Resilience and Emotional Intelligence: which role in achievement motivation

Resiliencia e Inteligencia Emocional: qué rol tienen en la motivación al logro
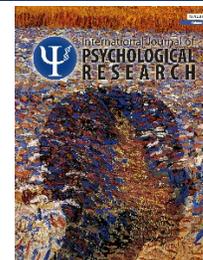
Paola Magnano [a] * ✉, Giuseppe Craparo [a] ✉ and Anna Paolillo [b] ✉

[a] Facoltà di Scienze dell'Uomo e della Società, Università degli studi Kore, Enna, Italia.

[b] Dipartimento Filosofia, Pedagogia e Psicologia, Università degli Studi di Verona, Verona, Italia.

ARTICLE INFO

ABSTRACT

In the framework of Positive Organizational Behavior, the construct of Psychological Capital identifies four psychological capacities that affect motivation and performance in the workplace: self-efficacy, hope, optimism and resilience. Emotional Intelligence, then, addresses self-regulatory processes of emotions and motivation that enable people to make adjustments to achieve individual, group, and organizational goals; Emotional Intelligence is strongly correlated with individual advancement and success in an organizational setting and with individual performance. Moreover, Emotional Intelligence is considered an antecedent to resilience. The present study aims to investigate the role of resilience and emotional intelligence in achievement motivation, verifying if emotional intelligence mediates the relationship among resilience and achievement motivation. Participants are 488 Italian workers, aged between 18 and 55 years. The findings confirm the significant role played by emotional intelligence on resilience and on motivation to achievement.

RESUMEN

En el marco del Comportamiento Positivo Organizacional, el constructo de Capital Psicológico identifica cuatro capacidades psicológicas que afectan la motivación y el desempeño en el trabajo: autoeficia, esperanza, optimismo y resiliencia. La inteligencia emocional entonces, se dirige a los procesos de autorregulación emocional y la motivación habilita a las personas realizar ajustes para alcanzar metas individuales, grupales y organizacionales; la Inteligencia emocional está fuertemente correlacionada con el progreso individual y el éxito en un entorno organizacional, y el rendimiento individual. Por otra parte, la inteligencia emocional se considera un antecedente de la resiliencia. El presente estudio tiene como objetivo investigar el papel de la resiliencia y la inteligencia emocional en la motivación al logro, verificando si la inteligencia emocional media la relación entre la resiliencia y la motivación al logro. Los participantes fueron 488 trabajadores italianos, con edades entre 18 y 55 años. Los resultados confirman el rol significativo que juegan la inteligencia emocional en la resiliencia y en la motivación al logro.

* **Corresponding author:** Paola Magnano, Facoltà di Scienze dell'Uomo e della Società, Università degli studi Kore, Enna, Italia. Email address: **paola.magnano@unikore.it.**

1. INTRODUCTION

Luthans (2002a) defines Positive Organizational Behavior (POB) as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace" (p. 59). The four states that are applied to today's workplace and contribute to positive psychological capital, with a return of improved performance such as higher productivity, better customer service, and more employee retention, are: (1) Confidence or Self-efficacy, the individual's conviction about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context (Stajkovic & Luthans, 1998). (2) Hope, a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-oriented energy) and (b) pathways (planning to meet goals) (Snyder, Irving, & Anderson, 1991). (3) Optimism, that influences how individuals perceive themselves and their environment, how they process incoming information, as well as how they decide to act based on this information. While optimists tend to trust that the future will be favourable, pessimists believe that bad events are likely to happen to them. As a result, pessimists behave in ways that allow them to prepare for the worst (Forgeard & Seligman, 2012). (4) Resilience, "the developable capacity to rebound or bounce back from adversity, conflict, and failure or even positive events, progress, and increased responsibility" (Luthans, 2002b, p. 702). Although resilience is just emerging in the organizational behaviour literature, POB has adopted a cross-disciplinary perspective, drawing from the established theory building and empirical findings in clinical and developmental psychology. For example, Masten's (2001; Masten & Reed, 2002) research supports that resilience can be developed through asset-focused, risk-focused, and process-focused strategies that are relevant and applicable to the workplace. Bonanno (2005) also supports that state-like resilience can be developed through training interventions. Finally, resilience is measurable (e.g., Block & Kremen, 1996; Wagnild & Young, 1993) and has been shown to be applicable and related to performance in the workplace (Coutu, 2002; Harland, Harrison, Jones, & Reiter-Palmon, 2005; Luthans, Avolio, Walumbwa, & Li, 2005; Luthans, Vogelgesang, & Lester, 2006; Waite & Richardson, 2004; Worline et al., 2002; Zunz, 1998). Luthans, Norman, Avolio, &

Avey (2008) investigate whether the recently emerging core construct of positive psychological capital (consisting of hope, resilience, optimism, and efficacy) plays a role in mediating the effects of a supportive organizational climate with employee outcomes. Bakker and Schaufeli (2008), utilizing three diverse samples, showed that employees' psychological capital is positively related to their performance, satisfaction, and commitment. In the complexity of POB framework, we will focus our study on the construct of resilience and its relations with Emotional Intelligence.

1.1 Emotional Intelligence at work

The concept of Emotional Intelligence (EI) refers to the ability to accurately perceive, access and generate emotions, assist thought processes, and reflectively regulate emotions so as to promote emotional and intellectual growth (Mayer, Salovey, & Caruso, 2004). EI addresses self-regulatory processes of emotions and motivation that enable people to make adjustments to achieve individual, group, and organizational goals (Froman, 2010). Some of the debate around the concept of EI, has considered EI as a stable set of dispositional attributes (e.g., personality traits, character, core values) as compared to a set of social-emotional skills that can be learned and developed (Mayer et al. 2004). As competencies, they encompass personality traits, motives, bodies of knowledge, and skills that can potentially facilitate individual achievement of positive work outcomes in such areas as job performance, career advancement, customer service, teamwork, and leadership (Goleman, 1995; Dulewicz & Higgs, 2000). However, EI, using both dispositional and learned competencies models, seems be positively related to productive organizational outcomes (Froman, 2010). Previous findings suggest that emotionally intelligent persons are better performers than their counterparts (Law, Wong, & Song, 2004; Van Rooy & Viswesvaran, 2004). Mayer, Salovey, & Caruso (2000) underlined that EI may influence work-related outcomes (e.g., job performance) and interpersonal interactions (e.g., job interviews).

In an extensive review of the literature on EI, Dulewicz & Higgs (2000) identified the core common elements in the overall construct which were subsequently demonstrated in empirical studies. These are: (1) Self-Awareness. The awareness of your own feelings and the ability to recognise and manage these. (2) Emotional Resilience. The ability to perform well and consistently in a range of situations and when under pressure. (3) Motivation. The drive and energy which

you have to achieve results, balance short and long-term goals and pursue your goals in the face of challenge and rejection. (4) Interpersonal Sensitivity. The ability to be aware of the needs and feelings of others and to use this awareness effectively in interacting with them and arriving at decisions impacting on them. (5) Influence. The ability to persuade others to change their viewpoint on a problem, issue or decision. (6) Intuitiveness. The ability to use insight and interaction to arrive at and implement decisions when faced with ambiguous or incomplete information. (7) Conscientiousness and Integrity. The ability to display commitment to a course of action in the face of challenge, to act consistently and in line with understood ethical requirements.

In a range of research studies Dulewicz and Higgs (1999; 1999b; 2000) have demonstrated that EI is strongly correlated with individual advancement and success in an organizational setting and with individual performance, and also it may be strongly related to leadership.

Numerous authors have theorized that EI contributes to people's capacity to work effectively in teams and manage work stress (e.g., Caruso & Salovey, 2004; Goleman, 1998). Moreover, EI may contribute to work performance (as reflected in salary, salary increase, and company rank) by enabling people to nurture positive relationships at work, work effectively in teams, and build social capital. Work performance often depends on the support, advice, and other resources provided by others (Seibert, Kraimer, & Liden, 2001). EI may also contribute to work performance by enabling people to regulate their emotions so as to cope effectively with stress, perform well under pressure, and adjust to organizational change (Lopes et al., 2006).

In the study of Carmeli (2003), the results indicated that emotionally intelligent senior managers developed emotional attachment to their organizations and were also more committed to their career. In addition, findings also indicated that emotionally intelligent senior managers tend to be more satisfied with their work. However, most of the studies found in literature have investigated EI in relation with variables like leadership, job performance, team working, business planning, professional success and success at workplace. Very few studies have been conducted on emotional intelligence and its influence on work motivation and achievement motivation (Devi, 2014). In particular they concern predominantly academic achievement: Umadevi (2009) analysed the relationship between EI, achievement motivation and academic achievement of primary school student-teachers, revealing positive relationship between EI, achievement motivation and academic achievement. Finally, in a very recent study, Mega, Ronconi, and De Beni, (2014) posited that students' emotions influence their motivation, and these, in turn, affect academic achievement.

1.2 Emotional Intelligence and Resilience

According to Armstrong, Galligan, and Critchley (2011), EI may well be directly connected to resilience, such that emotionally intelligent behavior in stressful circumstances is adaptive. Salovey, Bedell, Detweiler and Mayer (1999) theorize that persons with higher EI cope better with the emotional demands of stressful encounters because they are able to "accurately perceive and appraise their emotions, know how and when to express their feelings, and can effectively regulate their mood states" (p. 161). EI is thus postulated to buffer the effects of aversive events through emotional self-awareness, expression and management. Moreover we agree with Armstrong et al. (2011) that EI is antecedent to resilience (Matthews, Zeidner, & Roberts, 2002) rather than encompassing resilience (Bar-On, 1997), such that EI functions through its composite dimensions to facilitate resilience. As cited by Tugade and Fredrickson (2004), a convergence across several research methodologies indicates that resilient individuals have optimistic, and energetic approaches to life, are curious and open to new experiences, and are characterized by high positive emotionality (Block & Kremen, 1996; Klohnen, 1996). Additional evidence suggests that high-resilient people proactively cultivate their positive emotionality by strategically eliciting positive emotions through the use of humor (Werner & Smith, 1992), relaxation techniques (Demos, 1989; Wolin & Wolin, 1993), and optimistic thinking (Kumpfer, 1999).

Although to date there has been little research evidence on such resilience in the workplace, Luthans, Avolio, Walumbwa, and Li (2005) did find a significant relationship between the resilience of the Chinese workers who were undergoing significant change and transformation and their rated performance; Maddi (1987) found that hardy, resilient employees in a firm undergoing a massive downsizing maintained their health, happiness, and performance; Larson and Luthans (2006) found the factory workers' resiliency related to their job satisfaction; and Youssef and Luthans (2007) found that employees' level of resilience were related to their satisfaction, commitment, and happiness.

1.3 Resilience and Motivation

Motivation is a basic psychological process. Luthans (1998) asserts that motivation is the process that arouses, energizes, directs, and sustains behavior and performance. It is the process of stimulating people to action and to achieve a desired task. One way of stimulating people is to employ effective motivation, which makes workers more satisfied with and committed to their jobs.

As cited in the introduction, Positive Organizational Behavior (Luthans et al., 2005) identifies four psychological capacities which in aggregate are referred to as a core factor of psychological capital (Luthans, Luthans, & Luthans, 2004; Luthans & Youssef, 2004), and may have important implications for employee work motivation (Stajkovic, 2003). As posited by Luthans, Avey, Avolio, and Peterson (2010), conceptually, the definition of PsyCap suggests that the common link running among the four dimensions is a motivational propensity to accomplish goals and succeed. "Taken together, the four resources synergistically interacting to form the core construct of PsyCap can be expected to lead to higher performance based on their reinforcing greater extra effort from individuals, promoting the generation of multiple solutions to problems, positive expectations about results leading to higher levels of motivation, and positive responses to setbacks. In other words, there may be a motivational propensity found in PsyCap for goal accomplishment and success" (pp. 48-49). Stajkovic (2006) proposed motivational model called "core confidence" which included the same four constructs.

Even though in our literature research we did not find direct relations between resilience and work motivation, however, previous studies (Avey, Luthans, & Jensen, 2009) found that resilient individuals are better equipped to deal with the stressors in a constantly changing workplace environment, as they are open to new experiences, are flexible to changing demands, and show more emotional stability when faced with adversity (Tugade & Fredrickson, 2004). Recent research also demonstrates a positive link between resilience and employee performance (Luthans, Avolio, Avey, & Norman, 2007), job satisfaction organizational commitment and work happiness (Youssef & Luthans, 2007), and the ability to deal with massive corporate downsizing (Maddi, 1987).

Gordon Rouse's study (2001), finally, showed that more positive motivational patterns are associated with resilient students that with the non-resilient ones. The patterns are associated with better academic achievement. The results of this study also show that according to the students' beliefs, that the schooling environment of resilient students is not supporting some of their cognitive and social goals. Environmental facilitation of these goals could enrich the resilient students' self-concept, motivation, and overall goal accomplishment.

1.4 Aim of the study

Summarizing the literature review presented above, our starting point is what follows: (1) EI has important influences on attitudes at work, because addresses self-regulatory processes of motivation that enable people to achieve organizational goals (Froman, 2010), (2) resilience can be associated to EI: Armstrong et al. (2011) posited that EI is antecedent to resilience (Matthews et al., 2002); (3) achievement motivation can be associated to EI (Dulewicz and Higgs, 2000).

Considering there are very few studies – and not always focused on workplace context – that have explored the relations between resilience and motivation, the purpose of this study is to verify the relationship between Emotional Intelligence, Resilience with Work Motivation, in particular we hypothesize that:

Hyp. 1: Emotional intelligence will be positively related to achievement motivation;

Hyp. 2: Emotional intelligence will be positively related to resilience;

Hyp. 3: Resilience will mediate the relationship between emotional intelligence and achievement motivation.

2. METHOD

2.1 Participants and procedures

Participants were 488 Italian workers (248 males, 240 females), aged between 18 and 55 years (18-29 years=38.80%; 30-39 years=18.67%; 40-49 years=18.05%; over 50 years=24.48%) Table 1 represents sample distribution for gender and age: no significant differences were found in the socio-demographic distribution of the sample. They have been recruited on a voluntary basis, tests have been administered individually, anonymously, and without time limits. Workers were not obligated to provide to participate in data collection.

Table 1. *Sample distribution for gender and age*

	18-29 years	30-39 years	40-49 years	over 50 years	Total
Male	20.33%	11.20%	7.47%	11.83%	50.83%
Female	18.47%	7.47%	10.58%	12.66%	49.17%
Total	38.80%	18.67%	18.05%	24.48%	100.00%
Chi square=6.62, *df*=3.00, *p*=.09					

About half of the participants worked in the following employment sectors: administration (18.66%), teaching (16.35%), technical and operative (15.09%); the remaining 50% was distributed between caregivers (14.26%), entrepreneurs (8.81%), tourism (8.18%), commerce (6.50%), other profession non specified (8.80%). The 50% of the participants had a permanent contract.

2.2 Measures

Achievement Motivation was measured through the Achievement Subscale of WOMI - Work and Organizational Motivation Inventory (Giorgi & Majer, 2009), a self-report, multidimensional questionnaire which evaluates four macro-areas of working motivation: Reward, Success, Competence, Stability. In particular Achievement is a subscale of the Success area and it is composed of 6 items (e.g. "Having challenging goals") for which the individual has to evaluate his/her degree of motivation on a 5-point Likert scale (1 = "my motivation is very low" to 5 = "my motivation is very high"). Cronbach's α calculated on the sample of the study is .76.

Resilience was measured using the Resilience Scale for Adult – RSA (Friborg et al., 2006; Italian adaptation Laudadio, Mazzocchetti, & Perez, 2011), which evaluates resilience with a multidimensional perspective. It is a self-report questionnaire composed of 29 items scored along a 5-point semantic differential scale, with the positive differentials to the right for half of the items to reduce problems of acquiescence bias. It is grouped in six factors:

1. Perception of Self, which refers to self-esteem and self-confidence and the ability to manage negative behaviours and emotions (Skodol, 2010) (e.g., "In difficult periods I have a tendency to …. view everything gloomy … find something good that help me thrive").

2. Perception of Future, which refers to positive future orientation, and to motivation to achieve and be successful in the diverse aspects of life (Masten & Reed, 2002; Werner & Smith, 1992) (e.g., "I feel that my future looks … very promising …uncertain").

3. Structured Style, which refers to strong, well-differentiated and integrated sense of self (e.g., "I am at my best when I … have a clear goal to strive for … can take one day at a time").

4. Social Competences, which refers to interpersonal skills that promote the development and maintenance of relationship that assist in coping with stressful life experiences (Skodol, 2010) (e.g., "Meeting new people is … difficult for me … something I am good at").

5. Familiar Cohesion, which contains items about cooperation in the family, support of each other, loyalty towards others in the family, and general stability in the family (e.g., "In difficult periods my family … keeps a positive outlook on the future … views the future as gloomy").

6. Social Resources, which refers to the accessibility of support from friends, as well as one's own ability to provide support (e.g., "I get support … from friends/family members … no one").

As made by previous research (Friborg et al., 2006; Hjemdal, Friborg, Stiles, Rosenvinge & Martinussen, 2006), in the present study the total RSA score was used in preference to the individual RSA factors, as the subscales measure common aspects of resilience, thus supporting the use of the total RSA score without significantly changing the meaning of low vs. high resilience scores. Cronbach's α for the global scale is .79.

Emotional Intelligence was measured using the SREIT – Self Report Emotional Intelligence Test (Schutte et al., 1998; Italian adaptation Craparo, Magnano, & Faraci, 2014), made of 33 items answered on a 5-point Likert scale (from 1 = "completely disagree" to 5 = "completely agree"). The scale assesses how effectively respondents typically identify, understand, regulate, and harness emotions in themselves and

others. Cronbach's α calculated on the sample of the study is .83. Sample item is "I am aware of my emotions as I experience them".

The procedure was reviewed and approved by the Ethics Commission of Kore University.

2.3 Data Analysis

Tests were completed in SPSS 21.0.

Since gender differences among variables were not found in the present sample, the whole sample was taken into account for the statistical analyses.

For instance correlations among the considered variables were tested. Their high values (p <.001) confirmed the possibility to test the mediations. The recommended analyses follow the same procedure as the classic Baron & Kenny (1986) approach.

Then as in standard regression testing, a Sobel test was conducted using regression coefficients and their standard errors.

3. RESULTS

Descriptive statistics and correlations of data are provided in Table 2.

Mediations were tested using a procedure based on Baron & Kenny (1986). To confirm mediation, antecedent (emotional intelligence) must predict the mediator (resilience) and the outcomes (motivation to achievement), and the relationship between predictor and outcome must be significantly reduced after controlling for mediator.

Hypothesis 1 predicted that emotional intelligence would be positively related to achievement motivation. The results support the hypothesis (β =0.38, R^2 = 0.14, p < .001).

Hypothesis 2 predicted that emotional intelligence would be positively related to resilience. The results support the hypothesis (β =0.42, R^2 = 0.18, p < .001).

Hypothesis 3 predicted that resilience would mediate the relationship between emotional intelligence and achievement motivation. This hypothesis was also supported, since the effect of emotional intelligence on achievement motivation was reduced after controlling for resilience (β =0.30, p < .001 for emotional intelligence; β =0.18, R^2 = 0.17, p < .001 for resilience), so suggesting a partial mediation (Table 3). Fig. 1 presents a model summarizing the main results.

Then as in standard regression testing, a Sobel test was conducted using regression coefficients and their standard errors, indicating that the reduction in the regression coefficient was significant (z = 7.61, p < .001).

**Table 2.** *Descriptives and correlations among the studied variables*

	M	SD	1	2	3
1. Emotional Intelligence	123.21	13.02	1		
2. Global Resilience	111.43	15.69	0.42**	1	
3. Achievement Motivation	21.79	3.23	0.38**	0.31**	1

(**p < .01)

Table 3. *HLM models of mediation using a 3-step procedure derived from Baron and Kenny (1986) for Model 2*

	Variables	Dependent (β)	Mediator (β)	R^2
Step 1	EI – Achievement Motivation	0.38***		0.14***
Step 2	EI – RSA Tot	0.42 ***		0.18***
Step 3	EI – RSA Tot – Achievement Motivation	0.30***	0.18 ***	0.18***

(***$p < .001$)

Figure 1. *Summary of the results*
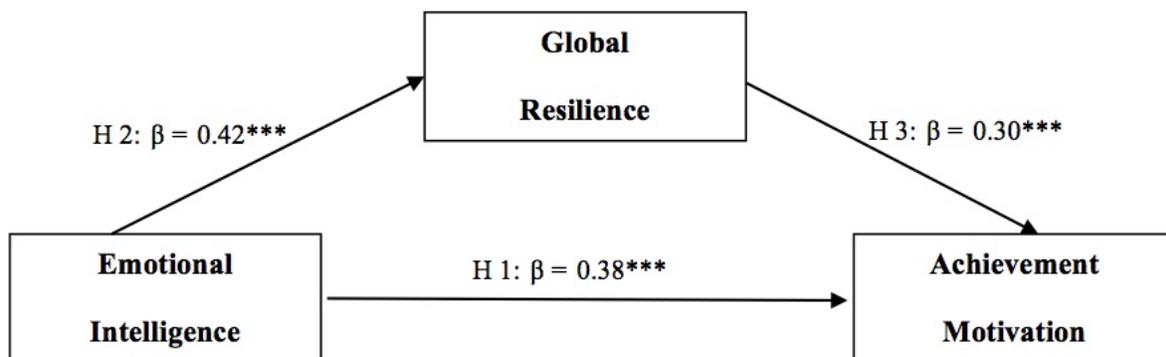
4. DISCUSSION

The purpose of this study was to analyse the relationship among EI, resilience and motivation to achievement, in particular by verifying the mediational role of resilience in the relationship between EI and achievement. The results suggest a significant relationship among the three constructs examined: EI seems to strongly predict motivation to achieve, since it has a direct impact on workers' motivation which didn't disappear neither after controlling for their resilience. The present findings have several implications; first of all, they confirm the significant role played by emotional intelligence on resilient people's lives (Tugade & Fredrickson, 2004), in terms of intellectual and emotional growth (Mayer & Salovey, 1997). Psychologically resilient people are effectively described as emotionally intelligent (Salovey et al., 1999) and appear to use positive emotions for their advantage (Tugade & Fredrickson, 2002) to produce

beneficial outcomes in the coping process (e.g., Folkman & Moskowitz, 2000; Fredrickson, 2000); therefore it is possible that certain individuals have a greater tendency to draw on positive emotions in times of stress (e.g., Feldman Barrett & Gross, 2001; Salovey, Hsee, & Mayer, 1993). According to these considerations, it is possible to conclude that the ability to accurately perceive, access and regulate emotions helps to develop some self-regulatory processes (of emotions and motivation) that enable people to deal better with a stressful work environment, and to make adjustments to achieve organizational goals. Hence, emotional intelligence is a prerequisite to become resilient, and resilience is a particular way through which EI can lead to better motivation to work achievement. Moreover, as Avey, Luthans, and Youssef (2010) stated, resilience has an underlying perseverance component that motivates endurance in the face of obstacles. It motivates persistence and a "keeping at it" outlook; resilience – although together

with the other PsyCap's three constituent psychological capacities – represents a core factor of motivation, perseverance, and success expectancies, increasing the probabilities of success and goal accomplishment.

Those results are in line with Avey, Reichard, Luthans, and Mhatre (2011) findings, stating that individuals higher in PsyCap (of which resilience is an important dimension) are likely to be energized and put forth effort that is manifested in higher performance over extended periods of time; that is because many factors or qualities have been associated with resilience, and these includes setting goals and taking steps to achieve these goals (Resnick, 2011). These results confirm that resilience, as a fundamental component of PsyCap (which has been described as motivational propensity, Luthans, et al., 2007), depends on emotional intelligence and it can lead to desirable employee attitudes (such as motivation).

In addition to this, there is a direct link between EI and motivation to achievement, which cannot be explained through the "adaptability" and coping resources of resilient individuals; it seems it is more linked with a personal baggage of social and relational resources which induce individuals to achieve, by using their ability to regulate emotions to promote their own work success and growth. Such direct relationship should be further explored.

Agreeing with Mayer et al. (2004), that emotional intelligence is a set of social-emotional skills which can and should be learned and developed even in the work context, the development and improvement of EI could be the subject of some organizational training to make employees aware of a positive use and regulation of self-emotion to successfully cope with stressors and being motivate to reach some important goals.

4.1 Limitations of the study

A first limitation of the study was the use of convenience sampling methods for data collection. While cross-sectional convenience samples may prove useful in exploring theoretical models, such as the one built in the present study, caution should be exercised while generalizing the results beyond the current research.

Second limitation of the study was the cross-sectional measurement. It was not possible to test the causal relationships proposed in the theoretical framework, and longitudinal assessment would provide further validation of specific relationships.

A further limitation regards the lack of outcome's measures, that could support the importance of the relationships between the variables of the study in the organizational performance.

Although those limitations, the significant results suggest that further research should be undertaken to replicate these preliminary findings.

5. CONCLUSION

The results of this study could be read in the larger framework of POB: the definition reported in the introduction recognizes that POB seems to incorporate "many existing concepts from the domains of attitudes, personality, motivation, and leadership" (Luthans, 2002a, p. 59). PsyCap is an outgrowth of POB and is defined as being, "an individual's positive psychological state of development characterized by: (1) having confidence (self efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals, and when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" (Luthans, Youssef, & Avolio, 2007, p. 3). Workers with high PsyCap tend to be more determined, expend more effort, expect success, maneuver obstacles more effectively, and bounce back from setbacks more readily (Luthans, Avolio et al., 2007; Luthans, Youssef et al., 2007). Future research could try to integrate EI in PsyCap model, analysing if EI plays a mediational role also among the other three dimensions (efficacy, hope and optimism), as already hypothesized by Luthans (2002a). According to Luthans, Avolio, et al., (2007), findings from this study could have practical implications for the development and management of human resources' motivational propensities in today's workplace. Employees who are more resilient and able to manage their emotions may be more motivated toward achievement and success and may show better performance and satisfaction.

6. REFERENCES

Armstrong, A. R., Galligan, R. F., & Critchley, C. R. (2011). Emotional intelligence and psychological resilience to negative life events. *Personality and Individual Differences,* 51(3), 331–336. doi:10.1016/j.paid.2011.03.025

Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Psychological Capital: a positive resource for combating employee stress and turnover.

Human Resource Management, 48(5), 677–693. doi:10.1002/hrm

Avey, J. B., Luthans, F., & Youssef, C. M. (2010). The Additive Value of Positive Psychological Capital in Predicting Work Attitudes and Behaviors. *Journal of Management*, 36 (2), 430–452. doi:10.1177/0149206308329961.

Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly,* 22(2), 127–152. doi:10.1002/hrdq.20070

Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: engaged employees in flourishing organizations. *Journal of Organizational Behavior,* 29(2), 147–154. doi:10.1002/job.515.

Bar-On, R. (1997). *The Emotional Quotient Inventory (EQ-i): A test of emotional intelligence.* Toronto, Canada: Multi-Health Systems, Inc.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51 (6), 1173–1182. doi:10.1037/0022-3514.51.6.1173

Block, J., & Kremen, A. M. (1996). IQ and ego-resiliency: Conceptual and empirical connections and separateness. *Journal of Personality and Social Psychology,* 70, 349-361. doi:10.1037/0022-3514.70.2.349

Bonanno, G. A. (2005). Clarifying and extending the construct of adult resilience. *American Psychologist,* 60, 265-267. doi:10.1037/0003-066X.60.3.265b

Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes: An examination among senior managers. *Journal of Managerial Psychology*, 18, 788–813. doi:10.1108/02683940310511881

Caruso, D., & Salovey, P. (2004). *The Emotionally Intelligent Manager.* San Francisco: Jossey-Bass.

Coutu, D. L. (2002). How resilience works. *Harvard Business Review*, 80(3), 46-55.

Craparo, G., Magnano, P., & Faraci, P. (2014). Psychometric properties of the italian version of self-report Emotional Intelligence Test (SREIT). *TPM*, 21(2), 121–133. doi: 10.4473/TPM21.2.1.

Demos, E. V. (1989). Resiliency in infancy. In T. F. Dugan, R. Cole (Eds.). *The child of our times: Studies in the development of resiliency* (3-22). Philadelphia: Brunner/Mazel.

Devi, A. (2014). *Emotional Intelligence in relation to self concept achievement motivation and academic achievement of student teachers of Punjab.* Unpublished paper. doi:10.1177/0149206307305562

Dulewicz, V., & Higgs, M. (1999). Can Emotional Intelligence be measured and developed? *Leadership and Organisation Development,* 20 (5), 242–252. doi: 10.1108/01437739910287117

Dulewicz, V., & Higgs, M. (1999b). *EIQ User Manual.* NFER-Nelson, Windsor.

Dulewicz, V., & Higgs, M. (2000). Emotional Intelligence. A review and evaluation study. *Journal of Managerial Psychology,* 15(4), 341–372. doi: 10.1108/02683940010330993

Feldman Barrett, L., & Gross, J. (2001). Emotional intelligence: A process model of emotion representation and regulation. In T. J. Mayne, G. A. Bonnano (Eds.), *Emotions: Current issues and future directions* (286-310). New York: Guilford.

Folkman S., & Moskowitz, J. T. (2000). Positive affect and the other side of coping. *American Psychologist,* 55, 647–654. doi: 10.1037/0003-066X.55.6.647

Forgeard, M. J. C., & Seligman, M. E. P. (2012). Seeing the glass half full: A review of the causes and consequences of optimism. *Pratiques Psychologiques,* 18(2), 107–120. doi:10.1016/j.prps.2012.02.002.

Fredrickson, B. L. (2000). Cultivating positive emotions to optimize health and well-being. *Prevention & Treatment*, 3(1), No Pagination Specified, Article 1.

Friborg, O., Hjemdal, O., Rosenvinge, J. H., Martinussen, M., Aslaksen, P. M., & Flaten, M. A. (2006). Resilience as a modulator for pain and stress. *Journal of Psychosomatic Research*, 61, 213–219. doi: 10.1016/j.jpsychores.2005.12.007

Froman, L. (2010). Positive Psychology in the Workplace. *Journal of Adult Development*, 17(2), 59–69. doi: 10.1007/s10804-009-9080-0.

Giorgi, G., & Majer, V. (2009). *WOMI. Work and Organizational Motivational Inventory.* Firenze: Giunti O.S.

Goleman, D. (1995). *Emotional intelligence.* New York: Bantam.

Goleman, D. (1998). *Working with Emotional Intelligence.* London: Bloomsbury.

Gordon Rouse, K. A. (2001). Resilient students' goals and motivation. *Journal of Adolescence,* 24(4), 461–72. doi: 10.1006/jado.2001.0383

Harland, L., Harrison, W., Jones, J., & Reiter-Palmon, R. (2005). Leadership behaviors and subordinate resilience. *Journal of Leadership and Organizational Studies,* 11, 2-14. doi: 10.1177/107179190501100202

Hjemdal, O., Friborg, O., Stiles, T. C., Rosenvinge, J. H., & Martinussen, M. (2006). Resilience predicting psychiatric symptoms: a prospective study of protective factors and their role in adjustment to negative life events. Child *Psychology and Psychotherapy*, 13, 194–201. doi: 10.1002/cpp.488

Klohnen, E. C. (1996). Conceptual analysis and measurement of the construct of ego-resiliency. *Journal of Personal and Social Psychology*, 70(5), 1067-1079. doi: 10.1037/0022-3514.70.5.1067

Kumpfer, K. L. (1999). Factors and processes contributing to resilience: The resilience framework. In M. D. Glantz, J. L. Johnson, (Eds.), *Resilience and development: Positive life adaptations* (179-224). New York: Kluwer Academic/Plenum Publishers.

Larson M., & Luthans F. (2006). Potential added value of psychological capital in predicting work attitudes. *Journal of Leadership and Organizational Studies,* 13, 44–61. doi: 10.1177/10717919070130020601

Laudadio, A., Mazzocchetti, L., & Pérez, F. J. F. (2011). *Valutare la resilienza: teorie, modelli e strumenti*. Roma: Carocci.

Law, K.S., Wong, C.S., & Song, L.J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of Applied Psychology,* 89, 483-496. doi: 10.1037/0021-9010.89.3.483

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(Suppl.), 132–138.

Luthans F., Avolio B., Walumbwa F., Li W. (2005). The psychological capital of Chinese workers: Exploring the relationship with performance. *Management and Organization Review,* 1, 247–269. doi: 10.1111/j.1740-8784.2005.00011.x

Luthans, F. (1998). Organisational Behaviour (8th ed.). Boston: Irwin McGraw-Hill.

Luthans, F. (2002a). Positive organizational behavior. Developing and managing psychological strengths. *Academy of Management Executive*, 16(1), 57-72. doi: 10.5465/AME.2002.6640181

Luthans, F. (2002b). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior,* 23, 695-706. doi: 10.1002/job.165

Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics*, 33, 2, 143–60.

Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. *Human Resource Development Quarterly*, 21(1), 41–67. doi:10.1002/hrdq.20034

Luthans, F., Avolio, B. J., Walumbwa, F. O., & Li, W. (2005). The psychological capital of Chinese workers: Exploring the relationship with performance. *Management and Organization Review,* 1, 247-269. doi: 10.1111/j.1740-8784.2005.00011.x

Luthans, F., Avolio, B., Avey, J. B., & Norman, S. M. (2007). Psychological capital: Measurement and relationship with performance and job satisfaction. *Personnel Psychology*, 60(3), 541–572. doi: 10.1111/j.1744-6570.2007.00083.x

Luthans, F., Luthans, K. W., & Luthans, B. C. (2004). Positive psychological capital: Beyond human and social capital. *Business Horizon*, 47(1), 45–50. doi:10.1016/j.bushor.2003.11.007

Luthans, F., Norman, S. M., Avolio, B. J., & Avey, J. B. (2008). The mediating role of psychological capital in the supportive organizational climate - employee performance relationship. *Journal of Organizational Behavior,* 29, 219–238. doi:10.1002/job

Luthans, F., Vogelgesang, G. R., & Lester, P. B. (2006). Developing the psychological capital of resiliency. *Human Resource Development Review*, 5(1), 25-44. doi: 10.1177/1534484305285335

Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford, UK: Oxford University Press.

Maddi S. R. (1987). Hardiness training at Illinois Bell Telephone. In P. Opatz (Ed.), *Health promotion evaluation* (101-115). Stevens Point, WI: National Wellness Institute.

Masten, A. S. (2001). Ordinary magic: Resilience process in development. *American Psychologist,* 56, 227-239. doi: 10.1037/0003-066X.56.3.227

Masten, A. S., & Reed, M. J. (2002). Resilience in development. In C. R. Snyder & S. Lopez (Eds.), *Handbook of positive psychology* (74-88). Oxford, UK: Oxford University Press.

Matthews, G., Zeidner, M., & Roberts, R. D. (2002). *Emotional Intelligence. Science & Myth.* Cambridge, Massachussetts; London, England: The MIT Press.

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3–31). New York: Basic Books.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2000). Competing models of emotional intelligence. In R. J. Sternberg (Eds.), *Handbook of human intelligence* (2nd ed.) (396-420). New York: Cambridge University Press.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry*, 15, 197–215.

Mega, C., Ronconi, L., & De Beni, R. (2014). What makes a good student? How emotions, self-regulated learning, and motivation contribute to academic achievement. *Journal of Educational Psychology,* 106(1), 121–131. doi:10.1037/a0033546

Resnick, B. (2011). The relationship between resilience and motivation. In: B. Resnick, L. P. Gwyther, K. A. Roberto (Eds.), *Resilience in Aging* (pp. 199-215). Springer: New York. 10.1007/978-1-4419-0232-0_13.

Salovey, P., Bedell, B., Detweiler, J., & Mayer, J. (1999). Coping intelligently: Emotional intelligence and the coping process. In C. R. Snyder (Ed.), Coping: *The psychology of what works* (pp. 141–164). New York: Oxford University Press.

Salovey, P., Hsee, C. K., & Mayer, J. D. (1993). Emotional intelligence and the self-regulation of affect. In D. M. Wegner, & J. W. Pennebaker (Eds.), *Handbook of mental control* (258-277). Englewood Cliffs, NJ: Prentice Hall.

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., et al. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences,* 25, 167–177. doi: 10.1016/S0191-8869(98)00001-4

Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. *Academy of Management Journal*, 44, 219-237.

Skodol, A. E. (2010). The resilient personality. In J. W. Reich, A. J. Zautra, J. S. Hall (Eds.), *Handbook of adult resilience* (112-125). New York: Guilford Press.

Snyder, C., Irving, L. M., & Anderson, S.A. (1991). Hope and health: Measuring the will and the ways. In C.R. Snyder & D. R. Forsyth (Eds.), *Handbook of social and clinical psychology: The health perspective* (285-305). Elmsford, NY: Pergamon.

Stajkovic, A. D. (2003). *Introducing positive psychology to work motivation: Development of a core confidence model.* Paper presented at the Academy of Management, Organizational Behavior Division, National meeting. Seattle, WA.

Stajkovic, A. D. (2006). Development of a core confidence higher-order construct. *Journal of Applied Psychology,* 91, 1208–1224. doi:10.1037/0021-9010.91.6.1208

Stajkovic, A., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin*, 124, 240-261.

Tugade, M. M., & Fredrickson, B. L. (2002). Positive emotions and emotional intelligence. In L. Feldman Barrett & P. Salovey (Eds.), *The Wisdom of Feelings* (319-340). New York: Guilford.

Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology,* 86(2), 320–333. doi:10.1037/0022-3514.86.2.320.

Umadevi, M. R. (2009). Relationship between Emotional Intelligence, Achievement Motivation and Academic Achievement. *Edutracks*, 8 (12), 31-35.

Van Rooy, D. L., & Viswesvaran, C. (2004). Emotional intelligence. A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior,* 65, 71–95. doi: 10.1016/S0001-8791(03)00076-9

Wagnild, G., & Young, H. (1993). Development and psychometric evaluation of the Resiliency Scale. *Journal of Nursing Measurement*, 1(2), 165-178.

Waite, P., & Richardson, G. (2004). Determining the efficacy of resiliency training in the work site. *Journal of Allied Health*, 33, 178-183.

Werner, E., & Smith, R. (1992). *Overcoming the odds: High risk children from birth to adulthood.* Ithaca, NY: Cornell University Press.

Wolin, S. J., & Wolin, S. (1993). *Bound and determined: Growing up resilient in a troubled family*. New York: Villard.

Worline, M. C., Dutton, J. E., Frost, P. J., Kanov, J., Lilius, J. M., & Maitlis, S. (2002). *Creating fertile soil: The organizing dynamics of resilience.* Paper presented at the annual meeting of the Academy of Management, Denver.

Youssef, C. M., & Luthans, F. (2007). Positive Organizational Behavior in the Workplace: The Impact of Hope, Optimism, and Resilience. *Journal of Management,* 33(5), 774–800. doi: 10.1177/0149206307305562

Zunz, S. (1998). Resiliency and burnout: Protective factors for human service managers. *Administration in Social Work,* 22(3), 39-54. doi: 10.1300/J147v22n03_03