

LOCUS OF CONTROL, GRIT AS A PREDICTOR OF PSYCHOLOGICAL DISTRESS IN YOUNG ADULTS

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Abstract

Psychological constructs like locus of control and grit affects the way a person reacts to the events and challenges occurring in their lives, thus determining how satisfied they become with life. The current research examined the interconnection among the locus of control, grit and psychological distress. The research utilized the sample of 200 young adults due to its relevance in the research problem. The result showed that the internal locus of control was connected with less of the psychological distress, and the degree of grit with less emotional discomfort. Grit became the most significant determiner of psychological distress. The research will complement other evidences scantily exploring the constructs in non-western populations particularly in the young adults of Pakistan. It fills a literature gap, wherein it has never really covered all cultural significance on grit and control. Based on this study, the importance of embracing the interaction between the locus of control and grit in determining the outcomes of mental illness among the youth within the context of South Asian sociocultural settings is emphasized. Clinical implications of the findings are that in the development of culturally sensitive psychological intervention plans, the priority should be to develop internal control beliefs and commitment to a life wide goal. The interventions can possibly alleviate psychological distress and improve emotional resilience, especially when it comes to young adults encountering academic and social pressure. These findings can also guide gender-responsive programming since it has been found that the degree of distress is different between males and females.

INTRODUCTION

Life satisfaction is different among individuals, and it is dependent on several psychological factors with the sense of control being in the center of attention. s Locus of control is a theory used to explain whether people feel that the events occurring in their life are a consequence of what they choose to do (internal locus) or it is dictated by something beyond them e.g. luck or the gods (external locus). This opinion is directly connected with self-efficacy that influences the decision-making and confidence in the power to impact the final results. The locus of control and personality traits correlate effectively through the mediation of well-being and resilience in the influence of grit.

The locus of control was first described by Rotter (1966) as a personality dimension, in regard to which people express their belief as to what happens to them in life. Internal locus of control is whereby a person believes that results are the products of oneself and capability and external locus is where results are ascribed to good fortunes or forces. According to the studies (Keenan & McBain, 1999; Brande et al., 2016; Barzegar, 2011), internal locus is linked to the adaptive coping style and increased

motivation, whereas the

external one is closely related to passive behavior and decreased self-determination. According to Bandura (1977, 2010), self-efficacy is a significant mediating factor because it frames locus of control into outcomes via, among others; mastery experiences, vicarious learning, verbal persuasion, and emotional control.

According to Duckworth et al., (2007), grit constitutes the long term passion and perseverance. It has a protecting effect on bad events psychologically and has a negative correlation with depression and stress (Sharkey et al., 2018). Grit is a mixture of willpower, attitude, and passion that aid in the resilient goals achievement in spite of difficulties (McKay & Brett, 2021; Dweck, 2009). Grit can also be acquired by setting goals and practicing mindfulness as well as training resilience.

Psychological distress includes emotional and mental distress that trouble one in the process of his or her daily functioning (Kessler et al., 2003). It can be brought about by traumatic experiences or persistent stress causing the symptoms to vary between physical problems, ability to think and conduct and distortions. Psychological distress is

related to internal and external factors and it may take the form of anxiety or depression or it may be in a psychosomatic form. There are a number of theoretical approaches which are helpful in its description, origin, and development: medical model (Carson et al., 1996), interpersonal theory, cognitive theory (Barlow & Durand, 1999), social learning theory created by Rotter, stress process theory (Pearlin et al., 1981). These models focus on the importance of social, cognitive and environmental mediators that affect the mental health outcome.

Empirical evidence is widely believed which shows that inner locus of control abets grit and this greatly reduces psychological distress in people of different types. Nonetheless, current studies are highly biased towards Western settings (e.g., the United States, the United Kingdom, Australia, Indonesia, Nigeria, South Korea), and have not really paid much attention to non-WEIRD samples, especially among the population of young adults in South Asia. More so, the cultural contribution to grit and positive attitude to grit interpretation has not been touched upon too extensively.

To deal with these gaps, the current study examines the joint impacts of locus of control and grit on psychological distress in young adults in Pakistan via culturally aware theories. Mediating relationships between these variables are also discussed in the study in order to give a deep perception of resilience in the context of a non-western culture.

LITERATURE

The present study examines the connection between the parameters of psychological distress, grit, and locus of control in young adults. The available literature lays emphases on these constructs as playing a fundamental role in comprehending psychological learning and coping with life stressors. Both grit and locus of control are considered as stable psychological characteristics that help people survive and prosper in difficulty. Their protective effects against the symptoms of psychological distress are supported by empirical evidence generated in the international and indigenous studies.

According to Connell (2023), locus of control and grit had independent predictions of suicidality and were found to be and held protective cognitive traits at both internal control and grit levels.

On the same note, Edoka, Uzor and Obikeze (2024) found out that although meaning in life was a robust precursor to well-being, grit had a more modest inverse relationship with internal locus of control among nursing students. Çelik and Sarıçam (2018) established that grit and positive thinking were significantly associated with internal academic locus of control with Turkish adolescents, and, therefore, played a significant role in academic success.

Nonetheless, O'Brien (2019) has found that the relationship between locus of control, grit, and persistence among high school dropouts all have no significant correlations; this implies that it differs by population. Conversely, Sturman et al. (2023) demonstrated that school-based interventions designed to address the locus of control and grit were found to positively affect the academic outcomes of individuals in a significant manner. In healthcare, Glaser (2024) determined the importance of grit and control inside the body in promoting recovery after shoulder surgery.

Occupational studies conducted on a mass scale observed the beneficial effect of grit in reducing depressive symptoms due to the generated perception of control and mitigating stress at work

(Jung et al., 2023; Lee et al., 2023). Grit and resilience were found to contribute to adolescent emotional health (Vinothkumar and Prasad, 2016) where resilience was not a mediating factor as regards grit.

According to Kazmi et al. (2025), internal locus, grit, and social support were protective sources of mental wellbeing of cardiac patients in Pakistan. A positive relationship between the internal locus and grit was not reflected at all in Nigerian college students (Akande and Ogunlade, 2021).

Ali and Zubair (2017) and Raj and Sharma (2018) obtained similar results that internal control and grit have a decreasing effect on anxiety and depression in students, and grit is the mediator of links between control beliefs and well-being respectively. Jaiswal and Bhatnagar Jaiswal and Bhatnagar (2018) found moderate interactions implying that grit was a mediator between psychological distress and internal control in Indian contexts.

RATIONALE OF THE STUDY

The current study will have the goal of discovering more about the nature of interaction between locus of control and grit that compare the effects of psychological distress in young adults.

The two constructs the locus of control and grit have recently been discussed independently in research work that examine their mental health consequences and findings demonstrate that adopting an internal locus of control is linked positively to mental health functioning and grit is related positively to the ability to persevere in the face of an emotional and situational challenge. Both of the constructs the locus of control and grit have been previously discussed separately in studies that investigate their mental health outcomes, and results indicate that having an internal locus of control has a positive association with mental health functioning whereas grit has a positive influence on maintaining perseverance in the face of both emotional and situational difficulties.

But the greater part of such studies have been accomplished in Western Educated Industrialized Rich and Democratic (WEIRD) societies and there has not been much consideration on the cultural aspects that could drive such psychological attributes and their consequences.

Although individual and mediating roles of locus of control and grit have been confirmed in predicting psychological

distress in the international research, the investigations of the locus of control and grit in the context of youth populations of South Asian settings have not been reported. The current body of literature has also focused mostly on either a clinical sample or the sample of working adults, which has created a large lack of knowledge regarding the way these constructs might work in student groups, who are under additional academic and social stressors. Moreover, there is a lack of research on the indirect impact of the locus of control together with grit as a combination of predictors of psychological distress and particularly in non-Western society where social forces and beliefs patterns might modify perceptions of internal and external control.

The proposed study will be relevant because it will aim to fill such gaps by considering the Pakistani young adults as the population to provide a culturally oriented understanding of the issue of psychological distress. Through the under reporting of the direct and interactive associations of locus of control and grit to psychological distress, the study offers a wholesome picture of how the variables of locus of control, grit

and psychological distress interact in a given sociocultural system. It also addresses gender as a variable and, in fact, it is quite possible that it may affect the psychological outcomes. By doing this, the proposed research is not only going to add to the current body of knowledge, but they will also contribute toward the establishment of contextually sound psychological interventions that can benefit the resilience and mental health among youth.

HYPOTHESIS

1. There will be a negative correlation between psychological discomfort and internal locus of control.
2. Psychological distress will be adversely correlated with higher levels of grit.
3. In young people, psychological distress is significantly predicted by locus autonomy and grit.

RESEARCH METHODOLOGY

This includes the selected design of this research, the sample size along with the sampling methods, tools, steps the were followed, analysis of the data and ehtics of this study.

RESEARCH DESIGN

The current study made use of a correlational research study that was held with an objective to define the

relationship between locus of control, grit and psychological distress among young adults. This might be an appropriate design as it allows testing the relationship among psychological construct naturally.

POPULATION AND SAMPLING

The sample consisted of 200 young adults, including both male and female regular students aged 16 to 29 years. Participants were selected to ensure the generalizability of findings to the broader young adult population. Non-probability purposive sampling technique was used to recruit participants based on predefined inclusion and exclusion criteria.

INCLUSION CRITERIA

Participants aged between 16 to 29 years with at least half way through middle school education and presently studying as a regular student.

EXCLUSION CRITERIA

Individuals with any psychiatric diagnoses or active substance abuse. Persons experiencing acute psychological episodes requiring immediate inpatient treatment. Individuals with neurological or intellectual challenges limiting their ability to participate.

ASSESSMENT MEASURES

Levenson Multidimensional Locus of Control Scales (Levenson, 1974): A 24-item instrument using a six-point Likert scale, with subscales for internality, powerful others, and chance. Internal consistency values are $I = .64$, $P = .77$, and $C = .78$.

Grit Scale (Duckworth, 2009): An 8-item Likert scale ranging from 1 ("not like me at all") to 5 ("very much like me"), with reverse-coded items and a validated internal consistency ($\alpha = .83$)

Kessler Psychological Distress Scale (K10): A 10-item measure assessing emotional distress over the past four weeks using a five-point scale. The total score ranges from 10 to 50, with higher scores indicating greater distress. The scale demonstrates strong reliability (Cronbach's $\alpha = .88$).

DATA COLLECTION PROCEDURE:

The University Institutional Review Board (IRB), had approved the study. Participants were approached either face-to-face or via online platforms and were briefed about the study's purpose before obtaining informed consent. They completed the LMLCS, DGS, K10, and a demographic form within 15–20 minutes. Data was collected through paper-pencil forms and secure online surveys,

ensuring confidentiality

by using participant ID codes and secure storage.

The analysis and screening of data were carried out with the help of SPSS. Associations between variables were evaluated using Spearman rank correlation, and Pearson correlation. Predictive relationships were examined through linear regression, as well as multiple regression. Descriptive statistics were calculated for demographics and psychological measures. Pearson correlation was used to explore relationships between locus of control, grit and psychological distress. Independent sample t-tests were used to examine psychological distress, grit, and locus of control differences according to gender.

Ethical Considerations: includes participants were given complete information about the research goals and procedure, written and online consent was collected. All personal data was coded and kept confidential in password-protected files. Participants retained the right to withdraw at any stage without any negative consequences. Support contacts were provided in case any psychological distress arose during or after participation.

DATA ANALYSIS

The data was screened with Statistical Package of the Social Sciences (SPSS). Pearson Correlation Analysis was conducted to see the kind of relationship between psychological distress, locus of

control, and grit. To

predict and examine gender difference, respectively, the methodologies to be adopted include linear regression, multiple regression, and independent t test.

RESULT

DESCRIPTIVE STATISTICS

TABLE 1: *SHOWING DESCRIPTIVE CHARACTERISTICS OF SAMPLE (N=200)*

Variable	f (%)
Age	
19-24	50 (25)
25-29	150 (75)
Gender	
Male	70 (35)
Female	130 (65)
Number of siblings	
0-4	140 (70)
5-9	60 (30)
Birth order	
1 st born	50
Middle born	90
Last born	51
Only child	4
Qualification	
Intermediate	6 (3)
Graduation	65 (32.5)
master	129 (64.5)
Family structure	
Joint	78 (39)
nuclear	122 (61)

Social status	
Upper class	21 (10.5)
Middle class	179 (89.5)

Note: *f* and % refers to frequency and percentage respectively.

The sample results were 200 young adults born 90 percent, last born 51 percent aged between 19-29 yrs (35 percent were and only child 4 percent . Almost all the men and 65 percent were women). With respondents (89.5 percent) placed regard to level of education, most themselves in the middle classes and very respondents were at the high level of few of those who perceived themselves to education with 64.5 percent being those be upper class(10.5 percent). Statistics who had the masters degree, 32.5 percent with regard to the family structure attained the level of graduation and again indicated that 61 percent of the 3 percent and 1 percent attained the level respondents were within the nuclear of intermediate and Intermediate family system, whereas 39 percent were respectively. within joint family system

Birth order among the sample of the students was 1st born 50 percent, middle

CORRELATIONAL ANALYSIS

TABLE 2: CORRELATION ANALYSIS BETWEEN SELF-ESTEEM, PARENTAL LOSS, AND GRIEF INTENSITY,

Variable	1	2	3
1. Locus of Control	—		
2. Grit	.329**	—	
3. Psychological Distress	.299**	.358**	—

Note. N = 200. $p < .01$ (2-tailed)

Pearson correlation analyses were conducted to examine the relationships among locus of control, grit, and psychological distress in a sample of 200 participants. The results showed that locus of control was significantly correlated to grit, $r(198) = .329$, $p < .01$, with a strong positive association which

means that the individuals with a higher sense of locus of control had a higher level of grit. It was also found that locus of control correlated positively with psychological distress, $r(198) = .299$ $p < .01$, and the larger the locus of control the more psychological distress.

Moreover, grit also had a significant positive relationship with the level of psychological distress, $r(198) = .358$, $p < .01$, which indicates that the more the grit scores, the higher the reports on the level of psychological distress.

INDEPENDENCE SAMPLES T-TEST

TABLE3: SHOWING RESULTS FOR INDEPENDENT SAMPLE T-TEST

Cohen's d	p	t(df)	Female M(SD)	Male M(SD)	Variable
-0.1	.480	-.708	68.30(8.64)	67.48(6.73)	Locscale
0.2	.111	1.60	38.90(6.44)	40.57(8.05)	Grit
-0.3	.017	2.40	33.25(8.59)	36.27(8.24)	Psychological distress

Showing results for independent sample t-test

Note: *m* is the mean, *SD* is the standard deviation.

The results of independent samples *t*-tests pointed at the significant gender differences in the scores on psychological distress, with females showing significantly higher rates of the

psychological distress than males, $PSF = 36.27$, $SD = 8.24$, 33.25 , $SD = 8.59$, $t(198) = 2.40$, $p = .017$, Cohen $d = -.3$. The scores of locus of control or grit did not demonstrate significant deviations within gender.

REGRESSION ANALYSES

TABLE 4: SHOWING LINEAR REGRESSION WITH PREDICTOR (LOCUS OF CONTROL) AND OUTCOME (PSYCHOLOGICAL DISTRESS)

variable	B	β	SE
constant	12.56***		4.96
LOC	.32***	.29	.072
R^2	.089		

Note = *B*= unstandardize coefficient, β = standardize beta, *SE*=Std, Error

TABLE 5: SHOWING LINEAR REGRESSION WITH PREDICTORS (GRIT) AND OUTCOME (PSYCHOLOGICAL DISTRESS)

variable	B	β	SE
constant	17.17***		3.22
LOC	.43***	.35	.08
R ²	.128		

Note = B= unstandardize coefficient, β = standardize beta, SE=Std, Error

Both locus of control and grit were shown as a meaningful predictor ($\beta = .35$, $p < .001$), explaining 12.8 percent of the variance of young adults via linear regression analysis. When locus of control was the predictor, it had a significant positive correlation to the psychological distress (.29, $p < .001$) and explained nearly 9% of the variance ($R^2 = .089$) which in turn means that those participants who had more external locus of control also reported greater levels of

distress. In the same sense, grit was also

TABLE 6: SHOWING MULTIPLE REGRESSION ANALYSIS PREDICTING [PSYCHOLOGICAL DISTRESS] FROM LOCUS OF CONTROL AND GRIT

Predictor	B	SE B	β	t	p
Constant	5.50	5.04	—	1.11	.268
Locus of Control	.21	.07	.203	2.95	.004
Grit	.35	.084	.291	4.22	<.001

A linear multiple regression was used to determine that Locus of Control and Grit would be important predictors of Psychological Distress. The general model was found to be statistically significant, $F(2, 197) = 19.46$, $p < .001$ and explained about 16.5 % of the variance in its dependent ($R^2 = .165$). The two predictors were significant individually. A large predictor was Locus

of Control ($203 = 2.95$, $t = p = 0.004$), the findings were indicating that the more the internal control, the greater were the scores in the dependent variable. Grit too was a major predictor ($p < .001$, $t = 4.22$, $b = .291$) meaning that the higher an individual has grit the higher his performance in the result column.

DISCUSSION

The purpose of this study aimed to investigate the connection between young people's mental health, locus of control and grit. Young adults have a strong desire to fit in or be related to someone. When they feel alone and cut off from personal relationships, they become angry and touchy, which can lead to a variety of behavioral changes in them, including grit and psychological discomfort. It was predicted that there would be a strong positive relationship between young adults' locus of control, grit, and psychological suffering in order to validate our theory. These means of the study had good reasons according to these hypotheses since internal locus of control and grit were both significantly and negatively associated with psychological distress. The findings provide a good empirical evidence of the supposed protective value of internal control and perseverance-based character

traits regarding mental health of young adults.

The first hypothesis (the internal locus of control negatively correlates with the psychological distress) was confirmed by data. The higher the beliefs about the internal control, the less psychological distress occurred in the participants. The same result is supported by Brande et al. (2016), who stressed that locus of control is one of the coping resources, and Barzegar (2011), who discovered that people with internal locus experience high motivation and adaptive functioning. The present findings also correspond to the study of Jaiswal and Bhatnagar (2018), which revealed that internal locus of control lessens psychological distress, that is, a person with the ability to control their life to a larger extent is better equipped to withstand emotional adversity.

The second hypothesis which was that grit would be inversely related to psychological distress was also supported. The inverse relationship was found to be strong, with higher levels of grit being associated with lower degrees of the emotional discomfort of the participants. This can be compared to Duckworth et al. (2007) and Sharkey et al. (2018), who discussed the importance of grit

(especially perseverance of effort) in preventing anxiety and depression. Moreover, identical results were observed by Glaser (2024) in a sample of clinical patients, who further supported researchers in saying that grit operates as a secure factor not only in the educational setting.

As to the third hypothesis, according to which both locus of control and grit were presumed to be significant predictors of psychological distress, the conclusions made with the help of multiple regression analyses confirmed this hypothesis. The better predictor was grit; however, both of these variables made a significant amount of contributions to the variance in distress. This confirms the observations of Lin et al. (2023) who reported that the combination of locus of control and grit was able to give improved psychological functioning as a whole. The research study also agrees with Raj and Sharma (2018), who highlighted the interactive underlying effects between the 2 constructs in relation to well-being about South Asian populations.

It is important to note that the identified gender disparity in distress, with higher levels among females, is similar to the presentation of Awaworyi et al. (2020),

indicating that gender disparities in locus of control could be one of the factors that influence emotional outcomes. It makes it clear that gender-sensitive paradigms should be considered when coming up with psychological interventions.

Notably, the current study builds on the findings of other researchers (e.g., O'Brien, 2019); however, it also proves the value of cultural and situational specificity because the findings of this study have pointed to significant associations in the Western context. This confirms the theoretical postulation that psychological constructs such as locus of control and grit can work in different ways in sociocultural contexts.

Finally, the current research does not only prove the presumed correlations of the internal locus of control, grit, and psychological distress but also reveals a topicality of the studied constructs within the context of the given sociocultural setting of young Pakistani adults. The results strengthen the idea that encouraging internal control beliefs and persistence can become the major elements of preventing psychological distress especially during overwhelming educational or development years.

CLINICAL IMPLICATIONS

These results indicate the applied significance of locus of control and grit as psychological resources that could protect against distress in adults of young age. Such constructs can become the points of a psychological intervention to increase resilience. Culturally sensitive programs by mental health professionals can be made to enhance beliefs surrounding internal control and enable long-term perseverance. They are particularly useful in any educational and clinical care where young adults are more often exposed to academic and social stress. Moreover, the gender-specific programs might be necessary, as males and females belong to different levels of psychological distress. Such findings can be used to create special interventions to enhance the internal control beliefs and perseverance. The youth working in the field of mental health and the counselors can use the strategies to improve self-regulatory characteristics and resilience in them especially those who report a high level of distress.

LIMITATIONS

It is necessary to note some constraints. The present study implements the purposive sampling strategy that is likely to deprive study results of their applicability to the broader sample of

young adults. Moreover, the research was cross-sectional, hampering the inferences on the causal associations among locus of control, grit, and indignation requiring psychological misery. Also, the sample was only composed of ordinary students and it locks out other subgroups of young adults who might be exposed to various stressors. The geography and demography represent relatively small areas, which also limit the scope of application of the results. The reliance on self-report instruments may introduce subjectivity and social desirability bias.

CONCLUSION

In the current research, the correlation was assessed among the dimensions of locus of control, grit, and psychological distress in a group of Pakistani young individuals. The results indicated that internal locus of control and a greater tendency of grit were linked to a low profile of psychological distress. The most predictive factor of distress turned out to be grit, which pointed at its protective stage in mental health. Moreover, the differences according to gender were noticed with females experiencing the highest level of distress compared to males. These findings favor the imperativeness of instilling grit and

internal locus-of-control to truncate psychological distress and conducive well-being among young people. The results add up to the study of psychological functioning within a South Asian environment and justify the creation of culturally competent interventions, which are focused on improving mental health in young adults.

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