

Relationship Between Perfectionism Dimension with Imposter Syndrome in University Student

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Abstract: This research was carried out to determine the simple and multiple relations between perfectionism dimensions and imposter syndrome among university students. It also aimed to study the differences between these two constructs considering the gender factor. This descriptive- correlation research investigated 130 male and 137 female individuals taken from a population of 484 top students randomly. The instruments of research include Hill *et al*, Perfectionism Scale and Clance's Imposter Phenomenon Scale. Correlation test, one-way and step-by- step ANOVA were used for data analysis. There is a significant correlation between perfectionism and imposter syndrome and between all components of perfectionism and those of imposter syndrome. From among eight components of perfectionism, high criteria for others, purposivism, parental pressure perception and need for approval possess high prediction power for perfectionism. There are also significant differences between perfectionism and imposter syndrome in male and female students. The high correlation between the two constructs and their components necessitates that we consider them as deterrent factors in academic performance and effective coping strategies to decrease or eliminate them.

Key words: Perfectionism dimension • Imposter syndrome

INTRODUCTION

Perfectionism construct was introduced to the literature of psychology as a personal or emotional characteristic [1] by Bronze and during these two recent decades several studies have been done to deal with conceptualism, theorizing, pathology and evaluating it [2]. Some researchers consider it as one-dimensional construct mainly harmful [3] but others considered it as two-dimensional construct both ordered and disordered [4]. Also some other authors focused on its multi-dimensional trait such as the three dimensions of self-oriented, other-oriented and society- prescribed [5] and again others stressed upon six- dimensions of this construct [6]. Recently, Hill *et al*, identified eight dimensions for perfectionism [1]. Based on each of these mentioned approaches, appropriate evaluating scales in accordance with it have been introduced.

Freud attributed perfectionism to the function of extremist superego [7]. Accordingly, this construct has been defined as staunch intention of a person towards perfect and unreachable standards as well as attempts to attain them. On the basis of multidimensional views [8],

perfectionism involves high expectation of a person of himself, of others and vice versa.

Finding of researches show that there's a correlation between perfectionism and personality and behavioral characteristics as well as psychiatric problems [9-11]. Self- perfectionism is in relation to both positive traits as attempts and self-esteem, self-actualization and competitiveness [11, 12] and to negative traits as autoerotism, self- criticism, feeling of sin, depression and neuroticism [12-14]. Positive perfectionism has a positive correlation with fully grown defensive mechanisms and a negative correlation with neurotic or imperfect defensive mechanisms. But negative perfectionism has a negative correlation with fully grown defensive mechanisms and positive correlation with neurotic or imperfect defensive mechanisms [15]. Also there is a significant relationship between perfectionism and attachment styles [16] and severe migraine [17].

Also, findings of research show that there is a positive correlation between negative perfectionism of parents and anxiety of children [18] and imposter syndrome [19], children's personality characteristics of obsessive- compulsive [20] as well as source of control

[21]. Stoeber and Otto identified two distinct gamuts as “perfectionism attempts” and “perfectionism concentration”. Healthy perfectionists in perfectionism attempts are at higher level of perfectionism concentration [22]. Ordered or healthy perfectionists comparing to disordered ones, show healthier autoerotism of themselves in social relationship and inconsistency of aims [23].

Recent studies in the field of perfectionism show that there is a relationship between perfectionism and eating disorder and physical dissatisfaction [24], low interpersonal self-efficiency, high interpersonal stress and overweight with excessive diet [25], obsessive-compulsive disorder, eating disorder, depression or anxiety [26], low efficiency considering attention, bias in responses and the dedicated time in intensive reading [27], suiciding [28] and the predictability of forecasting dimensions of perfectionism in variance of worry [29]. In fact, there is a difference between the attempts to achieve a perfection with negative reaction related to the feeling of perfectionism which itself cause to the anxiety. Imposter syndrome is referred to a kind of personality emotional disorder that exists among progressivists and those who are in the highest level of progressive of academic and career achievement. These people are afraid of being recognizable and being master of their own time even though they may achieve higher level of success. They are unable to input the success [31]. Imposter syndrome involves a series of clinical signs such as self-deception, considering his successes as chance, not deserving himself as being encouraged by others, fear of being recognized or master, considering his hardworking and attempts to achieve success as his weakness and finally the fear of negative outcomes of success [32]. Unlike achieving outer success, these people show reluctance to keep their success [33]. So, they may be engaged in imposter cycle, that is, when facing a competitive situation, the fear of that might happen and be doubtful about the outcomes of the action [34] and they might make themselves fully ready to do that perfectly or show reluctance because of facing failure or lack of success in doing that [35].

There is a relationship between imposter syndrome with variables of personality and emotion such as psycho neurosis, synotonism, satisfactory and conscientiousness [36], personality features [37], fear of success and perfectionism [38], selecting guidelines of self-handicapping [39]. There are some researches that have

been done concerning perfectionism and imposter syndrome. Thompson *et al*, founded a high correlation between disordered perfectionism and imposter syndrome. In this study the perfectionism construct has been evaluated on the basis of both normal and abnormal two-dimensional attitudes [40]. The results showed a simple and multiple correlations of dimensions of perfectionism and imposter syndrome.

This research was carried out to determine the simple and multiple relationship between perfectionism construct and its eight- some characters with imposter syndrome and its characters. Because of an eight-some attitude towards perfectionism (integrating traditional and modern attitudes to this construct) and its pertaining evaluating scale, this study is the only one in its kind. Research hypotheses have been discussed as follows: 1). There is a positive relationship between perfectionism and imposter syndrome. 2) There is a positive relationship between perfectionism and imposter syndrome constructs. 3) Perfectionism constructs are able to predict the imposter syndrome in which perfectionism was evaluated by test of perfectionism in Ahvaz. The results showed a simple and multiple correlations of dimensions of perfectionism and imposter syndrome. 4) Imposter syndrome is different in male and female students. 5) The amount of perfectionism is different among two groups of students of either sex.

MATERIALS AND METHODS

The present study is of descriptive and involves all those M.A Students of top ranked (1st - 10th) and B.A Students who got the first, second and third rank of university entrance examination of Azad university of Chalous. The total number of students is 484. 250 students were randomly selected. (Considering the university capacity) . Then students were demanded to answer the questioner attentively. To evaluate the amount of variables the following tools were used: 1. Hill and *et al* perfectionism scale: it is made of 59 different methods in which the answer to each one consists five degrees in Likert's spectrum ranging between the most agreement to the least agreement. This questioner evaluates the eight dimension of perfectionism as: focus on mistakes, high criteria for others, need for approval, disciplining organizing, perceiving pressure on part of parents, setting out the aims, metal cud and attempts for being the best. The releability and validity of this questioner has been determined by Jamshidi and *et al* and the results verified

the acceptability of tools and Cronbach's Alpha coefficients show that there is a considerable inner parallelism among dimension of this scale. 2. kelan's scale of imposter: This is a scale of self-reporting pencil-paper one which includes 20 items. The testee is then asked to the questions answer on the basis of a range of connected responses from "never" to "too much" (Likert's 5 degree). Perpetuity coefficient of the test according to Cronbach's Alpha method is 0.83 and the releability coefficient of this scale along with the social scale of avoidance and distress equals 0.48 at the level of 0.01. The data gathered from the questionnaire were analyzed using spss16 software. To meet this, indices of descriptive statistics (Mean and SD) and inferential statistics (correlation, variance analysis and step by step regression) were utilized.

RESULTS

The total number of students in this study are 130 students of male and 137 students of female at the age of 18-28 with average score of 18.06 and SD of 0.80 of which 130 persons are M.A students and 120 B.A ones. Statistical characteristics of this study are presented in Table 1.

To analyze the data and to test the hypothesis, correlation coefficient of perfectionism and imposter syndrome was calculated and presented in Table 2.

On the basis of the data presented in Table 2, the coefficient 0.663 is meaningful at the level of 0.001. According to the data of Table 2, there is a significant relationship between perfectionism and imposter syndrome.(First hypothesis is verified). Then, the eight components of perfectionism and the four components of imposter syndrome were put in correlation matrix. The results are shown in Table 3.

On the basis of the correlation matrix of the above, it can be said that there is a significant correlation between components of perfectionism and those of imposter syndrome at the level of $p < 0.01$ - $p < 0.05$

The highest correlation among the above criteria is for others and for pretension and imposter ($r=0.618$) and the least one is among intellectual cud and pretension and imposter ($r=0.142$). In all cases there is a positive correlation. (the second hypothesis is verified)

Then, the eight components of perfectionism as predictive variables and the general imposter syndrome as criterion variable were put in step by step regression equation. The summary of its results can be seen in Table 4.

Table 1: Statistical characteristics of variable

Statistic	N	Mean		Std. Deviation
	Statistic	Std. Error	Statistic	
Total perfectionism	250	189/62	2/464	38/95
focus on mistakes	250	26/60	0/425	6/71
high criteria for others	250	22/03	0/443	7
need for approval	250	24/99	0/466	7/37
discipline and organizing	250	25/15	0/391	6/17
parental pressure perception	250	25/42	0/463	7/32
Purposivism	250	24/01	0/381	6/03
intellectual cud	250	20/74	0/381	6/02
attempts to be the best	250	21/15	0/340	5/37
Total imposter	250	68/39	0/797	12/60
Affectation and pretend	250	17/28	0/253	4
scotomization	250	20/16	0/356	5/62
chance and fortune	250	14/26	0/195	3/08
Doubt to own ability	250	16/61	0/257	4/07
Mean	250	18/06	0/05109	0/807

Table 2: Correlation between perfectionism and imposter syndrome

Perfectionism	Imposter syndrome	
	Pearson Correlation	0/663**
Sig. (2-tailed)	.000	
N	250	

Table 3: Correlation between all components of perfectionism and those of imposter syndrome

	Attempts to be the best	Intellectual cud	Purposivism	Parental pressure perception	Discipline and organizing	Need for verification	High criteria for others	Focus on mistakes
Affectation and pretend	0/1201**	0/142*	0/536**	0/184**	0/484**	0/612**	0/618**	0/471**
Scotomization	0/154**	0/235**	0/464**	0/313**	0/466**	0/493**	0/513**	0/515**
Chance and fortune	0/200**	0/158**	0/470**	0/198**	0/397**	0/543**	0/535**	0/480**
Doubt to own ability	0/245**	0/138*	0/478**	0/310**	0/479**	0/528**	0/528**	0/519**

Table 4: Multiple correlation coefficient and step by step regression equation for imposter syndrome

Model	Variables	R	R Square	Adjusted R Square	Std. Error of the Estimate	B	Std. Error	Beta	t	Sig
1	Constant	0/626	0/391	0/389	9/85	43/57	2/06		21/13	0/000
	High criteria for others					1/126	0/089	0/626	12/62	0/000
2	constant	0/673	0/453	0/449	9/35	35/36	2/49		14/17	0/000
	High criteria for others					0/786	0/106	0/437	7/40	0/000
	Purposivism					0/654	0/123	0/313	5/30	0/000
3	Constant	0/695	0/482	0/476	9/12	32/87	2/52		13/02	0/000
	High criteria for others					0/560	0/120	0/311	4/66	0/000
	Purposivism					0/529	0/125	0/253	4/23	0/000
	Parental pressure perception					0/412	0/111	0/239	3/71	0/000
4	Constant	0/701	0/492	0/483	9/06	32/008	2/54		12/60	0/000
	High criteria for others					0/447	0/131	0/248	3/41	0/000
	Purposivism					0/487	0/126	0/233	3/87	0/000
	Parental pressure perception					0/333	0/116	0/196	2/86	0/000
	Need for verification					0/255	0/121	0/149	2/11	0/000

Table 5: The variance analysis of imposter syndrome between men and woman students

		Sum of Squares	df	Mean Square	F	Sig.
Total imposter syndrome	Between Groups	451/216	1	451/216	2/861	0/092
	Within Groups	39114/148	248	1571/718		
	Total	39565/364	249			
Affectation and pretend	Between Groups	32/429	1	32/428	2/207	0/156
	Within Groups	3967/527	248	15/998		
	Total	39999/956	249			
Scotomization	Between Groups	7/443	1	7/443	0/234	0/629
	Within Groups	7880/833	248	31/778		
	Total	7888/276	249			
Chance and fortune	Between Groups	27/369	1	27/369	2/889	0/090
	Within Groups	2349/207	248	9/473		
	Total	2376/576	249			
Doubt to own ability	Between Groups	26/940	1	26/940	1/629	0/203
	Within Groups	4100/424	248	16/534		
	Total	4127/364	249			

Table 6: The variance analysis of perfectionism component between men and woman students

		Sum of Squares	df	Mean Square	F	Sig.
Total perfectionism	Between Groups	778/820	1	778/820	0/512	0/475
	Within Groups	377146/31	248	1520/751		
	Total	377925/136	249			
focus on mistakes	Between Groups	0/181	1	0/181	0/004	0/950
	Within Groups	11218.015	248	45/234		
	Total	11218.196	249			
High criteria for others	Between Groups	14/375	1	14/375	0/293	0/589
	Within Groups	12188/429	248	49/147		
	Total	12202/804	249			
Need for approval	Between Groups	23/437	1	23/437	0/431	0/512
	Within Groups	13523/429	248	54/438		
	Total	13523/984	249			
Discipline and organizing	Between Groups	3/993	1	3/993	0/104	0/474
	Within Groups	9001/531	248	38/313		
	Total	9005/524	249			
Parental pressure perception	Between Groups	77/913	1	77/913	454/1	0/229
	Within Groups	13290/987	248	53/593		
	Total	13369/900	249			
Purposivism	Between Groups	0/514	1	.514	0/040	0/906
	Within Groups	9056/450	248	36/518		
	Total	9056/964	249			
Intellectual cud	Between Groups	91/245	1	91/245	2/530	0/113
	Within Groups	8943/331	248	36/062		
	Total	9034/576	249			
Attempts to be the best	Between Groups	0/120	1	0/120	0/004	0/949
	Within Groups	7203/404	248	29/046		
	Total	7203/524	249			

The results of variance analysis for credibility of regression have shown that it has enough credibility with $F=31.24$ at the level of lower than 0.001.

In the regression being done, variables of focus on mistakes, discipline and organizing, intellectual cud and attempts to be the best which are considered to be as inappropriate variables in predicting imposter syndrome, were disregarded. But, variables of high criteria for others, purposivism, parental pressure perception and need for approval posses, high predictory power for imposter syndrome respectively. In that, high criteria for others themselves predict 0.39 of changes and by adding the purposivism to it 0.45, by adding the parental pressure perception to them 0.48 and finally with adding of the need for approval 0.49 of changes related to the imposter syndrome at the level of 0.001. (Verification of the third hypothesis)

The total imposter syndrome and its components for testing their meaningful difference among two groups of male and female students were put to determine the one-way variance analysis. The results can be seen in Table 5.

The results of Table 5 shows that there is a critical “F” value for total imposter syndrome (2.861) and (2.027) for pretension and imposter syndrome, (2.889) for chance and fortune and (1.629) for uncertainty of personal ability at the level of $p<0.01$. But, there is no significant difference about disregarding and pretension. So, it is 99percent certain that there is a significant difference between two groups of male and female students in their total imposter syndrome and the above-mentioned components. (Verification of the fourth hypothesis)

Then, perfectionism and its eight components were analyzed through one-way variance to test if there is any significant difference in two groups of male and female students. The results are shown in Table 6.

The results of Table 6 shows that F-observed in perfectionism (0.512), in parental pressure perception(1.454) and in intellectual cud (2.53) at the level of ($p<0.01$) is significant. But, for the other components, the F-observed are not significant. So it is 99 percent certain that there is a significant difference between total perfectionism and the two above-mentioned components between students of either sex. (Verification of the fifth hypothesis)

DISCUSSION

The results of this study shows that there is a significant positive relationship between perfectionism and imposter syndrome. Unlike using different tools in doing this study, there is a coincidence of findings with former studies, [35, 19]. The high correlation coefficient between these two constructs indicates that though they don't have a cause and effect relation with together, they share a significant coincidence. Both of them are harmful and involve sickness dimension from the perspective of clinical specialist.

The existence of the relationship between imposter syndrome and the lack of interest in maintaining an opportunity and engaging in the survival cycle of imposter [32-34] and reluctance to do homework are all representative of this fact that this phenomenon as a kind of disorder is just for gifted and successful persons which causes them not to exploit their successes. It seems that perfectionists are also involved in this system with a minimum change.

The high positive correlation verifies this fact. The finding of this study is in accord with the opinion of those researches who considered perfectionism as a knife with two blades.

In fact the relationship of perfectionism with imposter syndrome is a witness to be emphasized on negative aspects of perfectionism.

The results of the present study concerning the correlation among components of perfectionism and imposter syndrome have shown that in all matrix grids, there is a significant positive correlation. The highest correlation is among imposter syndrome components and high criteria for others. Among perfectionism components, high criteria for others, need for approval, focus on mistakes and purposivism show the highest correlation with the components of imposter syndrome. That is, these components have more in common with imposter syndrome than the other components indicating the tendency towards disorders.

Also the results have shown that among the eight components of perfectionism only high criteria for others, purposivism, parental pressure perception and need for approval can verify the variance of imposter syndrome. These findings had been supported by researchers as Mehrabzadeh [38], Cowmen [39] and Thompson [35]. Referring back to the literature and high correlation among specific components of these two constructs can indicate that the source of external/outer documents can play a role of originating resource.

The results of the study concerning the difference in imposter syndrome among male and female students indicate that there is a significant difference in total perfectionism and the three components of pretension, chance and doubtfulness concerning personal ability between two genders. In all the above cases, the average number of male students was more than that of female ones. It seems that boys suffer more than girls from imposter syndrome characteristics like high-flying, childish independence and high esteem are justifiable enough to be related to the way how boys are reared.

Also, the results of this study about the difference of two genders in perfectionism indicate the meaningful difference of two groups in total perfectionism and the two components of parental pressure perception and intellectual cud. Because of kind of parental relations, girls are not given enough freedom and are under obligatory support of family hence suffer more from behavioral as well as emotional problems. Achieving to success is more related to the family, chance, etc, than to their own abilities.

CONCLUSION

High positive correlation between two constructs and their components involves the fact that both of them should be regarded as deterrent of educational performance at higher levels and that contrastive useful guidelines should be adapted to reduce or destroy them.

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