Interpersonal emotion regulation while at work: a test of differences

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Abstract: This study utilised the interpersonal emotion regulation questionnaire (IERQ) to examine the work environment by determining the interpersonal emotion regulation (IER) of employee's differences based upon employee and supervisor roles. A quantitative study design, utilising social medians was employed to sample 122 managers and non-mangers (n = 122). Testing analysis utilised ordinal regression and ANOVA analyses. The soothing subscale of IERQ was the only significant difference. The implications of the findings conceivably relate to the trainings of employees. The study points to the need for longitudinal studies of interpersonal emotion regulation in the workplace. This study has important implications for the business sector, as there is a lack of literature discerning the importance of the supervisory role with regard to the need for individuals in supervisory roles to regulate their own emotions as well as those of their subordinates. The IERQ has been utilised clinically to study patients. The study is the first, however, that the author is aware of, to utilise the IERQ to test organisational employees' intrinsic and extrinsic interpersonal emotional regulation.

Keywords: interpersonal emotion regulation questionnaire; IERQ; emotional intelligence; emotion regulation; emotional labour; group differences; intrinsic; extrinsic.

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1 Introduction

Corporate environments are natural social constructs where employees connect their emotions to work performance during social interactions (Antoniou et al., 2009; Barsade and O'Neill, 2016; Cherness and Goleman, 1998; Conway, 2011). A key goal of

corporate environments is to optimise employee performance. Cohen and Wills' (1985) social support theory indicates that there is a positive effect when support is given to employees in the workplace. Emotion regulation among employees occurs in the workplace, and emotion regulation can be useful for the organisation when there is an effective management of those emotions (Grandey, 2000). Emotion management is the deliberate and active modulation of emotions to maintain a specific emotional state (Gross, 2002; Koole, 2009; Mayer et al., 2008; Reeck et al., 2016). Specifically, interpersonal emotion regulation (IER) is an intrapersonal and interpersonal strategy used in the modulation of emotional state (Hofmann, 2014; Reeck et al., 2016; Zaki and Williams, 2013). IER occurs through behaviours of social interaction (Côté, 2014; Niven et al., 2015; Reeck et al., 2016; Zaki and Williams, 2013). IER has two distinct levels:

- 1 intrinsic emotion regulation the solicitation of others to help with modulating of one's own emotions
- 2 extrinsic emotion regulation the deliberate attempts to manage the emotions of others (Hofmann et al., 2016; Niven et al., 2009, 2011; Zaki and Williams, 2013).

Intrapersonal emotion regulation also can occur through behaviours of social interaction (Kappas, 2013; Zaki and Williams, 2013). Intrapersonal emotion regulation, as a strategy, is when a person intentionally solicits another person to assist them with regulating their emotions. The individual's need for social interaction with the intent to regulate one's own emotion is driven by the person's goal to modulate their emotional experiences through decreasing or increasing emotional experiences, using another person to assist them as a way to help them in maintaining or changing their emotional state (Reeck et al., 2016; Zaki and Williams, 2013). According to Hofmann et al. (2016) and Zaki and Williams (2013), emotion regulation through social interaction can also be unintentional. Unintentional management of one's own emotional experiences through the support of others occurs in social interactions when an individual helps a person with emotion regulation of their feelings and experiences. Even if a person does not solicit or knowingly seek to regulate their feelings through social interactions, regulation still occurs. The approaches to emotion regulation, whether interpersonal or intrapersonal, if utilised in social interactions, will likely will be a reappraisal of the emotional experiences for determination of meaning and to obtain a regulated emotional state (Zaki and Williams, 2013; Webb et al., 2012).

Researchers have found that intrapersonal emotion regulation of self at work can lead to better-quality communication, physiological and psychological well-being and positive work performance (Grandey et al., 2013; Lawrence et al., 2011; Webb et al., 2012). Depending upon the selected emotion regulatory strategy, intrapersonal or interpersonal has been linked to higher quality and satisfaction in customer services (Côté et al., 2010a), positive relationships with colleagues (Niven et al., 2012), empathy from leaders with positive perceptions of intent (Kellett et al., 2006), and behaviours by leaders that show concern for others that benefits the person who receives the emotional assistance with achieving their goals (Niven et al., 2013). Studies have reported that employees who regulate their own emotions while regulating others' emotions also can maintain a high quality of work performance (Caspi, 2000; Chughtai and Buckley, 2008; Kahn, 1990; Little et al., 2016). Niven et al.'s (2015) description of IER is "the deliberate influence by

one person to assist with the management of another person's feelings and experiences" (p.1452). IER from this perspective is the active shaping of the emotions of others. Literature is emerging regarding IER, but is limited (Côté et al., 2010a; Gable and Ries, 2010; Main et al., 2017; Netzer et al., 2015; Reeck et al., 2016; William et al., 2018). There are, to date, no work-related models for IER (Troth et al., 2017). The author of this study is not aware of any IER work-related models at the time of this article completion.

1.1 Work-related emotion regulation processes

Work-related emotion regulation has been conceptualised as relying on three models primarily for work settings (Troth et al., 2017). These three work models are:

- 1 the emotion regulation process model (Gross and John, 2003)
- 2 emotional labour (Grandey et al., 2013; Lawrence et al., 2011)
- 3 emotional intelligence (Mayer and Salovey, 1997).

Côté (2005) developed a social interaction model that has been used as a framework for examining interpersonal emotion management between individuals in the work environment. Côté's (2005) social interaction model is not as notable and studied as the work-related models previously described.

Emotion intelligence is the capacity of awareness of one's own and others' emotions with the ability to control both self and others' emotions (Mayer and Salovey, 1997). Emotional intelligence has been notably described and studied from a four-branch model. The branches are:

- 1 the ability to perceive emotion expression
- 2 the ability to facilitate the use of emotion
- 3 the ability to understand emotion
- 4 the ability to control emotion in self and others (Mayer and Salovey, 1997).

Emotional intelligence has a positive link to business outcomes (Joseph et al., 2015; O'Boyle et al., 2010). Emotional intelligence, whether studied from the emotional intelligence abilities model (Mayer and Salovey, 1997) or from a mixed method of emotional intelligence model (Boyatzis et al., 2000; Goleman, 1998), has been identified as a factor for success in organisational outcomes (Joseph et al., 2015; Wong and Law, 2002). And, according to Joseph et al. (2015) and Wong and Law (2002), emotional intelligence is a useful predictive measure for determining employees' success. Emotional intelligence is also used to better understand employees' job performance and leader effectiveness (Côté, 2014; Humphrey et al., 2016). Emotion regulation ability within the emotional intelligence framework, a specific branch of emotional intelligence, has been proven to have specific business benefit (Côté, 2014; Grandey, 2000; Humphrey et al., 2016; Menges and Kilduff, 2015; Peña-Sarrionandia et al., 2015; Wong and Law, 2002). The emotion regulation ability branch has been linked to positive outcomes associated with its usage (Peña-Sarrionandia et al., 2015), business benefit (Côté, 2014; Grandey, 2000; Humphrey et al., 2016; Menges and Kilduff, 2015; Peña-Sarrionandia et al., 2015; Wong and Law, 2002), and better relationship associations (Kafetsios et al., 2011; Peña-Sarrionandia et al., 2015).

Emotional intelligence is an inseparable positive link to work-related emotion regulation (Côté, 2014; Grandey et al., 2007; Gross, 2002; Peña-Sarrionandia et al., 2015; Thiel et al., 2015; Troth et al., 2017). Specifically, work-related emotion regulation is a different construct than emotional intelligence or emotion regulation ability. Emotional intelligence and emotion regulation ability only describes an intrapersonal skills approach for managing emotions. Emotional intelligence, emotion regulation ability, regulates self by having a sense of self-awareness and recognising the emotion of both self and others. It is through the recognition that the regulator has regarding another's emotional needs. The regulators are able to control self-emotions as well as other's emotions in the emotional management process because of their reactions to the emotional needs of the other person (Mayer and Salovey, 1997; Wong and Law, 2002). From this operational working, meanings have been presented in emotional intelligence models for which there have been studies supporting this branch of emotional intelligence (Bar-on, 2006; Mayer and Salovey, 1997; Mayer et al., 2008; Wong and Law, 2002). Emotional intelligence, emotion regulation ability, is not described as an intrapersonal skill useful as a strategy for managing one's own emotions for benefiting the self, rather it has been described and studied for the explicit purpose of benefiting another. Emotional intelligence is much more about awareness and acting on that awareness to benefit the person being regulated, rather than the person regulating another's emotion.

Emotional labour, as a work-related model, has been used and is popular for its value for regulating customers' emotion to drive business results (Hochschild, 1983; Grandey, 2000). Emotional labour as a construct has been studied primarily from the aspect of employees upholding organisational rules of emotional displayed behaviours that align with an organisation's rules and procedures for managing customer interactions (Bolton, 2005; Grandey, 2000; Grandey et al., 2013). Emotional labour is an interpersonal process for engaging and managing the emotions of others. There are two identified strategies for regulating emotions under this model. According to Grandey (2000), these two primary strategies are 'surface acting' and 'deep acting'. Surface acting is the adjustment of feelings and expressions to conform to rules or organisational desires. Feelings may be inconsistent with genuine feelings; emotional dissonance (Hochschild, 1983; Grandey, 2000; Zapf, 2002) is when there are emotions displayed that do not match a person's true feelings. The second strategy is deep acting genuine expression of feelings and emotions. These two strategies, surface acting and deep acting, have primarily been utilised in the context of employees regulating customers' emotions. To regulate the customers' emotions the customers' are initiated and driven through intrinsic motivation that is a response-dependent process based upon the clue's the employee receives from their customers through their work interactions. The employees react to the customers' behaviours. Emotional labour regulation, as a construct, is an interpersonal-focused strategy for emotion regulation of another's emotions. Emotional labour regulation is not an intrapersonal strategy that focuses on managing self-emotion for the self-health and self-well-being or the solicitation of others to assist with the management of personal emotion. Emotional labour regulation is used for organisational purposes to maintain rules, guidelines, policies, structures and organisational desires (Hochschild, 1983; Bolton, 2005; Grandey, 2000; Grandey et al., 2013).

Emotion regulation, as described by Gross (1998, 2002) and Gross et al. (2006) as emotion regulation process model, has similar business benefits similar to those of emotional intelligence (Gross, 2002; Kobylinska and Kusev, 2019; Torrence and Connelly, 2019). Gross' (1998, 2002) and Gross et al. 2006) emotion regulation process model describes a distinct construct for emotion regulation. Emotion regulation is the intrapersonal and interpersonal regulation self-awareness and management for one's own emotions through situation behaviours and solicitation of others (Gross, 1998, 2002). Emotion regulation utilises multiple strategies for management of emotions. These strategies distinguish emotion regulation as a construct from emotional intelligence or emotion regulation ability. The process of emotion regulation refers to the process by which individuals influence the kind of emotions they have, when they have these emotions, and how they express these emotions (Gross, 2002). A widely used and adopted emotion regulation model in the workplace is Gross' (1998) emotion regulation process model (Gross and John, 2003), a highly studied emotion regulation model (Braunstein et al., 2017; Jarrell and Lajoie, 2017; Troth et al., 2017). The emotion regulation process model is a framework that can be utilised for understanding emotion regulation and how coping occurs in situations. Emotion regulation has sequential systems responses and associated regulation strategies. Further, Gross' (1998) process model of emotion regulation mentions the solicitation of support for emotional management as a strategy, but does not provide further information (Zaki and Williams, 2013). Of the three work-related emotion regulation models, the emotion regulation process model is the only one that identifies interpersonal and intrapersonal emotion regulation as strategies for emotion regulation. The purpose of emotion regulation focuses on also managing self-emotion for the self-health and self-well-being that can be gained through reaction to certain situations, or by the solicitation of others, to assist with the management of personal emotions. The approach to emotion regulation of the Gross model is a bi-directional approach (see Troth et al., 2017), wherein emotional intelligence and emotion labour are not. In those models, the process of emotion regulation is not a benefit to the regulator as far as managing their own emotions.

1.2 Supervisor and employee utilisation of emotion regulation

There is a lack of literature and empirical study regarding the conceptualisation and operationalisation of emotion regulation in personal interaction at work among employees, and particularly, among employees and organisational leaders (Devdutt and Mehrotra, 2018; Diefendorff et al., 2008; Glasø and Einarson, 2008; Grandey, 2000; Lawrence et al., 2011; Leighton, 2012; Troth et al., 2017). The present study focuses on IER as utilised by supervisors and employees.

Cohen and Wills' (1985) social support theory suggests that supervisor support has a positive effect on an employee's adjustment at work. In the literature, supervisors and leaders are viewed as interchangeable. Therefore, the following supervisor, leader and manager, terms will be utilised interchangeably throughout this article. These are organisational agents who are responsible for the daily management, evaluation, and monitoring, of people in the work environment. Supervisors are tasked with moderating employees' reactions to demanding situations (Haver et al., 2013; Thiel et al., 2012) and

are able to give employees needed support (Tucker and Jimmieson, 2017). Leaders are positioned to interpersonally manage emotions (George, 2000; Humphrey, 2002), monitor individual experiences, regulate negative emotions (Thiel et al., 2015), and inspire followers to build interpersonal relationships (Little et al., 2016). Employees ideally regulate their own emotions in the work environment, with the help of other employees (Biggio and Cortese, 2012; Diefendorff et al., 2008) and with the help of supervisors (Haver et al., 2013). Employees, who are empowered in their communication, their feelings about what they believe the leader feels about them, and by the recognition they receive from their leadership, are more willing to engage in IER with their supervisor (Dasborough, 2006). Work environments of all types require some type of interaction with others that could be emotionally demanding on employees and those responsible for employees, e.g., supervisors or managers. The emotional demands can include dealing with customer problems, experiencing abusive behaviours, assisting colleagues with stresses in work environments, and other situations. As employees regulate emotional control, whether they are in leadership roles or not, their ability to regulate their emotions or not, influences organisations and can influence organisational performance (Grandey et al., 2007; Gooty et al., 2010; Menges and Kilduff, 2015). Distinguishing differences in strategies for regulation among organisation employees for interpersonal/intrinsic emotion (a process of recruiting the help of another to regulate one's own emotions) can position organisations to shape more effective environments (Little al. 2016); one in which leaders can manage subordinates' emotions for them to assist them in remaining productive. There is no doubt that employees' emotion regulation is critical due to its impact on the individual, as well as the individual's ability to utilise emotion regulation effectively to support and benefit subordinates (Côté et al., 2010b; Côté, 2014; Gooty et al., 2010; Humphrey et al., 2016; Humphrey 2002; George, 2000; Little et al., 2016).

Individuals in leadership roles must comply with organisationally desired rules and complex demands, as they are also responsible for communicating job assignments and tasks to subordinates. Supervisors of organisation are agents of their organisation with responsibility for guiding others toward optimum performance, thus they need to have good regulation of their own emotions and the regulation of others' emotions. This is required of those in leadership roles versus those who are not in a leadership position; a distinction that has not been thoroughly studied and is therefore lacking in the literature (Diefendorff et al., 2008; Humphrey et al., 2016; Troth et al., 2017; Niven et al., 2013). Leaders set the tone for organisations and are expected to have good interpersonal skills, which has been identified as a critical competency and a necessary leadership skill for future employees and for corporate environments (Côté et al., 2010b; Humphrey, 2002; Humphrey et al., 2016; George, 2000; Pescosolido, 2002; Thiel et al., 2012).

According to Diefendorff et al. (2008), who studied leader-followers, employees, and managers, apply different strategies to managing emotions. Ideally, managers should be capable of recognising and sharing experiences related to work through the interpersonal regulation of emotion that will bring subordinates into alignment with work performance (Humphrey et al., 2016; Humphrey, 2002; Frisk and Friesen, 2012; George, 2000; Graen and Uhl Bien, 1995; Thiel et al., 2015). There has been a lack of attention placed on IER processes and leader-facilitated emotion management (Little et al., 2016; Thiel et al., 2015; Hofmann et al., 2016; Troth et al., 2017) and a lack of study that explains the conceptualisation and operationalisation of emotion regulation at work wherein the leader

influences employees' emotions (Devdutt and Mehrotra, 2018; Diefendorff et al., 2008; Leighton, 2012; Troth et al., 2017).

This study focuses on leader and follower's interactions through the exchange relationship. This type of relationship is described as high quality (Grandey et al., 2013; Lawrence et al., 2011) between leaders and followers/subordinates (Little et al., 2016; Thiel et al., 2015). There is an examination of whether there are discernable differences with the use of emotion regulation between those that are in supportive positions and organisational supervisory roles and those that are not, specifically identifying, through interpersonal regulation emotion questionnaire (IERQ), whether there are differences among the groups in terms of skills to emotion regulation.

2 Study aim

This study aims to determine whether there are differences among employees and supervisor's IER while at work, and to identify whether it is possible to determined predictive factors based upon job role, age, gender and tenure, using the IERQ.

2.1 Research question and hypotheses

Research question	Is there a relationship difference in IER between leaders (managers) and non-leaders (non-managers)?
Hypothesis 1 (H1)	Interpersonal emotional regulation will distinguish managers from non-managers, while controlling for age, gender and tenure, will be a predictor factor.
Hypothesis 2 (H2)	Managers will have significantly higher interpersonal emotion regulation questionnaire (IERQ) scores than non-managers.
Hypothesis 3 (H3)	Managers will not have significantly higher IERQ scores than non-managers.

This study did not use the work model for emotional intelligence (Mayer and Salovey, 1997), as this work-related model is limited and not useful for this study because it lacks an intrapersonal strategy and relies on self-awareness and the self for emotion management. This work model does not fit with an intrapersonal and interpersonal regulation emotion management of self and others. This study is not an examination of emotional labour (Grandey et al., 2013). The emotional labour work-related model is for employees' regulation of their emotions and another's emotions to uphold organisational rules or to provide emotional displays for maintaining customers satisfaction. The emotional labour model for work relies on response strategies that support customer and organisational needs (Bolton, 2005; Grandey, 2000; Grandey et al., 2007, 2013); emotional labour regulation is not an intrapersonal strategy that focuses on managing self-emotion.

This study examines the research question by comparing the differences in interpersonal and intrapersonal emotion regulation behaviours of groups of supervisors and employees. In the literature review, there appears to be implied differences between the responsibilities of emotion regulation while at work. Supervisors are expected to be able to emotionally regulate their own emotions and the emotions of their employees (Little et al., 2016; Thiel et al., 2015). Organisational supervisors, by role, interact with colleagues and employees, and are expected and required to have high-quality relationships with subordinates (Grandey et al., 2013; Little et al., 2016).

Employees and followers expect leaders to intervene and help when they have negative emotions (Ashkanasy, 2003; Humphrey, 2008; Pescosolido, 2002; Toegel et al., 2013). Employees are only expected to regulate their emotion to align with rules, policies, procedures, and politeness, when engaging with the customer (Grandey et al., 2013; Lawrence et al., 2011).

There are studies measuring emotion regulation differences among cultural (Bonanno and Burton, 2013: Liddell and Williams, 2019), age (Liddell and Williams, 2019; Monteiro et al., 2014; Masumoto et al., 2016) and gender (Monteiro et al., 2014; Masumoto et al., 2016). However, there are no studies that the author is aware of that examines the interpersonal and intrapersonal emotion regulation differences among organisational personnel. The majority of studies have focused on theoretical and empirical studies from an intrapersonal perspective (McRae, 2016). Gross' (1998) process model of emotion regulation has been utilised primarily as the work-related model for studies focusing on work-related emotion regulation. This study uses Gross' (1998, 2002) emotion regulation process as its work-related model as the process model supports the ideas there are multiple strategies for managing emotions, particularly, interpersonal and intrapersonal emotion regulation, as it is believed that these strategies are utilised at work by all employees in varying degree. Gross (1998) identifies the strategy of utilising solicitation as an interpersonal strategy for managing self and others' emotions in a bi-directional way (see Gross, 1998). Gross' (1998) emotion regulation process model has been a model for examining the social interaction processes in work environments (Little et al., 2016; Niven et al., 2009). Therefore, it is believed that this study approach fits with this model idea that utilising multiple strategies could be effective in managing emotions.

At an aggregate level, this study examined both responses, interpersonal and intrapersonal emotion regulation utilising the IERQ to determine differences. The IERQ has been validated and has excellent psychometric characteristics supporting the scale and subscale usage as a dual strategy measure (Hofmann et al., 2016). To the author's knowledge, there are no other studies that have utilised the IERQ to measure emotion regulation behaviours of workers. Appelhans and Lueken (2006) indicated emotion regulation can be measured through self-report by asking participants how they feel, and using evidence to support responses as observed from heart rates as a physiological indicator.

There is a lack knowledge regarding the differences among the general population with their degrees of emotion regulation usage. Masumoto et al. (2016) completed a study investigating the effects of age, gender, differences in mood, and mental health-mediated emotion regulation among participants. The study utilised a structural

equation model analysis, and study findings found gender differences in aging effects on emotion regulation. More importantly, the study indicates that the possibility exists to determine differences among group emotion regulation utilisation. The study used distinct groups within a population, whereby delineating and demarcating variables where measurable. Masumoto et al. (2016) study is relatable to the present study. The variables identified for this study are supported by a literature review that indicated there might be differences among individuals' usages of emotion regulation between supervisors and employee's delineation of two groups. Gross' model was selected due to its wide acceptance and because of the emotion generative value the model provides regarding the emotion regulation responses – demarcation.

A study by Monteiro et al. (2014) focused on the influences of multiple variables, such as gender, age, and the emotion of coping among students – delineation. Their study findings identified generative differences among study participants. Monteiro et al. (2014) focused on the management of stress by university students and factors, such as gender, age and emotion regulation. This study of college students utilised the utilised the emotion regulation scale emotion regulation scale (DERS) that employs 36 items to assess six dimensions of difficulties related to regulation of emotion (Gratz and Roemer, 2004), a self-reported measure to determine emotion regulation differences. This study relied on these previous studies for the development of the research question and study hypotheses.

3 Method

3.1 Procedure

The questionnaire administered via SurveyMonkey® included the areas: informed consent, demographic information, organisational information, and the IERQ, along with instructions at the beginning of the measure to make it clear to participants to read and react to each question. An e-mail was sent via professional associations, such as LinkedIn, Facebook, and random e-mail addresses to a sample in the USA. A letter of invitation was sent to participants describing the intent of the study and eligibility requirements for voluntary participation. Participants for this study had to be employed at a public, private, or governmental organisation, in the United States to be eligible. To participate in this study, individuals had to identify status as a manager or non-manager. No incentive or offer was made to participants for participation. Participation was voluntary and anonymous. Participants were provided only that aggregate information would be utilised in the study.

3.2 Measure

The IERQ is a self-report scale consisting of four factors:

- 1 enhancing positive affect
- 2 perspective taking
- 3 soothing
- 4 social modelling.

The question shows excellent psychometric value with a high Cronbach alpha for a subscale between 0.89 and 0.94. The scale is made up of 20 items with four factors containing five items each, measured on a Likert scale: 1 = not true for me at all to 5 = extremely true for me. The four factors are:

- a Enhancing positive affect A tendency for others to increase feelings of happiness and joy.
- b Perspective taking The use of others to be reminded that others have it worse.
- c Soothing Seeking out others for comfort and sympathy.
- d Social modelling Looking to others to see how they cope with a given situation (Hofmann et al., 2016).

The IERQ, by design, measures ways in which a person uses others to regulate their own emotions. The instrument is meant to examine intrinsic and extrinsic interpersonal regulation (the process by which a person regulates others' emotions) of emotion usage. The IERQ scale combines strategies, because responses do not rely on a particular response by another person in interactions to regulate emotions. The IERQ has correlations with IER measures, emotional intelligence, and depression/anxiety, which make it a unique contribution to the field of emotion regulation.

		Part	icipant	S			
Male		88		Female		34	
		Tot	al sum				
Ethnicity		Role		Employment	length	Age rang	e
American Indian	1	Manager	88	1-2 yrs.	15	18-20 yrs.	0
Black or African American	29	Non-manager	34	2–4 yrs.	12	21–29 yrs.	1
Caucasian (non-Hispanic)	74			3–6 yrs.	6	30–39 yrs.	10
Hispanic	3			6–8 yrs.	3	40-49 yrs.	42
Other categories	15			8-10 yrs.	84	50–59 yrs.	42
						60–plus yrs.	25
No response	0				2		2
Total	122		122		122		122

Table 1Descriptive statistics

3.3 Participants

For this study, a total of 122 individuals participated; 88 were male and 34 were female; Table 1 provides descriptive statistics of the participants. Eighty-eight participants, (72%), identified as supervisors, and 34 participants, (30%), identified as not having supervisory or with managerial responsibility. The survey was developed to cover ages ranging from 18 to 60 or older. However, no participant was younger than age 18–20, with 60% identifying as Caucasian. For this study, all participants were required to be employed in the USA. Of the sample, 40% of participants were from the western region of the USA, 30% were from the southeast region, 26% were from the mid-west, and all other regions were represented. Participants reported tenures of one to ten years, with 68% of the sample reporting between 8 and 10-years' experience. Of the participant sample who reported, 33% had at least a bachelor's degree, 43% had a master's level education, none of the participants reported having less than a high school education and remaining where non-responsive to this question. Participants identified a broad range of occupations as their employment. Of the sample, 6% of participants were in management relating to business, and/or financial operations, less than 3%, were in computer, mathematical production occupations, 6% identified as healthcare practitioners, office, and/or administrative workers, 9% worked in education, training, and/or protective services, 22% worked in community and social services, 21% were employed in legal occupations, 26% reported their occupation as other, and 7% were non-responsive.

The 20-item IERQ measures four factors (Hofmann et al., 2016), which were tested in this study and the results were: enhancing positive affect (x = .94), perspective taking (x = .94), soothing (x = .94) and social modelling (x = .94) [see Hofmann et al. (2016) factory analysis].

4 Results

The goal of this study was to determine differences among managers' and non-managers' IER while at work, and if differences exist, to determine whether age, gender, and tenure, are factors in the utilisation of IER. An ordinal regression was used to predict differences between degrees of responses in participants' utilisation of IERQ. The IERQ has five items on a Likert scale, 1 = not true for me at all, 2 = a little bit, 3 = moderately, 4 = quite a bit and 5 = extremely true for me. Therefore, the data results would be ordinal data, and the regression measures the distance between the points. Through a logistic regression, shown in Tables 2 through 5, no significant findings were found among the IER subscale scores of managers and non-managers. A separately conducted ANOVA analysis, shown in Table 6, supports rejecting the study hypotheses: enhancing positive affective [F(1, 101) = 2.59, p = 0.110], perspective taking [F(1, 106) = 0.40, p = 0.527], social modelling [F(1, 102) = 2.02, p = 0.158], for a total scale score of [F(1, 98) = 3.50, p = 0.064]. There was a significant finding for the subscale score soothing [F(1, 103) = 5.50, p = 0.021 when performing an ordinal regression model fit test p = 0.000, goodness of fit $p \ge 0.05$ and Nagelkerke at 0.962.

In the ordinal regression conducted, parameter estimates for IERQ and subscale scores were not significantly different with $p \ge 0.05$. Therefore, study Hypotheses 1, 2 and 3 are rejected. There is not a significant difference in IER between leaders (managers) and non-leaders (non-managers). Imputed data was used for non-responses on IERQ in this study. Regarding the multiple imputation regression model, Monte Carlo technique, according to Schafer (1997), this technique allows for a completed dataset analysis using standard methods. This is when results are combined to produce estimates and confidence intervals incorporating missing-data uncertainty through observing for patterns of existing data to create a full dataset.

		II	nterpersonal regula	tion emotion ques	tionnaire (IRE Q			
		IERQ 1	and subscale enhan	cing positive affe	ct parameter esti	mates		
		Latin ato	Ct.d Lunon	P12/11	Ж	ر: ^ب	95% confide	nce interval
		Estimate	DIA. ELLOI	h ala	ĥ	.318.	Lower bound	Upper bound
[Role = 1]		2.565	1.038	6.109	1	.013	.531	4.599
Enhancing positive affect	Affect = 5.00	19.926	000.		1		19.926	19.926
Enhancing positive affect	Affect = 6.00	25.359	000.		1		25.359	25.359
Enhancing positive affect	Affect = 8.00	66.562	17,653.195	.000	1	766.	-34,533.064	34,666.188
Enhancing positive affect	Affect = 9.00	-14.428	10,013.032	.000	1	666.	-19,639.610	19,610.754
Enhancing positive affect	Affect = 11.00	25.584	18,115.843	.000	1	666.	-35,480.817	35,531.985
Enhancing positive affect	Affect = 12.00	17.541	9,142.973	.000	1	866.	-17,902.358	17,937.440
Enhancing positive affect	Affect = 13.00	110.576	9,997.822	.000	1	166.	-19,484.794	19,705.947
Enhancing positive affect	Affect = 14.00	54.415	10,626.270	.000	1	966.	-20,772.692	20,881.522
Enhancing positive affect	Affect = 15.00	33.012	8,667.906	.000	1	766.	-16,955.771	17,021.796
Enhancing positive affect	Affect = 16.00	3.505	12,660.962	.000	1	1.000	-24,811.523	24,818.534
Enhancing positive affect	Affect = 17.00	88.686	9,737.605	.000	1	.993	-18,996.670	19,174.041
Enhancing positive affect	Affect = 18.00	-2.402	10,201.592	000.	1	1.000	-19,997.154	19,992.350
Enhancing positive affect	Affect = 19.00	52.171	11,617.951	000.	1	966.	-22,718.594	22,822.936
Enhancing positive affect	Affect = 20.00	36.279	13,184.125	.000	1	866.	-25,804.132	25,876.690
Enhancing positive affect	Affect = 21.00	54.509	8,115.253	.000	1	.995	-15,851.095	15,960.113
Enhancing positive affect	Affect = 22.00	4.522	11,187.351	000.	1	1.000	-21,922.283	21,931.326
Enhancing positive affect	Affect = 23.00	72.483	000.		1		72.483	72.483
Enhancing positive affect	Affect = 24.00	85.916	16,248.226	000.	1	966.	-31,760.023	31,931.854
Enhancing positive affect	Affect = 25.00	118.842	000.		1		118.842	118.842
Enhancing positive affect	Affect = 99.00	0^{a}			0			
Notes: ^a Signifies that power The following denotes	is close to 1. one of four subsca	ales of the IREQ	enhancing positive	affect.				

Table 2Enhancing positive affect

Table 3 Perspective taking .

			Interpersonal reg	gulation emotion	questionnaire (IKE	6		
			IERQ and subscale	? perspective takis	ng parameter estin	iates		
		Latin ato	Cted annou	19/21	JF	ر:ب _ح	95% confide	nce interval
		Esumate	JIA. ETOT	h ata	aj	.J.Ķ.	Lower bound	Upper bound
[Role = 1]		2.565	1.038	6.109	1	.013	.531	4.599
Perspective taking	Affect = 5.00	-10.358	10,233.213	000.	1	666.	-20,067.086	20,046.370
Perspective taking	Affect = 6.00	4.431	8,693.722	000.	1	1.000	-17,034.950	17,043.812
Perspective taking	Affect = 7.00	-12.037	14,195.898	000.	1	666.	-27,835.487	27,811.412
Perspective taking	Affect = 8.00	-19.126	11,065.893	000.	1	666.	-21,707.878	21,669.626
Perspective taking	Affect = 9.00	-71.095	13,742.908	000.	1	966.	-27,006.700	26,864.509
Perspective taking	Affect = 10.00	-16.985	10,000.703	.000	1	666.	-19,618.003	19,584.034
Perspective taking	Affect = 11.00	-1.248	10,384.727	.000	1	1.000	-20,354.939	20,352.442
Perspective taking	Affect = 12.00	37.837	13,806.289	000.	1	866.	-27,021.992	27,097.666
Perspective taking	Affect = 13.00	7.704	12,460.954	000.	1	1.000	-24,415.317	24,430.726
Perspective taking	Affect = 14.00	-54.728	19,205.913	000.	1	866.	-37,697.626	37,588.169
Perspective taking	Affect = 15.00	38.168	15,267.700	000.	1	866.	-29,885.973	29,962.310
Perspective taking	Affect = 16.00	-31.379	22,473.038	000.	1	666.	-44,077.724	44,014.965
Perspective taking	Affect = 17.00	40.112	19,505.550	000.	1	866.	-38,190.063	38,270.288
Perspective taking	Affect = 18.00	-3.484	000.		1		-3.484	-3.484
Perspective taking	Affect = 19.00	13.064	13,116.029	000.	1	666.	-25,693.881	25,720.008
Perspective taking	Affect = 20.00	58.002	.000		1		58.002	58.002
Perspective taking	Affect = 99.00	0^{a}			0			
	•							

Notes: "signifies that power is close to 1. The following denotes one of four subscales of the IREQ perspective taking.

			Interperson	al regulation emotio	n questionnaire (IRE	(Õ)		
			IERQ an	d subscale soothing.	parameter estimates			
		Ectimate	Ct.d annou	Mald	Н	Cin	95% confide	nce interval
		estimate	10119 .DIG	nn 44	aj	.71S.	Lower bound	$Upper \ bound$
[Role = 1]		2.565	1.038	6.109	1	.013	.531	4.599
Soothing A	ffect = 5.00	-25.487	9,114.803	000		866.	-17,890.173	17,839.198
Soothing A	ffect = 6.00	3.243	12,916.991	000	1	1.000	-25,313.594	25,320.080
Soothing A	ffect = 7.00	-61.084	11,977.530	000	1	966.	-23,536.611	23,414.444
Soothing A	ffect = 8.00	20.983	12,204.791	000	1	666.	-23,899.969	23,941.935
Soothing A	ffect = 9.00	-19.132	11,889.933	000	1	666.	-23,322.973	23,284.709
Soothing Af	fect = 10.00	-24.173	14,979.374	000	1	666.	-29,383.206	29,334.861
Soothing Af	fect = 11.00	-19.712	21,133.085	000	1	666.	-41,439.797	41,400.373
Soothing Af	fect = 12.00	-34.767	14,077.884	000	-	866.	-27,626.913	27,557.379
Soothing Af	fect = 13.00	-86.803	10,603.818	000	1	.993	-20,869.904	20,696.298
Soothing Af	fect = 14.00	16.458	20,004.933	000	1	666.	-39,192.490	39,225.405
Soothing Af	fect = 15.00	-18.789	10,408.569	000	1	666.	-20,419.209	20,381.632
Soothing At	fect = 16.00	19.690	20,788.285	000.	-	666.	-40,724.600	40,763.980
Soothing Af	fect = 17.00	-25.017	15,011.443	000	1	666.	-29,446.904	29,396.871
Soothing Af	fect = 18.00	-125.247	.000		-		-125.247	-125.247
Soothing Af	fect = 19.00	82.625	19,629.227	000		766.	-38,389.954	38,555.203
Soothing Af	fect = 20.00	0^{a}			0			
Soothing Af	fect = 21.00	-88.814	000.		-1		-88.814	-88.814
Soothing At	fect = 99.00	0^{a}			0			

Table 4

Soothing

D.S. Harper

Notes: ^aSignifies that power is close to 1. The following denotes one of four subscales of the IREQ soothing.

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			Interpersonal reg IERQ and subscale	utation emotion qu ? social modelling	lestionnaire (IKE) parameter estimai	J) tes		
		$\Gamma_{otime oto}$	Ct.d amou	PI ² /II	JF	ر;ب ر	95% confide	nce interval
		DSumate	DIA. ETTOF	<i>11</i> ata	aj	SIC.	Lower bound	Upper bound
[Role = 1]		2.565	1.038	6.109	1	.013	.531	4.599
Social modelling	Affect = 5.00	67.004	13,626.267	000.	1	966.	-26,639.988	26,773.996
Social modelling	Affect = 6.00	0^{a}			0			
Social modelling	Affect = 7.00	-46.415	11,481.831	000.	1	766.	-22,550.389	22,457.560
Social modelling	Affect = 8.00	67.004	13,626.267	000.	1	966.	-26,639.988	26,773.996
Social modelling	Affect = 9.00	-3.920	14,594.104	000	1	1.000	-28,607.839	28,599.998
Social modelling	A ffect = 10.00	21.600	13,109.629	000	1	666.	-25,672.800	25,716.001
Social modelling	A ffect = 11.00	-14.245	17,320.389	000	1	666.	-33,961.583	33,933.093
Social modelling	A <i>ffect</i> = 12.00	-21.840	11,683.376	000.	1	666.	-22,920.837	22,877.157
Social modelling	A <i>ffect</i> = 13.00	-32.734	8,542.187	000.	1	766.	-16,775.113	16,709.645
Social modelling	A ffect = 14.00	3.335	12,846.542	000.	1	1.000	-25,175.425	25,182.095
Social modelling	A ffect = 15.00	-66.814	15,307.450	000.	1	766.	-30,068.864	29,935.237
Social modelling	A ffect = 16.00	-15.158	8,588.792	000.	1	666.	-16,848.881	16,818.564
Social modelling	A <i>ffect</i> = 17.00	-2.978	9,957.550	000.	1	1.000	-19,519.418	19,513.461
Social modelling	A ffect = 18.00	22.747	10,824.522	000.	1	866.	-21, 192.925	21,238.420
Social modelling	A <i>ffect</i> = 19.00	-79.562	14,800.366	000.	1	966.	-29,087.747	28,928.623
Social modelling	A <i>ffect</i> = 20.00	-110.200	15,056.957	000.	1	.994	-29,621.293	29,400.893
Social modelling	A <i>ffect</i> = 21.00	0^{a}			0			
Social modelling	A <i>ffect</i> = 22.00	2.517	26,704.556	000.	1	1.000	-52,337.451	52,342.485
Social modelling	A <i>ffect</i> = 23.00	17.527	000.		1		17.527	17.527
Social modelling	Affect = 99.00	0^{a}			0			
Notes: ^a Signifies that The following	power is close to 1. denotes one of four	subscales of the II	REQ social modelling	Š				

	Be	tween and within g	roups A	ANOVA		
	Interpersona	al regulation emotion	on ques	tionnaire (IREQ)		
		Sum of squares	df	Mean square	F	Sig.
Enhancing	Between groups	46.874	1	46.874	2.594	.110
positive	Within groups	1,824.873	101	18.068		
allect	Total	1,871.748	102			
Perspective	Between groups	5.495	1	5.495	.402	.527
taking	Within groups	1,448.356	106	13.664		
	Total	1,453.852	107			
Soothing	Between groups	91.871	1	91.871	5.496	.021
	Within groups	1,721.691	103	16.715		
	Total	1,813.562	104			
Social	Between groups	34.232	1	34.232	2.022	.158
modelling	Within groups	1,726.653	102	16.928		
	Total	1,760.885	103			
IRERQ	Between groups	639.456	1	639.456	3.496	.064
	Within groups	17,923.454	98	182.892		
	Total	18,562.910	99			

Note: The following denotes the five subscales of the IERQ enhancing positive affect, perspective taking, soothing and social modelling.

5 Discussion

The literature points to the importance of leaders' ability use IER as strategy in the work environment (Ashkanasy and Humphrey, 2011; George, 2000; Humphrey, 2002, 2008; Humphrey et al., 2016; Lopes et al., 2006; Pescosolido, 2002; Troth et al., 2017), whereby researchers have identified IER ability as a critical competency of leaders (Côté et al., 2010a, 2010b; Humphrey, 2002; Humphrey et al., 2016; George, 2000; Pescosolido, 2002; Thiel et al., 2012). The literature also points to the value of emotion regulation in the work environment as discussed in the Introduction section of this study. This study examined IER using the IERQ measure focusing on individual regulation in a two-way exchange of emotions rather than regulating emotions through customer interaction, utilising an emotional labour approach, or through a branch of emotional intelligence. This study failed to confirm the research hypotheses. There was no discernable emotion regulation differences observed among supervisors and employees as measured using IERQ. Studies have confirmed emotion regulation differences among groups and among variables, and that using self-reported measures can provide observable distinctions (Appelhans and Lueken, 2006; Monteiro et al., 2014). The lack of group differences, negated the need to perform additional variable analysis (Brown et al., 2017).

The literature, as indicated previously, points to an important skill for supervisors to have, which is the ability to employ IER. Therefore, it would be logical and reasonable to

expect a difference from individuals relying on emotion regulation as a requirement for job performance versus those who do not need this in their job performance. The study did not indicate a difference in the overall scale and four subscales, except for the subscale 'soothing'. Supervisors indicated a higher positive use of this skill than employees. According to Hofmann et al. (2016), this subscale of psychometric characteristics is related to seeking out others for comfort and sympathy. The measure of IER at the intrinsic and extrinsic process levels is a new phenomenon (Hofmann et al., 2016), and the measuring at the work level is a newer phenomenon (Little et al., 2016; Li and Liang, 2015; Thiel et al., 2015; Troth et al., 2017). There is a lack of study in the area of the differences pointing to knowledge about whether an organisation has an influence over skills and techniques used, or if these behaviours are individually driven regarding IER use (Li and Liang, 2015; Troth et al., 2017). This study points to a need for a better understanding of the effects of work-related IER.

6 Overview of the study

This study used a convenience sample and utilised social networks and e-mail addresses to contact willing participants. It is, therefore, inappropriate to generalise conclusions into the population, as the study subjects were not randomly selected. This study utilised a self-reported measure as the primary method of gathering information. However, self-reported biases were remedied in accordance with the recommendations of Podsakoff et al. (2003) for controlling method biases; [in that] study, participants were not aware of one another. The sample size for this present study was 122 participants; a quarter of participants were non-managers and three-fourths were supervisors, managers and/or in more senior positions. The author made a theoretical argument in the development of the hypothesised direction based on a previous research, which was limited and based on SEM methodology.

Finally, this is the first study to utilise the IERQ for non-clinical purposes and it is also a self-reported measure. The author utilised a validated measure, the IERQ, as developed by the original developers (Hofmann et al., 2016), and did not modify the instrument or instrument instructions. For which, in accordance with recommendations of Podskoff et al. (2003), prevents research biases. Despite the limitation of the IERQ having not been utilised outside of the clinical environment, the author feels confident about the IERQ measure having promise due, in part, to its high reliability [see Hofmann et al. (2016) factory analysis], and additionally for its social service research 0.60 coefficient (Cronbach, 1990). Further, Gross et al. (2006) indicated that in studying emotion regulation, multiple methods are necessary to achieving a better understanding of emotion regulation strategies.

7 Study implications

The study findings hold important implications for practice, and future training of individuals to regulate emotions, and therefore, should be replicated. It can be used as a starting point to further investigate emotional differences between groups of individuals who have been trained in emotion regulation and those who have not. This type of study

can point to the efficacy of such training. It is important for individuals and organisations to know that individuals' time allotted to develop these skills and resources, and to develop individual leaders, is time well spent. The study begins to advance the literature on IER, intrinsic and extrinsic two-way exchanges, and the skill differences, or lack thereof, between supervisors and employees.

Disclaimer

All procedures performed in this study involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

This research study, performed by the author, does not contain any studies with human participants in person, as all contact was via e-mail and questionnaires. Participants were at least 18 years or older. Participants had to be currently employed in the USA. Participants voluntarily participated and were given the option to discontinue participation at any time during the process without penalty or reprisal. Informed consent was obtained from all individual participants included in the study.

This study, performed by the author, does not contain any studies with animals.

References

- Antoniou, A., Cooper, C., Chrousos, G., Spielberger, C. and Eysenck, M. (2009) Affect Regulation and Well-being in the Workplace: An Interpersonal Perspective, pp.1–19, White Rose University Consortium [online] http://eprints.whiterose.ac.uk/43129/ (accessed 12 January 2017).
- Appelhans, B.M. and Lueken, L.J. (2006) 'Heart rate variability as an index of regulated as an index of regulated emotional responding', *Review of General Psychology*, Vol. 10, No. 3, pp.229–240.
- Ashkanasy, N.M. (2003) 'Emotions in organizations: a multi-level perspective', *Multi-level Issues in Organizational Behaviour and Strategy, Research in Multi-level Issues*, Vol. 2, pp.9–54, Elsevier Science, Oxford, UK.
- Ashkanasy, N.M. and Humphrey, R.H. (2011) 'A multi-level view of leadership and emotions: leading with emotional labor', in Bryman, A., Collinson, D., Grint, K., Jackson, B. and Uhl-Bien, M. (Eds.): *The Sage Handbook of Leadership*, pp.365–377, SAGE Publications Ltd., Thousand Oaks, Ca.
- Barsade, S. and O'Neill, O.A. (2016) 'Manage your emotional culture', *Harvard Review*, January–February [online] https://hbr.org/2016/01/manage-your-emotional-culture (accessed 12 January 2017).
- Biggio, G. and Cortese, C. (2012) 'Well-being in the workplace through interaction between individual characteristics and organizational context', *International Journal of Qualitative Studies in Health and Well-being*, Vol. 8, pp.1–13, DOI: 10.3402/qhw.v8i0.19823.
- Bolton, S.C. (2005) Emotion Management in the Workplace, Palgrave, Basingstoke.
- Bar-On, R. (2006) 'The bar-on model of emotional social intelligence (ESI)', *Psicothema*, Vol. 18, pp.13–25.
- Bonanno, G. and Burton, C.L. (2013) 'Regulatory flexibility: an individual difference perspective on coping and emotion regulation', *Perspectives on Psychological Science*, Vol. 8, No. 6, pp.591–612.

- Boyatzis, RE., Goleman, D. and Rhee, K.S. (2000) 'Clustering competence in emotional intelligence: insights from the emotional competence inventory', in Bar-On, R. and Parker, J.D.A. (Eds.): *Handbook of Emotional Intelligence*, pp.343–362, Jossey-Bass, San Francisco.
- Braunstein, L.M., Gross, J.J. and Ochsner, K.N. (2017) 'Explicit and implicit emotion regulation: a multi-level framework', *Social Cognitive and Affective Neuroscience*, Vol. 12, No. 10, pp.1545–1557.
- Brown, A.W., Kaiser, K.A. and Allison, D.B. (2017) 'Issues with data and analyses: errors, underlying themes, and potential solutions', *Proceedings of the National Academy of Sciences*, Vol. 115, No. 11, pp.2563–2570.
- Caspi, A. (2000) 'The child is father of the man: personality continuities from child to adulthood', *Journal of Personality Social Psychology*, Vol. 78, No. 1, pp.158–172.
- Cherness, C. and Goleman, D. (1998) 'Bring emotional intelligence to the workplace', *The Consortium for Research on Emotional Intelligence in Organizations* [online] http://www. eiconsortium.org (accessed 12 January 2017).
- Chughtai, A.A. and Buckley, F. (2008) 'Working engagement and its relationship with state and trait trust: a conceptual analysis', *Journal of Behavioral and Applied Management*, Vol. 10, No. 1, pp.47–71.
- Cohen, S. and Wills, T.A. (1985) 'Stress social support, and the buffering hypothesis', *Psychological Bulletin*, Vol. 98, No. 2, pp.310–357.
- Conway, J. (2011) 'Effects of supervisor-employee relationship on job performance', *Journal of Psychology*.
- Côté, S. (2005) 'A social interaction model of the effects of emotion regulation on work strain', *The Academy of Management Review*, Vol. 30, No. 3, pp.509–530 [online] https://doi.org/ 10.2307/20159142.
- Côté, S. (2014) 'Emotional intelligence in organizations', Annual Review of Organizational Psychology and Organizational Behavior, Vol. 1, pp.459–488 [online] http://doi.org/10.1146/ annurev-orgpsch-031413-091233.
- Côté, S., Gyurak, A. and Levenson, R.L. (2010a) 'The ability to regulate emotion is associated with greater wellbeing, income, and socioeconomic status', *Emotion*, Vol. 10, No. 6, pp.923–933, DOI: 10.1037/a0021156.
- Côté, S., Lopes, P., Salovey, P. and Miners, C. (2010b) 'Emotional intelligence and leadership emergence in small groups', *The Leadership Quarterly*, Vol. 21, No. 3, pp.496–508.
- Cronbach, L.J. (1990) Essentials of Psychological Testing, 2nd ed., Harper & Row, New York.
- Dasborough, M.T. (2006) 'Cognitive asymmetry in employee emotional reactions to leadership behaviors', *The Leadership Quarterly*, Vol. 17, No. 2, pp.163–178.
- Devdutt, J. and Mehrotra, S. (2018) 'Emotions at work and mental health: emerging directions', *International Journal of Community Medicine and Public Health*, Vol. 5, No. 4, pp.1233–1238.
- Diefendorff, J.M., Richard, E.M. and Yang, J. (2008) 'Linking emotion regulation strategies to affective events and negative emotions at work', *Journal of Vocational Behavior*, Vol. 73, pp.498–508, doi:10.1016/j.jvb.2008.09.006.
- Frisk, G.M. and Friesen, J.P. (2012) 'Perceptions of leader emotion regulation and LMX as predictors of followers' job satisfaction and organizational citizenship behaviors', *The Leadership Quarterly*, Vol. 23, No. 1, pp.1–12, DOI: 10.1016/j.leaqua.2011.11.001.
- Gable, S.L. and Ries, H.T. (2010) 'Good news! Capitalizing on positive events in an impersonal context', in *Advances in Experimental Social Psychology*, Vol. 42, pp.195–257, Academic Press, doi:10.1016/S0065-2601(10)42004-3.
- George, J.M. (2000) 'Emotions and leadership: the role of emotional intelligence', *Human Relations*, Vol. 53, No. 8, pp.1027–1055.

- Glasø, L. and Einarson, S. (2008) 'Emotion regulation in leader-follower relationship', *European Journal of Organizational Psychology*, Vol. 17, pp.482–500.
- Goleman, D. (1998) Working with Emotional Intelligence, Bantam Books, New York.
- Gooty, J., Connelly, S., Griffith, J. and Gupta, A. (2010) 'Leadership, affect and emotions: a state of the science review', *The Leadership Quarterly*, Vol. 21, pp.979–1004.
- Graen, G.B. and Uhl Bien, M. (1995) 'Relationship-based approach to leadership: development of leader-member exchange (LMX) theory over 25 years: applying a multi-level multi-domain perspective', *The Leadership Quarterly*, Vol. 6, No. 2, pp.219–247 [online] http://dx.doi.org/ 10.1016/10489843(95)90036-5.
- Grandey, A.A. (2000) 'Emotion regulation in the workplace: a new way to conceptualize emotional labor', *Journal of Occupational Health Psychology*, Vol. 5, pp.95–110.
- Grandey, A.A., Diefendorff, J.M. and Rupp, D.E. (2013) 'Bringing emotional labor into focus: a review and integration of three research lenses', in Grandey, A.A., Diefendorff, J.M. and Rupp, D.E. (Eds.): *Emotional Labor in the 21st Century: Diverse Perspectives on Emotion Regulation at Work*, pp.3–27, Psychology Press/Routledge, New York.
- Grandey, A.A., Kern, J.H. and Frone, M.R. (2007) 'Verbal abuse from outsiders versus insiders: comparing frequency, impact on emotional exhaustion, and role of emotional labor', *Journal* of Occupational Health Psychology, Vol. 12, No. 1, p.63, DOI: 10.1037/1076-8998.12.1.63.
- Gratz, K.L. and Roemer, L. (2004) 'Multidimensional assessment of emotion regulation and dysregulation scale', *Journal of Psychology and Behavioral Assessment*, Vol. 26, pp.41–54.
- Gross, J.J. (1998) 'The emerging field of emotion regulation: an integrative review', *Review of General Psychology*, Vol. 2, pp.271–299.
- Gross, J.J. (2002) 'Emotion regulation: affective, cognitive, and social consequences', *Psychophysiology*, Vol. 29, pp.281–291.
- Gross, J.J. and John, O.P. (2003) 'Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being', *Journal of Personality and Social Psychology*, Vol. 85, No. 2, pp.348–362 [online] https://doi.org/10.1037/0022-3514.85.2.348.
- Gross, J.J., Richards, J.M. and John, O.P. (2006) 'Emotion regulation in everyday life', in Snyder, D.K., Simpson, J. and Hughes, J.N. (Eds.): *Emotion Regulation in Couples and Families: Pathways to Dysfunction and Health*, pp.13–35, American Psychological Association [online] https://doi.org/10.1037/11468-001.
- Haver, A., Akejodet, K. and Furunes, T. (2013) 'Emotional regulation and its implications for leadership: an integrative review and future research agenda', *Journal of Leadership and Organizational Studies*, Vol. 20, pp.287–303, DOI: 10.1177/1548051813485438.
- Hochschild, A.R. (1983) The Managed Heart, University of California Press, Berkeley, CA.
- Hofmann, S.G. (2014) 'Interpersonal emotion regulation model of mood and anxiety disorders', Cognitive Therapy and Research, Vol. 38, No. 5, pp.483–492.
- Hofmann, S.G., Carpenter, J.K. and Curtiss, J.J. (2016) 'Interpersonal emotional regulation questionnaire (IERQ): scale development and psychometric characteristics', *Cognitive Therapy and Research*, Vol. 40, pp.341–356, DOI: 0.1007/s10608-016-9756-2.
- Humphrey, R.H. (2002) 'The many faces of emotional leadership', *The Leadership Quarterly*, Vol. 13, pp.493–504.
- Humphrey, R.H. (2008) 'The right way to lead with emotional labor', in Humphrey, R.H. (Ed.): *Affect and Emotion: New Directions in Management Theory and Research*, pp.1–17, Information Age Publishing, Charlotte, NC:.
- Humphrey, R.H., Burch, G.R. and Adams, L.L. (2016) 'The benefits of merging leadership research and emotions research', *Frontiers Psychology*, Vol. 7, p.1022, DOI: 10.3389/fpsyg. 2016.01022.
- Jarrell, A. and Lajoie, S.P. (2017) 'The regulation of achievements emotions: implications for research and practice', *Canadian Psychology/Psychologie Canadienne*, Vol. 58, No. 3, pp.276–287.

- Joseph, D.L., Jin J., Newman, D.A. and O'Boyle, E.H. (2015) 'Why does self-reported emotional intelligence predict job performance? A meta-analytic investigation of mixed EI', *Journal of Applied Psychology*, Vol. 100 [online] http://doi.org/10.1037/a0037681.
- Kafetsios, K., Nezlek, J.B. and Vassiou, A. (2011) 'A multilevel analysis of relationships between leaders' and subordinates' emotional intelligence and emotional outcomes', *Journal of Applied Social Psychology*, Vol. 41, No. 5, pp.1121–1144.
- Kahn, W.A. (1990) 'Psychological conditions of personal engagement and disengagement at work', *Academy of Management Journal*, Vol. 33, No. 4, pp.692–724.
- Kappas, A. (2013) 'Social regulation of emotion: messy layers', *Frontiers in Psychology*, Vol. 4, No. 51 [online] http://doi.org/10.3389/fpsyg.2013.00051.
- Kellett, J.B., Humphrey, R.H. and Sleeth, R.G. (2006) 'Empathy and the emergence of task and relations leaders', *The Leadership Quarterly*, Vol. 17, pp.146–172.
- Kobylinska, D. and Kusev, P. (2019) 'Flexible emotion regulation: how situational demands and individual differences influence the effectiveness of regulatory strategies', *Front. Psychol.*, Vol. 10, p.72, DOI: 10.3389/fpsyg.2019.00072.
- Koole, S.L. (2009) 'The psychology of emotion regulation: an integrative review', *Cognition and Emotion*, Vol. 23, pp.4-41, DOI: 10.1080/02699930802619031.
- Lawrence, S.A., Troth, A.C., Jordan, P.J. and Collins, A. (2011) 'A review of emotion regulation and development of a framework for emotion regulation in the workplace', in *The Role of Individual Differences in Occupational Stress and Well Being*, Emerald Group Publishing Limited [online] http://dx.doi.org/10.1108/S1479-3555(2011)0000009010.
- Leighton, C.L. (2012) Workplace Emotion Regulation: Making the Case for Emotional Labour and Emotion Work, Doctoral dissertation, University of Western Australia.
- Li, M. and Liang, L. (2015) 'Emotional labor between supervisors and subordinates: literature review and future research', *Open Journal of Business and Management*, Vol. 4, No. 1, pp.130–137.
- Liddell, B.J. and Williams, E.N. (2019) 'Cultural differences in interpersonal emotion regulation', *Front. Psychol.*, Vol. 10, No. 999, pp.1–15.
- Little, L.M., Gooty, J. and Williams, M. (2016) 'The role of leader emotion management in leader-member exchange and follower outcomes', *The Leadership Quarterly*, Vol. 27, No. 1, pp.85–97 [online] http://doi.org/10.1016/j.leaqua.2015.08.007.
- Lopes, P., Grewal, D., Kadis, J., Gall, M. and Salovey, P. (2006) 'Evidence that emotional intelligence is related to job performance and affect and attitudes at work', *Psicothema*, Vol. 18, pp.132–138.
- Main, A., Walle, E.A., Kho, C. and Halpern, J. (2017) 'The interpersonal functions of empathy: a relational perspective', *Emotion Review*, Vol. 9, No. 4, pp.358–366.
- Masumoto, K., Taishi, N. and Shiozaki, M. (2016) 'Age and gender differences in regulation, mood, and health', *Gerontology & Geriatric Medicine*, No. 2, pp.1–8, DOI: 10.1177/ 2333721416637002.
- Mayer, J.D. and Salovey, P. (1997) 'What is emotional intelligence?', in Salovey, P. and Sluyter, D.J. (Eds.): *Emotional Development and Emotional Intelligence*, pp.3–31, Basic Books, New York, NY.
- Mayer, J.D., Salovey, P. and Caruso, D.R. (2008) 'Emotional intelligence: new ability or eclectic traits?', *The American Psychologist*, Vol. 63, No. 6, pp.503–517 [online] https://doi.org/10.1037/0003-066X.63.6.503.
- McRae, K. (2016) 'Cognitive emotion regulation: a review of theory and scientific findings', *Current Opinion in Behavioral Sciences*, Vol. 10, pp.119–124.
- Menges, J.I. and Kilduff, M. (2015) 'Group emotions: cutting the Gordian knots concerning terms, levels of analysis, and processes', *Academy of Management Annals*, Vol. 9, No. 1, pp.845–928.

- Monteiro, N.M., Balogun, S.K. and Oratile, K.N. (2014) 'Managing stress: the influence of gender, age and emotion regulation on coping among university students in Botswana', *International Journal of Adolescence and Youth*, Vol. 19, No. 2, pp.153–173 [online] http://dx.doi.org/ 10.1080/02673843.2014.908784.
- Netzer, L., Van Kleef, G.A. and Tamer, M. (2015) 'Interpersonal instrumental emotion regulation', Journal of Experimental Social Psychology, Vol. 58, pp.124–135.
- Niven, K., Garcia, D., Van der Löwe, I., Holman, D. and Mansell, W. (2015) 'Becoming popular: interpersonal emotion regulation predicts relationship formation in real life social networks', *Frontiers in Psychology*, Vol. 6, p.1452, DOI: 10.3389/fpsyg.2015.01452.
- Niven, K., Sprigg, C.A. and Armitage, C.J. (2013) 'Does emotions regulation protect employees from the negative effects of workplace aggression?', *European Journal of Work and Organizational Psychology*, Vol. 22, No. 1, pp.1–20 [online] http://doi.org/10.1080/ 1359432X.2011.626200.
- Niven, K., Totterdell, P. and Holman, D. (2009) 'A classification of controlled interpersonal affect regulation strategies', *Emotion*, Vol. 9, No. 4, pp.498–509, DOI: 10.1037/a0015962. PMID19653772.
- Niven, K., Totterdell, P., Holman, D. and Headley, T. (2012) 'Does regulating others' feelings influence people's own affective well-being?', *Journal of Social Psychology*, Vol. 152, pp.246–260.
- Niven, K., Totterdell, P., Stride, C. and Holman, D. (2011) 'Emotion regulation of others and self (EROS): the development and validation of a new individual difference measure', *Current Psychology*, Vol. 30, pp.53–73.
- O'Boyle, E.H., Humphrey, R.H., Pollack, J.M., Hawver, T.H. and Story, P.A. (2010) 'The relation between emotional intelligence and job performance: a meta-analysis', *Journal of Organizational Behavior*, Vol. 32, pp.788–818.
- Peña-Sarrionandia, A., Mikolajczak, M. and Gross, J.J. (2015) 'Integrating emotion regulation and emotional intelligence traditions: a meta-analysis', *Frontiers in Psychology*, Vol. 6, p.160 [online] https://doi.org/10.3389/fpsyg.2015.00160.
- Pescosolido, A.T. (2002) 'Emergent leaders as managers of group emotion', *The Leadership Quarterly*, Vol. 13, pp.583–599.
- Podsakoff, P.M., MacKenzie, S.B. Lee, J.Y. and Podsakoff, N.P. (2003) 'Common method biases in behavioral research: a critical review of the literature and recommended remedies', *Journal* of Applied Psychology, Vol. 88, No. 5, pp.879–903.
- Reeck, C., Ames, D. and Ochsner, K. (2016) 'The social regulation of emotion: an integrative, cross-disciplinary model', *Trends in Cognitive Sciences*, Vol. 20, pp.47–63.
- Schafer, J.L. (1997) Analysis of Incomplete Multivariate Data, CRC Press, London.
- Thiel, C.E., Connelly, S. and Griffith, J. (2012) 'Leadership and emotion management for complex tasks: different emotions, different strategies', *The Leadership Quarterly*, Vol. 23, pp.517–533.
- Thiel, C.E., Griffith, J. and Connelly, S. (2015) 'Leader-follower interpersonal emotion management: managing stress by person-focused and emotion-focused emotion management', *Journal of Leadership & Organizational Studies*. Vol. 22, No. 1, pp.5–20.
- Toegel, G., Kilduff, M. and Ananad, N. (2013) 'Emotion helping by managers: an emergent understanding of discrepant role and outcomes', *The Academy of Management Journal*, Vol. 55, No. 2, pp.334–357.
- Torrence, B.S. and Connelly, S. (2019) 'Emotion regulation tendencies and leadership performance: an examination of cognitive and behavioral regulation strategies', *Front. Psychol.*, Vol. 10, No. 1486, pp.1–11.
- Troth, A.C., Lawrence, S.A., Jordon, P.J. and Ashkanasy, N.M. (2017) 'Interpersonal emotional regulation in the workplace: a conceptual and operational review and future research agenda', *International Journal of Management Reviews*, pp.1–21, DOI: 10.1111/ijmr.12144.

- Tucker, M.K. and Jimmieson, N.L. (2017) 'Supervisors' ability to manage their own emotions influences the effectiveness of their support-giving', *Journal of Personnel Psychology*, Vol. 16, No. 4, pp.195–205 [online] https://doi.org/10.1027/1866-5888/a000189.
- Webb, T.L., Miles, E. and Sheeran, P. (2012) 'Dealing with feeling: a meta-analysis of the effectiveness of strategies derived from the process of emotion regulation', *Psychological Bulletin*, Vol. 138, pp.775–808.
- Williams, W.C., Morelli, S.A., Desmond, C.O. and Zaki, J. (2018) 'Interpersonal emotion regulation: implications for affiliating, perceived support, relationships, and well-being', *Journal of Personality and Social Psychology*, Vol. 115, No. 2, pp.224–254.
- Wong, C. and Law, K.S. (2002) 'The effects of leader and follower emotional intelligence on performance and attitude: an exploratory study', *The Leadership Quarterly*, Vol. 13, pp.243–274, DOI: 10.1016/S1048-9843(02)00099-1.
- Zaki, J. and Williams, W.C. (2013) 'Interpersonal emotional regulation', *Emotion*, Vol. 13, pp.803-810.
- Zapf, D. (2002) 'Emotion work and psychological well-being: a review of the literature and some conceptual considerations', *Hum. Resour. Manag. Rev.*, Vol. 12, pp.237–268, DOI: 10.1177/ 1088868308330104.