016-9471-8>
- Enders, C.K. (2010). *Applied missing data analysis*. Guilford Press.

- Endrejat, P. C., Baumgarten, F., & Kauffeld, S. (2017). When theory meets practice: Combining Lewin's ideas about change with motivational interviewing to increase energy-saving behaviours within organizations. *Journal of Change Management*, *17*(2), 101-120.
<https://doi.org/10.1080/14697017.2017.1299372>
- Eysenck, H.J. (1967). *The biological basis of personality*. C.C. Thomas.
- Eysenck, H.J., & Eysenck, M.W. (1985). *Personality and individual differences*. Plenum Press.
- Faul, F., Erdfelder, E., Lang, A., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175-191. <https://doi.org/10.3758/BF03193146>
- Frayne, C. A., & Latham, G. P. (1987). Application of social learning theory to employee self-management of attendance. *Journal of Applied Psychology*, *72*, 387-392.
<https://doi.org/10.1037/0021-9010.72.3.387>
- Freud, S. (1959). Inhibitions, symptoms and anxiety. In J. Strachey & A. Strachey (Eds.), *The standard edition of the complete psychological works of Sigmund Freud* (pp. 163-166). Hogarth Press.
- Garnefski, N., & Kraaij, V. (2006). Cognitive emotion regulation questionnaire - development of a short 18-item version (CERQ-short). *Personality and Individual Differences*, *41*(6), 1045-1053. <http://dx.doi.org/10.1016/j.paid.2006.04.010>
- Garnefski, N., & Kraaij, V. (2007). The Cognitive Emotion Regulation Questionnaire. Psychometric features and prospective relationships with depression and anxiety in adults. *European Journal of Psychological Assessment*, *23*(3), 141-149.
<https://doi.org/10.1027/1015-5759.23.3.141>

- Garnefski, N., Kraaij, V., & Spinhoven, P. (2001). Negative life events, cognitive emotion regulation and emotional problems. *Personality and Individual Differences, 30*(8), 1311-1327. [https://doi.org/10.1016/S0191-8869\(00\)00113-6](https://doi.org/10.1016/S0191-8869(00)00113-6)
- Gohm, C.L. (2003). Mood regulation and emotional intelligence: Individual differences. *Journal of Personality and Social Psychology, 84*, 594–607. <https://doi.org/10.1037/0022-3514.84.3.594>
- Gratz, K. L. & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment, 26*(1), 41–54. <https://doi.org/10.1023/B:JOBA.0000007455.08539.94>
- Grimolizzi-Jensen, C. J. (2018). Organizational change: Effect of motivational interviewing on readiness to change. *Journal of Change Management, 18*(1), 54-69. <https://doi.org/10.1080/14697017.2017.1349162>
- Gross, J. J. (1998a). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology, 74*(1), 224–237. <https://doi.org/10.1037/0022-3514.74.1.224>
- Gross, J. J. (1998b). The emerging field of emotion regulation: An integrative review. *Review of General Psychology, 2*(3), 271-299. <https://doi.org/10.1037/1089-2680.2.3.271>
- Gross, J. J. (2014). *Handbook of emotion regulation (2nd ed.)*. Guilford Press.
- 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>

Gross, J. J., Sutton, S. K., & Ketelaar, T. (1998). Relations between affect and personality:

Support for the affect-level and affective-reactivity views. *Personality and Social*

Psychology Bulletin, 24, 279–288. <https://doi.org/10.1177/0146167298243005>

Hareli, S., & Parkinson, B. (2008). What's social about social emotions?. *Journal for the Theory*

of Social Behaviour, 38(2), 131-156. <https://doi.org/10.1111/j.1468-5914.2008.00363.x>

Hettema, J., Steele, J., & Miller, W. R. (2005). Motivational interviewing. *Annual Review of*

Clinical Psychology, 1, 91-111. <https://doi.org/10.1146/annurev.clinpsy.1.102803.143833>

Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, 52(12), 1280–1300.

<https://doi.org/10.1037/0003-066X.52.12.1280>

Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. University

of California Press.

Hogan, R., & Hogan, J. (2007). *Hogan Personality Inventory manual* (3rd ed.). Tulsa, OK:

Hogan Assessment Systems.

Huang, J. L., Ryan, A. M., Zabel, K. L., & Palmer, A. (2014). Personality and adaptive

performance at work: A meta-analytic investigation. *Journal of Applied Psychology*,

99(1), 162–179. <https://doi.org/10.1037/a0034285>

Hülshager, U. R., Alberts, H. J. E. M., Feinholdt, A., & Lang, J. W. B. (2013). Benefits of

mindfulness at work: The role of mindfulness in emotion regulation, emotional

exhaustion, and job satisfaction. *Journal of Applied Psychology*, 98(2), 310–325.

<https://doi.org/10.1037/a0031313>

Hutton, S., & Gates, D. (2008). Workplace incivility and productivity losses among direct care

staff. *AAOHN Journal*, 56(4), 168–175. <https://doi.org/10.392808910162-20080401-01>

- Jones, R. J., Woods, S. A., & Guillaume, Y. R. F. (2016). The effectiveness of workplace coaching: A meta-analysis of learning and performance outcomes from coaching. *Journal of Occupational and Organizational Psychology*, *89*(2), 249-277.
<https://doi.org/10.1111/joop.12119>
- Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: An integrative meta-analysis and cascading model. *Journal of Applied Psychology*, *95*(1), 54–78.
<https://doi.org/10.1037/a0017286>
- Klonek, F. E., Paulsen, H. F. K., & Kauffeld, S. (2015). They meet, they talk...but nothing changes: Meetings as a focal context for studying change processes in organizations. In *The Cambridge handbook of meeting science* (pp. 413-439). Cambridge University Press. <https://doi.org/10.1017/CBO9781107589735.018>
- Klonek, F. E., Wunderlich, E., Spurk, D., & Kauffeld, S. (2016). Career counseling meets motivational interviewing: A sequential analysis of dynamic counselor-client interactions. *Journal of Vocational Behavior*, *94*, 28-38.
<https://doi.org/10.1016/j.jvb.2016.01.008>
- Kokkonen, M., & Pulkkinen, L. (2001a). Examination of the paths between personality, current mood, its evaluation, and emotion regulation. *European Journal of Personality*, *15*, 83–104. <https://doi.org/10.1002/per.397>
- Kokkonen, M., & Pulkkinen, L. (2001b). Extraversion and neuroticism as antecedents of emotion regulation and dysregulation in adulthood. *European Journal of Personality*, *15*, 407–424. <https://doi.org/10.1002/per.425>
- Lamers, S. M. A., Bolier, L., Westerhof, G. J., Smit, F., & Bohlmeijer, E. T. (2012). The impact of emotional well-being on long-term recovery and survival in physical illness: A meta-

analysis. *Journal of Behavioral Medicine*, 35(5), 538-547.

<https://doi.org/10.1007/s10865-011-9379-8>

Lanaj, K., Chang, C.-H. “Daisy,” & Johnson, R. E. (2012). Regulatory focus and work-related outcomes: A review and meta-analysis. *Psychological Bulletin*, 138(5), 998–1034.

<https://doi.org/10.1037/a0027723>

Larsen, R.J., & Ketelaar, T. (1989). Extraversion, neuroticism, and susceptibility to positive and negative mood induction procedures. *Personality and Individual Differences*, 10, 1221-

1228. [https://doi.org/10.1016/0191-8869\(89\)90233-X](https://doi.org/10.1016/0191-8869(89)90233-X)

Larsen, R.J., & Ketelaar, T. (1991). Personality and susceptibility to positive and negative emotional states. *Journal of Personality and Social Psychology*, 61, 132–140.

<https://doi.org/10.1037/0022-3514.61.1.132>

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.

Liberty Mutual. (2004). Liberty Mutual workplace safety index: The direct costs and leading causes of workplace injuries. Boston, MA: Author.

Linehan, M. M., Bohus, M., & Lynch, T. R. (2007). Dialectical behavior therapy for pervasive emotion dysregulation: Theoretical and practical underpinnings. In: J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 581–605). Guilford Press.

Liu, L. A., Chua, C. H., & Stahl, G. K. (2010). Quality of communication experience: Definition, measurement, and implications for intercultural negotiations. *Journal of Applied*

Psychology, 95(3), 469-487. <https://doi.org/10.1037/a0019094>

Lucas, R. E., & Baird, B. M. (2004). Extraversion and emotional reactivity. *Journal of*

Personality and Social Psychology, 86(3), 473–485. <https://doi.org/10.1037/0022-3514.86.3.473>

- Lundahl, B., & Burke, B. L. (2009). The effectiveness and applicability of motivational interviewing: A practice-friendly review of four meta-analyses. *Journal of Clinical Psychology: In Session*, 65, 1232-1245. <https://doi.org/10.1002/jclp.20638>
- Lundahl, B. W., Kunz, C., Brownell, C., Tollefson, D., & Burke, B. L. (2010). A meta-analysis of motivational interviewing: Twenty-five years of empirical studies. *Research on social work practice*, 20(2), 137-160. <https://doi.org/10.1177/1049731509347850>
- Magill, M., Gaume, J., Apodaca, T. R., Walthers, J., Mastroleo, N. R., Borsari, B., & Longabaugh, R. (2014). The technical hypothesis of motivational interviewing: A meta-analysis of MI's key causal model. *Journal of Consulting and Clinical Psychology*, 82(6), 973-983. <https://doi.org/10.1037/a0036833>
- Matta, F. K., Erol, K. H. T., Johnson, R. E., & Biçaksiz, P. (2014). Significant work events and counterproductive work behavior: The role of fairness, emotions, and emotion regulation. *Journal of Organizational Behavior*, 35(7), 920-944. <https://doi.org/10.1002/job.1934>
- McCrae, R. R. (2002). NEO-PI-R data from 36 cultures. In R. McCrae & J. Allik (Eds.), *The five-factor model of personality across cultures* (pp. 105-125). Springer.
- Mennin, D. S. (2004). Emotion regulation therapy for generalized anxiety disorder. *Clinical Psychology & Psychotherapy*, 11(1), 17-29. <https://doi.org/10.1002/cpp.389>
- Mennin, D. S., & Farach, F. (2007). Emotion and evolving treatments for adult psychopathology. *Clinical Psychology: Science and Practice*, 14(4), 329-352. <https://doi.org/10.1111/j.1468-2850.2007.00094.x>
- Mennin, D. S., & Fresco, D. M. (2009). Emotion regulation as an integrative framework for understanding and treating psychopathology. In A. M. Kring & D. M. Sloan (Eds.),

- Emotion regulation in psychopathology: A transdiagnostic approach to etiology and treatment* (pp. 356-379). Guilford Press.
- Mennin, D. S., & Fresco, D. M. (2014). Emotion regulation therapy. In: J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 469–490). Guilford Press.
- Miller, W. R., & Rollnick, S. (1991). *Motivational Interviewing: Preparing people to change addictive behavior*. Guilford Press.
- Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change*. Guilford Press.
- Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). Guilford Press.
- Morgeson, F. P., Garza, A. S., & Campion, M. A. (2013). Work design. In I. B. Weiner (Ed.), *Handbook of psychology*, (2nd ed.), 525-559. Hoboken, NJ: John Wiley & Sons.
- Morris, A. S., Criss, M. M., Silk, J. S., & Houtberg, B. J. (2017), The impact of parenting on emotion regulation during childhood and adolescence. *Child Development Perspectives*, 11(4), 233-238. <https://doi.org/10.1111/cdep.12238>
- Ng, W., & Diener, E. (2009). Personality differences in emotions: Does emotion regulation play a role? *Journal of Individual Differences*, 30(2), 100-106. <https://doi.org/10.1027/1614-0001.30.2.100>
- Palan, S., & Schitter, C. (2018). Prolific.ac—A subject pool for online experiments. *Journal of Behavioral and Experimental Finance*, 17, 22-27. <https://doi-org.ezproxy.spu.edu/10.1016/j.jbef.2017.12.004>

- Paolacci, G., & Chandler, J. (2014). Inside the turk: Understanding mechanical turk as a participant pool. *Current Directions in Psychological Science*, 23, 184–188.
<https://doi.org/10.1177/0963721414531598>
- Parent, M. (2013). Handling item-level missing data: Simpler is just as good. *The Counseling Psychologist*, 41(4) 568-600. <https://doi.org/10.1177/0011000012445176>
- Pearson, C., & Porath, C. (2009). *The cost of bad behavior: How incivility is damaging your business and what to do about it*. New York, NY: Penguin.
- Petrides, K. V. (2009). Psychometric properties of the Trait Emotional Intelligence Questionnaire. In C. Stough, D. H. Saklofske, & J. D. Parker (eds.), *Advances in the assessment of emotional intelligence*. New York, NY: Springer.
- Porath, C. L., & Pearson C. (2013). The price of incivility. *Harvard Business Review*, 91(1–2), 115–121. Retrieved May 3, 2020 from Business Source Complete database.
- Pulakos, E. D., Schmitt, N., Dorsey, D. W., Arad, S., Hedge, J. W., & Borman, W. C. (2002). Predicting adaptive performance: Further tests of a model of adaptability. *Human Performance*, 15, 299–324. https://doi.org/10.1207/S15327043HUP1504_01
- Renna, M. E., Quintero, J. M., Fresco, D. M., & Mennin, D. S. (2017). Emotion regulation therapy: A mechanism-targeted treatment for disorders of distress. *Frontiers in Psychology*, 8(98), (1-14). <https://doi.org/10.3389/fpsyg.2017.00098>
- Rogers, C. R. (1951). *Client-centered therapy*. Houghton-Mifflin.
- Rusting, C. L., & Larsen, R. J. (1997). Extraversion, neuroticism, and susceptibility to positive and negative affect: A test of two theoretical models. *Personality and individual differences*, 22(5), 607-612. [https://doi.org/10.1016/S0191-8869\(96\)00246-2](https://doi.org/10.1016/S0191-8869(96)00246-2)

Scheibe, S., & Zacher, H. (2013). A lifespan perspective on emotion regulation, stress, and well-being in the workplace. *The Role of Emotion and Emotion Regulation in Job Stress and Well Being Research in Occupational Stress and Well Being*, 11, 163-193.

[https://doi.org/10.1108/S1479-3555\(2013\)0000011010](https://doi.org/10.1108/S1479-3555(2013)0000011010)

Schmitt, D. P., Allik, J., McCrae, R. R., & Benet-Martínez, V. (2007). The geographic distribution of Big Five personality traits patterns and profiles of human self-description across 56 nations. *Journal of Cross-Cultural Psychology*, 38, 173-212. [https://doi-](https://doi.org/10.1177/0022022106297299)

[org.10.1177/0022022106297299](https://doi.org/10.1177/0022022106297299)

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton, Mifflin and Company.

Stanley, D. M., Lane, A. M., Beedie, C. J., Friesen, A. P., & Devonport, T. J. (2012). Emotion regulation strategies used in the hour before running. *International Journal of Sport and Exercise Psychology*, 10(3), 159-171. <https://doi.org/10.1080/1612197X.2012.671910>

Soto, C. J., & John, O. P. (2017). Short and extra-short forms of the big five inventory – 2: The BFI-2-S- and the BFI-2-XS. *Journal of Research in Personality*, 68, 69-81.

<https://doi.org/10.1016/j.jrp.2017.02.004>

Theeboom, T., Beersma, B., & van Vianen, A. E. M. (2014). Does coaching work? A meta-analysis on the effects of coaching on individual level outcomes in an organizational context. *The Journal of Positive Psychology*, 9(1), 1-18.

<http://dx.doi.org/10.1080/17439760.2013.837499>

Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. *Monographs of the Society for Research in Child Development*, 59, 25–52.

<https://doi.org/10.1111/j.1540-5834.1994.tb01276.x>

- Torrence, B. S., & Connelly, S. (2019). Emotion regulation tendencies and leadership performance: an examination of cognitive and behavioral regulation strategies. *Frontiers in Psychology, 10*(1486) 1-11. <https://doi.org/10.3389/fpsyg.2019.01486>
- Tsai, W.-C., Chen, C.-C., & Liu, H.-L. (2007). Test of a model linking employee positive moods and task performance. *Journal of Applied Psychology, 92*(6), 1570–1583. <https://doi.org/10.1037/0021-9010.92.6.1570>
- Van Quaquebeke, N., & Felps, W. (2018). Respectful inquiry: A motivational account of leading through asking questions and listening. *Academy of Management Review, 43*(1), 5–27. <https://doi.org/10.5465/amr.2014.0537>
- Vasquez, C. A., Niven, K., & Madrid, H. P. (2020). Leader interpersonal emotion regulation and follower performance. *Journal of Personnel Psychology, 19*(2), 97-101. <https://doi.org/10.1027/1866-5888/a000249>
- Virgili, M. (2013). Mindfulness-based coaching: Conceptualisation, supporting evidence and emerging applications. *International Coaching Psychology Review, 8*(2), 40-57.
- Weiss, N. H., Sullivan, T. P., & Tull, M. T. (2015). Explicating the role of emotion dysregulation in risky behaviors: A review and synthesis of the literature with directions for future research and clinical practice. *Current Opinion in Psychology, 3*, 22–29. <https://doi.org/10.1016/j.copsyc.2015.01.013>
- Wessling, K. S., Huber, J., & Netzer, O. (2017). MTurk character misrepresentation: Assessment and solutions. *Journal of Consumer Research, 44*, 211-230. <https://doi.org/10.1093/jcr/ucx053>