

## **Mindfulness and Resilience as Predictors of Subjective Well-Being among University Students: A Cross Cultural Perspective**

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The present study aimed to investigate the role of mindfulness and resilience as predictors of subjective well-being among university students of Pakistan and Russia. It was also intended to determine the comparative differences among Pakistani and Russian university students. The sample comprised of 496 university students including 306 from Pakistan and 190 from Russia with age range 20-35 years ( $M=24.5$ ,  $SD=5.62$ ). Mindfulness Attention Awareness Scale (Brown & Ryan, 2003), Ego-Resiliency Scale (Block & Kremen, 1996), and Warwick-Edinburgh Mental Well-being Scale (Tennant et al., 2006) were used to assess the sample. Results showed that mindfulness was positively associated with resilience and subjective well-being; while resilience was positively related with subjective well-being in both samples. Findings also showed that relationship between mindfulness and subjective-wellbeing was moderated by resilience. Moreover, men showed more resilience and better subjective well-being as compared to women across Pakistani and Russian samples. However, non-significant gender differences were observed on mindfulness among Russian students; while Pakistani male students expressed higher scores on mindfulness. Findings further showed that, Russian students displayed elevated levels of resilience and subjective well-being as compared to Pakistani students; conversely non-significant cultural differences existed on mindfulness.

*Keywords.* Mindfulness, resilience, subjective well-being, university students

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Mindfulness and resilience are psychological strengths that can enhance subjective well-being of individuals. In the clinical settings, mindfulness and resilience constructs have been used as important tools of interventions to treat several psychological disorders (depression, stress, and post-traumatic stress disorder) that are caused because of trauma or stressful life events. Therefore, the present study aimed to determine the contribution of mindfulness and resilience in predicting subjective well-being. Culture influences virtually every aspect of life, from one's general perspective or outlook on the world to the understanding of what constitutes socially acceptable behavior. Culture is generally reflected in the form of shared motives, values, beliefs, identities, and interpretations or meanings of significant events that result from common experiences of members of collectives that are transmitted across generations (House, Hanges, Javida, Dorfman, & Gupta, 2004). People in Asian collectivistic cultures are said to have an interdependent self-concept that emphasizes concerns with interpersonal connectedness, caring for others, and social conformity. However, people in individualistic cultures are said to have an independent self-concept that emphasizes concerns with autonomy, meeting of personal needs, and individual uniqueness (Markus & Kitayama, 1991). Therefore, the present study aimed to explore cultural differences between Pakistani and Russian students in relation to mindfulness, resilience, and subjective well-being.

Mindfulness is regarded as paying attention to a mode of consciousness that indicates presence of mind (Bodhi, 2000). Mindfulness is a versatile construct which is described as a practicing technique and skill (Brown, Ryan, & Creswell, 2007); as well as heightened and deliberate awareness of internal and external experiences taking place at a particular moment (Brown & Ryan, 2003).

The second major construct of the present study is resilience which is considered as the individual's capability to sustain a normal state of balance when that person is exposed to exceptionally adverse situations (Bonanno, 2004). Resilience is a dynamic process wherein individuals display positive adaptation despite experiences of significant adversity or trauma (Luther & Cicchetti, 2000). Resilience does not eradicate stress or remove life adversities, instead it gives people the strength to handle problems effectively, overcome adversity, and move on with their lives (Richardson, 2002). Initially (Walsh, 2003) resilience has been conceptualized as a stable personal trait (e.g., hardiness); however, later research (Maddi, 2005) made it clear that, factors in the

environment support and constrains resilience (e.g., quality of parenting). In the present times, empirical studies revealed complex interactions among individual and environmental factors that influence the likelihood of resilience in the face of challenge (McEwen, Gray, & Nasca, 2015).

Presently, there are two main perspectives of well-being, that is psychological and subjective (or eudaemonic and hedonic); which are distinctive yet overlapping (Ryan & Deci, 2001). Psychological well-being or eudaemonia refers to the realization of the person's true nature, rather than personal happiness whereas, subjective well-being or hedonism explained in terms of pleasure that is, affective (pleasure and pain), biological, and societal on the occasions of suffering and enjoyment (Ryff & Singer, 2000).

Mindfulness is very crucial in extricating individuals from automatic thoughts, behaviors, and unproductive habits; therefore, it could perform a central function in acquiring informed and improved behavioral regulation, which eventually leads to well-being of individuals (Ryan & Deci, 2000). Wilber (2000) suggested that improvement and maintenance of well-being can be achieved through the quality of awareness. Likewise, empirical evidences suggested that mindfulness is a strong predictor of well-being (Ryan & Brown, 2003); and mindfulness played an important role in enhancing psychological and ecological well-being (Brown & Ryan, 2003). Keng, Smoski, and Robins (2011) asserted that mindfulness enables adaptive psychological functioning with improved subjective well-being, decreased psychological symptoms and emotional reactivity, and better regulation of behavior. Recent evidences showed that mindfulness is negatively related with various dysfunctional outcomes (anxiety and depression) and positively linked with emotional wellness (Roche, Haar, & Luthans, 2014). In the light of the aforementioned literature, we formulate the first hypothesis.

There is increasing recognition of mindfulness as a way to decrease stress and increase psychological functioning. For instance, Branstrom, Kvillemo, Brandberg, and Moskowitz (2010) indicated that mindfulness predicted positive behavioral outcomes such as hardiness, flexibility, and psychological adjustment. Walsh and Shapiro (2006) also asserted that mindfulness would be effective in the enhancement of positive psychological qualities (self-compassion, resilience, and psychological wellness). Likewise, increase in trait mindfulness have beneficial effects on various indicators of mental health such as reduced anxiety, enhanced self-compassion (Branstrom, Kvillemo, & Moskowitz, 2012), well-being, and resilience (Orzech et al., 2009). The

abovementioned studies provide substantial grounds for the formulation of second hypothesis.

Sharna et al. (2014) reported that effective resilience and stress management reduces depression and anxiety, and lead to improved well-being of the individual. Fava and Tomba (2009) demonstrated linear relationship between psychological well-being and resilience in high-risk populations. Recent evidences indicated that resilience is a strong determinant of subjective well-being and negatively linked with neuroticism (Migliorini, Callaway, & New, 2013; Steptoe, Deaton, & Stone, 2015). These empirical evidences offer considerable base for the formulation of the third hypothesis.

Several studies have empirically inferred the interaction effect of resilience in various positive psychological outcomes; for instance, psychological adjustment (Arrogante & Perez-Garcia, 2013); psychological health (Kashyap, Kumar, Krishna, (2014); and psychological well-being (Ifeagwazi, Chukwuorji, & Zacchaeus, 2015). Further evidences indicated that resilience buffers the relationship between psychological distress (depression and anxiety) and subjective well-being (Burns, Anstey, & Windsor, 2011); as well as relationship between impact of daily hassles and psychological well-being (Lai & Mak, 2009). On the basis of these deliberations, the assumption about moderating role of resilience has been postulated.

Few studies have reported gender differences on mindfulness; for example, male students exhibited lesser mental distress, study stress, and burnout and elevated levels of mindfulness and well-being (de Vibe et al., 2013). Other set of studies showed substantial gender differences on resilience and subjective well-being. For instance, it has been found that men reported higher levels of resilience than women in coping with adversity (Boardman et al., 2008; Morano, 2010; Scoloveno, 2014). In addition, women experience more negative affect as compared to men and reported higher levels of depression, anxiety, experienced stress (Brody & Hall, 2008); less psychological well-being and poor psychological health as compared to men (Graham & Chattopadhyay, 2013; Nydegger, 2004; Russo & Green, 1993; Soysa & Wilcomb, 2013).

Various studies have highlighted cultural differences in terms of major constructs of the present study. For instance, Özyeşil (2012) found that American students expressed higher mindfulness and the psychological needs sub-dimensions (autonomy, competence and relatedness) as compared to Turkish students. Empirical evidence further suggested that greater amount of mindfulness helps to inoculate

individuals against social and cultural forces acting to inhibit or undermine choice fullness and self-endorsement of values, goals, and behaviors (Brown & Ryan, 2004); therefore, in collectivist cultures individuals tends to be less mindful as compared to individualistic cultures (Özyeşil, 2012). However, another study showed that mindfulness, self-kindness, and self-compassion have been found to be highest in Thailand (collectivistic culture) as compared to United States (individualistic culture) (Neff, Pisitsungkagarn, & Hsieh, 2008). Aldwin (2004) argued that cultures shape both normative stressors and individuals' responses to them and corresponding coping including resilience. There has been some exploration of cultural differences in resilience (Antonovsky, 1998; Waaktaar & Torgersen, 2012); highlighting the importance of cultural identity as an important component of resilience in individuals (McCubbin et al., 1998).

Ample literature showed consistent and interesting finding that cultural differences play a major role in subjective well-being; people belonging to Asian (collectivistic) culture reported lower levels of satisfaction with life and pleasant emotions, and high level of negative affect as compared to North Americans (Diener, Diener, & Diener, 1995; Kitayama, Markus, & Kurokawa, 2000). It seems that people in individualistic countries tend (on average) to be happier than people living in collectivist societies. Kasser and Ryan (2001) argued that individualized society fits human nature better than collectivist society does. Similarly, collectivist cultures may have the edge in producing people who value and meet their social obligations (Ahuvia, 2002). Furthermore, Diener, and Oishi (2000) found that collectivist cultures of Japan and South Korea, despite their economic development, are outliers of social anxiety and low subjective well-being scores among the world's more prosperous states. These substantial evidences on the cultural differences suggested basis for the sixth hypothesis.

### **Rationale of the Study**

Notable work in the domain of mind-body research have pointed to a growing interest in mindfulness and its role in coping with day-to-day stressors as well as a basis for treatment with clinical populations (Baer, 2003; Segal, Williams, & Teasdale, 2002). Contributing to the literature, the present study describes a study of mindfulness, resilience, and subjective well-being among university students; therefore, rationale of the present study is three pronged. Firstly, many studies to date have demonstrated the benefits of mindfulness-based treatments for a range of

clinical disorders (e.g., Marlatt, 2002; Roemer & Orsillo, 2002; Segal et al., 2002); however, fewer studies have been conducted with community populations; the benefits of mindfulness are, therefore, less known. Hence, present study focused on the university students as significant segment of the community. Secondly, adjusting to university can be, particularly, a stressful time, as moving from adolescence to the demands and responsibilities of university can be challenging (Arthur & Hiebert, 1996). Here, students face changes that would have both short- and long-term impacts on their lives, for example, in the areas of interpersonal relations, particularly with parents, religious views, and ethnic diversity (Lefkowitz, 2005). The potential for mindfulness practice would help buffer in reducing overall symptoms of psychological distress, while increasing resilience and experiences of subjective well-being. Findings from this study would show promise for students at the transitional phase of university equipped with better psychological resources (mindfulness and resilience) would be capable of meeting the newly emerging challenges and sustaining positive subjective well-being. Thirdly, in the present study mindfulness and its positive outcomes have been comparatively explored among university students in Pakistani and Russian cultures, thereby rendering better understanding about the cultural aspect of positive psychological tendencies in collectivistic as well as individualistic cultures.

## **Objectives**

The major objectives of the present study were to explore the relationship between mindfulness, resilience, and subjective well-being in Pakistani and Russian university students. It was also intended to determine the moderating role of resilience in predicting subjective well-being from mindfulness among Pakistani and Russian university students.

## **Hypotheses**

- Mindfulness is positively associated with subjective wellbeing and resilience; while resilience is positively associated with subjective well-being.
- Resilience moderates the relationship between mindfulness and subjective well-being.

- Male students reflect more mindfulness and resilience and elevated levels of subjective well-being as compared to female students.
- Russian students (individualistic culture) would reflect higher mindfulness, more resilience, and better subjective well-being as compared to Pakistani students (collectivistic culture).

## Method

### Research Design

The present study was primarily based on correlational research design.

### Sample

A convenient sample ( $N = 496$ ) comprising Pakistani ( $n = 306$ ) and Russian ( $n = 190$ ) private and public sector university students, including both men ( $n = 225$ ) and women ( $n = 271$ ) was acquired. Age range of the respondents varied from 20-35 years ( $M = 24.5$ ,  $SD = 5.62$ ). The diversity of age range was owing to the inclusion of few students who acquired admission in MS and MPhil programs after a temporal gap; however, larger proportion of the students had mean age of 24.5 years. Respondents included presently enrolled students of Masters ( $n = 290$ ) and MS/MPhil ( $n = 206$ ); from various disciplines, i.e., Natural Sciences, Social Sciences, Management Sciences, and Engineering Sciences. The sample was selected from the Quaid-i-Azam University ( $n = 110$ ), National University of Science and Technology ( $n = 66$ ), and Arid Agriculture University ( $n = 130$ ) of Pakistan and Saint-Petersburg State University of Architecture and Civil Engineering of Russia ( $n = 190$ ). Inclusion criteria was based on acquiring respondents who were full time regular students with minimal 14 years of formal education; while those students were not included who were married or had children.

### Assessment Measure

**Mindfulness Attention Awareness Scale (MAAS).** The Mindfulness Attention Awareness (Brown & Ryan, 2003) was a 15-item scale designed to assess a core characteristic of dispositional mindfulness, namely, open or receptive awareness of and attention to what is taking place in the present. Responses on items were rated on 6-point Likert scale ranging from 1= *almost always* to 6 = *almost never*.

The lowest score on MAAS was 15 and highest possible score was 90; while high scores reflected higher levels of dispositional mindfulness. The MAAS has demonstrated adequate test-retest reliability, discriminant, and convergent validity, known-groups validity, and criterion validity (Brown & Ryan, 2003). According to Brown and Ryan (2003) the Cronbach's alpha reliability of MAAS was found to be .87; while in the present study alpha reliability of this scale was found to be .82 for Pakistani sample and .79 for the Russian sample.

**Ego-Resiliency Scale.** Ego-Resiliency Scale (Block & Kremen, 1996) was a self-report measure used to assess resilience. Ego-Resiliency Scale was a 14-item scale with all positive worded items. It was a 4-point rating scale with responses ranged from 1 = *does not apply at all* to 4 = *applies very strongly*. Possible score range was 14-56 with high scores indicated more resilience. Reported alpha co-efficient of this scale was .76 (Block & Kremen, 1996); while alpha of .88 and .81 was acquired for Pakistani and Russian samples, respectively.

**Warwick -Edinburgh Mental Well-being Scale (WEMWBS).** Warwick-Edinburgh Mental Well-being Scale (Tennant et al., 2006) was a 14-item scale of mental well-being. It consisted of positively phrased items that included both hedonic and eudaemonic features. It was a 5-point Likert scale ranging from 1 = *none of the time* to 5 = *all of the time*. Possible minimum scale score was 14 and the maximum score was 70 with higher scores indicated elevated levels of subjective well-being. Authors reported Cronbach's alpha of .89 for the total Warwick-Edinburgh Mental Well-being Scale (Tennant et al., 2006; Tennant et al., 2007); whereas alpha co-efficient of .91 and .86 was achieved for Pakistani and Russian samples, respectively.

## **Procedure**

Formal permissions from the higher authorities of universities were acquired to administer the research questionnaires on the students. Participants were approached by visiting different universities. Participants were informed about the study and their formal informed consent was acquired. They were also ensured about the confidentiality of their data and were briefed that the acquired information would only be used for the research purposes. Respondents were also assured of their right to quit at any time while filling the questionnaires. Questionnaires were administered on one to one basis. Participants filled the



questionnaires in the time range from 15 to 20 minutes. Later, they were graciously thanked and appreciated for their valuable contribution.

### Results

Pearson product moment correlation was conducted to determine the relationship among mindfulness, resilience, and subjective well-being. Multiple regression analysis was performed to determine the moderating role of resilience in predicting subjective well-being. Independent sample *t*-test was conducted to determine the group differences across gender and cultures among university students.

Table 1

*Relationship Between Mindfulness, Resilience and Subjective Well-being in University Students of Pakistan and Russia (N = 496)*

Variable	1	2	3	<i>M</i>	<i>SD</i>
1.Mindfulness	-	.33*	.49*	51.25	11.36
2.Resilience		-	.52*	44.74	10.80
3.Subjective Well-being			-	55.83	12.91

\*  $p < .001$

Results presented in Table 1 indicated that mindfulness had shown significant positive relationship with resilience and subjective well-being. Moreover, it was also found that resilience was positively linked with subjective well-being; thereby supporting the first hypothesis.

Table 2

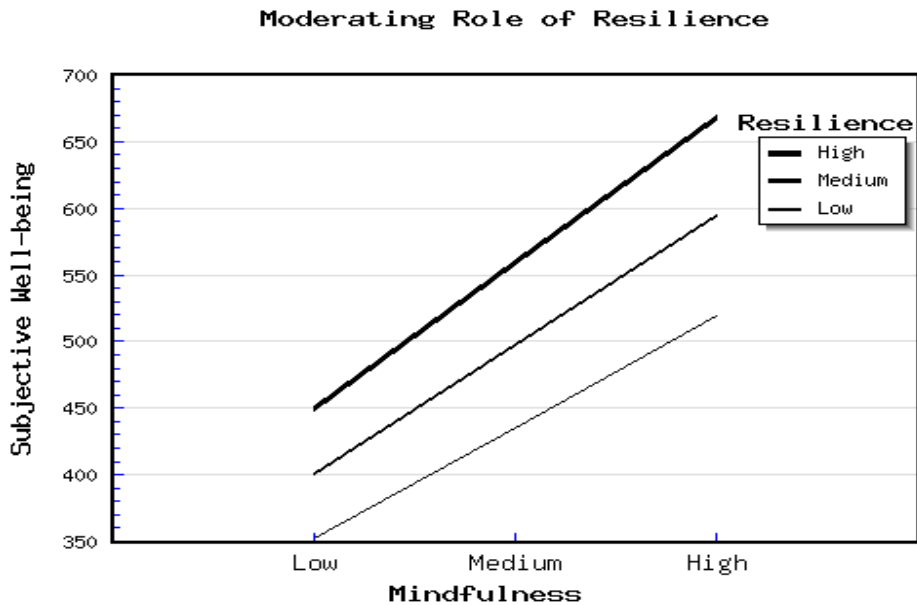
*Moderation through Multiple Hierarchical Regression Analysis Indicating Interaction Effect of Mindfulness and Resilience on Subjective Well-being (N = 496)*

Predictors	<i>Subjective Well being</i>		
	$\Delta R^2$	$\beta$	Slope ( <i>t</i> -value)
Step 1	.19		
Control Variables			
Step 2	.17		
Mindfulness		.29**	4.86** (3.22)
Step 3	.14		
Resilience		.31**	4.10** (2.61)
Step 4	.02		
Mindfulness x Resilience		.08*	
Total $R^2$	.26		

*Note.* Control variables included age, education, and national origin.

\*  $p < .05$ . \*\*  $p < .01$

Table 2 demonstrates the moderating role of resilience in explaining the relationship between mindfulness and subjective well-being. As presented in Table 2, resilience appeared to moderate the effect of mindfulness on subjective well-being and value of slope (with significant  $t$  values) indicated that there is enhancing effect of resilience which additionally augments the direct effect of mindfulness in envisaging subjective well-being.



*Figure 1.* Moderating Role of Resilience and Mindfulness in Predicting Subjective Well-being

Figure 1 demonstrates that resilience acts as a moderator in the relationship between mindfulness and subjective well-being. The above figure indicates that as mindfulness increases subjective well-being also increases i.e. there exists a direct relationship between the two variables. Moreover, resilience is positively enhancing the relationship between the mindfulness and subjective well-being. These findings stood valid for both Pakistani and Russian samples; hence offering empirical support for H2.

To find out the gender differences in relation to mindfulness, resilience and subjective wellbeing in university students of Russia and Pakistan, independent sample  $t$ -test was run. The results are given in Table 3.

Table 3  
*Gender Differences on Mindfulness, Resilience, and Subjective Wellbeing among Pakistani and Russian University Students (N= 496)*

Pakistani (N = 306)									
Variables	Men (n = 170)		Women (n = 136)		t	p	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
Mindfulness	57.41	8.17	49.28	7.26	6.72	.00	.92	4.81	.61
Resilience	45.63	5.28	41.39	6.74	4.55	.01	1.08	2.13	.48
SWB	57.05	6.45	51.33	8.11	5.20	.00	-4.09	-1.02	.54
Russian (N = 190)									
Variables	Men (n = 102)		Women (n = 88)		t	p	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
Mindfulness	46.83	7.30	47.92	8.63	0.78	.45	-3.59	0.37	.01
Resilience	48.24	6.23	43.00	8.57	4.72	.01	3.52	8.95	.53
SWB	53.35	8.76	48.29	9.16	3.38	.00	1.01	4.51	.46

Note. SWB = Subjective Well Being; *df* = 304 (Pakistani sample); *df* = 188 (Russian sample)

\*\* *p* < .01. \*\*\* *p* < .001.

Results exhibited significant gender differences on resilience and subjective well-being with men showing more resilience and subjective well-being as compared to women; and this holds applicable for both Pakistani and Russian students. However, findings indicated non-significant gender differences on mindfulness among Russian students; while male students reflected higher mindfulness as compared to women among Pakistani students. This pattern of findings proposes substantial but partial support for H3.

Table 4  
*Cultural Differences on Mindfulness, Resilience, and Subjective Well-being (N = 496)*

Variables	Pakistani (n = 306)		Russian (n = 190)		t(494)	p	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
Mindfulness	48.12	5.68	49.19	6.47	1.02	.23	-1.01	5.79	.05
Resilience	40.24	6.23	46.00	4.57	4.55	.01	3.52	8.95	.53
SWB	52.72	12.76	57.95	11.16	3.38	.02	9.01	34.51	.46

Note. SWB = Subjective Well Being

Table 4 indicated cultural differences across Pakistani and Russian samples in relation to mindfulness, resilience, and subjective wellbeing. Results indicated that Russian students reflected elevated levels of resilience and subjective wellbeing as compared to their Pakistani counterparts. However, non-significant cultural differences existed on mindfulness; hence, H4 is partially supported.

### **Discussion**

Results of the present study indicated a significant positive relationship between mindfulness and resilience. In the present study, the aforementioned pattern of relationship between mindfulness and resilience has been found consistent across both Pakistani and Russian students. According to Thompson, Arnkoff, and Glass (2011), mindful orientation of environment foster positive psychological capacities including resilience and optimism. Diener et al. (1995) further added that mindful and accepting orientation toward experience results in elevated psychological resilience following exposure to trauma among individuals of both individualistic and collectivistic cultures. Additional evidence also showed that mindfulness practices helps in promoting resilience both at personal level and workplace settings (Foureur et al., 2013); and increasing resilience and self-compassion in human services professionals working in various countries (Pidgeon, Ford, & Klaassen, 2014). Moreover, mindfulness-based techniques have assisted in recovering from post-traumatic stress and enhance resilience and hardiness (Johnson et al., 2014).

Findings of the present study also showed significant positive relationship between mindfulness and subjective well-being across both Pakistani and Russian respondents. These findings found substantial support in the explanation provided by Baer (2003) asserting that individuals who are more mindful and consciously aware of the immediate surroundings tends to be happier and have better problem solving skills. Similarly, Singleton et al. (2014) further added that mindful-based behavior has been found in linear relationship with better psychological adjustment and well-being among adults of Philippines (Asian cultures) and Sweden (individualistic culture). A coherent explanation for the positive relationship between mindfulness and subjective well-being has been suggested by Ryan and Deci (2000) asserting that mindfulness improves behavioral regulation, thereby leading to the overall well-being of the individuals. Moreover, mindfulness facilitates adaptive psychological functioning that increases

the subjective well-being of the individuals (Keng, Smoski, & Robins, 2011).

Results of the present study concluded that resilience has a significant positive relationship with the subjective well-being, and this pattern of relationship stands valid for both Pakistani and Russian students. These findings have rational grounds in the model of Hobfoll (2002) who asserted that positive psychological resources (such as resilience, self-efficacy, and hope) are significant predictors of better mental health, subjective well-being, and psychological adjustment. Similarly, Burns, Anstey, and Windsor (2011) also inferred that both dispositional optimism and psychological resilience positively predicted positive and active coping with stress; thereby enhancing subjective well-being and decreased psychological distress. Studies conducted in individualistic (He, Cao, Feng, Guan, & Peng, 2013) and collectivistic (Arrogante & Perez-Garcia, 2013) societies reported similar pattern of relationship inferring that elevated levels of resilience is associated with positive mental health and subjective well-being.

Results of multiple regression showed that resilience moderates the relationship between mindfulness and subjective well-being. In the present study, this model stands applicable for respondents of both cultures. The moderating role of resilience in predicting positive psychological outcomes has been depicted in various studies that are being conducted in diverse cultures. For instance, He et al. (2013) demonstrated that resilience buffers the relationship between personal distress and subjective well-being in American patients. Likewise, resilience has been found as a significant moderator in predicting optimism and satisfaction with life among Brazilians (Arrogante & Perez-Garcia, 2013); and coping strategies among Argentineans (Perez-Blasco, Viquer, & Rodrigo, 2012). A pragmatic explanation for the buffering role of resilience in predicting subjective well-being is highlighted by Ifeagwazi et al. (2015) and Kashyap et al. (2014) inferring that resilient skills helps people in managing negative affect (such as psychological distress and varying levels of personal and occupational stress), hence, leading to positive outcomes (such as improved psychological health, positive mood, and subjective well-being).

Results of the present study indicated significant gender differences on mindfulness with Pakistani men reflecting more mindfulness as compared to women; while non-significant gender differences existed in Russian sample. These mixed results found certain support from the earlier literature; for example, Shao, Roudan, Skarlicki,

and David (2009) reported that men are more mindful and consciously aware of themselves as compared to women. These gender differences on mindfulness might be cultural factors that are responsible for different socialization and cognitive processing in men that ultimately leads to increased mindfulness (Singleton, 2014). Similarly, men are less likely to experience mental distress and burnout and elevated levels of mindfulness and well-being (De Vibe et al., 2013). However, few studies also reported non-significant gender differences on mindfulness as Soysa and Wilcomb (2013) asserted that four facets of mindfulness (describing, awareness, non-judging, and non-reactivity) did not vary significantly by gender in undergraduates. With reference to indigenous context, Pakistani men and women experience different socialization practices which, in turn, have a far reaching impact including various cognitive functions such as mindfulness. On similar lines, social norms and behaviors further strengthening what is normally expected from men and women in different social situations; hence, play a pivotal role in enhancing the capacity of mindfulness more in Pakistani men as compared to women.

Conversely, significant yet, similar gender differences on resilience and subjective well-being have been found among both Pakistani and Russian samples with men indicating greater resilience and subjective well-being as compared to women. Prior studies also supported these findings by inferring that men have higher levels of resilience as compared to women (Mujeeb & Zubair, 2012) and death anxiety (Samreen & Zubair, 2013). Furthermore, men exhibited significantly greater subjective well-being as compared to women (Arzeen, 2013; Ayyash-Abdo & Alamuddin, 2007). Reviews of some past researches on gender differences on subjective well-being consistently agree that women tend to experience higher levels of unpleasant affect than men (Brody & Hall, 2008), experience elevated levels of internalizing disorders (depression, anxiety, and eating disorders), and lower subjective wellbeing (Lucas & Gohm, 2000).

Finally, findings of the present study concluded that Russian students displayed higher resilience and better psychological wellbeing as compared to Pakistani students; however, non-significant cultural differences have been found on mindfulness. There are numerous evidences which have shown that positive affect and happiness are majorly influenced by environmental and sociopolitical factors prevailing in individualistic and collectivistic cultures. Pakistani society being a collectivistic culture promotes interdependence, social obligations, and

adherence to normative values; thereby may limit the freedom of personal wellbeing and happiness. Leontiev and Rasskazova (2014) reported that Russian students are happier and chooses individualized sources of happiness; while, Japanese students opted for more mundane sources of happiness; however there have been no significant differences among Russians and Italians on sources of happiness. McCarthy, Hawkey, Jaafar, and Zubair (2012) found that Americans and Australians (as individualistic cultures) preferred more individualized and personal indicators of happiness and wellbeing; while Pakistani and Malaysians (as collectivistic cultures) endorse parental and family well-being more than the personal well-being.

**Limitations and Suggestions.** The present study has certain potential weaknesses. Firstly, the data was collected only from universities; thereby lacking diversity in the sample of the present study. It would be more appropriate to include sample from various segments of population so as to enhance the variability of sample. Secondly, present study makes use of quantitative measures to explore the phenomena; therefore, it would be much essential to include the qualitative appraisal which enhances comprehensive understanding of the variables. Thirdly, present sample size may restrict the generalizability of the findings on general population of students; hence, future studies may opt for larger samples to enhance the ecological validity of the assumed relationships among variables. Finally, it would be a suitable suggestion to explore antecedents of mindfulness in the context of other related variables (such as personality traits, self-efficacy, cognitive skills, and perceptual processes) to augment comprehensive understanding of the mindfulness model. On similar note, future explorations may also focus on the role of parental bonding and perceptions of adolescents' about their relationships with significant others in order to ensure a more comprehensive picture of mindfulness and resilience development through sophisticated research analysis.

**Implications.** The findings from the current study convey several practical implications for student development. Providing support for adaptive qualities of mindfulness, the current findings imply that the ability to remain aware of one's present moment experiencing is an adaptive approach in coping with stress and enhancement of subjective well-being of individuals, which may be particularly relevant during the transition to university.

Findings of the present study have practical implications in the field of educational psychology. Attention on present can be improved

considerably through different mindfulness techniques i.e., Mindfulness Based Stress Reduction therapy, in which stress is decreased to improve overall mental and physical functioning of individuals. Different interventions that are aimed to enhance mindfulness and resilience can be designed to enhance psychological wellbeing and emotional wellness of the students.

### References

- Arrogante, O., & Perez-Garcia, A. M. (2013). Is subjective well-being perceived by non-health care workers different from that perceived by nurses? *Relation with Personality and Resilience*, 24(4), 145-154. Doi:10.1016/j.enfi.2013.07.002
- Arthur, N., & Hiebert, B. (1996). Coping with the transition to post-secondary education. *Canadian Journal of Counseling*, 30 (2), 93–103.
- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice*, 10(2), 125–143.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230-241.
- Boardman, J. D., Blalock, C. L., & Button, T. M. (2008). Sex differences in the heritability of resilience. *Twin Research and Human Genetics*, 11(1), 12-27.
- Bränström, R., Kvillemo, P., Brandberg, Y., & Moskowitz, J. T. (2010). Self-report mindfulness as a mediator of psychological well-being in a stress reduction intervention for cancer patients: A randomized study. *Annals of Behavioral Medicine*, 39(2), 151-161.
- Brody, L. R., & Hall, J. A. (2008). Gender and emotion in context. In M. Lewis, J. M. Haviland-Jones, & L. F. Barret (Eds.), *Handbook of Emotions*, New York, NY: The Guilford Press.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848.
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18(4), 211-237.



- Burns, R. A., Anstey, K. J., & Windsor, T. D. (2011). Subjective well-being mediates the effects of resilience and mastery on depression and anxiety in a large community sample of young and middle-aged adults. *Australian and New Zealand Journal of Psychiatry, 45*(3), 240-248.
- Davis, D. M., & Hayes, J. A. (2012). What are the benefits of mindfulness? *Monitor on Psychology, 43*(7), 64-78.
- De Vibe, M., Solhaug, I., Tyssen, R., Friberg, O., Rosenvinge, J. H., Sørli, T., & Bjørndal, A. (2013). Mindfulness training for stress management: A randomized controlled study of medical and psychology students. *BMC Medical Education, 13*(1), 107.
- Fava, G. A., & Tomba, E. (2009) Increasing psychological well-being and resilience by psychotherapeutic methods. *Journal of Personality, 77*(6), 1903-1934.
- Foureur, M., Besley, K., Burton, G., Yu, N., & Crisp, J. (2013). Enhancing the resilience of nurses and midwives: Pilot of a mindfulness-based program for increased health, sense of coherence, and decreased depression, anxiety, and stress. *Contemporary Nurse: A Journal for the Australian Nursing Profession, 45*(1), 114-125.
- Graham, C., & Chattopadhyay, S. (2013). Gender and well-being around the world. *International Journal of Happiness and Development, 1*(2), 212-232.
- Heppner, W. L., Kernisl, M. H., Lakey, C. E., Campbell, W. K., Goldman, B. M., Davis, P. J., & Casciol, E. V. (2008). Mindfulness as a means of reducing aggressive behavior: Dispositional and situational evidence. *Aggressive Behavior, 34*(5), 486-496.
- Keng, S. L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical Psychology Review, 31*(6), 1041-1056.
- Kitayama, S., Markus, H. R., & Kurokawa, M. (2000). Culture, emotion, and well-being: Good feelings in Japan and the United States. *Cognition and Emotion, 14*(1), 93-124.
- Lefkowitz, E. S. (2005). Things have gotten better: Developmental changes among emerging adults after the transition to university. *Journal of Adolescent Research, 20*(1), 40-63.
- Marlatt, A. (2002). Buddhist philosophy and the treatment of addictive behavior. *Cognitive and Behavioral Practice, 9*(1), 44-50.

- McCarthy, S. N., Hawkey, K., Jafaar, J., & Zubair, A. (2012). *Indicators of happiness: A cross-cultural perspective*. Paper presented in 30<sup>th</sup> International Congress on Psychology, Cape Town, South Africa.
- McEwen, B. S., Gray, J. D., & Nasca, C. (2015). Recognizing resilience: Learning from the effects of stress on the brain. *Neurobiology of Stress*, *1*(1), 1-11
- Migliorini, C., Callaway, L., & New, P. (2013). Preliminary investigation into subjective well-being, mental health, resilience, and spinal cord injury. *The Journal of Spinal Cord Medicine*, *36*(6), 660-665.
- Morano, C. (2010). Resilience and coping with trauma: Does gender make a difference? *Journal of Human Behavior in the Social Environment*, *20*(4), 553-568.
- Mujeeb, A., & Zubair, A. (2012). Resilience, depression, anxiety, and stress among internally displaced persons affected by armed conflict. *Pakistan Journal of Social and Clinical Psychology*, *9*(3), 20-26.
- Neff, K. D., Pisitsungkagarn, K., & Hsieh, Y. P. (2008). Self-compassion and self-construal in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology*, *39*(3), 267-285.
- Nydegger, R. (2004). Gender and mental health: Incidence and treatment issues. In M. A. Paludi (Ed.), *Praeger guide to the psychology of gender* (pp. 93–116). Westport, USA: Praeger / Greenwood.
- Nyklíček, I., & Kuijpers, K. F. (2008). Effects of mindfulness-based stress reduction intervention on psychological well-being and quality of life: Is increased mindfulness indeed the mechanism? *Annals of Behavioral Medicine*, *35*(3), 331-340.
- Orzech, K. M., Shapiro, S. L., Brown, K. W., & McKay, M. (2009). Intensive mindfulness training-related changes in cognitive and emotional experience. *The Journal of Positive Psychology*, *4*(3), 212-222.
- Richardson, G. E. (2002). The meta-theory of resilience and resiliency. *Journal of Clinical Psychology*, *58*(3), 307-321. Doi:10.1002/jclp.10020
- Roche, M., Haar, J. M., & Luthans, F. (2014). The role of mindfulness and psychological capital on the wellbeing of leaders. *Journal of Occupational Health Psychology*, *19* (4), 476–489.
- Roemer, L., & Orsillo, S. (2002). Expanding our conceptualization of and treatment for generalized anxiety disorder: Integrating mindfulness

- and acceptance-based approaches with existing cognitive behavioral models. *Clinical Psychology: Science and Practice*, 9 (1), 54–68.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141-166.
- Ryff, C. D., & Singer, B. (2000). Interpersonal flourishing: A positive health agenda for the new millennium. *Personality and Social Psychology Review*, 4(1), 30-44.
- Samreen, H., & Zubair, A. (2013). Belief in personal control and death anxiety among police personnel. *Pakistan Journal of Psychological Research*, 28(2), 261-276.
- Scoloveno, R. (2014). A theoretical model of health-related outcomes of resilience in middle adolescents. *Western Journal of Nursing Research*, 19(39), 451-459.
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York: Guilford.
- Sharma, V., Sood, A., Prasad, K., Loehrer, L., Schroeder, D., & Brent, B. (2014). Bibliotherapy to decrease stress and anxiety and increase resilience and mindfulness: A pilot trial. *EXPLORE: The Journal of Science and Healing*, 10(4), 248-252.
- Singleton, O., Hölzel, B. K., Vangel, M., Brach, N., Carmody, J., Lazar, S. W. (2014). Change in brainstem gray matter concentration following a mindfulness-based intervention is correlated with improvement in psychological well-being. *Human Neuroscience*, 8 (33), 1123-1130.
- Soysa, C. K., & Wilcomb, C. J. (2013). Mindfulness, self-compassion, self-efficacy, and gender as predictors of depression, anxiety, stress, and well-being. *Mindfulness*, 6(2), 217-226.
- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., & Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-Being Scale: Development and UK validation. *Health and Quality of life Outcomes*, 5(1), 63-65.
- Waaktaar, T., & Torgersen, S. (2012). Genetic and environmental causes of variation in trait resilience in young people. *Behavior Genetics*, 42(3), 366-377.
- Walsh, F. (2003). Family resilience: A framework for clinical practice. *Family Process*, 42(1), 1-18.

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