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THE RELATIONSHIP BETWEEN SELF-COMPASSION, SELF-EFFICACY, AND CONTROL BELIEF ABOUT LEARNING IN TURKISH UNIVERSITY STUDENTS

MURAT ISKENDER
Sakarya University, Hendek, Sakarya, Turkey

In the present study, aims were (1) to determine gender differences in self-compassion, self-efficacy, and control belief for learning and (2) to examine the relationships between self-compassion, self-efficacy, and control belief for learning. Participants were 390 university students who completed a questionnaire package that included the Self-Compassion Scale, the Self-Efficacy Scale, and the Control Belief for Learning Scale. Results showed that there were no significant gender differences in self-compassion, self-efficacy, and control belief for learning. In correlation analysis, self-kindness correlated positively with self-efficacy and control belief for learning; self-judgment had a negative correlation with self-efficacy. Awareness of common humanity had positive correlations with self-efficacy and control belief for learning, and had negative correlations with self-judgment. On the other hand, isolation was associated negatively with self-efficacy and self-kindness, and positively with self-judgment. Mindfulness related positively to self-efficacy, and control belief for learning, and it was negatively related to self-judgment and isolation. Finally, it was found that over-identification had a negative correlation with self-efficacy and self-kindness, but positive correlations with self-judgment and isolation.

Keywords: self-compassion, self-efficacy, control belief for learning, university students.

The construct of self-compassion, recently defined and operationalized by Neff, offers an alternative approach to thinking about psychological well-being. Neff

Murat Iskender, PhD, Assistant Professor, Sakarya University, Hendek, Sakarya, Turkey.
Appreciation is due to reviewers including: Kristen Neff, PhD, Educational Psychology Department, University of Texas at Austin, 1 University Station, D5800, Austin, TX 78712, USA, Email: **kristin.neff@mail.utexas.edu**; M. Engin Deniz, PhD, Associate Professor, Faculty of Technical Education, Department of Education, Selcuk University, Campus 42075 Konya, Konya, Turkey. Email: **engindeniz@selcuk.edu.tr**
Please address correspondence and reprint requests to: Murat Iskender, Faculty of Education, Sakarya University, Hendek, Sakarya, Turkey 54300. Phone: +90 264 6141033; Fax: +90 264 6141034; Email: **iskender@sakarya.edu.tr**

(2003b) conceptualized *self-compassion* as *involving self-kindness, mindfulness and awareness of common humanity*. *Self-kindness* is related to *reacting with kindness and understanding toward oneself when experiencing negative events*. *Mindfulness* is related to *holding emotions in nonjudgmental awareness,* and *common humanity* is related to *viewing one's life as part of the larger human experience* and realizing that everyone goes through difficult times (Adams & Leary, 2007).

Self-compassion entails being kind and understanding toward oneself in instances of pain or failure rather than being harshly self-critical; perceiving one's experiences as part of the larger human experience rather than seeing them as isolated and individual; and holding painful thoughts and feelings in mindful awareness rather than over-identifying with them. Research indicates that self-compassion is significantly associated with positive mental health benefits and adaptive functioning (Neff, 2004), that is, less depression and anxiety and greater life satisfaction (Neff, 2003a).

Although new, the construct of self-compassion shows great promise. As measured using Neff's Self-Compassion Scale (2003b), it demonstrates positive associations with current markers of psychological well-being, such as self-acceptance, life satisfaction, social connectedness, self-esteem, mindfulness, autonomy, environmental mastery, purpose in life, personal growth, reflective and affective wisdom, curiosity and exploration in life, happiness, and optimism. It has also demonstrated negative associations with anxiety, depression, self-criticism, neuroticism, rumination, thought suppression, and neurotic perfectionism (Kirkpatrick, 2005).

Self-compassion has been found to be positively associated with mastery goals and negatively associated with performance goals, a relationship that was mediated by the lesser fear of failure and greater perceived competence of self-compassionate individuals. Also, self-compassion was positively associated with emotion-focused coping strategies and negatively associated with avoidance-oriented strategies (Neff, Hsieh, & Dejitterat, 2005). Self-compassion has also been found to be a stronger predictor of psychological health than mindfulness (Rendon, 2007) and has correlated with academic success (Conway, 2007). It has been negatively correlated with anxiety and cognitive interference, and, in addition, the magnitude of these correlations was greater under threatening conditions than under nonthreatening test conditions. Further, self-compassion has been shown to be positively related to social identity strength and unrelated to race-based rejection sensitivity (Williams, 2005).

Self-compassion has a significant positive association with self-reported measures of happiness, optimism, positive affect, wisdom, personal initiative, curiosity and exploration, agreeableness, extroversion, and conscientiousness. It also has a significant negative association with negative affect and neuroticism.

Self-compassion has predicted significant variance in positive psychological health beyond that attributable to personality (Neff, Rude, & Kirkpatrick, 2007).

Self-compassion can predict emotional and cognitive reactions to negative events in everyday life, it buffers people against negative self-feelings when imagining distressing social events, and moderates negative emotions after receiving ambivalent feedback (particularly for participants who have low self-esteem). Finally, self-compassion leads people to acknowledge their role in negative events without feeling overwhelmed with negative emotions (Leary, Tate, Adams, Allen, & Hancock, 2007).

Self-efficacy is defined as *people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances* (Bandura, 1986). Self-efficacy beliefs affect which action a person will choose, the amount of effort expended, endurance in the face of obstacles, thought patterns, stress level, and level of accomplishment achieved (Baldwin, Baldwin, & Ewald, 2006; Bandura, 1997).

Self-efficacy beliefs have been found to be sensitive to subtle changes in students' performance context, to interact with self-regulated learning processes, and to mediate students' academic achievement (Pintrich, 1999; Zimmerman, 2000). Similarly, research has consistently shown that self-efficacy is positively associated with general academic achievement (Caprara, Barbaranelli, Steca, & Malone, 2006; Ferla, Valcke, & Schuyten, 2008; Griffin & Griffin, 1998; Jackson, 2002; Lane & Lane, 2001; Lane, Lane, & Kyprianou, 2004; Pajares, 1996; Pajares & Kranzler, 1995; Pintrich & De Groot, 1990; Schunk, 1981, 1984; Wood & Locke, 1987) and with performance in several specific domains, including math (Pajares & Miller, 1994, 1995), writing (Pajares, 2003; Pajares, Britner, & Valiante, 2000; Pajares & Johnson, 1996), homework practices (Bassi, Steca, Fave, & Caprara, 2007; Zimmerman & Kitsantas, 2005) and sports (Bond, Biddle, & Ntoumanis, 2001; Chase, 2001).

Control belief for learning refers to *students' beliefs that their efforts to learn will result in positive outcomes*. It concerns the belief that outcomes are contingent on the amount of effort one puts in, in contrast to external factors such as the teacher. If students believe that the effort they put into studying makes a difference in their learning, they should be more likely to study more strategically and effectively (Pintrich, Smith, Garcia, & McKeachie, 1993).

Because research on self-compassion is relatively new, studies that examine the relationships between self-compassion and psychological variables – such as self-efficacy related to control belief for learning – are needed. Therefore, the aim in this research was to examine the relationships between dimensions of self-compassion, self-efficacy, and control belief for learning. It was hypothesized that self-kindness, common humanity, and mindfulness would be associated

positively with self-efficacy, and control belief for learning. The author also hypothesized that self-judgment, isolation, and over-identification would be related negatively with self-efficacy and control belief for learning.

METHOD

Participants

This research involved 390 students (176 men, 214 women; M = 20.83 years; SD = 1.55) at Sakarya University Educational Faculty in the 2007-2008 academic year. The data were gathered via the Self-compassion Scale (SCA; Neff, 2003b); and the Self-Efficacy Scale, and Control Belief for Learning Subscales of the Motivated Strategies for Learning Questionnaire (MSLQ; Pintrich et al., 1993). An additional questionnaire was administered regarding student demographic data, including age, gender, income, and department.

Instruments

Self-Compassion Scale Self-compassion was measured by the Self-Compassion Scale (Neff, 2003b). Turkish adaptation of this scale had been done by Akin, Akin, and Abaci (2007). The SCA is a 26-item self-report inventory and consists of six subscales; self-kindness, self-judgment, awareness of common humanity, isolation, mindfulness, and over-identification. Each item was rated on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*). Language validity findings indicated that correlations between Turkish and English forms were .94, .94, .87, .89, .92, and .94 for the six subscales, respectively. Results of confirmatory factor analysis indicated that the model was well fit and Chi-Square value (χ^2 = 779.01, N = 633, SD = 264, p = 0.00), which was calculated for the adaptation of the model, was found to be significant. The goodness of fit index values of the model were RMSEA = .056, NFI = .95, CFI = .97, IFI = .97, RFI = .94, GFI = .91, and SRMR = .059. The internal consistency coefficients of six subscales were .77, .72, .72, .80, .74, and .74, respectively. The test-retest reliability coefficients were .69, .59, .66, .60, .69, and .56.

Self-Efficacy Subscale Self-efficacy was measured by using the Self-Efficacy subscale of the Motivated Strategies for Learning Questionnaire (MSLQ; Pintrich et al., 1993). The Self-Efficacy subscale consists of 8 items and each item was rated on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*). In the reliability study, the internal consistency alpha coefficient was calculated to be .93. Turkish students' self-efficacy levels were measured by using the Turkish version of the Self-Efficacy Subscale of the MSLQ (Büyüköztürk, Akgün, Özkahveci, & Demirel, 2004). As a result of factor analysis in construct validity, it was found that factor loadings of items were between .52 and .65. In the reliability study, the internal consistency alpha coefficient was calculated to be .86.

Control Belief For Learning Subscale Control belief for learning was measured by using the Control Belief For Learning Subscale of the MSLQ (Pintrich et al., 1993). This subscale consists of 4 items and each item was rated on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*). In the reliability study, the internal consistency alpha coefficient was calculated to be .68. Turkish students' control belief levels were measured by using the Turkish version of the Control Belief Subscale of the MSLQ (Büyüköztürk et al., 2004). As a result of factor analysis in construct validity, it was found that factor loadings of items were between .60 and .72. In the reliability study, the internal consistency alpha coefficient was calculated to be .52.

Procedure

This research was conducted in the spring term of the 2007-2008 academic year. The measures were administered to students in groups of 30 during 50-minute class periods. Permission for student participation was obtained from the relevant heads of departments, and students participated voluntarily in research. Completion of the questionnaires was anonymous and there was a guarantee of confidentiality. Prior to administration of the measures, all participants were told about the purposes of the study.

RESULTS

Descriptive Data and Intercorrelations

Table 1 shows the intercorrelations among the variables.

TABLE 1
Correlation Among Self-Efficacy, Control Belief for Learning, and Self-Compassion

Variables	1	2	3	4	5	6	7	8	9
1. Control belief for learning	-								
2. Self-efficacy	.44**	-							
3. Self-kindness	.17**	.33**	-						
4. Self-judgment	0.04	-.12*	-.28**	-					
5. Awareness of common humanity	.14**	.27**	.50**	-.15**	-				
6. Isolation	.03	-.14**	-.28**	.64**	-.07	-			
7. Mindfulness	.19**	.38**	.72**	-.30**	.51**	-.34**	-		
8. Over-identification	.09	-.11*	-.29**	.66**	-.12*	.67**	-.39**	-	
9. Total self compassion	.01	.09	.23**	-.29**	.32**	-.31**	.07	-.39**	-

* $p < .05$, ** $p < .01$

When Table 1 is examined, significant correlations can be seen between dimensions of self-compassion, self-efficacy, and control belief for learning. While self-kindness correlated positively with self-efficacy ($r = .17$, $p < .01$)

and control belief for learning (r = .33, p < .001), self-judgment had a negative correlation with self-efficacy (r = -.12, p < .05). Awareness of common humanity had positive correlations with self-efficacy (r = .14, p < .01) and control belief for learning (r = .27, p < .01), and negative correlations with self-judgment (r = -.15, p < .01). On the other hand, isolation associated negatively with self-efficacy (r = -.14, p < .01) and self-kindness (r = -.28, p < .01) and positively with self-judgment (r = .64, p < .01). While mindfulness related positively to self-efficacy (r = .19, p < .01), control belief for learning (r = .38, p < .01), and self-kindness (r = .72, p < .01) it related negatively to self-judgment (r = -.30, p < .01) and isolation (r = -.34, p < .01). Finally, it was found that over-identification had a negative correlation with self-efficacy (r = -.11, p < .05) and self-kindness (r = -.29, p < .05) but positive correlations with self-judgment (r = .66, p < .01) and isolation (r = .67, p < .01).

Gender

Independent samples t tests were employed to examine gender differences. Means, standard deviations, and t test gender differences are given in Table 2.

TABLE 2
Gender Differences in Self-Compassion, Self-Efficacy, and Control Belief for Learning

	Females (n = 214)		Males (n = 176)			
Variable	*M*	*SD*	*M*	*SD*	*t*	*p*
Self-compassion	3.03	.17	3.03	.18	-.008	.993
Self-efficacy	5.33	1.01	5.42	.90	.94	.348
Control belief for learning	5.19	.99	5.26	1.01	.70	.483

As shown in Table 2, there were no significant gender differences in self-compassion, self-efficacy, and control belief for learning.

DISCUSSION

The purpose of the present study was to determine whether there were gender differences in achievement goals and to examine the relationships between self-compassion, control belief for learning, and self-efficacy. Results showed that there were no significant gender differences in self-compassion, self-efficacy and control belief for learning. On the other hand, findings have demonstrated that there are significant relationships between dimensions of self-compassion, control belief for learning, and self-efficacy.

Firstly, results of this study demonstrated that self-kindness, awareness of common humanity, and mindfulness were related positively to control belief for

learning and self-efficacy. Self-compassionate people have been shown to possess many psychological strengths, such as greater happiness, optimism, positive affect (Neff, Rude et al., 2007), and learning-approach goals (Akin, 2008); thus, self-kindness, awareness of common humanity, and mindfulness dimensions of self-compassion may be viewed as signs of psychological well-being. Self-kindness, awareness of common humanity, and mindfulness dimensions have also been associated with feelings of autonomy and competence (Neff, 2003a). Certainly, a key feature of self-compassion is that individuals do not harshly judge and criticize themselves when they notice something about themselves they do not like, and self-criticism is known to be an important predictor of psychological distress. Moreover, since self-compassionate individuals recognize when they are suffering, but when doing so they provide themselves feelings of warmth, kindness, and interconnectedness with the rest of humanity (Neff, in press), they can experience more positive and fewer negative emotions.

Similarly, research has consistently indicated that self-efficacy is positively related to adaptive variables such as general academic achievement (Caprara et al., 2006; Ferla et al., 2008), locus of control (Strauser, Ketz, & Keim, 2002), homework practices (Bassi et al., 2007; Zimmerman & Kitsantas, 2005), ability and effort (Hsieh & Schallert, 2008), self-regulation and self-concept (Pajares & Graham, 1999), and emotional support (Kanbara et al., 2008). Also, theorists suggest that in order for students to be successful in school, they must believe in their own power to produce successful outcomes (Skinner, Wellborn, & Connell, 1990) and that when students feel they are in control of their learning, they are more likely to use self-regulation strategies (Pintrich & De Groot, 1990). These properties are adaptive in nature. When these findings and interpretations are considered, the positive relationships found in this study between self-kindness, awareness of common humanity, mindfulness, self-efficacy, and control belief for learning seem reasonable and logical.

Secondly, self-judgment, isolation, and over-identification were found to be negatively related to self-efficacy. These three dimension of self-compassion mean that an individual attributes errors and unsuccessful life experiences to his/her own action, identifies intensively with negative feelings when faced with failure, and is swept up in and carried away by the storyline of his/her own pain (Neff, 2003b). Self-judgment, isolation, and over-identification involve an individual's self-critical, negative self-assessment, and being seized by emotions when experiencing a stressful and painful event. These factors of self-compassion have correlated positively with anxiety, depression, self-criticism, neuroticism, rumination, thought suppression, and neurotic perfectionism (Neff, 2003a, b; Neff, Kirkpatrick, & Rude, 2007; Neff, Rude et al., 2007). Therefore these dimensions of self-compassion are maladaptive. Research has revealed that self-efficacy is negatively associated with maladaptive variables such as

shame (Baldwin et al., 2006), psychological stress (Kanbara et al., 2008), and anxiety (Pajares & Graham, 1999). Thus, it can be said that an increase in self-efficacy will decrease self-judgment, isolation, and over-identification, and, there is a bidirectional causal relationship between these three dimensions of self-compassion and self-efficacy.

This study makes several contributions. Firstly, it demonstrates that self-compassion is associated with self-efficacy and control belief for learning. Secondly, this study was the first to examine the relationships between self-compassion, self-efficacy, and control belief for learning. However, participants were university students only; so generalizability is limited. Replication of this study could target other populations in order to generate more solid relationships among constructs examined in this study. Also, a structural equation model could be built among the variables examined in this study.

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