cogent
psychology

INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY | RESEARCH ARTICLE

The effect of proactive and preventive coping styles on personal and organizational outcomes: Be proactive if you want good outcomes

Önder Ersen[1] and Reyhan Bilgiç[1]*

*Corresponding author: Reyhan Bilgiç, Department of Psychology, Middle East Technical University, Turkey
E-mail: rey@metu.edu.tr

Reviewing editor:
Gabriela Topa, Universidad Nacional de Educacion a Distancia, Spain

Additional information is available at the end of the article

Abstract: The purpose of the present study is to examine the relationship between proactive and preventive coping styles and some individual and organizational outcomes, namely, job satisfaction, task performance, and organizational citizenship behavior. Psychometric qualities of the scales were established through a pilot study by collecting data from 90 employees selected from different sectors. More data were collected from additional 125 employees. Altogether, 215 employees participated in the present study. Of the participants, 114 were women (53%) and 101 were men (47%). Results showed that proactive coping skills predicted organizational outcomes positively (i.e. job performance, job satisfaction, and organizational citizenship behavior). Preventive coping style did not predict any of the outcomes. Results were discussed and implications for the managers were mentioned. Some future research themes were suggested, and limitations of the study were listed.

Subjects: Behavioral Sciences; Psychological Science; Work & Organizational Psychology; Stress and Emotion in the Workplace

Keywords: job satisfaction; task performance; OCB; proactive coping; preventive coping

ABOUT THE AUTHORS

Reyhan Bilgiç **r**eceived PhD from the Illinois Institute of Technology in Industrial and Organizational Psychology and currently working at the Psychology Department of Middle East Technical University, Ankara, Turkey. She supervised many masters and PhD theses in Industrial and Organizational Psychology. Research interests are stress at work, job satisfaction and work engagement, recruitment and personnel selection, personality at work, and psychometric issues. She has published articles nationally and internationally.

Önder Ersen completed his Master's thesis under the supervision of Reyhan Bilgiç from the Department of Psychology at the Middle East Technical University, Ankara Turkey, in 2014. He has joined the work force of human resources employees of FMCG firms in İstanbul, Turkey. He, currently, conducts organizational development (OD) and effectiveness activities by designing HR systems and procedures.

PUBLIC INTEREST STATEMENT

Stress experienced at work has consequences for both individuals and organizations. For individuals, the consequences are most of the time health related such as burnout, work family conflict, job and life satisfaction, and subjective well-being. The European Agency for Safety and Health at Work indicated that stress is one of the most influential health problems affecting 22% of workers from the 27 European Union Countries. If organizations cannot do anything to reduce the stress experienced at work, it is important that individuals do something about it. Although there are many stress reduction programs available, styles of individuals seem to be important to deal with the stress. Studies showed that there are different coping styles such as proactive and preventive. This particular study showed that having proactive coping style has positive consequences for both individuals and organizations such as performance and job satisfaction. Therefore it is public interest to have people adopt proactive coping style.

cogent •• psychology

The Effect of Proactive and Preventive Coping Styles on Personal and Organizational Outcomes: Be Proactive If You Want Good Outcomes

Stress has been one of the focuses of studies in psychology because of its negative impact on people and their health. Cartwright and Cooper (1997) underlined the detrimental effects of stress that it can lead to many problems like emotional distress, stomach disorder, headaches, sleeplessness, loss of energy, and so on. Moreover, in the long term, it can be more serious illnesses such as high blood pressure and cardiovascular disease (Theorell & Karasek, 1996).

Additionally, the negative effect of stress is also a critical factor in organizations. The European Agency for Safety and Health at Work indicated that stress is one of the most influential health problem affecting 22% of workers from the 27 European Union countries in 2005 and issued that stress is a factor in 50% to 60% of all lost working day (Milczarek, Rial-González, & Schneider, 2009). Time pressure, excessive work demands, role conflict, role ambiguity, and ergonomic insufficiencies are among the factors leading the employees to suffer from stress and in turn, there will be a decrease in work performance in terms of quantity, quality, and creativity (Cohen & Williamson, 1991). Moreover, Nawaz, Mohsan, and Khan (2011) point out that the relationship is mediated by job satisfaction. Additionally, Elovainio, Kivim Ä Ki, and Vahtera (2002) suggested that stress is a threatening factor for organizational performance and Meneze (2005) also stressed its negative influence on employees' performance by leading low productivity and job satisfaction, the increment in absenteeism and other problems like alcoholism, hypertension, and cardiovascular problems.

Since stress leads to an imbalance in the body and has negative influence on employee performance, therefore, for the organizations; the organizations and individuals must try to adopt ways on how to face stress as they would like to eliminate or alleviate it. Coping is one of the strategies that alleviate the effect of stress as Mostert and Joubert (2005) described coping as the attempts of individuals to block, decrease, or eliminate negative effects.

Due to its importance, coping and the way people cope with stress issues have been studied by researchers (Greenglass, Schwarzer, Jakubiec, Fiksenbaum, & Taubert, 1999; Lazarus & Folkman, 1984; Mostert & Joubert, 2005; Skinner & Zimmmer-Gembeck, 2007).

1. Research on proactive and preventive coping

While traditional stress research tends to emphasize the things that we can do when we get stressed, latest coping research focuses on taking actions that can be taken before stressful events occur. This became materialized especially after the new conceptualization of coping due to the influence of positive psychology movement (Peiro, 2007) and now it involves personal growth and self-regulated goal attainment strategies (Schwarzer & Knoll, 2003). Therefore, a new conceptualization of coping has been proposed by Schwarzer and Taubert (2002) as proactive and preventive coping which focus on a proactive, goal-oriented, and adaptive way of coping, as traditional coping models focuses on the reactive nature of coping only for the past and current stressors. However, proactive and preventive coping deal with anticipated, possible stressful situations which have not occurred yet. Therefore, these are future-oriented motivational higher order concepts. While proactive coping is defined as an individual's efforts to go after achieving new challenges, create new opportunities, and enable promotion toward challenging goals; preventive coping is defined as the process where an individual construct resources and resistance toward the possible occurrence of stress in the distant future. Therefore the main purpose of preventive coping is just to be on the safe side while in proactive coping, is to further the situation to develop opportunities to grow and at the same time to be on the safe side.

Knowing that stress factor is one of the most influential elements affecting employee's well-being and have a large impact on organizational outcomes, the way of coping as a motivational style of individuals was considered in the present study. Furthermore, the effect of this factor on its outcomes and explanatory mechanisms were examined. Therefore, the present study aims to explore the influence of proactive and preventive coping styles on the outcomes as job satisfaction, organizational citizenship behavior, job performance.

There exist different definitions of proactive coping in the literature because of limited studies since it is a newly studied topic of positive psychology. Among the differences referring to proactive coping, this study focuses on the definition of proactive coping as the strategies that are directed to construct general resources that facilitate promotion toward challenging goals and personal growth. The preventive coping was defined as the efforts to prepare potential arising situations to detect and prevent possible stressors in order to minimize the severity of these events. Therefore, in this study, proactive and preventive coping will refer to their unique, particular definition as suggested by Schwarzer and Taubert (2002).

Schwarzer and Taubert (2002) pointed out that, proactive and preventive coping differ in three ways. First of all, the two coping strategies have different points in terms of motivations. While proactive coping is based on challenge appraisal, preventive coping comes from harmful evaluations (Schwarzer & Taubert, 2002). Second, people take more constitutive and intentional actions in proactive coping (Greenglass et al., 1999), but in preventive coping, individuals build up more defensive and general strategies to save resources for future needs.

According to Schwarzer and Taubert (2002) while proactive coping is goal management, preventive coping is risk management. Risk management is defined as the activities including preventing and minimizing the occurrence of situations that is perceived as threatening. It focuses on how the negative effects of situation risk are managed (Dănciulescu, 2013). Goal management, on the other hand, is defined as the ability of a person to be able to control and regulate himself/herself in an effective way toward the achievement of what makes the individual happy and satisfied (Opayemi & Balogun, 2011). According to Heckhausen and Kuhl (1985), the main focus of goal management includes efforts through commitment and self-control which was defined as the ability to control one's impulses (Hagger, Wood, Stiff, & Chatzisarantis, 2010) in achieving a particular goal.

Schwarzer and Taubert (2002) characterized preventive coping as a kind of risk management because, in here, individuals have to manage different ambiguous risks in the long run and referred proactive coping as a goal management instead of risk management because in proactive coping, individuals are proactive in the sense that they start a purposeful way while taking action and create opportunities for personal development. Proactive individuals are motivated to face challenges and they try to achieve personal quality standards. The third difference specified by them is the level of worry discrepancy between preventive and proactive coping. While worry levels are higher in the former, it is lower in the latter.

The individuals high in proactive coping have that capacity to change the situation which may not exist yet toward a more desirable environment and have the motivation (Parker, Bindl, & Strauss, 2010) since they focus to create opportunities for growth, take purposeful and constructive actions for this purpose (Locke, 2005) and have high self-esteem and high self-efficacy (Schwarzer & Taubert, 2002; Veresova & Mala, 2012). However, individuals high in preventive coping build up general resistance resources, saving time, money, social bonds and skills just in case of necessity. They would like to change the situation only if they appraise the upcoming situation as a potential threat to them (Schwarzer & Taubert, 2002; Veresova, 2013). While proactive coping is associated with the positive effect, satisfaction with life positively, use of resources, future appraisal, realistic goal setting, and use of feedback and well-being (Chang & Sanna, 2001; Sohl & Moyer, 2009) the preventive coping is not (Sohl & Moyer, 2009).

cogent ••psychology

Experiencing positive emotions also provide individuals to utilize resources such as building new social bonds. Hambrick and McCord (2010) support this statement in their study, which examines the relationship between proactive, preventive coping styles, and personality. Results showed significantly positive correlation between agreeableness, extraversion, and proactive coping and the significantly negative correlation between neuroticism and proactive coping but the results did not indicate any significant relationship for preventive coping and between these factors.

These results imply that proactive coping individuals are less likely to experience negative emotions compared to the preventive coping individuals and they are more open to seeking social support from their environment since they are more extroverted and agreeable. These tendencies in proactive coping may motivate people to construct interpersonal relations with other individuals more easily compared to preventive coping because of the agreeableness and extraversion characteristics. Agreeableness is often expressed as an individual's willingness toward pro-social behaviors and ability to get along with other people (Graziano & Eisenberg, 1997; McCrae & John, 1992) and extraversion is defined as the tendency toward building social interaction and positive effect (Watson & Clark, 1997). The above-mentioned situations can also be explained by a broaden-build theory which states that positive emotions extend people's mentality, enable them to generate resources, however negative emotions limits one's turn of mind (Fredrickson, 2001). Guribye, Sandal, and Oppedal (2011) also observed that the experience of positive mood states with proactive coping provides individuals the ability to establish more social supportive relationships than preventive coping. In this regard, the experience of positive emotions may support the new social bonds discovery which can be helpful to an individual in building personal resources.

Findings above do imply that proactive coping individuals will experience fewer life stressors and deal better when confronted with stressors compared to preventive coping individuals and in turn, they will experience less of the negative consequences of the demands on their lives such as less burnout and they will experience more positive experiences just opposite of burnout like engagement. These terms can be named work attachments as positive for engagement and negative for burnout. Individuals attached positively will have more positive individual and organizational outcomes like job satisfaction, better job performance (Harter, Schmidt, & Hayes, 2002), organizational citizenship behaviors, but individuals attached negatively will not (Babakus, Yavas, & Ashill, 2009).

2. Personal and organizational outcomes of coping

The job satisfaction, job performance, and organizational citizenship behavior captured the attention of many researchers in terms of both their antecedents and dimensions. Goal orientation, especially proactive goal orientation as a motivational concept as it relates to goal setting (Parker, Bindl, & Strauss), may be considered to be one of the correlates of these organizational outcomes.

2.1. Job satisfaction

Job satisfaction refers to a positive psychological and emotional condition appearing from the evaluation of one's job and related job experiences (Locke, 1976). When features of individuals' job go beyond their expectations they feel satisfied. Calvo-Salguero, Carrasco-González, and De Lecea (2010) also, defined job satisfaction as an attitude relating to the extent to which employees like or dislike their job. According to Mullins (1999) factors affecting job satisfaction are individual, social, cultural, organizational, and environmental.

Similarly, Bender, Donohue, and Heywood (2005) also explained that job satisfaction is influenced by a different factor within the job itself as well as by internal personal characteristics and motivation (Pool, 1997). In addition to the effect of personal resources on job satisfaction, positive emotions also have a direct effect on job satisfaction. Brockner and Higgins (2001) discovered the positive influence of cheerful emotions on job satisfaction because positive emotions may enable individuals to focus on the positive sides of their job and in turn result in more job satisfaction.

Robbin, Odendaal, and Roodt (2003) also supported this finding in their research suggesting that more positive perceptions toward job will be an indicator of greater job satisfaction. From this point of view, one can assume that proactive coping individuals are likely to be more satisfied with their jobs compared to preventive coping individuals since they have a higher self-efficacy, see their jobs more challenging (Schwarzer & Taubert, 2002) and associates with more positive emotion (Guribye et al., 2011).

Therefore, **hypothesis 1** states that proactive coping will be positively related to job satisfaction while preventive coping is negatively related to job satisfaction.

2.2. Job performance

In addition to job attitudes, the assessment of employees' job performance has also a critical and essential function for organizations because through this mechanism, the company assesses the worthiness of all its employees and identifies the employees who are its key performers and the employees who need to be trained and motivated to perform better.

Defining, understanding and evaluating job performance has received an important attention from researchers (e.g., Arvey & Murphy, 1998; Borman & Motowidlo, 1997). Borman and Motowidlo made a distinction between categorization for job performance in terms of task performance and contextual performance. Task performance encompasses activities that are defined as part of the job and make a contribution to the organization's technical core directly or indirectly. Contextual performance or organizational citizenship behavior, on the other hand, includes activities which make a contribution to organizational effectiveness in ways that could further the responsibilities that exist within a particular job. Generally, these behaviors are performed voluntarily and are not within the formal job duties; however, indicate exemplary forms of performance that are desirable and beneficial for organizations (Podsakoff, Whiting, Podsakoff, & Blume, 2009).

Both individual and situational factors are related to job performance. For example, stress is one of the factors affecting job performance. Nawaz et al. (2011) had conducted a research between the occupational stress and the performance of employees and found a negative relationship between them. Predispositional factors also have an impact on employees' performance. According to Seibert, Crant, and Kraimer (1999), proactivity may provide better job performance since proactive individuals prefer and create situations that increase the probability of high-level performance. Thompson (2005) also investigated the relationship between proactivity and job performance and suggested that proactive people show high job performance by developing social networks that provide them the resources to show effective job performance.

Therefore, based on the findings above, effective coping skills like proactive coping can block or alleviate the negative effect of stress by providing opportunities to use personal and job resources and predict job performance. It also predicts higher job performance compared to preventive coping because in proactive coping, individuals try to achieve higher goals but in preventive coping, individuals may have minimally accepted standards for performance (Schwarzer & Taubert, 2002).

Therefore, **hypothesis 2** states that Proactive coping is positive, whereas preventive coping is negatively related to task performance.

Although the associations between stressors, coping and in-role performance have been well established (Gilboa, Shirom, Fried, & Cooper, 2008), extra-role behaviors such as organizational citizenship behavior (OCB) has been given less attention.

Different definitions and conceptualizations have been made for the OCB by the researchers. Organ defined OCB as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization" (Organ, 1988, p. 4). Altruism, courtesy, conscientiousness, civic virtue, and

sportsmanship are the five factors of the original OCB model (Organ, 1990). Alternatively, Spector and Fox (2002, p. 270) define OCB as "individuals may make voluntary contributions that go beyond specified task performance or the psychological contract with the employer".

Practical implications and importance of OCB are explicit, although a variety of definitions and conceptualizing definitions has been made. Organ (1988) noted that OCB enhances organizational effectiveness by adding to resource transformations, innovativeness, and adaptability. For instance, helping co-workers result in decreased inter-group conflict and in turn enables managers to focus on more important issues (Matin, Jandaghi, & Ahmadi, 2010).

In addition to the influence of OCB on organizational outcomes and on individuals, there are also some factors influencing OCB. For example, aspects of work setting are influential on OCB, such as organizational fairness (Tepper & Taylor, 2003). Moreover, some stressors have an impact on OCB. If stressors perceived as a hindrance by employees, they lead some negative emotions and these, in turn, reduce the likelihood of OCB performance; whereas positive emotions are associated with performing prosocial and cooperative behaviors (Carlson, Charlin, & Miller, 1988).

Proactive concepts also have been identified in the literature on organizational citizenship, such as taking charge and change-oriented citizen. Proactive work behavior involves proactive goals to improve the internal organizational environment and proactive problem solving (Parker, Williams, & Turner, 2006).

Organizational Citizenship behavior requires taking charge as well as to personal initiative (Frese, Garst, & Fay, 2007). Frese and Fay (2001) identified as important for personal initiative individuals' expectations that they control the situation and have an impact on the outcomes. Individuals with high control appraisals were proposed to maintain a strong sense of responsibility, to not give up easily, searching for opportunities to act, to have high hopes for success, and to actively search for information. Furthermore, according to Lavelle (2010), employees' tendency to engage in OCB depends on the individuals' need to improve their self-concept and achieve self-growth.

Therefore, **hypothesis 3** states that proactive coping is positively related while preventive coping is negatively related to OCB.

2.3. Control variable: work experience

It was suggested that demographic variables like tenure (job experience) might have an influence on work outcomes. Studies also indicate that work experience of employees has an impact on their work attachment styles, job performance level, and attitudes toward their job (Levinson, Fetchkan, & Hohenshil, 1988; Mackoniene & Norvile, 2014; Martin & Schinke, 1998). Therefore, the total work experience was taken as the control variable in this study.

3. Method

3.1. Participants

Two hundred and fifteen employees voluntarily participated in the present study. Of the participants, 114 were women (53%) and 101 were men (47%), and their age ranged from 22 to 54 ($M = 31.60$, $SD = 6.67$). The majority of the participants were university graduates (70.2%), and from graduate programs (24.7%). All of the participants completed the questionnaires via the internet. Of the full sample, 90 participants were first used for the pilot study. Among 90 participants, 51 were women (56.7%) and 39 were men (43.3%). The age range was between 23 and 54 ($M = 29.63$, $SD = 5.87$). The majority of the participants had university degrees (70%), and graduate degrees (26.7%).

3.2. Measures

The questionnaire package started with an informed consent form. Participants also received a demographic information form which was provided on the last page of the survey package. The mean scores of scales were used for analyses. The scales used in the survey package are explained below.

3.2.1. Proactive coping inventory

The present study utilized the Proactive Coping Subscale and the Preventive Coping Subscale from the Proactive Coping Inventory, which was developed by Greenglass et al. (1999). Items of the two subscales were translated into Turkish by the translators so that the items could have a linguistic equivalent. The Preventive Coping Subscale has 10 items in the original form. A sample item is *"I try to manage my money well in order to avoid being destitute in old age"*. After the translation, one item was eliminated by the researcher since it was not proper for Turkish sample. The Proactive Coping Subscale has 14 items. A sample item is *"I visualize my dreams and try to achieve them"*. Both preventive coping and proactive coping were rated on a 5-point Likert scale (1 = *Strongly disagree*; 5 = *Strongly agree*). A pilot study was conducted with 90 participants and one item from Proactive Coping Subscale was eliminated due to its low correlation with other items of the scale. The Cronbach alpha of internal consistency was .87 and .75 for preventive coping and proactive coping subscales, respectively. Additionally, the factorial validity of the new scale was established. The two-factor solution covered all the relevant items. Although the sample size was small, confirmatory factor analysis showed that two factor solutions had better fit indexes than the one-factor solution.

3.2.2. Job satisfaction scale

Three items from the job satisfaction subscale of Job Diagnostic Survey (Hackman & Oldham, 1975) was used by Bilgiç (1999) to measure job satisfaction. An example item is *"In general, I am satisfied with my job."* In this study, participants were asked to indicate their degree of agreement with the presented statements on a 5-point scale (1 = *Strongly disagree*, 5 = *Strongly agree*). The Cronbach alpha of internal consistency was reported as .81 in the present study

3.2.3. Performance scale

The Performance Scale was developed by Beffort and Hattrup (2003) and it has nine items. The scale was translated into Turkish by Karakurum (2005). The items were rated on a 5-point Likert scale A sample item is *"I perform my work with a high quality"*. The scale aims to measure the self-rated job performance of the employees with nine items. The internal consistency of the scale was reported as .92 in the present study.

3.2.4. Organizational citizenship behaviors scale

Organizational Citizenship Behaviors Scale was developed by Podsakoff, MacKenzie, Moorman, and Fetter (1990). A sample item is *"I help others who have heavy workloads"*. The scale was translated into Turkish by Bayazıt, Aycan, Aksoy, Göncü, and Öztekin (2006) and it has 24 items and rated on a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree). The Cronbach alpha of internal consistency was reported as .74 in the present study.

3.3. Procedure

The participation in the study was voluntary and all of the participants received a consent form providing info about the aim of the study. The questionnaire package included the informed consent form, Proactive Coping Inventory, Professional Self-Esteem Scale, Performance Scale, Job Satisfaction Scale, and Organizational Citizenship Behavior Scale. Firstly, a pilot study with 90 participants was conducted to test the psychometric properties of the translated version of Proactive Coping Inventory. Participants of the pilot study received the whole questionnaire package, and they were included in the dataset of the present study. The two samples did not differ from each other significantly for the study variables and for the demographic variables (except for age and work experience), hence the two data sets were combined and used for the whole analysis. Data were collected via the internet and snowball sampling was used to collect data. Before collecting the data, ethical permission was taken from the Ethical Committee of the Middle East Technical University.

cogent ·· psychology

4. Results

4.1. Descriptive statistics and bivariate correlations

The reliabilities (α), means (M), and standard deviations (SD) are presented in Table 1, and the correlations between study variables are presented in Table 2. The reliabilities are based on 215 participants combined.

4.2. Hypothesis testing

Hypothesis 1 stated that proactive coping would be positively related to job satisfaction and preventive coping would be negative. The hierarchical regression was performed as job satisfaction was the dependent variable. In the first step, the work experience was entered as the control variable and the result was significant (R^2 = .04, $F(1,211)$ = 8.98, p < .005). Work experience predicted job satisfaction positively (β = .20, t = 3.00, p < .005). In the second step, proactive coping was entered as the independent variable and the result was significant (ΔR^2 = .19, F(2,210) = 31.64, p < .001). Proactive coping skills predicted job satisfaction positively after controlling for the job experience (β = .44, t = 7.22, p < .001). However, preventive coping was not related with job satisfaction. Therefore, **hypothesis 1** was partially supported.

Hypothesis 2 states that proactive coping was positively and preventive coping was negatively related to task performance. The results showed that after controlling for job experience, proactive coping was positively related to task performance (R^2 = .50, $F(2,210)$ = 106.34, p < .001) and proactive coping skills predicted job performance positively (β = .70, t = 14.34, p < .001). However, preventive coping was not related to job performance. Therefore, there was a partial support for the above hypothesis.

Table 1. Reliabilities, means, standard deviations, and minimum and maximum values of study variables

Variable	Reliabilities	Mean	SD	Min.	Max.	Number of items
Age		31.61	6.7	22	54	
Preventive	.87	3.58	.57	1.78	5.00	9
Proactive	.75	3.51	.39	2.62	4.38	13
Job performance	.81	3.76	.69	2.11	5.00	9
Job satisfaction	.74	3.23	.86	1.00	4.67	3
OCB	.76	4.96	.47	3.38	6.08	24

Note: OCB: Organizational citizenship behavior

Table 2. The bivariate correlations among study variables

Variable	1	2	3	4	5	6
1. WE	1.00					
2. Preventive	.09	1.00				
3. Proactive	.12	.02	1.00			
4. JP	.13	.02	.71**	1.00		
5. JS	.20**	−.06	.46**	.52**	1.00	
6. OCB	.14*	.03	.55**	.64**	.28**	1.00

Note: WE: Work experience; JP: Job performance; JS: Job satisfaction; OCB: Organizational citizenship behavior.
*p < .05, **p < .01

Hypothesis 3 states that proactive coping is positively related while preventive coping is negatively related to OCB. In the first step, the work experience was taken as the control variable; and the result was significant (R^2 = .02, $F(1,211)$ = 3.92, $p < .05$). Work experience predicted OCB significantly (β = .14, t = 1.98, $p < .05$). In the second step, proactive coping was taken as the independent variable and the result was significant (ΔR^2 = .28, F (2,210) = 44.79, $p < .001$). Proactive coping predicted OCB positively (β = .53, t = 9.17, $p < .001$). However, preventive coping was not related to OCB. Therefore, **Hypothesis 3** also was partially supported.

5. Discussion

The purpose of the present study was to investigate the relationship between coping strategies and organizational outcomes.

5.1. Influences of coping strategies on Individual and organizational outcomes

It was suggested that while proactive coping would positively influence the individual and organizational outcomes which are job satisfaction, job performance, and organizational citizenship behavior preventive coping would have a negative influence. Firstly, it was found that proactive coping predicted all of the individual and organizational outcomes positively after controlling work experience factor. The literature lacks the empirical data investigating these relationships, therefore it can be asserted that this study will broaden the coping literature by indicating significant proactive coping and organizational outcomes style relationship. Although there is a scarcity in the literature, the relation between proactive and preventive coping and organizational outcomes can be explained from the perspective of Higgins' (1997) regulatory focus theory which assumes that individual's regulation of goals depends on either promotion focus, a regulatory state-focusing on advancement, accomplishment, and aspirations, or prevention focus, a regulatory state focusing on protection, safety, and avoiding negative outcomes. Comprehending the literature, proactive and preventive coping concepts are based on the regulatory focus theory (Grant & Ashford, 2008), the former can be referred to as promotion focus and the latter can be referred to prevention focus.

Proactive coping is likely to have a positive impact on job satisfaction because it is associated with positive emotions and mood states (Sohl & Moyer, 2009) and positive emotions may enhance general feelings of job satisfaction (Brockner & Higgins, 2001). Although there are contradictory findings in the literature, the majority of the findings support the positive relationship between proactive coping and job satisfaction. While Mackoniene and Norvile (2014) found a negatively weak relationship between job satisfaction and proactive coping, other studies indicated a significant positive relationship between job satisfaction and promotion focus which is a very similar concept to proactive coping (Brief, Butcher, & Roberson, 1995; Lanaj, Chang, & Johnson, 2012).

Similarly, significant positive relationship between proactive coping and job performance which is in line with expectation can be explained in a way that, proactive coping employees prefer and create situations that enhance the likelihood of high level of performance by setting more challenging goals and taking purposeful actions for self-development (Schwarzer & Taubert, 2002; Veresova & Mala, 2012). Hence, proactive individuals may designate higher performance standards for themselves and strive to reach their ideal goal. Similar findings were found in the promotion focus oriented individuals. Studies indicated that reaching or exceeding high-performance goals are meant for self-actualization and self-aspiration for the promotion focus employees and they associate with more challenging goals to reach their ideal setting (Spiegel, Grant-Pillow, & Higgins, 2004; Wallace, Johnson, & Frazier, 2009).

Another possible factor explaining the reason why the proactive coping predict positive job performance can be its alleviating effect on the negative effect of stress. Knowing that stress has a vitally negative impact on job performance (Nawaz et al., 2011), using proactive coping may be very useful in blocking the negative influence of stress on job performance and may enable employees to perform their job properly. Lastly, results showed a significantly positive relationship between proactive coping and organizational citizenship behavior as it was expected. Studies

investigating the relationship between promotion focus and OCB are also in line with this result (Rioux & Penner, 2001; Wallace et al., 2009). According to Lavelle (2010), employees may perform OCB in order to gain rewards and achieve better career advancements. This idea is consistent with proactive coping because proactive coping individuals are motivated by the activities and tasks, enhancing their self-concept and offering them career advancement (Schwarzer & Taubert, 2002; Veresova & Mala, 2012). Experiencing positive emotions instead of negative ones may also explain the reason behind proactive coping and OCB relationship. According to Johnson, Telentino, Rodopman, and Cho (2010), employees are more likely to perform OCB when they experience positive emotions. Because employees using proactive coping strategies are less likely to experience negative emotions such as stress, worry and anxiety and more likely to experience cheerfulness related emotions, they may perform OCB by going beyond from their regular responsibilities.

In addition to hypotheses expecting positive relationship between proactive coping and organizational outcomes, other hypotheses suggested that preventive coping would affect outcomes of work negatively (i.e. job satisfaction, job performance, and organizational citizenship behavior). There are no studies examining the relationship between preventive coping and these outcomes. Therefore, this study aimed to show these relationships; however, counter to expectations, preventive coping was unrelated to organizational outcomes. Therefore, it can be inferred that the lack of significant association between preventive coping and these outcomes may be because of other factors which may influence the relationship between preventive coping and organizational outcomes. This may be due to the fact that, preventive coping individuals' performance and attitudes toward his/her job and/or profession may depend on how they frame the task (Higgins, 2000).

While proactive coping individuals frame the tasks in terms of goal achievement, preventive coping individuals frame as goal maintenance in order to avoid negative consequences. For instance, preventive coping individuals may perceive an obligation to show at least standard performance in order to fulfill the requirement in their job or may want to avoid the negative consequences of performing low job performance. In parallel to these reasons, they may perform OCB by engaging extra roles. Turkish employees who are using preventive coping might adapt themselves in accordance with the conditions and may have a fear of losing their job since the unemployment rate of Turkey is 10.5%, which is considerably high as of February 2014 according to the website of the Turkish Statistics Institute. In this regard, the cost of losing the job may be perceived as very risky and in turn, they may try to show better performance and have a positive attitude toward their job and profession. Another possible explanation for these insignificant results may be because of the type of jobs. The sample was collected from individuals with different jobs. However, if the data had been collected from the jobs requiring high vigilance, such as certain military jobs, security jobs or auditors, preventive coping would be predicting these outcomes positively. Keith and Frese (2005) explain this situation in their study because they observed that preventive individuals are concerned with continually monitoring their circumstances for errors. Therefore, it can be inferred that preventive coping individuals would be positively related to safety performance which consists of employee activities contributing to workplace safety (Griffin & Neal, 2000) and studies found their positive association between safety performance and prevention focus (Cesario, Higgins, & Scholer, 2008; Wallace, Little, & Shull, 2008). Future studies should, therefore, investigate some moderator factors explaining the preventive coping and the organizational outcomes relationship and researchers should design their studies specifically to the jobs.

5.2. Contributions of the study
This study provides several important contributions to the existing literature. First of all, it is the first time a study puts emphasis on the distinctive features of proactive and preventive coping by treating the latter one as an antecedent of negative work attachment. These are the two separate subscales of proactive coping inventory and some studies used two coping styles as a single concept of proactive coping, although Schwarzer and Taubert (2002) underlined the distinctive features of both scales. Referring their unique definitions as they offered, this study contributed to the existing literature empirically distinguished data for proactive and preventive coping.

cogent •• psychology

Second, this study showed that proactive coping is a better predictor of work attachment related outcomes compared to preventive coping. Proactive coping has an influence on all work outcomes of work attachment styles, namely, job satisfaction, job performance, and OCB. Thirdly, this study showed for the first time that in addition to regulatory focus (Higgins, 1997), regulatory coping strategies namely proactive and preventive coping are also important. Lastly, the contribution of this study is that proactive coping and preventive coping scales were translated into Turkish to provide Turkish literature two new scales with high psychometric properties. Therefore, these two scales can be used for future studies.

5.3. Limitations of the study and suggestions for future research
This study has several limitations. First of all, the number of participants is relatively low in comparison with other studies in the literature. A higher number of participants can provide more accurate results. Therefore, futures studies should include adequate participants. Second, proactive and preventive coping scales were translated into Turkish and this study is the first to test their psychometric properties. Therefore, the results must be taken into consideration accordingly because the reliabilities and validities are based only on this study.

Third, the study was completed with self-report questionnaires and it is not free from bias such as social desirability. Future research should collect the data of outcome variables, especially job performance and OCB from supervisors because employees are more likely to give socially desirable responses when the level of performance is questioned.

Fourth, it was suggested that preventive coping would predict the organizational outcomes; however, the results did not support this suggestion. These results may be culture-specific. In this regard, cultural dynamics can be added to future studies to reveal better understanding such as individualism, collectivism and uncertainty avoidance dimensions.

5.4. Implications for managers and organizations
The results of the study present several implications for managers and organizations. First of all, the results showed that proactive coping has some positive outcomes for employees using it. The increase in using the proactive coping provides employees to have more positive attitudes toward their job and profession and to engage their work with a high motivation and decreases the probability of experiencing disengagement toward the job. Briefly, proactive coping provides an increment in work engagement and decreases burnout. Therefore, in terms of practical implications for organizations and managerial perspective, proactive coping can be very important in which the demand for jobs is because of its alleviating effect on the negative impacts of stress and additionally its role in increasing potential for growth and well-being. Therefore, managers should take notice of its positive effects on employees and invest in the promotion of proactive coping strategy in the organizations. As stress cannot be eliminated completely from work life, it is important to develop strategies not only alleviating the negative effect of stress but also increasing the potential for growth and well-being as in the case of proactive coping. Therefore the present study can be a good guide for managers who would like to help her/his subordinates for their feelings of stress and encourage them for self-promotion and growth.

Author details
Önder Ersen[1]
E-mail: ersenonder@gmail.com
Reyhan Bilgiç[1]
E-mail: rey@metu.edu.tr
[1] Department of Psychology, Middle East Technical University, Ankara, Turkey.

References
Arvey, R. D., & Murphy, K. R. (1998). Performance commitment to subordinates. *Personnel Psychology, 53* (2), 275–297.

Babakus, E., Yavas, U., & Ashill, N. J. (2009). The role of customer orientation as a moderator of the job demand–burnout–performance relationship: A surface-level trait perspective. *Journal of Retailing*, 85(4), 480–492. doi:10.1016/j.jretai.2009.07.001

Bayazıt, M., Aycan, Z., Aksoy, E., Göncü, A., & Öztekin, T. (2006, June). *Contextual performance: Antecedents and motivational processes operating among blue-collar employees*. Paper accepted for presentation at 10th ISSWOV International Conference on Work Values and Behavior, Tallinn, Estonia.

Beffort, N., & Hattrup, K. (2003). Valuing task and contextual performance: Experience, job roles, and ratings of the importance of job behaviors. *Applied Human Resources Management Research*, 8(1), 17–32.

Bender, K. A., Donohue, S. M., & Heywood, J. S. (2005). Job satisfaction and gender segregation. *Oxford Economic Papers*, 57(3), 479–496. doi:10.1093/oep/gpi015

Bilgiç, R. (1999). *A different way of testing the interaction between core job dimensions and growth need strength (GNS)*. Conference on TQM and Human Factors, 210–215. CMTO, Sweden, Linköping Universitet.

Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, 10(2), 99–109. doi:10.1207/s15327043hup1002_3

Brief, A. P., Butcher, A. H., & Roberson, L. (1995). Cookies, disposition, and job attitudes: The effects of positive mood inducing events and negative affectivity on job satisfaction in a field experiment. *Organizational Behavior and Human Decision Processes*, 62, 55–62. doi:10.1006/obhd.1995.1030

Brockner, J., & Higgins, E. T. (2001). Regulatory focus theory: Implications for the study of emotions at work. *Organizational Behavior and Human Decision Processes*, 86, 35–66. doi:10.1006/obhd.2001.2972

Calvo-Salguero, A., Carrasco-González, A. M., & De Lecea, J. M. S. M. (2010). Relationship between work-family conflict and job satisfaction: The moderating effect of gender and the salience of family and work roles. *African Journal of Business Management*, 4(7), 1247–1259.

Carlson, M., Charlin, V., & Miller, N. (1988). Positive mood and helping behavior: A test of six hypotheses. *Journal of Personnel Psychology*, 55(2), 211–229. doi:10.1037/0022-3514.55.2.211

Cartwright, S., & Cooper, C. L. (1997). *Managing workplace stress* (Vol. 1). Sage.

Cesario, J., Higgins, E. T., & Scholer, A. A. (2008). Regulatory fit and persuasion: Basic principles and remaining questions. *Social and Personality Psychology Compass*, 2, 444–463. doi:10.1111/j.1751-9004.2007.00055.x

Chang, E. C., & Sanna, L. J. (2001). Optimism, pessimism, and positive and negative affectivity in middle –Aged adults: A test of a cognitive and affective model of psychological adjustment. *Psychology and Aging*, 6(3), 524–531. doi:10.1037/0882-7974.16.3.524

Cohen, S., & Williamson, G. M. (1991). Stress and infectious disease in humans. *Psychological Bulletin*, 109, 5–24.

Dănciulescu, A. (2013). The Role of Risk Management and Treatment Methods Applied In Todays Economy. *Romanian Economic & Business Review*, 8(3), 18–25.

Locke,E.A. (1976). The nature and causes of job satisfaction. In M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp.1297–1349). Chicago: Rand McNally

Elovainio, M., Kivim Ä Ki, M., & Vahtera, J. (2002). Organizational justice: Evidence of a new psychosocial predictor of health. *American Journal of Public Health*, 92(11), 105–108. doi:10.2105/AJPH.92.1.105

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *The American Psychologist*, 56, 218–226.

Frese, M., & Fay, D. (2001). Personal initiative: An active performance concept for work in the 21st century. *Research in Organizational Behavior*, 23, 133–187. doi:10.1016/S0191-3085(01)23005-6

Frese, M., Garst, H., & Fay, D. (2007). Making things happen: Reciprocal relationships between work characteristics and personal initiative in a four-wave longitudinal structural equation model. *Journal of Applied Psychology*, 92, 1084–1102. doi:10.1037/0021-9010.92.4.1084

Gilboa, S., Shirom, A., Fried, Y., & Cooper, C. (2008). A meta-analysis of work demand stressors and job performance: Examining main and moderating effects. *Personnel Psychology*, 61, 227–271. doi:10.1111/j.1744-6570.2008.00113.x

Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3–34. doi:10.1016/j.riob.2008.04.002

Graziano, W. G., & Eisenberg, N. H. (1997). Agreeableness: A dimension of personality. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology* (pp. 795–824). New York, NY: Academic Press.

Greenglass, E., Schwarzer, R., Jakubiec, D., Fiksenbaum, L., & Taubert, S. (1999, July). *The proactive coping inventory (PCI): A multidimensional research instrument*. In 20th International Conference of the Stress and Anxiety Research Society (STAR), Cracow, Poland (Vol. 12, p. 14).

Griffin, M. A., & Neal, A. (2000). Perceptions of safety at work: A framework for linking safety climate to safety performance, knowledge and motivation. *Journal of Occupational Health Psychology*, 5(3), 347–358. doi:10.1177/0093854809351682

Guribye, E., Sandal, G. M., & Oppedal, B. (2011). Communal proactive coping strategies among Tamil refugees in Norway: A case study in a naturalistic setting. *International Journal of Mental Health Systems*, 5(1), 9–21. doi:10.1186/1752-4458-5-9

Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159–170. doi:10.1037/h0076546

Hagger, M. S., Wood, C., Stiff, C., & Chatzisarantis, N. L. D. (2010). Egodepletion and the strength model of self-control: A meta-analysis. *Psychological Bulletin*, 136, 495–525. doi:10.1037/a0019486

Hambrick, E. P., & McCord, D. M. (2010). Proactive Coping and Its Relation to the Five-Factor Model of Personality. *Individual Differences Research*, 8(2), 67–77.

Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87, 268–279. doi:10.1037/0021-

Heckhausen, H., & Kuhl, J. (1985). From wishes to action: The dead ends and short cuts on the long way to action. In M. Frese & J. Sabini (Eds.), *Goal-directed behavior: Psychological theory and research* 134-160. Hillsdale, NJ: Earlbaum.

Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, 52, 1280–1300. doi:10.1037/0003-066X.52.12.1280

cogent • psychology

Higgins, E. T. (2000). Making a good decision: Value from fit. *American Psychologist*, 55(11), 1217–1230. doi:10.1037/0003-066X.55.11.1217

Johnson, R. E., Tolentino, A. L., Rodopman, O. B., & Cho, E. (2010). We (sometimes) know not how we feel: Predicting job performance with an implicit measure of trait affectivity. *Personnel Psychology*, 63, 197–219. doi:10.1111/j.1744-6570.2009.01166.x

Karakurum, M. (2005). *The effects of person-organization fit on employee job satisfaction, performance and organizational commitment in a Turkish public organization* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.

Keith, N, & Frese, M. (2005). Self-regulation in error management training: emotion, control and metacognition as mediators of performance effects. *Journal Of Applied Psychology*, 90(4), 677-69. doi:

Lanaj, K., Chang, C. H. D., & Johnson, R. E. (2012). Regulatory focus and work-related outcomes: A review and meta-analysis. *Psychological Bulletin*, 138(5), 998–1034. doi:10.1037/a0027723

Lavelle, J. J. (2010). What motivates OCB? Insights from volunteerism literature. *Journal of Organizational Behavior*, 31, 918–923. doi:10.1002/job.644

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

Levinson, E. M., Fetchkan, R., & Hohenshil, T. H. (1988). Job satisfaction among practicing school psychologists revisited. *School Psychology Review*, 17, 101–112.

Locke, E. A. (2005). Why emotional intelligence is an invalid concept. *Journal of Organizational Behavior*, 26(4), 425–431. doi:10.1002/job.318

Mackoniene, R., & Norvile, N. (2014). Burnout, job satisfaction, self-efficacy, and proactive coping among Lithuanian school psychologists. *Tiltai*, 60(3), 199–211.

Martin, U., & Schinke, S. P. (1998). Organizational and individual factors influencing job satisfaction and burnout of mental health workers. *Social Work in Health Care*, 28(2), 51–62. doi:10.1300/J010v28n02_04

Matin, H. Z., Jandaghi, G., & Ahmadi, F. (2010). A comprehensive model for identifying factors impacting on development of organizational citizenship behavior. *African Journal of Business Management*, 4(10), 1932.

McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60, 175–215. doi:10.1111/jopy.1992.60.issue-2

Meneze, M. M. (2005). *The Impact of Stress on productivity at Education Training & Development Practices: Sector Education and Training Authority*.London

Milczarek, M., Rial-González, E., & Schneider, E. (2009). European Agency for Safety and Health at Work, Bilbao-Spain, Christa Sedlatschek, Director "OSH in figures: stress at work–facts and figures". Office for Official Publications of the European Communities. Bilbao, Spain

Mostert, K., & Joubert, A. F. (2005). Job stress, burnout and coping strategies in the South African police service. *South African Journal of Economic and Management Sciences*, 8(1), 39–53. doi:10.4102/sajems.v8i1.1282

Mullins, L. J. (1999). *Management and organisational behaviour*. London: Financial Times Pitman.

Nawaz, M. M., Mohsan, F., & Khan, M. S. (2011). Impact of stress on job performance of employees working in banking. *Interdisciplinary Journal of Contemporary Research in Business*, 3(2), 1982–1991.

Opayemi, A. S., & Balogun, S. K. (2011). Extraversion, consientiousness, goal management and lecturing profession in Nigeria. *Psychological Studies & Services*, 19(2), 65–74.

Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.

Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 12, pp. 43–72). Greenwich, CT: JAI Press.

Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, 36(4), 827–856. doi:10.1177/0149206310363732

Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology*, 91, 636–652. doi:10.1037/0021-9010.91.3.636

Peiro, J. M. (2007). Stress and coping at work: New research trends and their implications for practice. In K. Na Swall, J. Hellgren, & M. Sverke (Eds.), *The individual in the changing working life* (pp. 284–310). Cambridge, UK: Cambridge University Press.

Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual- and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 94(1), 122–141. doi:10.1037/a0013079

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1(2), 107–142. doi:10.1016/1048-9843(90)90009-7

Pool, S. (1997). The relationship of job satisfaction with substitutes of leadership, leadership behavior, and work motivation. *The Journal of Psychology*, 131(3), 271–283. doi:10.1080/00223989709603514

Rioux, S. M., & Penner, L. A. (2001). The causes of organizational citizenship behavior: A motivational analysis. *Journal of Applied Psychology*, 86(6), 1306–1314. doi:10.1037/0021-9010.86.6.1306

Robbin, S. P., Odendaal, A., & Roodt, G. (2003). *Organisational behavour: Global and Southern African perspective*. Cape Town: Pearson Education South Africa.

Schwarzer, R., & Taubert, S. (2002). Tenacious goal pursuits and striving toward personal growth: Proactive coping. In E. Frydenberg & E. Frydenberg (Eds.), *Beyond coping: Meeting goals, visions, and challenges* (pp. 19–35). New York, NY, US: Oxford University Press. doi:10.1093/med:psych/9780198508144.003.0002

Schwarzer, R., & Knoll, N. (2003). Positive coping: Mastering demands and searching for meaning. In S. J. Lopez & C. R. Snyder (Eds.), *Positive psychological assessment: A handbook of models and measures* (pp. 393–409). Washington: DC: American Psychological Association.

Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of Applied Psychology*, 84(3), 416. doi:10.1037/0021-9010.84.3.416

Skinner, E. A., & Zimmmer-Gembeck, M. J. (2007). The development of coping. *Annual Review of Psychology*, 58, 119–144. doi:10.1146/annurev.psych.58.110405.085705

Sohl, S. J., & Moyer, A. (2009). Refining the conceptualization of a future -oriented self regulatory behavior: Proactive coping. *Personality and Individual Differences*, 47, 139–144. doi:10.1016/j.paid.2009.02.013

Spector, P. E., & Fox, S. (2002). An emotion-centered model of voluntary work behavior. Some parallels between counterproductive work behavior and organizational citizenship behavior. *Human Resource*

Management Review, 12, 269–292. doi:10.1016/S1053-4822(02)00049-9

Spiegel, S., Grant-Pillow, H., & Higgins, E. T. (2004). How regulatory fit enhances motivational strength during goal pursuit. *European Journal of Social Psychology, 39*, 39–54. doi:10.1002/ejsp.180

Tepper, B. J., & Taylor, E. C. (2003). Relationships among supervisors' and subordinates' procedural justice perceptions and organizational citizenship behaviors. *Academy of Management Journal, 46*, 97–105.

Theorell, T., & Karasek, R. A. (1996). Current issues relating to psychosocial job strain and cardiovascular disease research. *Journal of Occupational Health Psychology, 1*(1), 9. doi:10.1037/1076-8998.1.1.9

Thompson, J. A. (2005). Proactive personality and job performance: A social capital perspective. *Journal of Applied Psychology, 90*(5), 1011–1017. doi:10.1037/0021-9010.90.5.1011

Veresova, M. (2013). Procrastination, stress and coping among primary school teachers. *Procedia-Social and Behavioral Sciences, 106*, 2131–2138. doi:10.1016/j.sbspro.2013.12.243

Veresova, M., & Mala, D. (2012). Stress, proactive coping and self efficacy of teachers. *Procedia-Social and Behavioral Sciences, 55*(5), 294–300. doi:10.1016/j.sbspro.2012.09.506

Wallace, J., Little, L., & Shull, A. (2008). The moderating effects of task complexity on the relationship between regulatory foci and safety and production performance. *Journal of Occupational Health Psychology, 13*(2), 95–104. doi:10.1037/1076-8998.13.2.95

Wallace, J. C., Johnson, P. D., & Frazier, M. L. (2009). An examination of the factorial, construct, and predictive validity and utility of the Regulatory Focus at Work Scale. *Journal of Organizational Behavior, 30*, 805–831. doi:10.1002/job.v30:6

Watson, D., & Clark, L. A. (1997). Extraversion and its positive emotional core. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology* (pp. 767–793). New York, NY: Academic Press.

Cogent Psychology (ISSN: 2331-1908) is published by Cogent OA, part of Taylor & Francis Group.

Publishing with Cogent OA ensures:

- Immediate, universal access to your article on publication
- High visibility and discoverability via the Cogent OA website as well as Taylor & Francis Online
- Download and citation statistics for your article
- Rapid online publication
- Input from, and dialog with, expert editors and editorial boards
- Retention of full copyright of your article
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

Submit your manuscript to a Cogent OA journal at www.CogentOA.com