

## **Perfectionism and Academic Burnout: The Mediating Role of Worry and Depressive Rumination in University Students**

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The present study investigated effects of perfectionism, depressive rumination (DR), and worry on academic burnout in university students. In addition mediating roles of depressive rumination and worry was explored. A sample of 515 students (237 females, 278 males) with age range of 17-27 years; ( $M = 20$ ,  $SD = 1.66$ ) were included from various government and private universities of Lahore. The research instruments used were: Almost Perfect Scale-Revised (APS-R; Slaney, Rice, Mobley, Trippi, & Ashby, 2001), Rumination Response Scale (Treynor, Gonzalez, & Nolen-Hoeksema, 2003), Penn State Worry Questionnaire (Meyer, Miller, Metzger, & Borkovec, 1990), and Indigenous Burnout Scale (Ijaz & Khan, 2012). Results revealed a significant positive relationship between perfectionism (standard/order) and worry. Moreover a significant positive relationship was also found among perfectionism (discrepancy), depressive rumination, worry, and academic burnout. The mediation analysis showed that depressive rumination and worry significantly mediated the relationship between perfectionism and academic burnout. The present study highlighted the need for studying different dimensions of perfectionism and also identifying the causes of depressive rumination and Worry in student population which have been found to be leading to academic burnout.

*Keywords.* Perfectionism, depressive rumination, worry, academic burnout, university students

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Human life is a constant struggle to achieve, setting goals. During this competition of life, at times one achieves what he desires and fails when these goals are unrealistic and impractical. Sometimes one achieves those goals and sometimes fails to achieve goals that are unrealistic and too big in comparison to the ability level of the person. Generally, failure and success are like two sides of a coin and a person goes through both in a balanced way, but for some individuals, success matters the most, they set high standards for themselves and others and strive for perfectionism.

Perfectionism is considered to be a temperamental characteristic that involves an individuals' tendency to set high goals of performance for them and at the same time being overly critical about one's efforts to achieve those goals (Enns, Cox, & Clara, 2002). Perfectionism in student population has been found to be increasing drastically. In a detailed meta-analysis by Curran and Hill (2019), spanning 27 years of studies conducted on multi-dimensional perfectionism in college students in United States, Canada and United Kingdom, it was concluded that perfectionism has increased drastically in recent generations as compared to previous ones. In Pakistan, as the pressure to achieve more and more each day, there has been a rise of perfectionism in students as well. In Pakistani context, the research on perfectionism has focused on exploring it in the context of fear of evaluation (Shafique, Gul, & Raseed, 2017), impact of perfectionism in terms of loneliness and life satisfaction (Hasnain & Fatima, 2012).

Literature (Curran & Hill, 2019) has mentioned different ways of conceptualizing perfectionism including Hewitt and Flett's (1991) multidimensional model of perfectionism and dual process model of perfectionism, i.e., adaptive and maladaptive by Slade and Owens, 1998. Multi-dimensional model focuses on direction of perfectionistic beliefs and behaviors including self oriented perfectionism (directed towards self by the self); socially prescribed perfectionism (directed towards the self by others) and others oriented perfectionism (directed towards others by the self).

The second dual process model focuses on the role of perfectionism in one's life and it describes adaptive perfectionism as the one that involves setting realistic goals and focus on achieving success rather than avoiding failure. On the other hand, maladaptive perfectionism involves setting unachievable goals, investing energies to avoid failure and it has got an inherent fear of failure. Thus it is not surprising for adaptive perfectionists to have positive outcomes such as positive affect, better academic achievement, effective problem solving, better life satisfaction (Bergman, Nyland, & Burns, 2007;

Hicks & Yao, 2015) and maladaptive perfectionists to have negative outcomes involving depression, anxiety, suicidal ideation, low self-worth, self-criticism, and so on (Kiamanesh, Dieserud, & Haavind, 2015; Meh & Adams, 2016). Among other negative outcomes, maladaptive perfectionism has been frequently linked with burnout in student population and in others as well (Aboalshamat et al., 2017; Garratte-Reed, Howell, Hayes, & Boyes, 2018; Zhang, Gan, & Cham, 2007).

In addition to these two models, Slaney et al. (2001) studied perfectionism both qualitatively and quantitatively and they concluded that perfectionism is manifested in a three dimensional way including setting high standards, being orderly and having discrepancy in standards and performance. On the basis of their findings, they developed Almost Perfect Scale-R in 2001 and proposed that adaptive perfectionist set high standards for themselves and are more orderly and have low discrepancy between goals and performance while maladaptive perfectionist have high standards, are low in orderliness and have high discrepancy (Ulu & Tezeg, 2012). The current research focuses on the three dimensional presentation of perfectionism proposed by Slaney and colleagues and exploring what role perfectionism is playing in burnout in the presence of worry and rumination.

Like perfectionism, burnout is also an alarming issue that student population is experiencing all over the world (Kristanto, Chen, & Thoo, 2016). Maslach, Jackson, and Leiter (1996) described burnout as a condition in which a person goes through physical and emotional exhaustion, impersonal attitude, and a loss of sense of achievement (as cited in Asghar et al., 2019). Academic burnout has been found to be affecting academic performance of students (Mazurkiewicz et al., 2011), their mental health (May, Bauer, & Fincham, 2015), physical health (Toker, Melamed, Berliner, Zelster, & Shapira, 2012) relationships and other dimensions of functioning (Gil-Monte, Unda Rojas, Sandoval, & Ocana, 2009; Salanova-Soria, Martinez, Bresó, & Lorens, 2005). It is also important to understand the factors that may make a person more likely to experience academic burnout and empirical evidence has shown that the factors increasing vulnerability to burnout include attribution style (Erfani & Maleki, 2015), self-efficacy beliefs (Jenaabadi, Nastiezaie, & Safarzaie, 2017), low social support (Boudreau, Santen, Hamphill, & Dobson, 2004), neuroticism (Magnano, Paolillo, & Barrano, 2015) and many more. Perfectionism is one of the factors that predicts academic burnout (Kijajic, Gaudreau, & Franche, 2017; Zhang et al., 2007). Majority of the work on the two variables is being done in westerns cultures, and it

highlights the need to unravel the factors leading to burnout in our culture, so that they can be controlled to reduce the incidence of burnout among student population.

Although the relationship between perfectionism and burnout is studied in the West, and it has been highlighted that several factors play a role in making this relationship more influential. These factors include self-esteem, coping styles, personality factors etc. Recent literature has emphasized the role of preservative cognition, manifested as worrying and rumination, in many psychological and physical problems (Brosschot, Gerin, & Thayer, 2006). These two variables have also been found to be involved in perfectionism and burnout both (Flett, Coulter, Hewitt, & Nepon, 2011; May et al., 2019). So in the current research, the main aim was to explore the interaction between Perfectionism and burnout in the presence of worry and rumination.

There is a considerable association between rumination and worry (Watkins, 2004; Watkins, Moulds, & Mackintosh, 2005), in which many of their features are overlapping (McLaughlin, Sibrava, Behar, & Borkovec, 2006). Both are recurrent types of cognitions which focus on individual (Borkovec et al., 2004). Both have a conceptual cognitive way of thinking (Watkins & Teasdale, 2001; Watkins, Teasdale, & Williams, 2000). Both have a mental rigidity and face a struggle for diverting attention from a distressful cue (Hazlett-Stevens, 2001).

There are researches which put light on the discernable aspects of worry and rumination (Hong, 2007; Muris, Roelofs, Rassin, Franken, & Mayer, 2005). Initially, several studies have observed variance in worry and rumination with regard to their time of occurrence (McLaughlin et al., 2007). Worry involves upcoming events and it is concerning the distress that is yet to come. Individuals being upset regarding something that has happened in the past are upset regarding the unpleasant effects that it can cause later in life (Barlow, 2002). While rumination can show distress regarding upcoming events but primarily they focus on occasions that have already happened, thinking about the cause of it, and wondering regarding the significance of what happened (McLaughlin et al., 2007; Watkins, 2004; Watkins et al., 2005).

The review of literature has shown that although student population is under a lot of stress and there are many factors that have been found to be having a deteriorating effect on their performance. Among these, perfectionism and burnout appear to be important contributors in the presence of mediating variables like worrying and

ruminating. The current research included these variables as they are in control of the person and can be altered if found to be playing role in predicting burnout. The findings of the study can be used to help counselors to change maladaptive perfectionism into adaptive by controlling the worrying and rumination and in turn reducing the experience of burnout.

### **Hypotheses**

The hypotheses for the study are as follows:

1. High standards and order perfectionism are negatively related with depressive rumination, worry and academic burnout among university students.
2. Discrepancy is positively related with depressive rumination, worry and academic burnout among university students.
3. Depressive rumination significantly mediates the relationship between perfectionism (discrepancy) and academic burnout.
4. Worry significantly mediates the relationship between perfectionism (discrepancy) and academic burnout.

## **Method**

### **Research Design**

To investigate the relationship among perfectionism, rumination, worry, and burnout in university students, correlational research design was used.

### **Sample**

A sample of 515 students including girls ( $n = 237$  and boys ( $n = 237$ ) was selected for the study. The age ranges of the participants were 17-27 years ( $M = 20$ ,  $SD = 1.66$ ). Sample was selected from government (university of Veterinary and Animal Sciences, Lahore College for Women University, Government College University, and University of Education) and private sector universities (University of South Asia, University of Lahore, and Forman Christian College) of Lahore. Sampling strategy used was simple stratified sampling; students in each university were divided into two broad strata of social sciences and natural sciences; students were then randomly selected

(every third student in the class) from classes of three random departments from both social and natural science category.

The inclusion criteria for selection of the participants include those who didn't have any physical disability; ability to understand Urdu and English and; those who were attending classes and weren't having exams or mid-tests.

### **Instruments**

**Almost Perfect Scale Revised (APS-R; Slaney et al., 2001).** It is a 23-item, English version, self-report questionnaire which measures three dimensions of perfectionism: High Standards (7 items), Order (4 items), and Discrepancy (12 items). The high standards subscale measures high personal standards for performance and achievement. The discrepancy scale measures respondents' perceptions of themselves as failing to meet their personal standards for performance. The order subscale measures a preference for neatness and order. Participants respond on a 7-point scale from 1 to 7. Higher scores correspond to more perfectionism. Chronbach's alpha coefficients for high Standards is .85, for discrepancy is .92 and for order is .86 (Slaney et al., 2001).

**Ruminative Responses Scale (RRS; Treynor et al., 2003).** It is an English version, self-report measure which asks the participants to rate the frequency with which they think or do certain things when they feel sad. The 22 items of the Rumination Responses Scale measures responses that are self-focused, and are focused on the causes or consequences of having a depressed mood. Items are rated on a four-point scale ranging from 1 to 4. The questionnaire provides scores for the following subscales: Depression related symptoms (12 items), Brooding (5 items), and Reflection (5 items). Coefficient alphas ranged from .88 to .92 (Treynor et al. 2003).

**Penn State Worry Questionnaire (Meyer et al., 1990).** It is an English version scale which measures generality, excessiveness, and uncontrollability of pathological worry. It is a 16-item questionnaire that aims to measure the trait of worry, using Likert rating from 1 to 5. Items no. 1, 3, 8, 10, and 11 are reversed scored. Total is sum of all 16 items. Possible range of scores is 16-80. Coefficient alphas for scale ranged from .60-.99 (Meyer et al., 1990).

**Indigenous Burnout Scale (Ijaz & Khan, 2012).** It is an indigenous Urdu scale. It is a self-report measure and has a total of 36 items. It is a four-point Likert scale ranging from 0 to 3. This scale is used for measuring overall burnout of university students. It consists

of four subscales called Emotional and physical exhaustion (17 items), Inability to perform (8 items), Withdrawal (6 items), and self-destruction (5 items). Overall alpha coefficient of the scale is .92 (Ijaz & Khan, 2012).

### **Procedure**

The research began by collecting the list of government and private sector universities. The universities were then randomly selected for collecting data. After identifying the Universities, permissions for data collection were sought from the authorities. Later, the students were approached in their classes, they were briefed about the purpose of the study and their consent was taken. Then every 3rd participant in class who agreed to participate in the study was given the research protocol including consent form, demographic sheet and all the questionnaires. Students were also instructed to fill the questionnaires with honesty and not to miss any item. They were told that the information they provide would be kept confidential and will be used for research purposes only. It was a group administration and the average time taken to fill the protocol was 15-20 minutes. During the process of data collection, students were encouraged to ask any question if they didn't understand any statement from the questionnaires. After data collection, the students were debriefed and all the concerns were addressed by the researcher.

### **Ethical Considerations**

Certain ethical considerations were kept in mind while carrying out research. Initially, permissions from all institutes were taken before data collection was carried out. Also, permission for using scales was also taken from their respective authors. Further, confidentiality and anonymity of participants was ensured along with taking their informed consent. Participants were protected from all kind of physical and psychological harm. Reporting of results was also accurately done.

### **Results**

Chronbach alpha reliabilities along with skewness and kurtosis for research instruments were computed. Table 1 indicates that all four scales and their subscales have a satisfactory reliability ranging from .93 to .68. Among descriptive statistics, the scales and their subscale have their skewness and kurtosis values below 1 indicating that their distribution lies within normality (Miles & Shevlin, 2001). Positive

values for skewness indicates the presence of higher values and the tail points towards the right side, while negative values indicate the presence of lower values and the tail points towards the left side. Negative values of kurtosis show a flat tailed distribution.

Table 1

*Alpha Coefficients for Perfectionism, Depressive Rumination, Worry, Burnout, and Their Subscales (N = 515)*

Scales	k	$\alpha$	Range		Skew	Kurt
			Potential	Actual		
APS	23	.74	23-161	38-157	-.46	.14
High Standards	7	.73	7-49	10-49	-1.13	3.68
Discrepancy	12	.92	12-84	17-84	-.45	-.73
Order	4	.68	4-28	5-28	-.88	1.00
RRS	22	.87	22-88	25-86	.12	.05
PSWQ	16	.93	16-80	16-80	-.43	-.76
IBS	36	.93	0-108	5-105	-.15	-.52

*Note.* APS = Almost Perfect Scale; RRS = Rumination Response Scale; PSWQ = Penn State Worry Questionnaire; IBS = Indigenous Burnout Scale; Skew = Skewness; Kurt = Kurtosis.

Table 2

*Correlations among Perfectionism, Depressive Rumination, Worry and Burnout among University Students (N = 515)*

Variables	1	2	3	4	5	6	7	8	9	10
1.Standard	-	.24**	.30**	.10*	.15**	.06	.10*	.03	-.02	.05
2.Discrepancy		-	.32**	.29**	.34**	.21**	.18**	.21**	.15**	.21**
3.Order			-	.07	.18**	.02	.05	.02	-.08	.01
4.Depressive Rumination				-	.54**	.56**	.53**	.51**	.35**	.49**
5.Worry					-	.61**	.60**	.53**	.36**	.51**
6.Burnout						-	.95**	.89**	.73**	.79**
7.Emotional and Physical Exhaustion							-	.78**	.54**	.71**
8.Inability to perform								-	.61**	.61**
9.Withdrawal									-	.50**
10.Self-destruction										-
<i>M</i>	41.1	54.0	2.0	56.4	53.7	55.5	27.8	12.7	9.30	5.67
<i>SD</i>	4.94	14.8	.70	10.7	14.4	20.7	10.9	5.11	4.60	3.20

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

Table 2 illustrates that there is a significant positive relationship between high standard and discrepancy subscales of perfectionism with depressive rumination and worry; while no significant relationship is found between order subscale of perfectionism and depressive rumination although order subscale correlates positively



with worry. With reference to interaction between perfectionism and burnout, the findings have shown that discrepancy has got significant positive relationship with burnout and its subscale while standards has got significant positive correlation with emotional and physical exhaustion subscale of burnout and order subscale of perfectionism was found to have no relationship with burnout. Thus, the hypothesis 1 is rejected which states that high standard and order subscales of perfectionism are negatively related with depressive rumination, worry and burnout.

### **Mediating Role of Depressive Rumination on Perfectionism (discrepancy) and Academic Burnout**

For exploring the mediating role of depressive rumination on the relationship between perfectionism (discrepancy), and academic burnout, linear regression was carried out by enter method in which perfectionism (discrepancy) was entered first and then depressive rumination was entered as independent variables. Academic burnout was entered as dependent variable. Results are depicted in Table 3.

Table 3

*Mediating Effect of Depressive Ruminations on Perfectionism (discrepancy) and Academic Burnout (N = 515)*

Predictors	Model 1	Model 2	SE	95% CI	
	B	B		LL	UL
Constant	39.5	-7.88	4.39	-16.5	.74
Perfectionism (discrepancy)	.21***	.05	.05	-.03	.18
Depression Rumination		.54***	.07	.91	1.20
$R^2$	.05	.32			
$F$	24.3***	118***			
$\Delta R^2$		.27			
$\Delta F$		202***			

Note. LL = Lower Limit; UL = Upper Limit; CI = Confidence Interval.

\*\*\*  $p < .001$ .

Table 3 indicates that perfectionism (discrepancy) predicts burnout and explains 5% variance in contributing to it in model 1. However, when mediator which is depressive rumination is entered in model 2 then perfectionism (discrepancy) losses its significance and

no longer predicts academic burnout. Relationship is completely mediated by depressive rumination in model 2 and depressive rumination explains 27% additional variance in academic burnout. Sobel  $t = 6.40$  ( $p < .001$ ) confirms the significantly complete mediating role of depressive rumination in the relationship between discrepancy and academic burnout. The direction of prediction is positive meaning that an increase in perfectionism (discrepancy) leads to an increase depressive rumination which increase burnout.

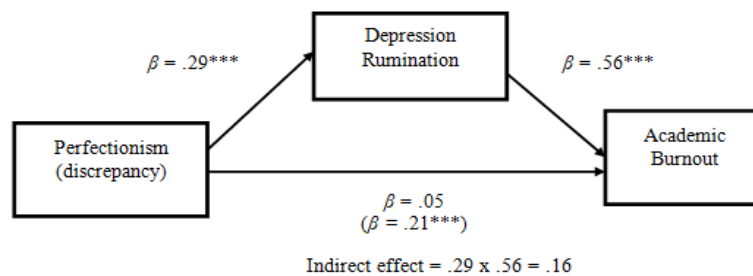


Figure 1. Standardized regression coefficients for discrepancy and academic burnout that are mediated by depression rumination.

Figure 1 shows Standardized regression coefficient for discrepancy and academic burnout that are mediated by depression rumination. The Standardized regression coefficient for discrepancy and academic burnout, when depression rumination is held constant, is in parenthesis. The above figure shows that total effect of discrepancy, that was .21, was significant and predicted academic burnout when depression rumination was held constant. However, when depression rumination was added, then direct effect of discrepancy on academic burnout that was .05 became non significant while indirect effect through depressive rumination, which was .16, got significant showing that discrepancy no longer predicted academic burnout. The findings of the study thus support the hypothesis number 3.

### Mediating Role of Worry on Perfectionism (discrepancy) and Academic Burnout

For exploring the mediating role of worry in the relationship between perfectionism (discrepancy), and academic burnout, linear regression was carried out by Enter method in which perfectionism (discrepancy) was entered first and then worry was entered as

independent variables. Academic burnout was entered as dependent variable. Results are depicted in Table 4.

Table 4

*Mediating Effect of Worry on Perfectionism (discrepancy) and Academic Burnout (N = 515)*

Predictors	Model 1	Model 2	SE	95% CI	
	B	$\beta$		LL	UL
Constant	39.5	8.36	3.36	1.76	15.0
Perfectionism(discrepancy)	.21***	.01	.05	-.09	.11
Worry		.60***	.05	.76	.98
$R^2$	.04	.37			
F	24.3***	148***			
$\Delta R^2$		.32			
$\Delta F$		260***			

Note. LL = Lower Limit; UL = Upper Limit; CI = Confidence Interval.

\*\*\*  $p < .001$ .

Table 4 indicates that discrepancy predicts academic burnout and explains 4% variance in contributing to it in model 1. However, discrepancy loses its significance in predicting academic burnout when worry is added in model 2. The relationship is completely mediated by worry in which it explains additional 32% variance in academic burnout. Sobel  $t = 7.45$  ( $p < .001$ ) confirms the significantly complete mediating role of worry in the relationship between discrepancy and academic burnout. The direction of prediction is positive meaning that an increase in discrepancy leads to an increase in worry which in turn increases academic burnout.

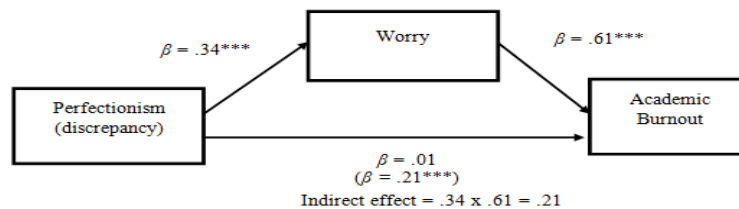


Figure 2. Standardized regression coefficients for discrepancy and academic burnout that are mediated by worry.

Figure 2 shows Standardized regression coefficients for discrepancy and academic burnout that are mediated by worry. Standardized regression coefficient for discrepancy and academic burnout, when worry is held constant, is in parenthesis. It can be seen that total effect of discrepancy, that was .21, was significant and predicted academic burnout when worry was held constant. However, when worry was added, then direct effect of discrepancy on academic burnout that was .01 became non significant while indirect effect through worry, which was .21, got significant showing that discrepancy no longer predicted academic burnout. Thus, hypothesis 4 is also supported by the findings of the study.

## Discussion

The aim of current study was to explore the role of perfectionism, depressive rumination and worry in aggravating or reducing academic burnout. It also investigated the mediating role of depressive rumination and worry in relationship between discrepancy and academic burnout.

Results for hypothesis no. 1 showed that high standard perfectionism increased depressive rumination; and high standard and order increased worry in university students rather than decreasing it which was contradicting to previous researches. This may be because that individuals having healthy perfectionism (or those who have a reduced discrepancy between their desired and acquired goals) have a fast-moving life, carrying out tasks without getting tired, struggling to achieve dominance, and being influential when it comes to their social circle (Dunkley, Blankstein, & Berg, 2012). As students who have perfectionism think excessively regarding achievement and also engage in certain behaviors like organizing things for acting on these thoughts. They may end up in spending hours worrying on a task and will wonder whether the task that they have done is up to their high standards or not. They usually wait till the last minute for doing their task but feel very fatigued by then as they spend a lot of time worrying about the possible failures they can face (Hagen, 2016) which reduces their academic performance.

Further, it was evident from results of hypothesis 2 that discrepancy led to an increase in depression rumination, worry, and burnout in university students. Previous researches had found a similar result as that of the current study (Brown, 2011; Chang et al., 2007; DiSchiena, Luminet, Philippot, & Douilliez, 2012; Egan, Hattaway, & Kane, 2014; Randles, Flett, Nash, McGregor, & Hewitt, 2010; Soliemanifar, Rezaei, Rasuli, & Rasuli, 2015). This may be because

that these students may have a fear of not meeting their idealistic aims making them ruminate regarding their performance (Macedo, Marques, & Pereira, 2014). Additionally, these students may also engage in worrying because when upcoming risks (like failing in exams) and regarding outputs (getting a low GPA) that are unrealistic, regarding which they are worried about, scarcely happen, in return reinforces these students to worry again in case of distress as they think that it prevented undesirable outcomes in future from happening (Borkovec et al., 2004). Hence, these students undergo through persistent tension that makes such individuals vulnerable for accumulating stress which in turn leads to burnout in them (Hill & Curran, 2016).

It was evident from results of hypothesis no. 3 that depressive rumination mediated the relationship between discrepancy and academic burnout. No previous research has explored this relationship. However, depressive rumination has been studied as a mediator in other researches like in one study depressive rumination mediated the relationship between perfectionism and depressive symptoms (Flett et al., 2011). Also, previous researchers have found a relationship between maladaptive perfectionism and burnout (Madigan, Stoeber, & Passfield, 2015) but they haven't studied impact of rumination on relationship between perfectionism (discrepancy) and academic burnout. From current study, mediating role of rumination suggests that perfectionist students who have a greater discrepancy in their desired and achieved goals will ruminate over their failure which in turn may cause academic burnout in them. This may be because as perfectionist students have desired goals that are unrealistic so no matter how hard they try they aren't unable to achieve them. So for coping with this, they may engage in depressive rumination that involves experiencing the failure over and over again by thinking about it. This may drain their energy to carry out other tasks in life and will ultimately lead to burnout in them.

Study also investigated whether worry mediated relationship between perfectionism (discrepancy) and academic burnout. Results for hypothesis 4 showed that worry mediated the relationship between discrepancy and academic burnout. Worry has been studied as a mediator in some researches like a study showed that worry mediated relationship between self-compassion and anxiety (Raes, 2010). However, no previous research has explored the mediating role of worry in relationship between maladaptive perfectionist (or those perfectionist who have a greater discrepancy between their desire and acquired goals) and academic burnout due to which current research has explored this relationship. This may be because maladaptive

perfectionists are more likely to engage in worrying (Handley, Egan, Kane, & Rees, 2014) as a way of coping with stressors in life. Those who worry usually process a lot of undesirable emotional symptoms; are hopeless and feel inadequate with regard to having skills for effectively handling their issues; and uphold views that are perfectionistic in nature in spite of their self-assessed insufficiency to handle their issues. Hence, individuals who worry face a discrepancy between their desired goals and present circumstances of their life; and feel insufficient to reach those goals and think negatively regarding their lives as it is devoid of the goals they desire (Paolini, Yanez, & Kelly, 2006). Further, worrying also make a person more vulnerable for getting burnout (Moen, Myhre, Klöckner, Gausen, & Sandbakk, 2017) which effects overall adaptive functioning of individual.

### **Limitations and Suggestions**

There were limitations of study like sample size was small and was only taken from universities of Lahore hence making the sample unrepresentative of overall student population and this limited the generalizability of the research findings. So in further a larger sample size ought to be taken and sample should be collected from all provinces. However, since it was the first study exploring relationship among perfectionism, rumination, worry, and academic burnout hence it provides a base for future studies. The study results indicate that in the presence of depressive rumination and worry, the role of perfectionism decreases considerably in causing academic burnout. This finding needs further investigation and the future researchers may focus on identifying adaptive and maladaptive perfectionism in our students and studying the role of depressive rumination and worry in each type in causing burnout. The findings of the study have also shown that standard and order subscales of Almost Perfect Scale-revised do relate with burnout which points towards the need of studying perfectionism from a multidimensional perspective e.g. using Hweitt and Flett (1991) or Slade and Ovens (1998) dual process model.

### **Conclusion**

The aim of the study was to find out relationship among perfectionism, depressive rumination, worry and academic burnout in university students. The findings of the study revealed that in this sample, discrepancy between one's goals and ability level was

strongly related with depressive rumination, worry and burnout while the other two aspects of perfectionism were not related to burnout. The study also highlighted the critical role played by depressive rumination and worry in burnout. Results of the study thus emphasize the need to raise awareness regarding how depressive rumination, worry and certain aspects of perfectionism can affect overall performance of students. Educational institutes shall also put a special focus on exploring academic as well emotional and psychological reasons of poor academic performances, so that this early identification can pave the way for prevention and intervention of at risk students.

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