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Interplay of Grit, Self-Control, and Happiness: A Gender-Based Study of University Students

Iman Javid
Amazon Fulfillment Centre, Australia

Maryam Zafar
&
Syeda Maryam Batool
Department of Gender and Development Studies
Lahore College for Women University

Abstract

University students are constantly under psychological and academic pressure, emphasizing the necessity of assessing personal traits that promote success and well-being. Grit, self-control, and subjective happiness are some of the most important qualities. This study examines the association between grit as a predictor and happiness and self-control as outcome variables among students of Pakistani universities. A quantitative descriptive design was employed to collect survey data from 300 students enrolled in three universities in Lahore. These standardized tools included the Subjective Happiness Scale, the Barratt Impulsiveness Scale, and the Grit Scale. SPSS was used for analyzing the data, employing independent sample t-tests, correlation analysis, and descriptive statistics. The results showed that the following three constructs were significantly positively correlated: grit had a strong association with happiness ($r = .265$, $p < .001$) and self-control ($r = .130$, $p < .05$), and self-control was favorably correlated with happiness ($r = .123$, $p < .05$). These findings show that resilience, emotional control, and physical well-being reinforce one another. There were no statistically significant variations across academic disciplines or gender. This study highlights the importance of fostering students' persistence and self-control in higher education institutions to enhance their psychological well-being and resilience.

Keywords: Grit, Self-Control, Happiness & Gender Differences, University Students & Emotional Regulation, Academic Stressors.

Introduction

During the last decade, mental health and academic performance of university students has been the subject of longstanding attention among researchers, university administrators, and policymakers. Higher education is a provisional period for young adults, through which they can develop intellectual capabilities, careers, and social contacts. This time is crucial for students in terms of developing uncertainty, pressure to perform well, financial management, and social exposure. According to recent findings worldwide, university students are experiencing higher levels of stress, anxiety, and emotional exhaustion during the COVID-19 pandemic and the

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proliferation of digitally mediated educational settings (Xu & Wang, 2023). In developing nations, where mental health treatments are still in short supply and socio-economic disparities are leading to an increase in academic stress, these challenges are reinforced. According to Shakeel, Fazal & Majoka (2022) and Jamil & Muschert (2023), students in Pakistan have to not only acquire knowledge and sustain their psychological well-being but also struggle with competitive grading systems, few job opportunities, and financial constraints and pressures. The primary study question in these situations is to identify the personal resources that might help students in adjustment, survival, and achievement. Modern psychology of education has been gradually moving away from a deficit-oriented approach to a strengths-based formulation. Instead of focusing on pathology or academic failure, scholars have started analyzing positive psychological characteristics associated with imparting resilience and success. Of these, grit, self-control, and happiness have come out as effective predictors of student achievement. Much like these constructs are conceptually different, they merge around the themes of perseverance, emotional regulation, and continued working towards meaningful goals.

Grit, defined by Duckworth et al. (2007), means the presence of long-term commitment and persistence in pursuing long-term goals. It includes two aspects: persistence of struggle and permanence of interests. In contrast to momentary motivation, grit is an indication of enduring commitment in the face of challenges, disappointments, or the frustration of delayed gratification. Empirical findings in various learning institutions have established that gritty students are better placed to graduate through challenging educational programs, have a consistent interest, and attain their long-term objectives. It is relevant in recent research. As an example, Credé (2018) stated that although grit is similar to conscientiousness, its perseverance aspect is the only predictor of long-term hard work in difficult situations. The more recent studies have connected grit with these adaptive academic behaviors, lower dropout rates, and enhanced well-being in the context of cultural environments (Çarkıt, 2024; Tang et al., 2019).

Self-control is a complementary construct, but a different construct. Being described as the ability to manage impulses, emotions, and actions to pursue long-term goals, self-control helps students to avoid distractions and follow a disciplined studying schedule (Duckworth & Gross, 2014). Self-regulatory capacity has gained special relevance in the academic world, which is becoming increasingly dispersed with digital distractions. According to meta-analytic evidence, in certain contexts, self-control is more strongly related to academic success than intelligence (Richardson et al., 2012). Further, self-control can be closely associated with self-managed learning, such as time management, goal monitoring, and strategic planning. The capacity of the students to self-regulate has gained a paramount place in academic achievement in post-pandemic learning settings where the majority of learning is conducted online and in

hybrid modes (Klimova et al., 2022). Happiness, often understood as subjective well-being, is the emotional basis that helps to maintain motivation and resilience. According to Diener (2000), subjective well-being was characterized as life satisfaction, positive effect, as well as a relatively lack of negative emotions. In the college community, greater happiness has been linked with better coping mechanisms, positive interpersonal relations, and increased academic activity (Boehm & Lyubomirsky, 2008). Notably, happiness is not just an indication of success; it can also act as a resource that can enhance perseverance and the pursuit of goals. When students have a pleasant feeling, they will be more prone to using adaptive coping strategies, being optimistic, and getting over academic failures.

Recent studies have highlighted the interdependence of grit, self-control, and happiness; likewise, these personality characteristics have not been found to function independently; rather, they appear to reinforce one another in dynamic ways. As an example, a latent profile study by Alhadabi et al. (2023) found that different patterns of motivation among university students existed, in that people with greater grit and self-control were more tolerant of ambiguity and intrinsically motivated. Gender was also an important predictor of membership in these profiles, and this indicates that demographic influences might determine the pattern in which these traits are clustered. In the same vein, Çarkıt (2024) discovered the mediating effect of grit on life satisfaction by indirectly affecting career adaptability, which emphasized the engagement of the middle variables between perseverance and well-being. In the Pakistani environment, the authors reported that grit among undergraduates was predicted by psychological well-being, resilience, hope, and subjective happiness significantly and thus that there were reciprocal relationships between perseverance and emotional resources (Jehanghir & Akbar, 2022).

Another dimension that has become very significant in explaining such associations is gender. According to some of the studies, female students report subjective well-being and academic performance as higher than in the case of their male counterparts (Zia et al., 2025). According to others, gender affects the structure and not the magnitude of grit and self-control traits (Alhadabi et al., 2023). The situation is complicated by cross-cultural research. Rasheed et al. (2023) noted that there were large gender variations in emotional intelligence in cultural settings, but grit only exhibited moderate relationships with life satisfaction. These results highlight the importance of taking into consideration socio-cultural expectations, gender demands, and organizational frameworks when explaining psychological characteristics.

The Pakistani higher education environment forms a very interesting background to explore these relationships. In Pakistan, the university sector is growing and has a lot of enrollment, although it has been found that the resources and support services are not distributed equally (Higher Education Commission of Pakistan [HEC], 2023). Lack of financial security,

unrealistic parental expectations, and insufficient access to formal counseling services are common issues for students. Besides, the shift to online and hybrid learning during and after the pandemic added more self-regulatory requirements. According to Jamil & Muschert (2023), academic stress and emotional exhaustion levels were high among Pakistani university students at this time. The factors that can help in the protection of disengagement and burnout under such an environment might be perseverance and emotional regulation. The studies that have specifically addressed the situation of digital learning support this view. Klimova et al. (2022) established that perseverance mediated the connection between the online self-regulated learning behaviors and grade achievement in Pakistani students. The result of this study indicates that grit could be a mediator between behavioral discipline and academic achievement, especially where independent learning is needed. Collectively, these studies suggest that grit, self-control, and happiness are potentially mutually reinforcing resources in problematic academic environments.

Although there is an increasing body of international scholarship, there is still little evidence that looks at the overall effect of these constructs in Pakistan. Besides, discrepancies in the results about gender differences emphasize the necessity of a contextual study. This study will help in understanding more about the role of non-cognitive characteristics in promoting academic persistence and psychological health by placing grit, self-control, and happiness in the socio-economic and cultural context of Pakistani universities. This kind of knowledge is practically important to institutions of higher learning that would want to develop interventions that would enhance resilience, emotional control, and student flourishing. Overall, with the current concerns of rising mental health and retention among students in universities, focus on positive psychological resources is becoming more critical. Grit, self-control, and happiness are mutually reinforcing strengths that can not only help the students to overcome the academic pressures, but also to flourish in them. The investigation of the constructs in the Pakistani setting makes a contribution to the global discussion about positive psychology in the educational context and shapes evidence-based initiatives to achieve student success.

Theoretical Implications

The results of the study have several contributions to the literature:

1. **Constructs Integration:** The positive correlations were confirmed between grit, self-control, and happiness, which is why theories of the connection between motivational and affective characters in academic success are supported (Duckworth and Gross, 2014).
2. **Contextual Relevance:** This study shows the contextual specificity of non-cognitive traits by showing the lack of gender and disciplinary variations. Disciplinary or gender differences may not be prominent in Pakistan because of socio-economic pressures and educational problems.

3. **Dynamic Relationships:** According to the findings, it is mentioned that grit and happiness may influence each other, which is also observed by Çarkıt (2024) and Jehanghir and Akbar (2022). This indicates a problem in the need for longitudinal studies that are capable of capturing longitudinal dynamics.

Practical Implications

1. **To Students:** Grit and self-control can not only aid in academic success but also in life in general. Goal-setting workshops, mindfulness training, and resilience-building programs can help students to persist despite the difficulties.

2. **To Educators:** Teachers have an important part to play in fostering grit and happiness through the provision of a conducive environment, realistic challenges, and perseverance. The proposed interventions, such as storytelling and role modeling, can assist students in getting to know that the learning process also includes failures.

3. **To Policymakers:** Educational policies ought to incorporate non-cognitive skill building in education curricula, and these three areas are grit, emotional control, and well-being. Student mental health programs have the potential to increase grit and self-control indirectly, through increasing happiness and resilience.

Research Objectives

The specific objectives of this study are as follows:

1. To identify the connection between grit, self-control, and happiness among university students.
2. To determine gender differences in grit levels, self-control levels, and happiness levels.
3. To compare natural science and social science students with each other in terms of their grit, self-control, and happiness.

Research Hypotheses

According to the literature review, the subsequent hypotheses were formulated:

1. The university students show a high positive correlation between grit, self-control, and happiness.
2. The male and female students have vast differences in their grit, self-control, and happiness levels.

3. There is a high dissimilarity in grit, self-control, and happiness among the students in social sciences and natural sciences.

Rationale

According to the study's literature analysis, grit, self-control, and happiness are interrelated concepts that have significant effects on well-being and academic achievement. The intricacy of the connections has been highlighted by recent research that has emphasized mediating and moderating variables such as online self-regulated learning, resilience, and job adaptability. Evidence suggests that gender predicts grit and self-control profiles along with variations in subjective satisfaction, making gender differences an increasingly significant feature. The distinctive social and cultural settings of the Pakistani context have been determined by all of these characteristics. The purpose of this study is to investigate the particular ways in which grit, self-control, and happiness interact for both genders of Pakistani university students in accordance with the results reported above. Expanding on global insights and addressing local expertise gaps, which might have a positive impact on the design of educational initiatives and legislation.

Significance of the Study

The study provides insight into recognizing how psychological resources like self-control and resilience enable Pakistani youngsters to succeed academically and lead happy lives regardless of their challenging social and economic scenario. The findings are going to assist educators, legislators, and mental health specialists in creating treatments and interventions that support the resilience and overall well-being of the students in the institutions. By highlighting the connections between these factors, i.e., grit, self-control, and happiness, this study contributes to the broader discourse about positive psychology and the growth of university students.

Limitations of the Study

Despite the results offering insightful information, it is crucial to recognize several limitations: 1) Social desirability bias could be created by the use of self-report measures. Behavior-based measures of self-control and resilience could possibly be incorporated into future research. 2) Conclusions about causality may not be allowed simply because of the cross-sectional design. It is crucial to conduct longitudinal research to determine whether grit predicts happiness, happiness predicts grit, or if the relationship between the two is reciprocal. 3) Generalizability was impacted by the sample's confinement to three Lahore universities, and a more accurate representation would be obtained if institutions from other regions of Pakistan were included in the sample.

Review of the Literature

Numerous studies demonstrate the importance of grit, self-control, and contentment in determining students' academic and personal paths. For students dealing with the challenges of higher education in developing nations like Pakistan, this article highlights how grit, self-control, and happiness are interconnected and provides a framework for both academic and psychological resilience. Duckworth et al. (2007) established the concept of grit, which is the determination and enthusiasm for achieving long-term goals. According to Duckworth and Quinn (2009), it consists of the following two components: consistency of interests and persistence of effort. Grit is a motivating factor for success in both academic and extracurricular fields since, in contrast to cognitive capacity; it focuses consistent effort in dealing with adversities. The predictive validity of grit is still supported by recent empirical research. Through the mediating function of career adaptability, grit has been demonstrated to significantly positively correlate with life happiness in a 2024 study of Turkish undergraduates, in which age serves as a moderator (Çarkıt, 2024).

In Pakistan, research indicated that grit among undergraduates was substantially predicted by psychological well-being, resilience, hope, meaning in life, and subjective happiness. This suggests that grit develops in parallel with a range of positive psychological attributes (Jehanghir & Akbar, 2022). While some academics assert that grit seems comparable to self-control and conscientiousness (Credé, 2018), others highlight its special function in maintaining motivation over a prolonged period of time, particularly during circumstances in which challenges happen frequently (Moen & Olsen, 2020). Considering the institutional and economic barriers Pakistani students have to face, grit tends to represent a very favorable attribute for them (Muhammad et al., 2020). The capacity to exert control over one's impulses, emotions, and behaviors for the purpose of achieving desired outcomes has been termed self-control (Duckworth & Gross, 2014). It is essential to maintain concentration, avoid distractions, and follow study schedules in academic settings. Studies regularly show that self-control is even more important than intelligence, which was found to be an effective indicator of academic success (Richardson et al., 2012).

Higher self-control and grit levels were found to be associated with motivational profiles that were marked by a stronger "want-to" motivation and a larger tolerance for ambiguity, according to a 2023 profile analysis of 525 students (Alhadabi et al., 2023). This implies that students' potential for resilience is shaped by the interaction between self-control and drive, alongside possessing a regulatory feature. With an epidemic of digital distractions and socioeconomic pressures, self-control has been found particularly crucial for Pakistani students (Michaelson et al., 2013). The association between learning practices and grade achievement was shown to be mediated by perseverance of effort, a component of grit which has been found to have strong relevance with self-control, according to a new research study on online self-regulated learning (Klimova et al., 2022). This study

emphasizes the value of self-control in online and mixed learning settings, which are becoming more prevalent in the midst of the epidemic. Happiness, which is frequently interpreted as subjective well-being, comprises positive affect and cognitive assessments of life satisfaction (Diener, 2000). Happiness among students has been associated with better coping mechanisms, less burnout, and better performance in institutions (Pretorius & Blaauw, 2014). The importance of happiness in student outcomes was demonstrated by a recent comparative cross-cultural study by Zia et al. (2025), which discovered that female students reported greater academic accomplishment and subjective satisfaction than male students. Likewise, a study conducted in Pakistan revealed a significant connection between academic success, optimism, and subjective happiness, with gender differences in subjective levels of happiness that are evident (Rasheed et al., 2023).

In positive psychology, happiness is crucial since it may be considered as both a resource and a repercussion. According to Boehm and Lyubomirsky (2008), students who expressed greater levels of happiness were more inclined to develop and stay with significant goals, which may strengthen their work ethic and self-control. The interplay between grit, self-control, and happiness is increasingly recognized as synergistic rather than isolated. According to Duckworth and Gross (2014), self-control and grit constitute two different but connected concepts: self-control helps students regulate their immediate urges, while grit sustains the work toward targets for the future. According to Oriol et al. (2017), happiness consequently offers the emotional stability and internal drive required to preserve self-control and grit. This conceptual model is strengthened by recent findings of Alhadabi et al. (2023) that more adaptive academic behaviors and a higher tolerance for ambiguity were linked to motivational profiles with high levels of grit and self-control. Çarkıt (2024) demonstrated that grit indirectly predicted life satisfaction through job adaptability, suggesting that other adaptable attributes could function as a mediator in the association between grit and happiness. According to Jehanghir and Akbar (2022), in Pakistan, grit was anticipated by subjective happiness independently, indicating a reciprocal instead of a one-way association.

Recent research has discovered a number of mediating and moderating variables. The association between grit, happiness, and academic accomplishment was demonstrated as being influenced by adaptability to career changes (Çarkıt, 2024), self-regulated methods of learning (Klimova et al., 2022), and resiliency (Jehanghir & Akbar, 2022). The grit–happiness connection is moderated by age, with students who are younger showing greater impacts (Çarkıt, 2024). These results highlighted the significance of demographic and contextual factors in determining the interplay between grit, self-control, and happiness. These correlations could have been moderated by academic discipline, socio-economic level, and gender norms in Pakistan. Although gender disparities have been reported inconsistently in many studies, more recent research provides greater accuracy. In terms of both subjective happiness and academic accomplishment, female students have been outscored by male

students (Zia et al., 2025). According to Rasheed et al. (2023), grit had little impact on life satisfaction, whereas emotional intelligence differentiated by gender had a significant association with happiness. Alhadabi et al. (2023) stated that males and females can display different patterns of traits instead of only differing in significant levels. Additional evidence reported that gender affects motivational, grit, and self-control profiles. This indicated that gender discrepancies may be more complex, involving patterns of characteristic combinations, as compared to categorical variations between specific constructs.

Pakistani culture's gender norms and expectations influenced educational experiences, and female students frequently have distinct resources as well as constraints, rather than male students (Rana et al., 2024). Although variations in self-control and grit could possibly be impacted by gendered norms for discipline and resilience, higher subjective pleasure among females could be due to the existence of broader social support networks. Cross-cultural comparisons also showed how the social context affects gender disparities in various areas. In East Asian scenarios, female students have been more likely to exhibit self-control and academic diligence, but in Western contexts, gender differences in grit tend to be less expected to turn out (Tang et al., 2019). These trends suggest that an extensive assessment of gender inequality needs to consider both institutional and cultural variables seriously.

Research Methodology

Research Design

This study used a quantitative research approach with an emphasis on gender differences to investigate the relationship between grit, happiness, and self-control among university students in Pakistan. A quantitative research design has been employed because this method allows researchers to identify statistically significant relationships between constructs and generalize all findings across a wider population (Creswell & Creswell, 2018). Furthermore, the design enhanced subgroup comparisons, especially between academic disciplines, e.g., natural sciences and social sciences, and between male and female students. Research in higher education has recently recommended that gender differences in non-cognitive traits, i.e., resilience and self-control, be investigated (Alhadabi et al., 2023; Zia et al., 2025).

Population and Sampling

The study population consisted of graduate and undergraduate students enrolled at three important universities in Lahore, Pakistan, including Lahore College for Women University, Government College University, and Forman Christian College University. For the purpose of ensuring diversity in the students' sample, academic subjects, and institutional contexts, these universities were specially selected. For the present study, a sample size of 300 students was determined, which is found statistically sufficient for applying correlation and group comparison analyses (Tabachnick & Fidell, 2019). Almost

100 female students from LCWU, 100 male students from FCU, and 100 students (50 male and 50 female) from GCU formed the total sample. Participants, who ranged in age from 18 to 27, included both bachelors and master's degree students. Because of accessibility and practicality concerns, the convenience sampling method was used in this research. It is a non-probability technique used to select respondents according to the proximity of the researcher and accessibility of the respondent (Etikan et al., 2016).

Inclusion and Exclusion Criteria

Students from the natural sciences, including biology, chemistry, and computer science, and social sciences, i.e., Psychology, Sociology, and Political Science, participated to ensure disciplinary diversity for the purpose of establishing a thorough comparison between students studying scientific and social sciences whereas, students from humanities and business fields have been overlooked, since they represent diverse educational settings with distinct standards of self-control and resilience.

Variables

The variable structure provides both group comparisons and correlation analysis, while additionally, demographic factors provide context for assessing results (Çarkıt, 2024). In this study, self-control and happiness were the dependent variables, and grit was the independent variable.

Instruments

To ensure the validity and reliability of the scale, three established psychological measures have been employed:

1. Duckworth et al. (2007) created the 12-item Grit Scale to assess persistence of effort and consistency of interests. This scale was approved for use since it has been demonstrated to have exceptional reliability in an array of cultural scenarios, including South Asia.
2. The Subjective Happiness Scale (SHS, 4 items), a self-report tool developed by Lyubomirsky and Lepper (1999), has been assessing subjective happiness globally. It employed a 7-point Likert scale and has been proven with consistent validation across cultures, especially in recent South Asian studies (Rasheed et al., 2023).
3. The Barrett Impulsiveness Scale (BIS-11) measures impulsivity as an enforcement of self-control; it has been modified from Stanford (2009), and its ability to detect attitudes toward self-control is extensively recognized.

Data Collection Procedure

Approval from the relevant university authorities had been obtained before the collection of data commenced. An official request letter, which authorized the outreach to students from other departments of the university, was issued by the Department of Gender and Development Studies, LCWU. Departmental lists were employed, and announcements in the classroom were made to recruit participants. The study's objectives, confidentiality procedures, and the voluntary nature of participation were made clear to the students. Before participation, informed consent was acquired from the students. During class hours, hard copy questionnaires were handed out and filled out in order to increase response rates. In order to reduce bias, identifying information was recorded, and students were guaranteed complete anonymity.

Ethical Considerations

The study followed the Higher Education Commission of Pakistan's and the American Psychological Association's (APA, 2020) ethical guidelines. The following were important ethical guarantees: participant informed permission; response confidentiality and anonymity; voluntary participation and withdrawal rights; and safe data stored for studies only.

Data Analysis

The Statistical Package for the Social Sciences (SPSS, version 25) was used to analyze the data as follows:

1. Descriptive statistics were applied to compile mean scores, standard deviations, and demographic factors for happiness, self-control, and grit.
2. Pearson's correlation was employed to evaluate the relationships between happiness, self-control, and grit.
3. To examine gender differences in grit, self-control, and happiness, uses the independent samples t-test to evaluate the distinctions between students studying the social and natural sciences.

Results

This study describes the findings, and the data were collected from a total sample of 300 participants, which comprised 150 males and 150 females. The Subjective Happiness Scale, Grit Scale, and Self-Control Scale were used to gather data. The results are obtained by analyzing the data through SPSS version 25.

Table 1: Demographics of the Participants

Age	**Frequency**	**Percentage**
18-20Years	60	20%
21-23Years	141	47%
24-26Years	81	27%
27+Years	18	6%
Gender	**Frequency**	**Percentage**
Male	150	50%
Female	150	50%
Academic Year	**Frequency**	**Percentage**
First Year	36	12%
Second Year	68	22.7%
Third Year	73	24.3%
Fourth Year	123	41%
Major/Field of Study	**Frequency**	**Percentage**
Social Sciences	150	50%
Natural Sciences	150	50%
Family Income	**Frequency**	**Percentage**
Less than 25,000	23	7.7%
25,000-50,000	36	12%
50,000-75,000	74	24.7%
75,000-100,000	99	33%
Over100,000	68	22.7%
Marital status	**Frequency**	**Percentage**
Married	46	15.3%
Unmarried	254	84.7%
Discipline	**Frequency**	**Percentage**
Gender Studies	35	11.7%
Social Work	19	6.3%
Botany	19	6.3%
Zoology	28	9.3%
Statistics	17	5.7%
Physics	21	7%
Sociology	17	5.7%
Psychology	24	8%
International Relations	11	3.7%
Chemistry	19	6.3%
Political Science	8	2.7
Biology	27	9.0
Economics	4	1.3
Maths	13	4.3
Mass Communication	13	4.3
Computer Science	25	8.3
Total	**300**	**100**

Table 2: Descriptive Statistics of the Participants

	Range	Mean	S.D	Median	Mode
Happiness	24	17.14	4.580	17	18
Grit	48	37.03	6.133	37	36
Self-Control	55	60.83	8.779	60	59

In this survey, we collected information from 300 respondents. The difference between the minimum and maximum happiness of people is 24. The average happiness response is 17.14. Standard deviation measures the dispersion among data sets. The variation among people is 4.580. Happiness has a median value of 17, and its most prevalent value is 18. 48 people fall between the minimum and maximum grit range. In the current study, Spearman's Correlation Coefficient is used for testing correlational hypotheses of the study, namely the relationship between Grit, Self-Control, and Happiness. Grit response average is 37.03. Individual differences are 6.133. The most common value of grit is 36, and the middle number is 37. The difference between people's minimal and maximal self-control is 55 points. The average self-control response score is 60.83. The average difference between individuals is 8.779. The range of self-control is 0 to 60, with 59 being the most typical value.

Table 3: The Correlation Coefficient among the Research Variables

In the current study, Spearman's Correlation Coefficient is used for testing correlational hypotheses of the study, namely the relationship between Grit, Self-Control, and Happiness.

Hypothesis	The first variable	The second variable	R	P value	Result
1	Grit	Self-Control	0.130	0.024	H_1 Accepted
2	Grit	Happiness	0.265	0.000	H_1 Accepted
3	Self-Control	Happiness	0.123	0.034	H_1 Accepted

According to the results, the relationship between the variables shows that correlation is significant at the 0.05 level (2-tailed). The results revealed that there was a significant positive relationship between Grit, Self-Control, and Happiness.

Table 4: Independent Sample T-test Scores of Male and Female Participants Grit, Self Control, and Happiness Scales (N=300)

	Male		Female					
							95% Interval Difference	Confidence of the
Variables	M	SD	M	SD	t(df)	P	LL	UL
Grit	36.66	5.941	37.40	6.316	-1.045(298)	0.297	-2.133	0.653
Self Control	59.97	8.002	61.69	9.440	-1.709(298)	0.089	-3.715	0.262
Happiness	4.21	1.077	4.37	1.207	-1.199(298)	0.232	-0.418	0.102

Results of independent sample T-test indicated that there was non-significant difference between male (M=36.66, SD=5.941) and female participants (M=37.40, SD=6.316) on "Grit, Scale", there was non-significant difference between male (M=59.97, SD=8.002) and female participants (M=61.69, SD=9.440) on "Self-Control Scale" and there was non-significant difference between male (M=4.21, SD=1.077) and female participants (M=4.37, SD=1.207) on "Happiness Scale".

Table 5: Independent Sample T-test Scores of Social Sciences and Natural Sciences Participants Grit, Self Control, and Happiness Scales (N=300)

	Social Sciences		Natural Sciences					
							95% Interval Difference	Confidence of the
Variables	M	SD	M	SD	t(df)	P	LL	UL
Grit	36.89	6.280	37.17	5.999	-0.404(298)	0.686	-1.682	1.109
Self Control	60.99	9.379	60.67	8.162	0.309(298)	0.758	-1.685	2.311
Happiness	4.23	1.174	4.34	1.117	-0.819(298)	0.413	-0.369	0.152

Based on the results of an independent sample T-test, there was no significant difference between Social Sciences participants (M=36.89, SD=6.280) and Natural Sciences participants (M=37.17, SD=5.999) on the "Grit Scale," between Social Sciences participants (M=60.99, SD=9.379) and Natural Sciences participants (M=60.67, SD=98.162) on the "Self-Control Scale," and between Social Sciences participants (M=4.23, SD=1.174).

Discussion

The purpose of this study was to examine the relationship between grit, self-control, and happiness among university students in Pakistan, with a special focus on gender differences and academic discipline variations. The analysis revealed significant positive correlations among the three constructs, indicating that students with higher levels of grit also demonstrated greater self-control and reported higher levels of subjective happiness. The results, however, demonstrated no apparent changes in grit, self-control, or happiness between genders or between students studying the natural sciences and social sciences. There are theoretical and practical implications to these outcomes. In addition to evaluating areas of convergence and divergence, this article presents its findings within the context of previous research and emphasizes the consequences for educators, students, and legislators. The study found that grit, self-control, and happiness are positively correlated, which was in line with earlier research suggesting that self-control and grit represent complementary concepts that contribute to long-term goals for pursuing psychological well-being, regardless of their differences (Duckworth & Gross, 2014).

The outcomes of this research that grit and self-control have a positive relationship align with the findings reported by Alhadabi et al. (2023), who discovered that students with high grit tended to have better self-regulatory abilities, which encouraged them to remain resilient in uncertain circumstances or adversities. Similarly, highlighting the harmonious effect between grit and self-regulation, Klimova et al. (2022) demonstrated that persistence of effort is a fundamental aspect of grit that mediated the correlation between online educational patterns and successful academic performance. A research by Jehanghir and Akbar (2022), showed that subjective contentment significantly predicted grit among Pakistani undergraduates, thus being consistent with the positive correlation between grit and happiness. It also implied a mutually reinforcing relationship, i.e., pleasure ultimately encourages perseverance by generating optimism and intrinsic desire, whereas grit helps in pursuing significant objectives and achieving higher success.

Furthermore, Çarkıt (2024) found that grit implicitly increased life satisfaction through job flexibility and suggested that adaptive capacities could function as a mediating factor in the relationship between grit and happiness. These findings are supported by the current study's findings, which showed that grit not only maintains academic significance but also improves well-being by promoting resilience and adaptability.

Contrary to expectations, the present study found no significant gender differences in grit, self-control, or happiness, while some prior studies reported gender disparities in these constructs. According to recent research, gender gaps appear to be closing, especially in educational institutions, where opportunities have become more equitable. For example, according to Zia et al. (2025), it was found that across all cultural situations, female students

outperformed male students in terms of academic achievement and subjective happiness. In a similar way, Rasheed et al. (2023) revealed that emotional intelligence varied by gender and was strongly correlated with happiness, whereas grit's impact on life satisfaction was negligible. The current research does not have gender differences; however, it lends credibility to Alhadabi et al.'s (2023) claiming that gender affects trait profiles, which are blends of motivation, self-control, and grit rather than just perceived variations.

The shifting gender dynamics at Pakistani universities might have been one reason. More proportionate experiences with grit, happiness, and self-control across the sexes probably resulted from greater female enrollment, stronger support networks, and modifications in culture that prioritized women's education (Rana et al., 2024). Gender differences could possibly be disappearing as female students likely no longer experience the same psychological or motivational challenges that have been documented in the past. In Pakistani higher education, the similarities between the sexes can be considered a reflection of common educational standards. The challenges of balancing personal and academic obligations, financial strain, and severe academic loads have been experienced by both male and female students, which may standardize how grit, self-control, and happiness are expressed between the sexes.

Additionally, there were no noticeable variations between students studying the natural and social sciences. This result deviated from previous studies that have frequently emphasized differences in traits like personality, cognitive abilities, or wellness levels across disciplines (Robins & Pals, 2002; Von Stumm et al., 2011). However, recent research supported the current findings; for instance, Klimova et al. (2022) found that grit has been predicting online self-regulated learning across disciplines, indicating that persistence and self-control could be used as universal qualities regardless of academic field. Similar findings have been submitted by Jehanghir and Akbar (2022), who determined that grit was predicted by resilience and subjective happiness across a range of student groups, regardless of taking into account any variation in specific disciplines.

The findings with no disciplinary disparities could suggest that non-cognitive qualities like self-control and grit are domain-general, indicating these are applicable in a variety of situations and academic settings. In Pakistani institutions, where students studying the natural and social sciences encounter comparable difficulties due to fierce competition, limited financial resources, and social expectations of academic achievement, this could be further an indication of the effects of homogenizing forces. The results demonstrate that happiness is a contributing factor to grit and self-control. This supports the findings of Zia et al. (2025), who found a substantial correlation between academic accomplishment and the happiness of female students, and Jehanghir and Akbar (2022) found that subjective pleasure has been proven a significant predictor of grit.

Happiness may enhance grit by promoting optimism, resilience, and feelings of happiness that sustain individuals moving through a prolonged period of challenges. Additionally, the reciprocal nature of grit/self-control and enjoyment has been aligned with more general theories of positive psychology (Li et al., 2018). Positive emotions extend cognitive and behavioral repertoires, which have consequently allowed individuals to develop long-lasting personal resources, including self-control and grit, based on broaden-and-build theory (Fredrickson, 2001). Therefore, students who have been feeling satisfied and happy tend to be more prepared to dedicate themselves to challenging academic assignments, fight through failures, and eventually achieve more success, all of which reflects further into their happiness and creates a cycle of positive reinforcement.

Conclusion

With consideration for possible gender and disciplinary variations, the current study examined the connections between grit, self-control, and happiness among a sample of university students from Lahore, Pakistan. The results showed a positive relationship between variables, including grit, self-control, and happiness. The findings indicated that students who have been controlling their desires (self-control) and struggle toward long-term goals (grit) are likewise more inclined to report higher levels of subjective happiness. This validates the theory that emotional and motivational resources complement one another in enhancing psychological and academic achievement. Notably, the findings showed that neither gender nor academic discipline revealed any significant differences in the study. The current findings align with more recent evidence by Alhadabi et al. (2023) and Jehanghir and Akbar (2022) that suggested non-cognitive traits might be domain-general and influenced more by contextual pressures than by demographic categories. These results are in contrast to some earlier studies that suggested academic disciplines influence levels of perseverance (Von Stumm et al., 2011) or that females may report higher happiness (Zia et al., 2025).

The structures' reciprocal nature should be emphasized, as happiness was found to be a resource that may strengthen perseverance, along with an outcome of grit and self-control. According to Fredrickson's broaden-and-build theory (2001), feelings of happiness have been improving resilience and cognitive resources among individuals. This implies that fostering happiness in Pakistani students by encouraging surroundings, optimism, and mental health treatments may improve resilience and self-control. From a theoretical perspective, the present study filled a gap that was highlighted in previous research by confirming the relationship between grit, self-control, and happiness in a non-Western cultural context (Kannangara et al., 2018). It focuses attention on recognizing that these concepts were found to be interdependent and crucial for academic resilience, particularly in situations where students have encountered challenges with institutions and socio-economic pressure.

Suggestions

The following suggestions have been laid out in light of the literature review and results:

1. **Curriculum Integration**: Universities should integrate training modules that promote grit and self-control, such as workshops on time management, goal-setting, and resilience-building.
2. **Positive Psychology Interventions**: Programs focusing on gratitude, optimism, and mindfulness can enhance students' happiness and mental health.
3. **Gender-Sensitive Approaches**: Policies should account for gender-based differences in psychological traits, providing tailored support to male and female students.
4. **Disciplinary Support**: Social sciences and natural sciences students may face distinct academic challenges; interventions should be designed to address discipline-specific stressors.
5. **Counseling Services**: Institutions should strengthen student counseling services to provide personalized support for fostering self-control, grit, and emotional well-being.
6. **Further Research**: For examination of underlying relationships between grit, self-control, and happiness alongside its cumulative impact on professional achievement, future research ought to employ longitudinal methods.

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Iman Javid is an Associate at Amazon Fulfillment Centre, Australia

Maryam Zafar is a Lecture Assistant, Department of Gender and Development Studies, Lahore College for Women University (LCWU)

Syeda Maryam Batool is a Lecturer, Department of Gender and Development Studies, Lahore College for Women University (LCWU)