

THE INFLUENCE OF GRIT AND PRUDENCE ON LEADERSHIP POTENTIAL AMONG UNIVERSITY STUDENTS

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Abstract

The present study investigated the influence of grit and prudence on the leadership potential among university students. The aim of the study was to check the predictive relationship of grit and prudence on leadership potential. A simple random sampling technique was used to select HEC based universities for the present study and then through convenience sampling participants were selected (N=320). Data was collected using the instruments namely Short Grit Scale (Duckworth & Quinn, 2009), Prudence subscale of the Values in Action Inventory of Strengths-120 (Peterson & Seligman, 2004) and the Leadership Trait Questionnaire (Northouse, 2018). The overall analysis included the Descriptive statistics, Pearson Correlation, Multiple Regression was performed using SPSS version 21.0. The findings revealed a significant positive correlation among grit, prudence, and leadership potential. The regression analysis demonstrated that prudence significantly influenced the leadership potential, which predicts 38.4% of the total variance, while grit also predicted leadership potential, explaining 11.4% of the total variance. Furthermore, the combined effect revealed that grit and prudence together has contributed to 41.5% of the variance in leadership potential, that is statistically significant effect ($p < .001$). These results are more likely to indicate that the value of promoting both grit and prudence in the leadership developmental strategies. The study has also its contributions in adding to the literature examining the combined role of character strengths in leadership potential. It also focuses on providing practical implications for leadership development programs within educational settings.

INTRODUCTION

The concept of leadership potential has emerged as one of the most prominent constructs in psychological, educational, organizational, and social sciences, which refers to an individual's potential to become an effective leader in the future instead of only measuring the performance of the current recognized leaders (Murphy & Johnson, 2011). According to the modern perspectives, the concept of leadership potential is

more perceived as a complex phenomenon that is highly influenced by the psychological ups and downs, motivational processes, cognition, and context of an individual growth (Avolio & Reichard, 2008; Silzer & Church, 2009). In rapidly changing and competitive environments, organizations are more likely to prioritize individuals who demonstrate not only competence but also the adaptability, ethical judgment, more resilience, and sustained growth

orientation (Day et al., 2014; Dries & Pepermans, 2012).

The level of significance in terms of leadership potential mostly lies in its role in their organizational sustainability, and long-term socio-economic progress. Early identification of the leadership-related characteristics is most particularly important during the emerging adulthood (Arnett, 2000; Komives et al., 2005). The university is better place as significant developmental ecosystem through which leadership skills may be developed (Dugan & Komives, 2007; Koyuncuoglu, 2021). Research also suggests that the development of the leadership skills is greatly influenced by an organized environment due to the chance to be provided with practical learning and social responsibility (Anjum et al., 2023; Brooks et al., 2024).

Classic leadership theories are more certainly to be built on personality traits approaches that mostly says that extraversion, conscientiousness, agreeableness, and openness are the personality traits that are linked consistently with the emergence and performance of the leaders (Hoffman et al., 2011; Judge & Bono, 2001; Judge et al., 2002). Meta-analysis also provides this evidence for the predictive ability of the Big Five Personality traits for leadership (Zaccaro, 2007). Further theories are likely to integrate models which focus on motivation and self-regulation in relation to leadership skills that are more perceived as developmental (Hogan & Kaiser, 2005; Bandura, 1991).

Within the positive psychology framework, constructs like grit and prudence have gained quite huge attention but they also remained underexplored in Pakistan. Grit, is sustained passion and perseverance toward the long-term goals, it also has been widely connected with achievement, persistence, along with success under certain challenging conditions (Duckworth et al., 2007; Duckworth, 2016; Eskreis-Winkler et al., 2014). Prudence, is one of the character strength within the Values in Action classification system, which basically reflects the on the careful decision-making, foresight, impulse control, along with consideration for long-term consequences

(Peterson & Seligman, 2004; Schwartz & Sharpe, 2006). It is one of the closely aligned with the concept of the phronesis, that mostly emphasizes on the ethical reasoning and context-sensitive judgment in decision-making (Sternberg, 1998; Grossmann et al., 2020).

Empirical literature has found that grit is more positively associated with the academic achievement, occupational persistence, and the performance under pressure (Li & Li, 2021; Guerrero et al., 2016). It also has been linked to the resilience and the goal commitment across various demanding contexts such as education, military training, and the professional environments (Caza et al., 2019; Winkler et al., 2014). However, if concerned with the predictive validity, it has been questioned due to the conceptual overlap with conscientiousness (Credé et al., 2017; Datu, 2021). Similar to that, prudence is also being associated with the self-regulation, functioning, and ethical reasoning, which kind of make it particularly relevant for the most of leadership contexts (Miyake et al., 2000; Northouse, 2021 Roberts et al., 2009).

Leadership development can be better understood as the interaction between motivational persistence and the cognitive judgment. Even though the grit helps in concentrating on the sustained effort, motivation to pursue more goals, prudence will most likely to help in making sure that some of this kind effort was mainly based on the reflection and strategy. The interconnection can make it easier for this trait to be related to the virtue-based approach to the leadership-based (González et al., 2024; Peterson & Seligman, 2004). Modern research indicates that the successful leaders need to have the considerable amounts of integration between perseverance and adaptive decision-making in unpredictable environments (Rego et al., 2023; Jordan et al., 2020).

At some of the universities, there is evidence that like grit, motivation, and self-regulation can have significant impacts on the development and leadership of students (Cheung et al., 2024; Wu et al., 2022). This means that universities can also serve as institutions that contributes to the development of the necessary character skills (Day

et al., 2014). Nevertheless, while the development of the leadership skills can be impacted by the personal traits, it is also possible to observe how these important factors like emotional intelligence and social skills can have considerable influence (Northouse, 2021; Zaccaro et al., 2004).

Although there is a vast literature available on the personality and leadership, a very little empirical study has been done on grit and prudence in

tandem as a single predictive framework of both combined. Most of the research that has been conducted so far has taken into consideration people from the Western countries, and therefore there are many gaps in terms of the knowledge about how these qualities work amongst the university going students in developing nations (Riaz et al., 2021).

Conceptual framework of the study

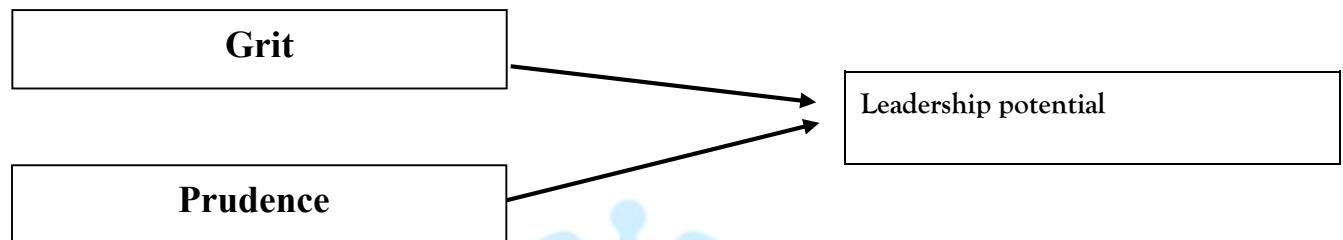


Figure 1: Showing the Predictive Relationship between Grit, Prudence and Leadership Potential

Method

Research Design

A quantitative and cross-sectional correlational research design was being employed to examine the predictive relationship between grit, prudence, and leadership potential.

Sample

The sample of the study consisted of 320 university students, age ranging from 18–30 years from four HEC-recognized universities in the Rawalpindi. Participants both included male and female students.

A simple random sampling technique was used to select universities for the present study. A list of Higher Education Commission (HEC) recognized public and private universities was obtained, using the fishbowl random selection method, two public and two private universities were selected proportionately. After obtaining permission from the selected institutions, data were collected using convenience sampling according to the accessibility and availability of students.

Objectives

- To examine the relationship between grit, prudence, and leadership potential among university students.
- To assess the predictive relationship of prudence and grit on leadership potential.

Hypothesis

- There is a significant relationship between grit, prudence, and leadership potential among university students.
- Prudence and grit significantly predict leadership potential among university students.

Instruments

Instrument included Short Grit Scale (Duckworth & Quinn, 2009) which is an 8-item scale which measures the consistency of interest along with perseverance of the effort on a 5-point Likert scale. The scale has demonstrated good reliability, with a reported Cronbach's alpha of .73. The second scale was VIA-IS-120 Prudence Subscale (Peterson & Seligman, 2004), It is a subscale that assesses careful decision-making, foresight, and self-regulation. The subscale has

shown satisfactory internal consistency, with reliability coefficients generally ranging from .70 to .80. The third scale was Leadership Trait Questionnaire (Northouse, 2018) that is a 14-item scale which measures the leadership-related personality traits on a 5-point Likert scale. The scale has demonstrated good reliability, with a reported Cronbach's alpha of .87.

Procedure

Data were collected through the self-report questionnaires after obtaining the informed consent. Participants were tried to be briefed about the study objectives and were assured about the confidentiality. Ethical guidelines were strictly considered.

Data Analysis

Data was analyzed by using SPSS version 21.0. Descriptive statistics were computed concerning demographics and alpha reliability was used to know the reliability. Pearson correlation assessed relationships among variables, while multiple regression to assess combined effect.

Results

As per statistical analysis, using Pearson Correlation and Multiple Regression. Grit, prudence and leadership potential shared a positive relationship. Grit and prudence had a positive impact on leadership potential thus proposed hypothesis was proved.

Table no 1.

Mean, Standard Deviation, Range and Cronbach alpha reliability of Short Grit Scale, Prudence Character Strength subscale of VIA-120, and Leadership Trait Scale (N=320)

Variables	N	M	Range	SD	α
SGS	320	26.80	9-40	4.91	.70
PCS-VIA	320	17.69	5-25	4.30	.78
LTQ	320	50.81	20-70	9.51	.88

Note: N= total number of participants, M=mean, SD=Standard deviation, α = Alpha reliability, SGS= Short Grit Scale, PCS-VIA= Prudence character strength value in action scale, and LTQ= leadership trait questionnaire.

Table no 1 showed the mean, standard deviation and normality results of the data gathered from SGS, PCS-VIA and LTQ scales. The SGS showed moderate alpha reliability of 0.70 alpha. PCS-VIA has reliability of 0.78 alpha which showed moderate to good reliability. Whereas LTQ showed higher alpha reliability of 0.88.

Demographic characteristics of Sample

The total number of subjects that were part of the research was 320. The majority of subjects belonged to the age range 18-22 years (68.8%), had a middle socioeconomic status (81.6%), and were unmarried (81.3%). The number of females (53.4%) was somewhat higher than males (46.6%). Equally distributed between four different universities.

Table no 2

Inter correlation of Grit, Prudence and leadership potential

Variables	N	M	SD	1	2	3
Grit	320	26.80	4.91	-		
Prudence	320	17.69	4.30	0.32**	-	
LP	320	50.81	9.51	0.34**	0.62**	-

Note: N= total number of participants, M=mean, SD=Standard deviation, LP=Leadership potential (Significance level=0.01)

The table no 3 shows the correlation among Grit, prudence and leadership potential. The results

indicate that there is a significant positive correlation among grit and prudence ($r = 0.32, p <$

0.01). whereas there is moderate positive correlation among grit and leader potential ($r = .34, p < .01$). However, there is a strong correlation among prudence and leadership potential ($r =$

.622, $p < .01$). Hence it is suggested that there is a significant positive correlation among grit, prudence and leadership potential.

Table # no 4

Regression coefficient of Grit and prudence on leadership potential

Variables	B	S.E	t	p	CI (95%) (UL, LL)
Constant	19.27	2.51	7.65	.001	(24.22,14.32)
Prudence	1.26	0.09	12.71	.001	(1.46,1.07)
Grit	0.34	0.08	3.94	.001	(0.51,0.17)

Note: B=unstandardized beta, S. E=unstandardized standard error, t=t-value, p=level of significance, CI=confidence interval, LL=lower limit, UL=Upper limit

Table 4 shows the results of multiple regression among Grit, prudence and leadership potential. As per results, Grit and prudence are the significant positive predictors of leadership potential ($p < .001$). Both as predictors are showing 41.5% total variance in leadership potential among university students. The regression model is moderately strong and statistically meaningful ($R^2 = .415$).

Discussion

The present study aimed to investigate the relationship between grit, prudence, and leadership potential among university students and in order to examine whether grit and prudence predict leadership potential among the university students. The results majorly confirmed the hypotheses made prior to the research. Correlational analysis showed that there were significant positive correlations between grit, prudence, and leadership potential. It means that grit is positively related to prudence and leadership potential and prudence is strongly positively related to leadership potential. In addition, the multiple regression analysis showed that both grit and prudence were significantly predicting leadership potential, explaining 41.5% of its variance.

The relationship between grit and leadership potential is mostly consistent with past research that stressed perseverance and passion for the achievement of long-term goals as critical elements of leadership. According to Duckworth et al.

(2007), grit was assumed as sustained effort and consistency of interests, and, similarly, according to Caza et al. (2019), persons who have more developed grit show stronger leadership results. Furthermore, prudence has proved to be the most strongly correlated variable with leadership potential, corroborating its characterization as a strength of character that incorporates such qualities as self-control, good judgment, and planning for the future (Peterson & Seligman, 2004). Likewise, Schwartz & Sharpe (2006) and Grossmann et al. (2020) also emphasized the importance of wise decision making in leadership. Thus, all these results indicate that perseverance and prudence are important characteristics associated with leadership potential.

The regression findings further demonstrated that grit and prudence significantly predicted leadership potential. These findings are consistent with Bandura's (1991) social cognitive theory, which proposes that self-regulatory capacities influence goal-directed behavior and performance. Individuals with higher levels of grit are more likely to persevere in the face of difficulties and maintain commitment to long-term goals (Credé et al., 2017; Datu, 2021), whereas individuals high in prudence are characterized by thoughtful planning and behavioral regulation (Roberts et al., 2009). These qualities are considered fundamental to leadership effectiveness and development (Hogan & Kaiser, 2005; Northouse, 2021).

In addition to this, prudence was found to be a more significant predictor of leadership potential

than grit. This result implies that there is a possibility that the development of one's leadership abilities can require not only perseverance but also wise decision making. According to Sternberg (1998), wisdom and good judgment play an important role in leadership, whereas Zaccaro et al. (2004) and Zaccaro (2007) stressed the significance of personality and social intelligence in the process of leadership emergence. Thus, prudence may imply a larger potential for making a well-thought-out choice and becoming a leader.

In general, the results of the current study prove that leadership potential depends on positive psychological traits of a person and his/her virtues (Day, 2000; Day et al., 2014; Murphy & Johnson, 2011). In accordance with the trait approach to leadership (Judge et al., 2002; Hoffman et al., 2011), this study proves that both prudence and grit are non-cognitive traits, which determine leadership potential in university students, thus contributing to understanding of leadership development in emerging adulthood (Arnett, 2000).

Implications

This study implies that the integration of character-building exercises like persistence of interest, consistency of effort, and ethical decision making should also receive more consideration from institutions of the higher education or university. In organizational contexts, grit and prudence may also help in the process of the leadership skills. The research highlights the need for a holistic strategy to develop leaders through grit and prudence.

Limitations

- The cross-sectional nature of the research does not permit the determination of causation in relation to grit, prudence, and leadership potential.
- Moreover, the reliance on self-reported data is likely to result in social desirability bias.
- Additionally, the study participants were predominantly middle socioeconomic status, thus limiting the generalization of the findings.

Future recommendations

- Any future research on this topic must adopt the longitudinal and experimental designs in order to better identify the causal effects among the studied constructs.
- The future research must also consider a wide range of cultures and the socio-economic groups as sample populations in order to enhance generalizability.
- Furthermore, the other variables related to leadership development should be investigated in future research.
- Finally, the adoption of the multi-rater methods rather than self-report measures, and conducting intervention studies, could lead to more accurate assessments and practical results in this domain.

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