

## UNDERSTANDING THE LINK BETWEEN CHARACTER STRENGTHS AND MINDFULNESS: INSIGHTS FROM HIGH SCHOOL POPULATIONS

Sadaf Zahra<sup>1</sup> Najia Zulfiqar<sup>\*2</sup>

<sup>1</sup>PhD scholar at the University of Haripur

<sup>2</sup>Assistant Professor at The University of Haripur Department of Psychology

<sup>2</sup>najia.zulfiqar@uoh.edu.pk

Corresponding Author: \*

Najia Zulfiqar

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### ABSTRACT

**Objective:** To examine (a) the relationship between global character strengths and dispositional mindfulness among high-school students, and (b) the distribution of levels of character strengths and mindfulness in the sample.

**Methodology:** A cross-sectional survey was conducted with 344 high-school students age ( $M = 17.06$ ,  $SD = 0.63$ ) drawn from urban and rural schools. Character strengths were measured with the Values in Action Inventory of Strengths for Youth (VIA-Youth, 96 items, 5-point Likert) and mindfulness with the Mindful Attention Awareness Scale–Adolescent version (MAAS-A, 14 items, 6-point Likert). Data collection occurred in classroom settings under researcher supervision. Analyses comprised descriptive statistics, categorical classification of score ranges (low/moderate/high), and Pearson product-moment correlation to test the association between total VIA and MAAS scores. Reliability (internal consistency) was evaluated for both scales.

**Results:** The sample was predominantly urban (83.1%), largely from nuclear families (79.7%), and balanced by gender (53.9% male). The correlation between total VIA and MAAS scores was small and positive but not statistically significant ( $r = .077$ ,  $p = .157$ ), indicating minimal shared linear variance between global character strengths and dispositional mindfulness in this sample.

Classification of total VIA scores showed 25.0% low, 50.6% moderate, and 24.4% high; MAAS-A classifications showed 25.6% low, 51.7% moderate, and 22.7% high. Instruments were administered with standard procedures; internal consistency was assessed (see manuscript for coefficients).

**Conclusion:** Most students reported moderate levels of both character strengths and mindfulness, yet global measures of these constructs were largely independent in this cross-sectional sample. The findings suggest that aggregate indices of character strengths may obscure facet-specific relations with mindfulness and that cultural, developmental, and measurement factors can influence observed associations. Longitudinal, facet-level, and intervention studies—using culturally validated measures and multi-informant designs are recommended to clarify causal pathways and identify which specific strengths most closely relate to mindful attention in adolescents.

**Keywords:** Character Strengths, VIA-Youth, Mindfulness, MAAS-A, Adolescents, Cross-Sectional Study.

## INTRODUCTION

Character strengths are positive, measurable traits that reflect an individual's enduring capacities for

thinking, feeling, and behaving in ways that benefit both self and others. The Values in Action (VIA) classification identifies 24 distinct strengths grouped under six core virtues wisdom, courage, humanity, justice, temperance, and transcendence(1). These strengths represent the essential building blocks of positive character and are considered central to human flourishing. Within adolescent populations, character strengths have been linked with greater well-being, resilience, academic motivation, and social competence. Students who recognize and apply their strengths tend to exhibit higher life satisfaction, engagement in learning, and prosocial behavior (2). Strength-based education and interventions encourage young individuals to develop awareness of their personal assets and apply them effectively, thereby supporting both emotional and academic growth during formative years (3).

Mindfulness, a complementary construct within positive psychology, refers to the ability to attend to present-moment experiences with openness and nonjudgmental awareness (4) It is both a mental capacity and a cultivated skill that fosters attentional control and emotional regulation. Among adolescents, mindfulness has been widely studied for its role in promoting psychological well-being, reducing anxiety, and improving academic performance (5). Empirical studies show that mindful adolescents report lower stress, enhanced self-control, and greater emotional stability (6) Moreover, mindfulness-based programs implemented in school settings have been shown to improve classroom climate, foster empathy, and enhance students' concentration and self-regulation (7). Thus, mindfulness represents a critical personal resource that may interact with other positive traits such as character strengths to influence adolescents' holistic development.

Recent theoretical and empirical work has begun to explore the interrelationship between character strengths and mindfulness. From a conceptual

perspective, mindfulness can heighten individuals' awareness of their thoughts and actions, thereby facilitating the conscious recognition and use of personal strengths (8). Conversely, exercising one's strengths may nurture mindfulness by promoting greater self-reflection and present-focused engagement. Empirical studies have reported that interventions integrating both constructs, such as Mindfulness-Based Strengths Practice (MBSP), produce improvements in life satisfaction, optimism, and subjective well-being (9, 10) However, despite these promising findings, much of the research in this area has focused on adults or university students, leaving adolescent populations understudied(11, 12). Since adolescence is a period marked by rapid psychological and emotional changes, understanding the dynamics between mindfulness and character strengths during this developmental stage is particularly important.

Several research gaps remain evident in the literature, as most previous studies have been conducted in Western contexts, limiting the cultural generalizability of findings, while research on adolescents often relies on small samples or cross-sectional designs that weaken inferences regarding the relationship between mindfulness and strengths; moreover, there is limited data on the baseline levels of character strengths and mindfulness among high school students in South Asian countries, highlighting the need to address these gaps to develop culturally informed interventions and expand the evidence base on adolescent well-being within non-Western educational contexts.

The present study is grounded in the recognition that adolescence is a pivotal stage for identity formation and socio-emotional development. Cultivating mindfulness and understanding one's character strengths during this period may provide protective psychological resources that foster resilience, self-awareness, and effective coping strategies. Examining the association between these constructs will help determine whether mindfulness training can enhance the awareness and utilization of character strengths, or whether strengths-based education can promote mindful engagement. This inquiry holds practical

significance for educational psychologists, teachers, and policymakers seeking evidence-based approaches to support students' mental health and academic growth.

The findings from this study will contribute to positive psychology and educational research by providing empirical insights into the relationship between character strengths and mindfulness among high school students. It will also describe the levels of these constructs in the target population, offering valuable data for designing interventions that integrate mindfulness and strengths-based approaches in school settings. Such integrative models have the potential to enhance students' emotional adjustment, academic engagement, and overall well-being. Moreover, understanding these associations within the local cultural context can guide educators in developing more inclusive and contextually relevant strategies for student development.

The aim of this study is to explore the relationship between character strengths and mindfulness among high school students and to assess the levels of these constructs within this group.

The specific objectives for this study were as follow: (1) to identify the relationship between character strengths and mindfulness among high school students.

(2) to examine the levels of character strengths and mindfulness among high school students.

### **Methodology**

The primary data collection tools were two standardized self-report questionnaires. Character strengths were assessed using the *Values in Action Inventory of Strengths for Youth (VIA-Youth)*, a 96-item instrument developed to measure the 24-character strengths outlined by Peterson and Seligman (2004). Each item is rated on a five-point Likert scale ranging from 1 (very much unlike me) to 5 (very much like me) (1). The VIA-Youth has demonstrated high reliability and validity across diverse adolescent samples, with Cronbach's alpha coefficients typically exceeding .80 for most

subscales. Mindfulness was measured using the *Mindful Attention Awareness Scale – Adolescent Version (MAASA)*, a 14-item measure designed to assess dispositional mindfulness, defined as the open or receptive awareness of and attention to what is taking place in the present. Each item is rated on a six-point Likert scale, where higher scores indicate greater mindfulness(13).

Data collection was carried out in the participating schools during regular school hours. Permission was obtained from school principals and class teachers prior to data administration. The questionnaires were distributed in classroom settings, and students were briefed on the purpose of the study, the voluntary nature of participation, and the confidentiality of their responses. The researcher and trained assistants supervised the sessions, provided standardized instructions, and were available to clarify any questions. Each session lasted approximately 40 to 50 minutes, during which students completed the demographic form and both psychometric scales. Completed questionnaires were collected immediately to minimize the risk of data loss.

Data were coded and entered the Statistical Package for the Social Sciences (SPSS) version 25 for analysis. Preliminary analyses involved checking data accuracy, handling missing values, and testing assumptions of normality, linearity, and homoscedasticity. Descriptive statistics, including means, standard deviations, frequencies, and percentages, were computed to examine the demographic profile of participants. Pearson product moment correlation coefficient was use to check relationship between character strength and mindfulness and crosstab analysis were use to assess the levels of character strengths and mindfulness among participants.

### **Results**

The present study investigated the relationship and level of character strengths and mindfulness among high school students.

**Table-1**  
**Demographic Information of the Participants (n = 100)**

Variable	Subcategory	f (%)
Gender	Male	188(53.9%)
	Female	154(44.1%)
Majors (Field of Study)	Pre-Medical Group	156(44.7%)
	Pre-Engineering Group	60(17.2%)
	IT Group	126(36.1%)
	I.Com	2(.6%)
Living Environment	Urban	290(83.1%)
	Rural	52(14.9%)
Parental Status	Both Alive	320(91.7%)
	Father alive Mother Deceased	10(2.9%)
	Mother alive Father deceased	12(3.4%)
	Both deceased	2(.6%)
Father's Qualification	Matric	74(21.2%)
	Inter	106(30.4%)
	Ist-grade	154(44.1%)
	Post-grade	10(2.9%)
Mother's Qualification	Matric	120(34.4%)
	Inter	76(21.8%)
	Ist-grade	142(40.7%)
	Post-grade	6(1.7%)
Family System	Nuclear	278(79.7%)
	Joint	66(18.9%)

Table-1 shows the demographic profile of the participants indicated that out of 344 high school students, 188 (53.9%) were male and 154 (44.1%) were female, suggesting a nearly balanced gender distribution with a slight male majority. In terms of academic discipline, the majority were enrolled in the pre-medical group (44.7%), followed by the IT group (36.1%), the Pre-Engineering group (17.2%), and a very small proportion in I. Com (0.6%). Most participants resided in urban areas (83.1%), while 14.9% were from rural backgrounds, reflecting a primarily urban sample. Regarding parental status, the vast majority

(91.7%) had both parents alive, whereas a small percentage had lost one or both parents. Educationally, fathers were most frequently qualified at the undergraduate (first-grade) level (44.1%), followed by intermediate (30.4%) and matriculation (21.2%) levels, while only 2.9% had postgraduate qualifications. Mothers showed a similar trend, with the highest percentage holding undergraduate (40.7%) qualifications. In terms of family structure, 79.7% of students lived in nuclear families, while 18.9% belonged to joint family systems.

**Table-2**  
**Descriptive Statistics of Demographic Variables (n = 344)**

Variable	Mean ± SD
Age (years)	17.06 ± 0.63
Birth Order	2.30 ± 1.23
Number of Male Siblings	1.88 ± 1.06
Number of Female Siblings	1.75 ± 1.26
Grade Percentage Score*	3.45 ± 1.48
Socioeconomic Status†	3.08 ± 0.87

Table-2 shows the descriptive statistics of demographic variables showed that the average age of participants was 17.06 years (SD = 0.63), indicating a relatively homogenous age group of late adolescents. The mean birth order was 2.30 (SD = 1.23), suggesting that most students were either first or second-born children. The mean number of male siblings was 1.88 (SD = 1.06), and

the mean number of female siblings was 1.75 (SD = 1.26), reflecting moderately sized families. The average grade percentage score was 3.45 (SD = 1.48), which denotes a satisfactory academic performance, while the mean socioeconomic status score was 3.08 (SD = 0.87), indicating that most participants belonged to a middle socioeconomic class.

**Table-3**  
**Relationship of character strength and mindfulness among high school students (n = 344)**

Variables	1	2
1. character strengths	1	
2. mindfulness		.077**

Table-3 shows the correlation analysis revealed a weak positive but statistically nonsignificant relationship between character strengths and mindfulness among high school students ( $r = .077$ ,  $p = .157$ ). This result indicates that although there

was a slight positive association between the two constructs, it was not strong enough to reach statistical significance. In other words, higher levels of character strengths were not consistently associated with greater mindfulness in this sample.

**Table 4**  
**Descriptive Classification of Character Strength Levels among High School Students (n = 344).**

Character Strength Level	Score Range*	Frequency (n)	Percentage (%)
Low	< 309.75	86	25.0
Moderate	309.75 – 355.00	174	50.6
High	> 355.00	84	24.4
Total	–	344	100.0

Table-4 shows the classification of character strengths among participants demonstrated that half of the students (50.6%) fell into the moderate range of character strength scores, while 25% exhibited low levels and 24.4% showed high levels.

This distribution suggests that most adolescents possess a balanced or average level of character strengths, with fewer students at the extremes. Such a pattern reflects a typical developmental stage during adolescence, where personality traits

and values are still being shaped. The moderate predominance also implies opportunities for further enhancement of positive traits through

interventions such as moral education, life-skills training, or strength-based counseling programs.

**Table 5**  
**Descriptive Classification of Mindfulness Levels among High School Students (n = 344)**

Mindfulness Level	Score Range*	Frequency (n)	Percentage (%)
Low	< 44.00	88	25.6
Moderate	44.00 - 58.00	178	51.7
High	> 58.00	78	22.7
Total	—	344	100.0

Table-5 shows classification of mindfulness levels showed that 51.7% of students scored within the moderate range, 25.6% demonstrated low mindfulness, and 22.7% reported high mindfulness levels. This distribution indicates that while most adolescents possess an average degree of mindfulness, a considerable proportion still lacks consistent awareness and attention regulation skills. Given that mindfulness contributes to emotional regulation, stress management, and academic engagement, these findings underscore the importance of integrating mindfulness-based activities into school programs. Enhancing mindfulness could also foster higher character strength development over time, potentially leading to improved well-being and adaptive functioning among high school students.

### Discussion

The aim of this study was to examine the relationship between character strengths and mindfulness among high school students and to assess the levels of these constructs within this group. The study also sought to describe the demographic characteristics of the participants to provide context for interpreting the findings.

The first set of findings presented in Table 1 described the demographic information of the 344 participants. The results indicated that 53.9% of the sample were male and 44.1% were female, suggesting a relatively balanced gender representation. Most students came from urban areas (83.1%) and lived in nuclear family systems (79.7%). A majority had both parents alive (91.7%), and parents' education levels mostly fell

within intermediate or first-grade categories. These findings depict a generally stable family structure and educational background, which may positively influence adolescents' psychological development. Prior research has highlighted that adolescents from intact families and urban environments often display higher self-efficacy, academic motivation, and emotional stability(14). Such socio-demographic stability could provide a favorable context for the cultivation of character strengths and mindfulness. However, the predominance of urban students might also suggest higher exposure to academic pressure and social competition, factors that may influence self-perception and mindfulness levels differently than in rural populations.

Table 2 presented the descriptive statistics of demographic variables, showing that the mean age of participants was 17.06 years (SD = 0.63), confirming that the sample comprised late adolescents. The average birth order was 2.30, indicating that most students were neither first-born nor last-born, and they reported having approximately two male and two female siblings on average. These data reflect a typical family size in the cultural context of Pakistan. Previous research suggests that adolescents in middle birth positions often develop strong interpersonal and adaptive skills due to shared responsibilities and negotiation experiences within larger families (15). Similarly, age around 17 years is associated with heightened self-awareness and identity formation factors that can significantly shape the expression of character strengths and mindfulness (16). Thus, the demographic characteristics of the participants

appear suitable for exploring these psychological constructs during a key developmental period.

Table 3 reported the main inferential finding of the study, showing the relationship between character strengths and mindfulness. The Pearson correlation coefficient was positive but small ( $r = .077$ ,  $p = .157$ ), indicating a non-significant relationship between the two constructs. This suggests that among these adolescents, higher character strengths were not strongly associated with higher mindfulness levels. Although this finding contrasts with some theoretical expectations that mindfulness facilitates the awareness and enactment of personal strengths (8, 17). It aligns with several studies that have reported weak or non-significant correlations between mindfulness and character strength scores in adolescent samples (18). These researchers observed that while certain specific strengths such as self-regulation, gratitude, and love of learning tend to correlate more robustly with mindfulness, the overall composite VIA score may obscure such nuanced relationships. Another possible explanation for the weak correlation could be cultural and educational influences. In collectivist societies like Pakistan, adolescents often experience external academic and familial expectations that may limit opportunities for mindful self-reflection or individualized strengths use (19). Furthermore, developmental immaturity in metacognitive awareness during adolescence might contribute to the relatively weak linkage between these constructs compared with adult populations (6).

Table 4 examined the descriptive classification of character strength levels among students. The results showed that 25% of students demonstrated low strength levels, 50.6% fell within the moderate range, and 24.4% scored high. This indicates that most students possessed moderate levels of character strengths, consistent with patterns reported in other adolescent populations. Studies conducted in various cultural settings have found similar distributions, where adolescents often exhibit moderate endorsement of character strengths due to ongoing personality development and limited life experience (2, 20). However, the presence of approximately one-quarter of students

in the high category suggests that a substantial portion of this population already displays strong prosocial tendencies, resilience, and moral awareness. Such findings align with the view that adolescence is a formative stage for developing virtues that support psychological well-being and social competence (21). Educational psychologists argue that implementing strength-based educational programs during these years can further enhance motivation, self-esteem, and emotional adjustment (22). Therefore, the observed moderate-to-high levels of strengths in many students represent an encouraging baseline for potential interventions.

Table 5 presented the descriptive classification of mindfulness levels. Like the distribution of character strengths, 25.6% of students scored low in mindfulness, 51.7% fell in the moderate range, and 22.7% scored high. This indicates that most high school students reported average mindfulness levels, suggesting that while they possess some capacity for present-moment awareness, there remains significant room for improvement. These findings are consistent with international research demonstrating that adolescents often show moderate levels of dispositional mindfulness, which tend to increase with targeted interventions or training (6, 16). For instance, school-based mindfulness programs have been shown to improve attention regulation, emotional control, and academic focus (23). The moderate levels observed in this sample may reflect the absence of systematic mindfulness training within schools and the potential influence of academic stress, which can disrupt mindful awareness. Similar results were reported by Rawlett et al. (2016), who found that adolescents without exposure to mindfulness curricula typically report average levels of attention awareness, whereas those who undergo structured programs show significant improvements in emotional stability and self-regulation (24).

### **Conclusion**

The findings of the present study indicate a weak and statistically nonsignificant relationship between character strength and mindfulness, suggesting that variations in character strength scores are not meaningfully associated with

changes in mindfulness levels. This outcome implies that the two constructs may operate independently within the studied population. Although the direction of association was positive, its magnitude was negligible, highlighting limited interdependence between the two variables. These results contribute to the existing body of knowledge by reinforcing previous research that has similarly reported weak or inconsistent associations between related psychological or behavioral constructs. Future studies should explore potential mediating or moderating factors that may clarify the underlying mechanisms linking character strength and mindfulness, using larger and more diverse samples to enhance generalizability.

#### **Limitations and recommendations of the study**

The present study is not without limitations. Its correlational design restricts the ability to infer causality between character strength and mindfulness, and reliance on self-reported data may have introduced response biases or inaccuracies. The relatively small and homogeneous sample further limits the generalizability of the findings to broader populations. Moreover, the study focused solely on two variables, which may not fully represent the complex psychological or contextual factors that could influence their relationship. Measurement constraints and limited variability within the sample may also have contributed to the weak and nonsignificant correlation observed.

Future research should address these limitations by employing longitudinal or experimental designs to explore causal relationships and underlying mechanisms. Including larger and more diverse samples across various demographic and cultural settings would improve the external validity of results. Researchers should also consider integrating additional variables, such as motivation, emotional intelligence, or personality traits, that might clarify the interaction between character strength and mindfulness. Using mixed-method approaches could enrich quantitative findings with contextual insights, while refining measurement instruments could enhance precision and sensitivity in future investigations.

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