# Positive Affect as Mediator between Emotional Intelligence and Creativity: An Empirical Study from India

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**ABSTRACT:** Since last two decades, emotional intelligence has drawn much curiosity in different fields. The reason for it can be attributed to many claims that show how emotional intelligence predicts variations in individual behavior and outcomes. Although previous studies have examined the role of emotional intelligence in individual behavior and outcomes, there is a dearth of research investigating the process by which emotional intelligence leads to creativity. The aim of this study was to examine relations among emotional intelligence, positive affect and creativity and the mediating role of positive affect on the relationship between emotional intelligence and creativity. Two hundred participants working in different organizations in India completed measures of emotional intelligence, creativity and positive affect. Results of correlation analysis indicated that emotional intelligence was positively associated with creativity and positive affect and positive affect was also positively associated with creativity. All the four subscales of emotional intelligence were also associated with positive affect and creativity. Results of structural equation modeling indicated that positive affect acted as a partial mediator in the relationship of emotional intelligence and creativity. This study provides an empirical framework by showing how emotional intelligence predicts creativity via positive affect. The study presents important contributions to the literature on emotional intelligence and creativity. Limitations of the study, implications, and future directions concerning possible mediators and moderators are briefly discussed.

**KEYWORDS:** Creativity; Emotional intelligence; Positive affect; Structural equation modeling; Mediation

## INTRODUCTION

The attention on the study of creativity among professionals and researchers continues to grow in different fields since 1990 (Runco, 2004). This interest has been fuelled to cope with the global marketplace, technological advancements & uncertain economy which highlights creativity as the "cornerstone of innovation" (Klijn & Tomic, 2010). Business organizations today are operating in such a complex environment where innovation has become the precious organizational resource for performance and survival (Zhang & Bartol, 2010). This complexity in the organizations has created mounting pressure to act more creatively than their counterparts (Rosenbusch, Brinckmann, & Bausch, 2011). Therefore to adapt, grow, and persist; organizations need to capitalize the creative potential of their employees, which can serve as stepping stone to innovation, change & performance (Gupta, 2014). Thus, research in the area of creativity has witnessed unparalleled interest of present researchers (Yoshida, Sendjaya, Hirst, & Cooper, 2014).

Creativity involves generating peculiar and useful ideas

(Amabile, Barsade, Mueller, & Staw, 2005; Zhou & George, 2001). Although creativity has been defined in a number of ways, there has been lack of consensus on the factors and the principal mechanisms by which it operates. Prior research highlights that individual factors such as personality and cognitive ability are related to creativity (Green, Cohen, Kim, & Gray, 2012; Furnham & Bachtiar, 2008) and researchers have continued to explore the same (Zhou & Hoever, 2014). In the context of individual characteristics researchers have also emphasized the role of emotions in creativity (Forgeard, 2011). Prior research has established that individuals who have the abilities to regulate and utilize their emotions, would have more positive outcomes than their counterparts who lack such abilities (Akhtar et al., 2015; Kluemper, DeGroot, & Choi, 2013; Kong & Zhao, 2013). In the last two decades, the concept of Emotional Intelligence (EI) has garnered immense importance in diverse fields including psychology, psychiatry, business, education, and medicine (Martins, Ramalho, & Morin, 2010; Mayer, Roberts, & Barsade, 2008; O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011). This amplified interest can be seen in the growing stream of research that has been involved in the argument that EI can explain the unique variance in individual behaviors and outcomes (O'Boyle et al., 2011). However, studies probing EI and creativity relationship are limited (Lassk & Shepherd, 2013).

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Researchers from different fields indicate that more research is warranted on how EI promote creativity (Lassk & Shepherd, 2013; Sanchez-Ruiz et al., 2011). Particularly, there is a need to identify the mechanism through which EI leads to creativity.

This study seeks to investigate how emotional intelligence fosters creativity. In line with this, the current study takes into consideration the suggestions of Rego, Sousa, Marques, and e Cunha (2014) to incorporate a broad spectrum of positive affect to investigate its influence on creativity. Positive affect implies the state of an individual experiencing positive emotions such as joy, happiness, and excitement (Gooty, Connelly, Griffith, & Gupta, 2010). It has been suggested that positive emotions are conducive in broadening individual's mindsets (Fredrickson & Joiner, 2002) which in turn help them to build psychological resources to capitalize adaptive benefits (Fredrickson & Branigan, 2005). Despite the fact that positive affect may last for short duration, however, the personal resources accumulated when an individual is in a state of positivity are long lasting and function as reserves which can be utilized in future tasks (Fredrickson & Losada, 2005). Positive affect not only acts as a reservoir of energy and fosters motivation, but it also facilitates psychological engagement to attain the task (Grant & Berry, 2011). Furthermore, it is evident from previous research that experiencing positive affect helps individuals to perform better (Amabile et al., 2005; Malinowski & Lim, 2015). This evidence lays the foundation for our study that positive affect may work as a mechanism explaining the relation of emotional intelligence and creativity which largely remains overlooked in the extant literature. Therefore, the aim of this study is to examine the mediating role of positive affect in the relationship of emotional intelligence and creativity. Examining positive affect as a mediator is important as employees with more positive affect are valuable for organizations because of the favorable outcomes associated with positive affect. The study model is shown in Figure 1.

#### THEORY AND HYPOTHESES

#### The El Construct

The EI construct consists of four abilities: (1) Perception

means the ability of a person to perceive emotions of self and those around accurately; (2) Facilitation means ability of a person to assimilate emotions to generate thought; (3) Understanding means an individual's ability to comprehend and analyze emotions; and (4) Management means individual's ability to regulate and control emotions in the self and others (Mayer & Salovey, 1997). Given that emotions influence the attitude and behaviors of individuals and help them to be effective and successful at work (Bar On, 2010), individuals having high levels emotional intelligence are likely to have more favorable outcomes than individuals with low emotional intelligence. As an individual characteristic, EI has witnessed vast attention in the workplace research (Joseph & Newman, 2010; Schlaerth, Ensari, & Christian, 2013). Higher emotional intelligence has been found to show linkage with different outcomes such as performance (Carmeli, 2003), subjective well-being (Sánchez-Álvarez, Extremera, & Fernández-Berrocal, 2016), job satisfaction (Jordan & Troth, 2011) and organizational citizenship behavior (Carmeli & Josman, 2006).

# **Emotional Intelligence and Creativity**

In view of creativity, earlier research paid more attention to the cognitive path (Proctor & Burnett, 2004). However, now a general consensus on checking the associations between emotional aspects and creative results have been found in the literature, suggesting that creativity may be a function of emotions (Amabile et al., 2005; Lassk, & Shepherd, 2013). Sternberg (1985) also suggested that emotional intelligence is necessary to steer day to day environment effectively and perform creatively. Thus, individuals with high EI may report high scores on creativity. Some studies provide evidence that individual's EI and creativity are positively related (Geher, Betancourt, & Jewell, 2017; Lassk & Shepherd, 2013; Zampetakis, Kafetsios, Bouranta, Dewett, & Moustakis, 2009). Thus, it is hypothesized that: H1: Emotional intelligence is positively related to creativity.

# **Emotional Intelligence and Positive Affect**

Jordan, Ashkanasy, Hartel, and Cooper (2002) probed the linkage of EI and work states related to emotional processes and

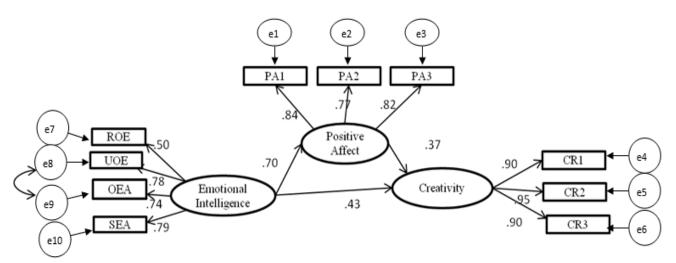


Figure 1: The structural equation model regarding the mediating effect of positive affect on the relation between emotional intelligence and creativity.

Note: Factor loadings are standardized. SEA, OEA, UOE, ROE=Four parcels of emotional intelligence; PA1-PA3=Three parcels of positive affect; CR1-CR3=Three parcels of creativity

argued that employees with high emotional intelligence experience less negative emotional reactions than their low counterparts. Moreover, individuals with higher EI facilitate greater positive affect because of their greater capacity to perceive and reason around emotions (Mayer & Salovey, 1997). Previous studies have demonstrated that EI is a correlate of positive affect (Extremera, & Rev. 2016; Lopes, Grewal, Kadis, Gall, & Salovey, 2006; Schutte, Malouff, Simunek, McKenley, & Hollander, 2002). Thus, it is hypothesized that: H2: Emotional intelligence is positively related to positive affect.

# **Positive Affect and Creativity**

Prior research has revealed that positive emotions lead to solving problems innovatively, openness to new ideas, efficiency in making decisions and performances (Boyatzis, Rochford, & Taylor, 2015). Positive affect has been identified as a probable antecedent to creativity (Baas, De Dreu, & Nijstad, 2008; Kim & Shin, 2015). Clore, Schwarz, and Conway (1994) suggested that creativity may be fostered when some cognitive variations occur due to the experience of positive affect. Fredrickson (1998) through the broaden-and-build model, suggested that people explore and turn up with novel ideas when their cognitive and psychological resources begin to spread out due to the experience of positive emotions. This theoretical justification was empirically tested by researchers, and the results of these studies show that positive moods are positively related to creativity (Amabile et al., 2005; Parke, Seo, & Sherf, 2015). Thus, it is hypothesized that: H3: Positive affect is positively associated with creativity.

# Mediating role of positive affect in the relationship between emotional intelligence and creativity

Employees high on emotional intelligence are likely to get along well with each other and thus, develop relationships because of their ability to understand and manage emotions in self and others (Mayer et al., 2008). In addition, employees with high emotional intelligence experience less negative emotional reactions than employees with low emotional intelligence (Jordan et al., 2002). This, in turn, helps them to experience more positive affect (Mayer & Salovey, 1997). This enhanced positive affect further has found to play a significant role in affecting various work outcomes such as helping behavior, performance, job enrichment and organization citizenship behavior (Johnson, 2008; Staw, Sutton, & Pelled, 1994). Considering this evidence, it may be speculated that positive affect may enhance creative potential of employees. As positive affect helps in expanding the cognitive horizon of individuals, it is likely that the enhanced positive affect will help individuals to be more attentive and creative (Fredrickson & Branigan, 2005). On the whole, individuals are likely to be more creative when they experience positive feelings like joy, contentment, and pride in work, etc. than those experiencing negative feelings like fear & anxiety (Isen, 2002). Consistent with preceding evidence it is expected that individuals with high emotional intelligence are likely to display positive affect which in turn may lead to enhanced employees' creativity. In view of this, positive affect might be a mediator in this study. Thus, it is hypothesized that: H4: Positive affect mediates the relationship between emotional intelligence and creativity.

#### **METHOD**

# Sample and Procedure

Two hundred employees (121 males and 79 females) working in different organizations in India participated voluntarily in the study. The average age of the participants was 39.30 years with SD=9.00. The study used a descriptive cross-sectional design and data were collected using a paper-pencil method. To obtain the data, the researchers first contacted HR departments and explained the purpose and objectives of the study. Organizations showing interest and voluntarily allowing their employees to participate in the study were then given questionnaires along with envelopes so that completed questionnaires can be returned in a sealed envelope directly to researchers. All the participants were assured of confidentiality and anonymity of their responses.

#### **MEASURES**

#### **Emotional Intelligence**

To assess EI of employees, a scale developed by Wong & Law was administered (WLEIS; Wong & Law, 2002). The scale comprises of four subscales: Self-Emotion Appraisal (SEA); Others' Emotion Appraisal (OEA); Regulation of Emotion (ROE); Use of Emotion (UOE). The scale contains 16 statements & responses are scored on a seven-point Likert scale (1=Disagree strongly to 7=Agree strongly). A sample item includes "I am a self-motivating person." The WLEIS has been found to show good psychometric properties (Cheng, Huang, Lee, & Ren, 2012). The Cronbach's alphas in this study for the four subscales were: SEA: 0.86; OEA: 0.87; ROE: 0.84; UOE: 0.82. Alpha reliability for the scale was 0.90.

## Creativity

Employees' creativity was assessed through 13-item creativity scale (Zhou & George, 2001) Employees reported their perception of creative performance scored on a five-point scale (1=Not at all characteristic to 5=Very characteristic). A sample item includes "I come up with creative solutions to problems." Reliability and excellent psychometric properties of the scale have been shown in prior research (Zhang & Bartol, 2010). Alpha reliability for the scale was 0.93.

#### **Positive Affect**

Positive affect was assessed using Positive Affect and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). This scale comprises of 10 adjectives for positive affect like "excited", "inspired", "determined" etc. Participants were requested to find out what they usually experience on a five-point Likert scale (1=Very slightly or not at all to 5=Extremely). Reliability and excellent psychometric properties of the scale have been shown (Bajaj, Gupta, & Pande, 2016; Bajaj, & Pande, 2016). The current study had 0.85 Cronbach's alpha value for the positive affect.

#### **DATA ANALYSIS**

Correlations, means, standard deviations, and reliability

estimates of emotional intelligence, positive affect, and creativity measures were computed using SPSS. The mediation role of positive affect was tested using two-step Structural Equation Modeling (SEM) procedure using AMOS 18.0. Firstly, we calculated the measurement model. After obtaining satisfactory results of the measurement model, we tested the hypothesized structural model. The overall fit of the model to data was evaluated by calculating several indices recommended by Hu and Bentler (1999). As each latent factor had multiple items, we formed parcels of the items employing an item-to-construct balance approach (Bajaj, 2016; Little, Cunningham, Shahar, & Widaman, 2002). We formed three parcels for each of the positive affect and creativity factors to control inflated measurement error. Four EI dimensions were used as indicators to create EI latent variable: SEA, OEA, UOE, and ROE.

#### **RESULTS**

# **Descriptive Analysis**

Means, standard deviations, and correlations for each variable were calculated and are presented in Table 1. EI showed a positive correlation with positive affect and creativity. Positive affect also showed a positive correlation with creativity.

#### **Measurement Model**

There are three latent factors (emotional intelligence, positive

affect and creativity) and 10 observed variables in the measurement model. The measurement model exhibited excellent fit:  $\chi^2$ =71.5, df=32, p<0.01; RMSEA=0.08; PClose=0.03; SRMR=0.04; and CFI=0.97.

#### Structural Model

A partially-mediated model (Model 1) with a mediator and a direct path from emotional intelligence to creativity was analyzed. This model showed a good fit to the data:  $\chi^2$ =71.5, df=32, p<0.01; RMSEA=0.08; PClose=0.03; SRMR=0.04; and CFI=0.97. Model 2 was formed by correlating the error terms of OEA and UOE as recommended by modification index. The meditational model (Model 2) fit the data well ( $\chi^2$ =58.5, df 31; RMSEA=0.07; PClose=0.14; SRMR=0.04; and CFI=0.98 and improved the model fit ( $\Delta\chi^2$  (1, N=200)=13, P<0.05). The fit of Model 2 was more satisfactory than Model 1 as indicated by a smaller AIC value (Table 2).

# **Bootstrapping**

To assess the significance of the mediating effects of positive affect on the relationship between emotional intelligence and creativity, bootstrapping procedures in AMOS were conducted. From the original data set (N=200), by random sampling, we generated 5000 bootstrapping samples. Emotional intelligence had

**Table 1.**Means, standard deviations and correlations among study variables.

Measure	М	SD	1	2	3	4	5	6	7	8
Age			1							
Gender			0.32**	1						
SEA	5.7	1.03	0.1	0.03	1					
OEA	5.7	1.01	0	0.01	0.65**	1				
UOE	5.1	1.2	0.12	0.01	0.57**	0.40**	1			
ROE	5.6	1.06	.18**	0.01	0.44**	0.33**	0.36**	1		
Emotional intelligence	5.5	0.82	0.14	0.01	0.85**	0.76**	0.75**	0.72**	1	
Positive affect	3.7	0.65	0.04	0	0.47**	0.43**	0.57**	0.38**	0.59**	1
Creativity	3.6	0.77	0.1	0.06	0.51**	0.40**	0.59**	0.36**	0.60**	0.59**

Note: SEA: Self-Emotion Appraisal; OEA: Others' Emotion Appraisal; UOE: Use of Emotion; ROE: Regulation of Emotion; \*\* p<0.01

**Table 2.** Fit Indices among Competing Models

	<u>,                                     </u>			T.		1		1
	χ2	df	χ2/df	SRMR	RMSEA	CF1	ECVI	AIC
Model 1	71.5	32	2.24	0.04	0.08	0. 97	0.591	117.5
Model 2	58.5	31	1.9	0.04	0.08	0.98	0.535	106.5

Note: N: 200, SRMR=Standardized Root-Mean-Square Residual; RMSEA=Root Mean Square Error of Approximation; CFI=Comparative fit index; ECVI=Expected Cross-Validation Index; and AIC=Akaike Information Criterion

Table 3. Direct and indirect effects and 95% confidence intervals (CI).

Model pathways	Point estimates	95% CI		
		Lower	Upper	
Total effect				
Emotional intelligence-Creativity	0.69	0.57	0.78	
Direct effects				
Emotional intelligence-Positive affect	0.70	0.54	0.82	
Positive affect-Creativity	0.37	0.14	0.57	
Indirect effects				
Emotional intelligence-Positive affect-Creativity	0.26	0.13	0.44	

a significant indirect effect on creativity via positive affect. Thus positive affect significantly mediated the relationship between emotional intelligence and creativity. The direct and indirect effects are shown in Table 3.

#### DISCUSSION

The present study was conducted to investigate the underlying mechanism of EI and creativity relationship in a sample of employees working in different organizations in India. Furthermore, the mediating role of positive affect was also explored. The results provided preliminary evidence that employees' emotional intelligence was associated with their creativity. Moreover, the findings of EI and creativity relationship are consistent with prior research (Zampetakis et al., 2009). The findings further reported the positive effect of emotional intelligence on positive affect. These results are also consistent with previous research (Lopes et al., 2006). Consistent with past studies positive affect was found to correlate significantly with creativity (Amabile et al., 2005; Parke et al., 2015). The major contribution of this study is that the relationship between emotional intelligence and creativity was mediated by positive affect. Thus, higher levels of EI of employees will lead to higher levels of positive affect, which in turn contributed to higher creativity. These findings are in tune with the previously proclaimed mediating role of positive affect (Parke et al., 2015) and provide concrete evidence with a different cultural setting (employees in Indian Organizations). Thus, higher levels of EI enhanced creativity, and this effect was partially mediated by positive affect. In this way, this study helps to identify the path through which the relationship between EI and creativity operates. These results may be of particular benefit to scholars interested in emotional intelligence and its implications in the workplace.

#### **Theoretical Implications**

The quest to understand how creativity can be fostered within an organization has become imperative to survive and maintain a competitive edge in the global market. Findings of the study offer insights to understand the connection between emotional intelligence, positive affect, and fostering creativity. The results of the study shed light on how emotional intelligence affects creativity and what role positive affect plays in facilitating employee creativity. Thus, the significant implication of the study is that we identify the mechanism of how emotional intelligence is positively related to employee creativity. Therefore our findings add to the literature on emotional intelligence, and creativity. The current research argues about the potential role of positive affect in leveraging creativity in organizations. This is in line with the point that an individual comes up with fresh and functional ideas as a consequence of experiencing positive affect (Binnewies & Wörnlein, 2011). Our results provide a basis for recommending that by encouraging employees to stay remain in a state of positive affect, an organization can stimulate creativity among employees. This is primarily due to the fact that affective state stands out as a factor that can be altered (Baas et al., 2008).

#### **Practical Implications**

The findings of the study offer several practical implications.

One of the most important challenges that any organization faces is to improve performance and to respond to innovative competitors, which calls for the need to promote employees' creativity. Thus, it becomes a necessity to tap the creative potential of employees which can be utilized by an organization to grab opportunities and overcome the challenges. Employees can enhance their creativity once they are given the opportunities to develop their EI. Boyatzis (2009) recommended that emotional intelligence can be developed in adulthood and it will certainly have a positive impact on job outcomes or life outcomes. Intervention programs enhancing creativity may need to focus on helping employees experience positive affect through promoting their emotional intelligence levels. As emotional intelligence may increase positive affect, the training designed to improve both emotional intelligence and positive affect are likely to enhance creativity individuals' creativity which subsequently will help their organization to stay ahead in the competition.

As we found that positive affect assumes a mediating role for creativity. Therefore managers can foster employee's creativity by facilitating them to experience positive affect. Experiencing positive emotions can open doors for expanding personal and social development of individuals ultimately leading to more positive work and life outcome. Individuals are generally not aware of how affect stimulates cognitive processing and creativity (Amabile et al., 2005). Managers by cultivating awareness and imparting knowledge may train employees about how to use moods to affect thinking and problem solving (Seo & Barrett, 2007). This will enable employees to learn how to use moods to boost their effectiveness (Mayer et al., 2008). Moreover, organizations should also work to help their employees be in a state of positive affect.

Thus, an organization may enhance its productivity with improved outcomes such as creativity by creating awareness of the emotions and moods that employees experience at work. By doing so, organizations may utilize the power of creative potential of their employees as an important competitive advantage.

# CONCLUSION

Our study was primarily focused on analyzing the empirical relationship among EI, positive affect, and creativity. Our study advances the knowledge in the field of emotional intelligence and affect in enhancing creativity. However, some limitations are inherent which leaves scope for further investigation. First, the sample size is small. Second, cross-sectional design is used in the study, which makes it difficult for a causal relationship to draw any conclusion, i.e., probably there may exist other links and explanations as well. Drawing from the dynamic connection between affect and creativity, it is plausible to suggest that positive affect may predict creativity. Also at the same time, it may be the outcome of creativity (Zhou & Ren, 2012). In future, longitudinal studies can be used to examine the relationships. Future studies should also incorporate experiments to assess the effects of EI training on organizational and individual outcomes. The third constraint is the use of self-assessing instruments to measures the variables, which poses a threat to internal validity as respondents may be biased, and we cannot avoid social desirability. To avoid self-report biases, other's assessment for data collection can be

used. The powerful relationship between emotional intelligence and creativity can be further advanced by exploring the role of mediators such as psychological climate, leader-member exchange, organizational justice etc. Future research endeavors may also assess the role of moderating variables such as mindfulness, team psychological safety, and work unit structure etc. on the relationship between EI and creativity.

#### **REFERENCES**

- Akhtar, R., Boustani, L., Tsivrikos, D., & Chamorro-Premuzic, T. (2015). The engageable personality: Personality and trait EI as predictors of work engagement. *Personal Individ Differ*, 73, 44-49.
- Amabile, T.M., Barsade, S.G., Mueller, J.S., & Staw, B.M. (2005).
  Affect and creativity at work. *Administrative Science Quarterly*, 50(3), 367-403.
- Baas, M., De Dreu, C.K.W., & Nijstad, B.A. (2008). A metaanalysis of 25 years of mood- Creativity research: Hedonic tone, activation, or regulatory focus? *Psychol Bull*, 134(6), 779-806.
- Bajaj, B. (2016). Mediating role of self-esteem in the relationship of mindfulness to resilience and stress. *IJEMHHR*, 19(4), 1-6.
- Bajaj, B., & Pande, N. (2016). Mediating role of resilience in the impact of mindfulness on life satisfaction and affect as indices of subjective well-being. *Personal Individ Differ*, 93, 63-67.
- Bajaj, B., Gupta, R., & Pande, N. (2016). Self-esteem mediates the relationship between mindfulness and well-being. *Personal Individ Differ*, 94, 96-100.
- Binnewies, C., & Wörnlein, S.C. (2011). What makes a creative day? A diary Study on the interplay between affect, job stressors, and job control. *J Organ Behav*, *34*(4), 589-607.
- Boyatzis, R.E. (2009). Competencies as a behavioral approach to emotional intelligence. *Journal of Management Development*, 28(9), 749-770.
- Boyatzis, R.E., Rochford, K., & Taylor, S.N. (2015). The role of the positive emotional attractor in vision and shared vision: toward effective leadership, relationships, and engagement. *Frontiers in Psychol*, *6*, 670
- Carmeli, A. & Josman, Z.E. (2006). The relationship among emotional intelligence, task performance, and organizational citizenship behaviors. *Human Performance*, 19(4), 403-419.
- Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes: An examination among senior managers. *J Manag Psychol*, 18(8), 788-813.
- Cheng, T., Huang, G.H., Lee, C., & Ren, X. (2012). Longitudinal effects of job insecurity on employee outcomes: The moderating roleof emotional intelligence and the leader-member exchange. *Asia Pacific Journal of Management*, 29(3), 709-728.
- Clore, G.L., N. Schwarz, & Conway, M. (1994). Cognitive causes and consequences of emotion. In R.S. Wyer & T.K. Srull (Eds.), *Handbook of Social Cognition*. Hillsdale, NJ: Lawrence Erlbaum. 323-417.
- Extremera, N., & Rey, L. (2016). Ability emotional intelligence and life satisfaction: Positive and negative affect as mediators. *Personal Individ Differ, 102*, 98-101.

- Forgeard, M.J. (2011). Happy people thrive on adversity: Preexisting mood moderates the effect of emotion inductions on creative thinking. *Personali Individ Differ*, 51(8), 904-909.
- Fredrickson, B.L. (1998). What good are positive emotions? *Rev General Psychol*, 2(3), 300-319.
- Fredrickson, B.L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and Thought action repertoires. *Cognition & Emotion*, 19(3), 313-332.
- Frederickson, B.L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science*, 13, 172-175.
- Fredrickson, B.L., & Losada, M.F. (2005). Positive affect and the complex dynamics of human flourishing. Am Psychol, 60(7), 678-686.
- Furnham, A., & Bachtiar, V. (2008). Personality and intelligence as predictors of creativity. Personal Individ Differ, 45(7), 613-617.
- Geher, G., Betancourt, K., & Jewell, O. (2017). The Link between emotional intelligence and creativity. *Imagination, Cognition* and *Personality*, 37(1), 5-22.
- Gooty, J., Connelly, S., Griffith, J., & Gupta, A. (2010). Leadership, affect and emotions: A state of the science review. *The Leadership Quarterly*, 21(6), 979-1004.
- Grant, A.M., & Berry, J.W. (2011). The necessity of others is the mother of invention: Intrinsic and prosocial motivations, perspective taking, and creativity. *Acad Manag J*, 54(1), 73-96.
- Green, A.E., Cohen, M.S., Kim, J.U., & Gray, J.R. (2012).
  An explicit cue improves creative analogical reasoning. *Intelligence*, 40(6), 598-603.
- Gupta, V. (2014). Employee Creativity: Mediating & Moderating Role of Psychological Capital. *Indian J Ind Relat*, 49(4), 649-662.
- Hu, L.T., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct Equ Modeling*. *A*, *6*(1), 1-55.
- Isen, A.M. (2002). Missing in Action in the AIM: Positive Affect's Facilitation of Cognitive Flexibility, Innovation, and Problem Solving. *Psychol Inquiry*, 13(1), 57-65.
- Johnson, S. K. (2008). I second that emotion: Effects of emotional contagion and affect at work on leader and follower outcomes. *The Leadership Quarterly*, 19(1), 1-19.
- Jordan, P.J., & Troth, A. (2011). Emotional intelligence and leader member exchange: The relationship with employee turnover intentions and job satisfaction. *Leadership & Organization Development Journal*, 32(3), 260-280.
- Jordan, P.J., Ashkanasy, N.M., Hartel, C.E.J., & Cooper, D. (2002). Emotional Intelligence as a Moderator of Emotional and Behavioral Reactions to Job Insecurity. *Acad Manag Rev*, 27(3), 361-372.
- Joseph, D.L., & Newman, D.A. (2010). Emotional intelligence: An integrative meta-analysis and cascading model. *J Appl Psychol*, 95(1), 54-78.
- Kim, M., & Shin, Y. (2015). Collective efficacy as a mediator between cooperative group norms and group positive affect and team creativity. *Asia Pac J Manag*, *32*(3), 693-716.

- Klijn, M., & Tomic, W. (2010). A review of creativity within organizations from a psychological perspective. J Manag Develop, 29(4), 322-343.
- Kluemper, D.H., DeGroot, T., & Choi, S. (2013). Emotion management ability: Predicting task performance, citizenship, anddeviance. J Manag, 39(4), 878-905.
- Kong, F., & Zhao, J. (2013). Affective mediators of the relationship between trait emotional intelligence and life satisfaction in young adults. Personal Individ Differ, 54(2), 197-201.
- Lassk, F.G., & Shepherd, C.D. (2013). Exploring relationship between emotional intelligence salesperson creativity. Journal of Personal Selling & Sales Management, 33(1), 25-37.
- Little, T.D., Cunningham, W.A., Shahar, G., & Widaman, K.F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. Struct Equ Modeling. A, 9(2), 151-173.
- Lopes, P.N., Grewal, D., Kadis, J., Gall, M., & Salovey, P. (2006). Evidence that emotional intelligence is related to job performance and affect and attitudes at work. Psicothema, 18(1), 132-138.
- Malinowski, P., & Lim, H.J. (2015). Mindfulness at work: Positive affect, hope, and optimism mediate the relationship between dispositional mindfulness, work engagement, and well-being. Mindfulness, 6(6), 1250-1262.
- Martins, A., Ramalho, N., & Morin E. (2010). A comprehensive meta-analysis of the relationship between emotional intelligence and health. Personal Individ Differ, 49(6), 554-564.
- Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.). Emotional Development and Emotional Intelligence. Educational Implications (pp. 3-31). New York, NY: Basic Books.
- Mayer, J.D., Roberts, R.D., & Barsade, S.G. (2008). Human abilities: Emotional intelligence. Ann Rev Psychol, 59, 507-536.
- O'Boyle, E.H., Humphrey, R.H., Pollack, J.M., Hawver, T.H., & Story, P.A. (2011). The relation between emotional intelligence and job performance: A meta-analysis. J Organ Behav, 32(5), 788-818.
- Parke, M.R., Seo, M.G., & Sherf, E.N. (2015). Regulating and facilitating: The role of emotional intelligence in maintaining and using positive affect for creativity. J Appl Psychol, 100(3), 917-934.
- Proctor, R.M., & Burnett, P.C. (2004). Measuring cognitive and dispositional characteristics of creativity in elementary students. Creativity Research Journal, 16(4), 421-429.
- Rego, A., Sousa, F., Marques, C., & e Cunha, M.P. (2014). Hope and positive affect mediating the authentic leadership and creativity relationship. J Bus Res, 67(2), 200-210.
- Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. J Bus Vent, 26(4), 441-457.
- Runco, M.A. (2004). Creativity. Ann Rev Psychol, 55, 657-687.
- Sanchez-Ruiz, M.J., Hernandez-Torrano, D., Perez-Gonzalez, J.C.,

- Batey, M., & Petrides, K.V. (2011). The relationship between trait emotional intelligence and creativity across subject domains. Motivation and Emotion, 35(4), 461-473.
- Sánchez-Álvarez, N., Extremera, N., & Fernández-Berrocal, P. (2016). The relation between emotional intelligence and subjective well-being: A meta-analytic investigation. J Positive Psychol, 11(3), 276-285.
- Schlaerth, A., Ensari, N., & Christian, J. (2013). A meta-analytical review of the relationship between emotional intelligence and leaders' constructive conflict management. Group Processes & *Intergroup Relations*, 16(1), 126-136.
- Schutte, N.S., Malouff, J.M., Simunek, M., McKenley, J., & Hollander, S. (2002). Characteristic Emotional Intelligence and Emotional Well-Being. Cognition and Emotion, 16(6), 769-785.
- Seo, M.G., & Barrett, L.F. (2007). Being emotional during decision making, good or bad? An empirical investigation. Acad Manag J, 50(4), 923-940.
- Staw, B.M., Sutton, R.I., & Pelled, L.H. (1994). Employee positive emotion and favorable outcomes at the workplace. Organ Sci, 5(1), 51-71.
- Sternberg, R.J. (1985). The triarchic mind: A New Theory of Human Intelligence. New York, NY: Penguin.
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. J Personal Soc Psychol, 54(6), 1063-1070.
- Wong, C.S., & Law, K.S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. The Leadership Quarterly, 13(3), 243-274.
- Yoshida, D.T., Sendjaya, S., Hirst, G., & Cooper, B. (2014). Does servant leadership foster creativity and innovation? A multilevel mediation study of identification and prototypicality. J Bus Res, 67(7), 1395-1404.
- Zampetakis, L. A., Kafetsios, K., Bouranta, N., Dewett, T., & Moustakis, V.S. (2009). On the relationship between emotional intelligence and entrepreneurial attitudes and intentions. International Journal of Entrepreneurial Behavior & Research, 15(6), 595-618.
- Zhang, X., & Bartol, K. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. Acad Manag J, 53(1), 107-128.
- Zhou, J. & George, J.M. (2001). When Job Dissatisfaction Leads to Creativity: Encouraging the Expression of Voice. Acad Manag J, 44(4), 682-696.
- Zhou, J., & Hoever, I.J. (2014). Research on workplace creativity: A review and redirection. Ann Rev Organ Psychol Organ Behav, 1(1), 333-359.
- Zhou, J., & Ren, R. (2012). Striving for creativity: Building positive contexts in the workplace. In K. S. Cameron, & G. Spreitzer (Eds.). The Oxford Handbook of Positive Organizational Scholarship (pp. 97-109). Oxford: Oxford University Press.