

## **Dispositional Mindfulness and Academic Performance Among Adolescents: The Mediating Role of Psychological Well-Being**

**Akhilendra K. Singh and Sadhana Singh**

Banaras Hindu University, Varanasi

Mindfulness is a state of mind characterized by the awareness of the 'here-and-now.' Studies in the recent decade have found that mindfulness can lead to a positive change in students' performance. The mechanisms and effects of mindfulness on academic performance among adolescents in developing countries have been less elaborated in previous studies. This paper examines the relationship between mindfulness, and the academic performance of school students and explores the role of psychological well-being in this relation. Through a survey with 144 students of CBSC Schools, this study corroborates the positive association between mindfulness, psychological well-being, and academic performance. This study adds empirical evidence to the roles of mindfulness in students' academic and personal development. It also explores the pathway through which mindfulness is related to academic performance. The findings provide implications for addressing students' academic challenges and conducting further research among school-going children in India and beyond.

**Keywords:** Dispositional mindfulness, academic performance, and psychological well-being.

Adolescence is a very crucial period of human development. Due to radical changes in physiology and psychic, this age is considered a period of stress and storm. Maintaining Psychological well-being and a high level of academic performance has always been a challenge for teenagers. Academic performance is one of the significant criteria which decide education, career, and various other important aspects of a students' life.

### **Academic Performance**

Academic performance (AP) is the set of grades obtained by the person in activities of an academic nature (Ramirez-Coronel, Martinez-Suárez, Minchala-Urgilés, & Contreras-Sanango, 2020). Ryff and Keyes (1995) regarded academic performance as the result achieved from the educational process, which has previously been set out with its learning objectives and purposes.

Academic performance is the ability to measure the learning acquired in the educational process or program, in short, Academic performance is the result of academic

or educational stimuli (Cooke et al., 2006). Academic performance is the capacity of the student to acquire the objectives established in the teaching and learning process, which makes it possible to verify the level obtained by the individual (Ramirez-Coronel, et al., 2020).

Various factors that could enormously influence academic performance like attention and concentration in study, interest & motivation in the study, study habits, level of intelligence, health, well-being, etc. In the present study, an effort is made to explore the role of dispositional mindfulness and psychological well-being in academic performance among adolescents.

### **Dispositional Mindfulness**

Mindfulness is a 'state of mind' which has been defined in many ways. Dispositional mindfulness (or sometimes called trait mindfulness) is referred to the innate capacity of paying and maintaining attention to present-moment experiences with an open and non-judgmental attitude (Brown & Ryan, 2003). Kabat Zinn (2003) also proposed a working operational definition of mindfulness as: 'the awareness that

emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment'. Bishop et al., (2004) stated that mindfulness is a 'state of mind characterized by attention and awareness in the present moment, and by an accepting, curious, and openness or non-judgmental attitude'.

Mindfulness has been theorized to increase meta-cognition, reduce ruminating thoughts, and help a person to focus (Davis & Hayes, 2012). It has been found that mindfulness helps in reducing stress, improves the working memory, gives more cognitive flexibility, less emotional reactivity; also contributes to more self-determined and autonomous actions which are highly necessary for good academic performance. Therefore, successful goal pursuit in any aspects like high academic achievement, successful career, relationships in human life requires mindfulness. Thus, it is highly important to get a clear idea about mindfulness to enhance one in these life pursuits.

### ***Psychological Well-Being***

The concept of psychological well-being has received significant attention in recent years in scientific literature. It is an umbrella term that was defined differently way by different researchers.

Huppert (2009) stated that psychological well-being is about lives going well that is the combination of feeling good and functioning effectively. Whereas, Burns (2016) defined psychological well-being as an inter-and intra-individual level of positive functioning that can include one's relatedness with others and self-referent attitudes that include one's sense of mastery and personal growth.

Psychological wellbeing is made up of 6 distinct dimensions of wellness (Ryff, 2014). A person with a high level of psychological wellbeing strives for an aim in life (purpose in life), experiences continuous personal development (personal growth), and got the impression to be able to operate his environment (environmental mastery). Furthermore, people, scoring high on psychological wellbeing, have a positive view against themselves (self-acceptance), experience independence and

self-determination regarding their thoughts and actions (autonomy), and have close relationships with others, based on reciprocal reliance (positive interpersonal relationships).

### ***Mindfulness and Psychological Well-Being***

Research on mindfulness has grown exponentially since 1996 owing its significance in treating both physical and psychological afflictions, (Black, 2014).

Mindfulness has been theorized as promoting the health and well-being of individuals; in particular, mindfulness directly nurtures the well-being experience through providing richness and it indirectly does so through facilitate self-regulating health behavior which includes increased attention to and acceptance of individual needs and values and a higher capacity to behave consistency with those needs and values (Brown, Ryan, & Creswell, 2007). The results of previous studies show that mindfulness may directly, and also through mediating variables, reduce stress, depression, anxiety and aggression and increase life satisfaction and psychological well-being (Lomas, et al., 2019).

Research on general populations' show that mindfulness augments self-compassion, positive affection, well-being, and quality of life whereas reduces negative emotions, rumination, stress symptoms, anxiety, somatization, aggression, and avoidance behavior (Shapiro et al., 2008). Moreover, mindfulness may increase health and emotional tolerance for negative emotions and stressors (Kabat-Zinn, 2003). Calvete, Orue, and Sampedro (2017) show that long-term acting with awareness can indeed help with predicting negative emotions and symptoms of psychological issues in adolescents.

### ***Mindfulness and Academic Performance***

Although early research focused primarily on the effects of mindfulness on populations suffering from chronic pain and illness (Anderson, Lau, Segal, & Bishop, 2007), contemporary studies have shifted their focus to the benefits of mindfulness training on cognition. For example, Chambers, Lo, and Allen (2008) studied the impact of intensive mindfulness meditation on various performance tasks and found that

people who participated in mindfulness training had enhanced sustained attention and working memory capacity. Mrazek, Franklin, Phillips, Baird, and Schooler (2013) examined the effects of mindfulness training on mind wandering and performance on the Graduate Record Examination (GRE). The researchers found that reading comprehension scores were improved after mindfulness training, and the reduction of distracting thoughts mediated this effect.

Mindfulness has been shown to have an impact on intellectual skills, improving sustained attention, visuo-spatial memory, working memory, and concentration (Zeidan et al., 2010). Other studies have also demonstrated an association between trait mindfulness and enhanced performance on tasks assessing sustained attention (Schmertz, Anderson, & Robins, 2009) and persistence (Evans, Baer, & Segerstrom, 2009). Some other researchers found a significant positive relationship between trait mindfulness and academic performance (Lin & Mai, 2018; McCloskey, 2015; Mrazek et al., 2013).

In contrast Trait mindfulness was not found to be a significant direct predictor of academic performance (Miralles-Armenteros, Chiva-Gómez, Rodríguez-Sánchez & Barghouti, 2021). Waters, Barsky, Ridd, and Allen (2015) mentioned a substantial deficit in the literature on mindfulness and academic achievement

#### ***Well-Being and Academic Performance***

Psychological well-being has been found to predict students' attitudes and academic performance in higher educational institutions (Salami, 2010). Berger, Alcalay, Toretti and Milicic (2011) found that emotional wellbeing correlated positively with academic achievement.

The research also revealed that the students, who have medium or high levels of academic performance, have a high index of well-being, the purpose of life, and personal growth on the scale (Turashvili, & Japaridze, 2012). Student academic performance has also been associated with psychological well-being, feeling of satisfaction with achievements, and coping with stressful situations. (Trucchia, Lucchese, Enders, & Fernández, 2013).

Pietarinen, Soini & Pyhältö (2014) examined the relationship between school-related wellbeing and academic achievement. The correlation analysis indicated that the positive component of students' school-related wellbeing (thriving in school) correlated positively with academic achievement.

In contrast to the previously mentioned findings, a study by Van Petegem, Creemers, Aelterman & Rosseel (2008), illustrated that there was no significant relationship between wellbeing and academic achievement measured at the same point of time.

Recently Ramirez-Coronel, et al. (2020) found that the greater their psychological well-being the better their academic performance. Alike, Bhatt (2021) reported that Psychological Well-being can discriminate between high achievers, average achievers, and low achievers in science.

#### ***Mindfulness, Psychological Well-being, and Academic Achievement***

Previous studies reported a significant direct association between mindfulness and well-being (Frewen, et al., 2008) whereas wellbeing has been significantly associated with academic performance (Ramirez-Coronel, et al. (2020). Therefore, an indirect route in the association between mindfulness and academic performance may have through psychological well-being. Uniquely different from previous research, the present study examined the influence of dispositional mindfulness on students' academic performance and psychological well-being.

Based on available research in the field, it was hypothesized that Mindfulness would be significantly positively associated with academic performance (H1) and psychological well-being (H2). Psychological well-being would be significantly positively associated with academic performance (H3). Psychological well-being would significantly mediate the relationship between mindfulness and academic performance (H4).

#### **Method**

##### ***Participants:***

One hundred and forty-four students of secondary and senior secondary level have

participated in the study. Participants' ages range from 14-18 years (Mean= 15.48 years; SD=0.96 years). Seventy-five of the participants were male (52.08 %) and 69 were female (47.92 %). There were 105 participants from secondary level (72.92 %) and 39 were from senior secondary level (27.08 %) of schooling.

### Measures

1. *Cognitive and Affective Mindfulness Scale –R (Feldman, et al., 2007)*: Cognitive and Affective Mindfulness Scale –R (CAMS-R) is 12 items self-reports scale that measures everyday mindfulness. The scale items are written in everyday language which can capture the comprehensive conceptualization of mindfulness and can be understood by individuals without prior experience in mindfulness practice. The scale uses Likert-type four-point response formats which varied from 1 (rarely) to 4 (always). The developers of scale also suggest the utilization of the 10-item version of CAMS-R with the omission of 2nd and 7th items since these items may be potentially confounded with worry and rumination respectively. Ten item version of the scale was used which has demonstrated acceptable reliability in this study ( $\alpha = 0.73$ )

2. *Scales of Psychological Well-being (Ryff & Keyes, 1995)*: The scales of psychological well-being (SPWB) were developed to measure the six dimensions of psychological well-being namely autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. In the shortest version of the scale, eighteen items assess six dimensions of psychological well-being (three items per dimension). It is a six-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Six items were reverse coded. All the eighteen items of six dimensions were added to attain the PWB score. This short version of Scales of Psychological Well-Being was found to be a valid and reliable measure of psychological well-being ( $\alpha = 0.69$ ).

3. *Academic Performance*: The Academic Performance of the students was assessed in the terms of their term end exam CGPA. We

recorded the CGPA of the candidate for two successive term-end exams and averaged them for getting the Academic Performance Score.

### Procedure

All necessary permission regarding data collection was taken from the school administration. The student was personally contacted and the study aimed to explain to them. When the students agreed to participate in the study a booklet containing the above scales was given to them for the response. The participants were not paid for their participation in the study.

*Data Analytic Strategy for Hypothesis Testing*: Based on Baron and Kenny's (1986) recommendation mediated regression analysis was carried out to determine the relationship between mindfulness and academic performance as mediated by psychological well-being. In this analysis dependent variable (Academic Performance) is regressed on the independent variable (mindfulness). In the second step, the mediator (Psychological Well Being) is regressed on the independent variable. In the last step, the dependent variable is regressed consecutively (hierarchical) on both the meditational and independent variables. At each step, there must be a significant ( $p \leq 0.05$ ) effect and the effect of the independent variable on the dependent variable must be less in the third equation than in the first equation. Full mediation is supported when the independent variable has no significant ( $p \leq 0.05$ ) effect on the dependent variable when the mediator variable is controlled, whereas partial mediation is indicated if the effect of the independent variable is reduced but still significant ( $p \leq 0.05$ ) when the mediator variable is controlled (Baron & Kenny, 1986).

### Results

Means, standard deviations (SD), and inter-correlations among the variables are shown in Table 1. The reliability results that indicated the Cronbach's alpha ( $\alpha$ ) values for mindfulness (CASM-R) and psychological well-being (SPWB) were 0.73, and 0.69 respectively. There were significant positive relationships among mindfulness, psychological well-being, and academic performance.

**Table 1 Mean, standard deviation and correlations among variable (N=144)**

Variables	Mean	SD	1	2	3
Mindfulness	24.26	3.84	(.73)		
Psychological Well-Being	73.91	9.67	.324**	(.69)	
Academic Performance	7.67	1.01	.255**	.323**	--

Cronbach's alphas are represented along the diagonal in the parentheses

\*P<.05 \*\*P<.01

**Table 2 Mediated regression analysis**

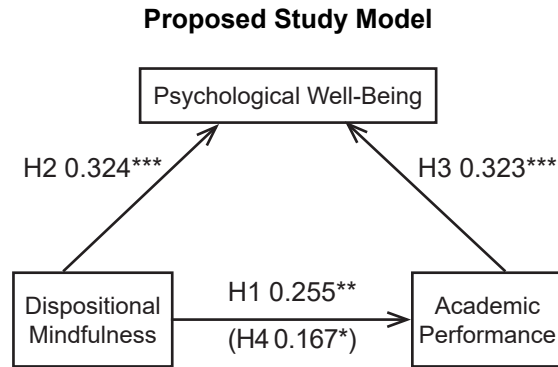
Independent Variables	Dependent Variables
	Academic Performance
Mindfulness	Mediating Variable - Psychological Well-Being
Step 1 (Mindfulness>Academic Performance)	.255**
Step 2 (Mindfulness>Psychological Well-Being)	.324***
Step 3a (Psychological Well-Being>Academic Performance)	.323***
Step 3b (Mindfulness > Academic Performance)	.167*
Sobel Test	2.941**
Aroian Test	2.899**

\*P<.05 \*\*P<.01 \*\*\*P<.001

Note: Standardized β value is reported in table

Mediated regression analysis was performed to test the proposed hypotheses. Results recorded in table 2 show that mindfulness was significantly positively associated with academic performance (H1 is supported) and psychological well-being (H2 is supported). Psychological well-being was significantly positively associated with academic performance (H3 is supported). The result further indicates that psychological well-being was partially mediated the relationship

between mindfulness and academic performance (H4 is partially supported).



\*P<.05 \*\*P<.01 \*\*\*P<.001

Note: The standardized regression coefficient between dispositional mindfulness and academic performance, controlling for psychological well-being, is in parentheses.

**Figure 1: Path Coefficient (Standardized) for the Dispositional Mindfulness/ Psychological Well Benign /Academic Performance Mediation Analysis**

**Discussion**

The main purpose of the present study was to examine the role of dispositional mindfulness in academic performance and psychological well-being. The mediating role of psychological wellbeing in dispositional mindfulness and academic performance relationship was also examined.

**Dispositional Mindfulness and Academic Performance**

A significantly positive association between mindfulness and academic performance was the first major finding of the present study. Our result is following previous studies that have demonstrated the positive relationship between mindfulness and academic performance (Lin & Mai, 2018; McCloskey, 2015). Researchers argue that mindfulness enhanced emotional awareness (Bishop et al., 2004), reduces stress and anxiety (McCloskey, 2015), or increases attention and memory (Sample, Thomas, & Marco, 2017), which lead to increased academic performance. Although, mindfulness might also have an effect on academic performance by

enhancing specific skills, such as attention or inquiry and openness, which can improve a student's ability to perform well (Docksai, 2013).

Increased mindfulness could prevent the reallocation of working memory resources to anxious thoughts, and enable attention to be shifted from task-related stressors to task-related information needed to complete the activity at hand. Mrazek et al. (2013) demonstrated that mind wandering, or switching the focus of attention to non-task-related concerns such as environmental stressors, could obstruct academic performance.

#### ***Dispositional Mindfulness and Well-Being***

The second major finding of the present study was that mindfulness was significantly positively associated with psychological well-being among adolescents. Our result is supported by several studies that have shown significant negative associations of dispositional mindfulness with stress (Brown, Weinstein, & Creswell, 2012), anxiety (Hou, Ng, & Wan, 2015), and significant positive associations of dispositional mindfulness with psychological well-being (Bajaj, Gupta, & Pande, 2016) and subjective well-being (Hepburn, Carroll, & McCuaig, 2021).

Mindfulness is present-centered attention focused on the "here and now" of our experience. It is nothing but seeing clearly what is going in our lives when our perception is organized by wishes, desires, and needs. It is an antidote for the consciousness state that is governed by rules and routines which is called a state of mindlessness. It makes one focus on what is happening "right now". It does not mean living for the moment without concern for the forthcoming events. Further, increased focus on the present moment prevents us from wandering in the past, cogitating and regretting, or in the future, inventing hypothetical anxiety-provoking circumstances.

#### ***Psychological Well-Being and Academic Performance***

A significant positive association between psychological well-being and academic performance was the third major finding of our study. This finding has been supported by

previous studies (Salami, 2010; Turashvili, & Japaridze, 2012; Pietarinen, Soini & Pyhältö, 2014). In recent work, Ramirez-Coronel, et al. (2020) found that a high level of psychological well-being is associated with better academic performance. Bhatt (2021) also reported that Psychological Well-being can discriminate between high achievers, average achievers, and low achievers in science.

A significant positive relationship between psychological well-being and academic performance can be explained by taking the underlying conception of basic needs into account. According to the Self-Determination Theory (Deci & Ryan, 2000), higher levels of psychological wellbeing can be seen as an indicator for sufficient fulfillment of basic needs. Consecutively, this satisfaction of basic needs promotes intrinsic motivation. Finally, intrinsic motivation again has been proven to have a reciprocal positive relationship with academic achievement. (Taylor et al., 2014).

#### ***Mediational Mechanism***

Besides direct effect in our study, it has been found that mindfulness may also enhance the academic performance of the students indirectly through psychological well-being. Previous studies reported that Dispositional mindfulness has been positively associated with psychological well-being (Bajaj et al., 2016) whereas a high level of psychological well-being is associated with better academic performance (Ramírez-Coronel, A. et al., 2020)). Our study presents evidence of the relationship between dispositional mindfulness and academic achievement through psychological well-being.

Mindfulness includes the processes of regulating, sustaining, and switching attention while inhibiting elaborative processing (Bishop et al., 2004). Parto and Besharat, (2011) stated that the act of mindfulness may help individuals decrease their emotional reactivity and use their body as a support and a primary warning measure for acknowledgement and humanizing of emotional and cognitive reactions. Through improving, executive cognition, especially attention control, mindfulness may account for psychological well-being. In other words, it

improves psychological well-being by promotion of cognitive processes, such as attention control, reducing rumination and, improving mindful awareness, emotion, executive cognition, and working memory (Chambers, Lo & Allen, 2008). A high level of psychological well-being ultimately helps students to perform well in their academics as this executive cognition is really important for academic performance.

### **Limitations, Implications, and Future research**

This study is not free from limitations. First, the data in our study were obtained by shortened versions of Scales of Psychological Well Being. Hence, the scales may not adequately reflect the scales of the original versions of the questionnaire. Second, to measure psychological well-being on a day-to-day basis, we selected one questionnaire (i.e., the shortened version of the Scales of Psychological Well Being). Meanwhile psychological wellbeing covers a wide spectrum of mental states, some studies have chosen to assess psychological well-being with multiple measures. Hence, it is plausible that the shortened version of the scale does not cover the whole spectrum of psychological wellbeing. Third, we were forced to exclude a considerable number of participants from our analysis due to unresponsiveness on a scale. Thus, analysis was conducted on a small sample size which limited the generalization of the obtained results to other populations. Fourth, to measure the academic performance we rely only on CGPA which limited the generalization of our results.

It is important to explore the relationship between dispositional mindfulness and psychological well-being and academic performance because it is likely to have implications for the student's self-management of academic performance and well-being.

With growing pressure on mental health services, there is an increasing need to promote a proactive approach to health self-management (Gilbert 2015). Dispositional mindfulness might be a resource that could be relied on in times of stress or symptomology to facilitate adaptive management of health and well-being (Bajaj et al. 2016; Brown et al. 2012). It has been shown that dispositional mindfulness can be enhanced

through mindfulness meditation training (Quaglia et al. 2016). Therefore, as our research suggests a positive link between dispositional mindfulness psychological wellbeing, and academic performance more emphasis could be put on the promotion of mindfulness training as a psychosocial intervention for those with low dispositional mindfulness. This could be useful not just with adolescents but also potentially in college/ universities to enhance this adaptive trait within the younger generation.

It is of importance to gain comprehension of the complex relationship between mindfulness, academic performance, and psychological wellbeing. If realized, the effectiveness of mindfulness-based interventions can be increased. Therefore, we recommend future studies investigate this relationship through longitudinal multilevel analysis. This analysis provides the opportunity to inspect variations of mindfulness, psychological wellbeing, and academic performance within and between individuals over successive periods.

### **Conclusions**

In sum, we can say that dispositional mindfulness is a powerful and proactive factor that can play a significant role in students' academic performance by enhancing their psychological well-being.

### **References**

- Anderson, N. D., Lau, M. A., Segal, Z. V., & Bishop, S. R. (2007). Mindfulness based stress reduction and attentional control. *Clinical Psychology & Psychotherapy, 14*(6), 449-463.
- Bajaj, B., Gupta, R., & Pande, N. (2016). Self-esteem mediates the relationship between mindfulness and well-being. *Personality and Individual Differences, 94*, 96-100. doi:10.1016/j.paid.2016.01.020
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173-1182. doi:10.1037/0022-3514.51.6.1173
- Berger, C., Alcalay, L., Torretti, A., & Milicic, N. (2011). Socio-emotional well-being and academic achievement: Evidence from a multilevel approach. *Psicologia: Reflexão e*

- Crítica*, 24(2), 344–351. doi:10.1590/S0102-79722011000200016
- Bhat, B. A. (2021). Psychological Well-Being of Senior Secondary School Students in Relation to Gender and Academic Achievement: An Empirical Study. *Shanlax International Journal of Education*, 9, (2), 96-101. doi:10.34293/education.v9i2.3704
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., Velting, D., & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230–241. doi:10.1093/clipsy.bph077
- Black, D. S. (2014). Mindfulness-based interventions: An antidote to suffering in the context of substance use, misuse, and addiction. *Substance Use & Misuse*, 49(5), 487-491. doi: 10.3109/10826084.2014.860749
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822. doi: 10.1037/0022-3514.84.4.822
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18(4), 211–37. doi:10.1080/10478400701598298
- Brown, K. W., Weinstein, N., & Creswell, J. D. (2012). Trait mindfulness modulates neuroendocrine and affective responses to social evaluative threat. *Psych neuroendocrinology*, 37(12), 2037–2041. doi:10.1016/j.psyneuen.2012.04.003
- Burns R. (2016) Psychosocial Well-being. In: Pachana N. (Eds) Encyclopedia of Geropsychology. Springer, Singapore. doi:10.1007/978-981-287-080-3\_251-1
- Calvete, E., Orue, I., & Sampedro, A. (2017). Does the acting with awareness trait of mindfulness buffer the predictive association between stressors and psychological symptoms in adolescents? *Personality and Individual Differences*, 105(15), 158–163. doi:10.1016/j.paid.2016.09.055
- Chambers, R., Lo, B. C. Y., & Allen, N. B. (2008). The impact of intensive mindfulness training on attentional control, cognitive style, and affect. *Cognitive Therapy and Research*, 32(3), 303–322. doi:10.1007/s10608-007-9119-0
- Cooke, R., Bewick, M. B., Barkham, M., Bradley, M., & Audin, A. (2006). Measuring, Monitoring and Managing the Psychological Well-Being of First Year University Students. *British Journal of Guidance & Counselling*, 34(4), 505-517. doi:10.1080/03069880600942624
- Davis, D. M., Hayes, J. A. (2012). What are the benefits of mindfulness? *American Psychological Association*, 43 (7), 64. Retrieved from <http://www.apa.org/monitor/2012/07-08/ce-corner.aspx>
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. doi:10.1207/S15327965PLI1104\_01
- Docksai, R. (2013). A mindful approach to learning. *The Futurist*, 47, 8-10.
- Evans, D. R., Baer, R. A., & Segerstrom, S. C. (2009). The effects of mindfulness and self-consciousness on persistence. *Personality and Individual Differences*, 47(4), 379–382. doi:10.1016/j.paid.2009.03.026
- Feldman, G., Hayes, A., Kumar, S., Greeson, J., & Laurenceau, J. P. (2007). Mindfulness and emotion regulation: The development and initial validation of the Cognitive and Affective Mindfulness Scale Revised (CAMS-R). *Journal of Psychopathology and Behavioral Assessment*, 29(3), 177-190. doi:10.1007/s10862-006-9035-8
- Frewen, P. A., Evans, E. M., Maraj, N., Dozois, D. J. A., & Partridge, K. (2008). Letting go: Mindfulness and negative automatic thinking. *Cognitive Therapy and Research*, 32, 758–774. doi:10.1007/s10608-007-9142-1
- Gilbert, H. (2015). Mental health under pressure. Retrieved from: <https://www.kingsfund.org.uk/publications/mental-health-under-pressure>.
- Hepburn, S. J., Carroll, A., & McCuaig, L. (2021). The Relationship between Mindful Attention Awareness, Perceived Stress, and Subjective Wellbeing. *International journal of environmental research and public health*, 18(23), 12290. doi:10.3390/ijerph182312290
- Hou, W. K., Ng, S. M., & Wan, J. H. (2015). Changes in positive affect and mindfulness predict changes in cortisol response and psychiatric symptoms: a latent change score modeling approach. *Psychology & Health*, 30(5), 551–567. doi:10.1080/08870446.2014.990389
- Huppert, F.A. (2009), Psychological Well-being: Evidence Regarding its Causes and Consequences. *Applied Psychology: Health and Well-Being*, 1, 137-164. doi:10.1111/j.1758-0854.2009.01008.x



- Kabat-Zinn, J. (2003) Mindfulness-Based Interventions in Context: Past, Present, and Future. *Clinical Psychology: Science and Practice*, 10, 144-156. doi:10.1093/clipsy.bpg016
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144–156. doi:10.1093/clipsy.bpg016
- Lin, J. W., & Mai, L. J. (2018). Impact of mindfulness meditation intervention on academic performance. *Innovations in Education and Teaching International*, 55, 366–375. doi:10.1080/014703297.2016.1231617
- Lomas, T., Medina, J. C., Ivtzan, I., Rupprecht, S., & Eiroa-Orosa, F. J. (2019). A systematic review and meta-analysis of the impact of mindfulness-based interventions on the well-being of healthcare professionals. *Mindfulness*, 10(7), 1193–1216. doi:10.1007/s12671-018-1062-5
- McCloskey, L. E. (2015). Mindfulness as an intervention for improving academic success among students with executive functioning disorders. *Procedia-Social and Behavioral Sciences*, 174, 221–226. doi:10.1016/j.sbspro.2015.01.650.
- Miralles-Armenteros, S., Chiva-Gómez, R., Rodríguez-Sánchez, A., & Barghouti, Z. (2021). Mindfulness and academic performance: the role of compassion and engagement. *Innovation in Education and Technical International*, 58, 3–13. doi: 10.1080/14703297.2019.1676284
- Mrazek, M. D., Franklin, M. S., Phillips, D., Baird, B., & Schooler, J. W. (2013). Mindfulness training improves working memory capacity and GRE performance while reducing mind wandering. *Psychological Science*, 24(5), 776-781. doi:10.1177/0956797612459659
- Parto, M., & Ali Besharat, M. (2011). Mindfulness, Psychological Well-Being and Psychological Distress in Adolescents: Assessing the Mediating Variables and Mechanisms of Autonomy and Self-Regulation. *Procedia—Social and Behavioural Sciences*, 30, 578-582. doi:10.1016/j.sbspro.2011.10.112
- Van Petegem, K., Creemers, B., Aelterman, A., & Rosseel, Y. (2008). The importance of pre-measurements of wellbeing and achievement for students' current wellbeing. *South African Journal of Education*, 28(4), 451-468.
- Pietarinen, J., Soini, T. & Pyhältö, K. (2014). Students' emotional and cognitive engagement as the determinants of wellbeing and achievement in school. *International Journal of Educational Research*, 67, 40-51. doi:10.1016/j.ijer.2014.05.001
- Quaglia, J. T., Braun, S. E., Freeman, S. P., McDaniel, M. A., & Brown, K. W. (2016). Meta-analytic evidence for effects of mindfulness training on dimensions of self-reported dispositional mindfulness. *Psychological Assessment*, 28(7), 803–818. doi:10.1037/pas0000268
- Ramírez-Coronel, A. A., Martínez-Suárez, P. C., Minchala-Urgilés, R. E., & Contreras-Sanango, M. A. (2020). Psychological well-being and academic performance of students in the career of nursing undergraduate. *Espirales Revista Multidisciplinaria De investigación*, 4 (34). doi:10.31876/er.v4i34.747
- Ryff, C. D. (2014). Psychological Well-Being Revisited: Advances in the Science and Practice of Eudaimonia. *Psychotherapy and Psychosomatics*, 83, 10-28. doi:10.1159/000353263
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727. doi:10.1037/0022-3514.69.4.719
- Salami O. S. (2010). Emotional intelligence, self-efficacy, psychological well-being and students attitudes: implications for quality education. *European Journal of Educational Studies*, 2, 247-257
- Sample J., Thomas M., & Marco R.F. (2017) A randomized controlled pilot intervention study of a Mindfulness-Based Self-Leadership Training (MBSLT) on stress and performance. *Mindfulness*, 8, 1393–1407. doi:10.1007/s12671-017-0715-0
- Schmertz, S. K., Anderson, P. L., & Robins, D. L. (2009). The relation between self-report mindfulness and performance on tasks of sustained attention. *Journal of Psychopathology and Behavioral Assessment*, 31(1), 60–66. doi:10.1007/s10862-008-9086-0
- Shapiro, S. L., Oman, D., Thoresen, C. E., Plante, T.G., & Flinders, T. (2008). Cultivating

- Mindfulness: Effects on Well-Being. *Journal of Clinical Psychology*, 64, 840-862. doi: 10.1002/jclp.20491
- Taylor, G., Jungert, T., Mageau, G. A., Schattke, K., Dedic, H., Rosenfield, S., & Koestner, R. (2014). A self-determination theory approach to predicting school achievement over time: The unique role of intrinsic motivation. *Contemporary Educational Psychology*, 39(4), 342–358. doi:10.1016/j.cedpsych.2014.08.002
- Trucchia, S. M., Lucchese, M. S., Enders, J. E., & Fernández, A. R. (2013). Relationship between academic performance, psychological well-being, and coping strategies in medical students. *Revista de la Facultad de Ciencias Medicas (Cordoba, Argentina)*, 70(3), 144–152.
- Turashvili, T., & Japaridze, M. (2012). Psychological well-being and its relation to the academic performance of students in a Georgian context. *Problems of Education in the 21st Century*, 49, 73-80. doi:10.33225/pec/12.49.73
- Waters, L., Barsky, A., Ridd, A., & Allen, K. (2015). Contemplative education: A systematic, evidence-based review of the effect of meditation interventions in schools. *Educational Psychology Review*, 27(1), 103–134. doi:10.1007/s10648-014-9258-2
- Zeidan, F., Johnson, S. K., Diamond, B. J., David, Z., & Goolkasian, P. (2010). Mindfulness meditation improves cognition: Evidence of brief mental training. *Consciousness and Cognition*, 19 (2), 597–605. Doi: 10.1016/j.concog.2010.03.014.

**Akhilendra K. Singh**, Ph.D., Assistant Professor of Psychology, DAV PG College, Banaras Hindu University, Varanasi. E-mail-akhilendrabhu@gmail.com.

**Sadhana Singh**, Ph.D., Lecturer in Psychology, GGIC, Sadat Ghazipur; Email-singhsadhana85@gmail.com