Mindfulness as Mediator of the Effects of Learned Helplessness and Self-Handicapping on Flourishing

Margarita Bakracheva

Sofia University St. Kliment Ohridski, Bulgaria

Abstract

Learned helplessness and self-handicapping are described as ineffective strategies in the course of self-regulation and in relation to academic and overall performance. At the same time positive psychology focusses on the multiple benefits of well-being and flourishing for the optimal development in long-term. Numerous evidence-based examples for promotion of mindful mindset report positive effects on flourishing. The direct and indirect effects of learned helplessness and self-handicapping on flourishing, and the mediating role of mindfulness are measured in a convenient sample of 225 pre-service and in-service teachers. Results confirm that learned helplessness and self-handicapping are negatively related to flourishing and mindfulness. Mindfulness has full mediating effect for the relation of learned helplessness and flourishing and partial mediating effect for the relation of self-handicapping and flourishing. These effects are considered pathways to learning how to flourish. In situations of insecurity, unpredictability, and perceived lack of control that usually provoke learned helplessness and self-handicapping promotion of mindful mindset and proactive attitude can foster flourishing. Flourishing on its turn underlies better performance of teachers and students in long-term. This suggests possible strategies for integration and implementation of mindfulness in educational setting.

Keywords: *flourishing, mindfulness, self-handicapping, learned helplessness*

1. Introduction

Learned helplessness is defined as passive behaviour and inability to learn when exposed to situations and events, perceived as stressful, uncontrollable and inevitable [1]. There are three types of deficiencies related to learned helplessness. The first is the cessation of attempts to avoid the unwanted stimulus, the motivational deficit. The second is not learning from the experience of reaching a positive decision due to the inability to recognize that control is possible, the cognitive deficit. The third is defined as emotional deficit [1], [2]. Research confirm that lack of control leads to motivational, cognitive and emotional reactions [3], [4], [5]. In educational setting students with learned helplessness feel discouraged and usually prefer to give up [6]. Learned helplessness has been studied in relation to students' motivation and achievement, and in relation to the role of teachers who can reduce learned helplessness [7]. Teachers' role has been demonstrated as reducing the overall anxiety and preventing learned helplessness among students, or teachers are viewed as positive motivators [8].

Self-handicapping describes the process of actively defending self-esteem in the event of perceived potential danger. Behavioural responses cover a wide range, including test anxiety [9], occurrence of physical symptoms such as illness [10], search for real or imaginary causes, explanation of facts and events [11], [12]. All they are aimed at the common motive of self-defence and self-presentation [13]. There are two forms of self-handicapping, behavioural and verbal. Behavioural self-handicapping are real actions that interfere with good performance, and passive behaviour is expressed in non-exertion or little effort to complete the task [11]. Self-declared obstacles have a defensive function - to protect self-esteem by shifting attention to the barrier [14], however in the long run this is reported to have a negative impact on well-being [15]. Self-handicapping is associated with depression, low self-esteem, strong orientation towards others, perfectionism, social anxiety, poor academic performance, and deteriorating relationships with others [16]. A meta-analysis of research on self-handicapping as a commonly used strategy to regulate threat to self-esteem in academic settings outline multiple antecedents that have a place and highlights that educational interventions to enhance academic achievement have to consider prevention of self-handicapping [17], [18]. Self-handicapping is broadly studied in relation to personal motivation and self-esteem in academic context [19]. Concerning

practical implications is discussed like for the learned helplessness that teachers can help students identify the factors they have control over and reduce the tendency to self-handicapping [17], [20].
Flourishing is the optimal level of perceived well-being. Seligman's model for human flourishing is based on his idea of authentic happiness [21]. Individuals are at their happiest (i.e. flourishing) when they are high on PERMA - the acronym for flourishing components - positive emotions, engagement, positive relationships, meaning and accomplishments [22]. To flourish means to experience self-fulfilment and positive emotions, accomplish meaningful goals, be engaged, and have good connections with others. It reflects both the result, but also the continuous engagement in authentic behaviours. Flourishing is not fixed, but something that can be learnt and pursued and the most effective way is through interventions, aimed at flourishing, that can be fostered at an early stage in the individuals' development [22]. Flourishing in education becomes important at the background of the negative tendencies of burnout, mobbing and stress among educators, especially during the pandemic. Within the framework of positive psychology, the idea is promotion and learning how to flourish, which concerns both teachers and students. Education for flourishing and flourishing in education is discussed [23] and attention given to the factors that contribute to teachers flourishing [24].
The broadest definition of mindfulness is active awareness at all times. Some definitions are active awareness of current reality, conscious directed control [25]; cognitive process of creating new categories, openness to new information and awareness of the existence of more than one perspective [26]. The focus is on the present moment, the awareness of partial self-control and taking responsibility for one's own decisions and learning to tolerate anxiety (and a direct attitude towards maintaining mental well-being [27]. In most definitions mindfulness is considered a combination of awareness and acceptance - without sinking into the process of rumination, but being focused on the present, the invaluable, purposefully focused attention, experience and search and freedom from conditioning. This is everyday behaviour, but in order to become an attitude, it must be mastered. Mindfulness, as well as flourishing, can be learned - in a formal and informal way. There are a lot of forms of mindfulness practicing and trainings, all of which outline positive outcomes. Especially during the last decade a lot of recommendations are given for practicing mindfulness in educational setting [28]. Mindfulness in schools is increasingly popular, and programmes, interventions, and accompanying research on mindfulness in schools are increasing exponentially [29] and positive outcomes largely discussed [30].

2. Research Design

The objective of this study is to trace the relations of learned helplessness and self-handicapping to flourishing and mindfulness. We have three hypotheses: H1. Learned helplessness and self-handicapping as protective, ineffective coping strategies, will be related to lower flourishing and mindful mindset; H2: Mindfulness will promote flourishing; and H3: Mindfulness can mediate the effects of learned helplessness and self-handicapping on flourishing (fig. 1).

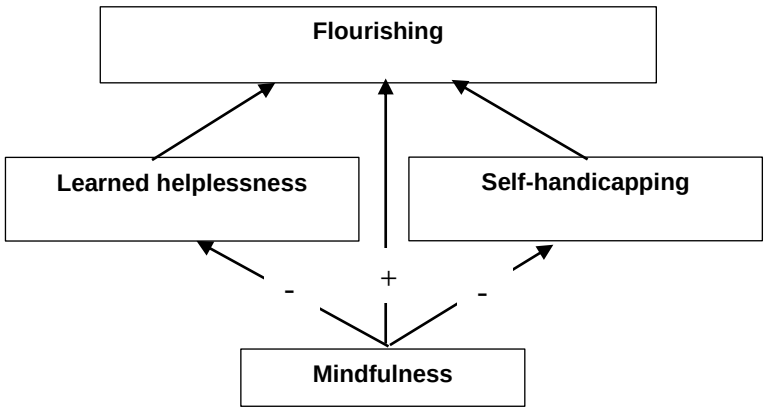

Figure 1. Model of the study

2.2. Sample

The convenient sample comprises 225 pre-service and in-service teachers. The participants were volunteers and did not receive any reward or credit for taking part in the study and have given their informed consent to participate in the study. 13% were man, 82% women and 5% indicated that they did not want to answer. The age range of the participants is: 39% at the age of 20-25, 17% at the age of 25-35, 21% at the age of 35-45, 17% at the age of 45-55, and 6% over the age of 55.

2.3. Scales

We have included 4 scales for the study, all having 5-point Likert response scale: 1) The Flourishing Scale [31] with α = .839; 2) Cognitive and Affective Mindfulness Scale – Revised (CAMS-R) [32] with α = .579; 3) Learned helplessness scale [33] with α = .901; and 4) Self-handicapping scale [34] with α = .749.

2.4. Data Analysis

Data processing was performed using SPSS 25 with Process 3.2. Analyses include descriptive and correlational analysis, reliability analysis, regression, and mediation analysis.

3. Results

Descriptive statistics and partial correlations with control on individual variables are presented in Table 1. Variance is low to moderate. Learned helplessness and self-handicapping have means below and mindfulness and flourishing above the theoretical mean of the scale. Mindfulness and flourishing have positive correlations, as well as learned helplessness and self-handicapping. Learned helplessness and self-handicapping have negative correlations with mindfulness and flourishing.

Table 1 Descriptive statistics and correlations (p < .001)

	Min	Max	Mean	SD	Variance	Self-handicapping	Mindfulness	Flourishing
Learned helplessness	1.00	3.95	2.17	.56	.313	.646	-.470	-.536
Self-handicapping	1.72	4.04	2.82	.39	.153		-.308	-.345
Mindfulness	2.20	4.70	3.74	.46	.213			.546
Flourishing	2.63	5.00	4.00	.52	.268			

The full mediating effect of mindfulness for the relation of learned helplessness and flourishing and partial mediating effect for the relation of self-handicapping and flourishing is confirmed by 4 steps hierarchical regression [35].

The first regression analysis reveals that learned helplessness and self-handicapping have a significant effect on flourishing - learned helplessness: (R2 = .298, F = 49.177; p <.01; β = -.546, t = -7.013, p <.01), and self-handicapping (R2 = .132, F = 18.282; p <.01; β = -.374, t = -4.339, p <.01).

The second regression analysis confirmed that the learned helplessness and self-handicapping significantly predict the mediator mindfulness. Learned helplessness predicts mindfulness (R2 = .229), F = 35.705; p <.01; β = -.485, t = -5.975, p <.01). Self-handicapping is also a significant predictor of mindfulness (R2 = .107, F = 15.092; p <.01; β = -.339, t = -3.885, p <.01).

The third regression analysis confirmed the effect of mindfulness on flourishing (R2 = .327, F = 56.441; p <. 01; β = 572, t = 7.513, p <.01). The results in table 2 outline the hierarchical regression analyses, describing the expected mediating effect of mindfulness for the relation of learned helplessness and flourishing and for the relation of self-handicapping and flourishing.

Table 2. Mediating effect of mindfulness for the relation of learned helplessness and flourishing and for the relation of self-handicapping and flourishing

Model	stand. Beta	t value	sig.	95.0% CI for B		Adjusted R Square	F value and sig.
				LLCI	ULCI		
Learned helplessness							
Step 1							
(Constant)		31.582	.000	4.351	5.536	.292	49.177 p < .01
learned helplessness	-.546	-7.013	.000	-.620	-.169		
Step 2						.472	53.199; p < .01

(Constant)		2.716	.008				
learned helplessness	-.093	-1.158	.250	-.620	-.169		
mindfulness	.228	3.189	.002	.389	.741		
Self-handicapping							
Step 1							
(Constant)		16.625	.000	4.751	6.036	.132	18.828; p < .01
self-handicapping	-.374	-4.339	.000	-.475	-.061		
Step 2						.410	41.689; p <.01
self-handicapping	-.203	-2.566	.012	-.475	-.061		
mindfulness	.503	6.364	.000	.389	.741		

The first hierarchical analysis reveals that in step 1 the learned helplessness significantly predicts flourishing. The effect becomes insignificant with the inclusion of mindfulness (step 2). The full mediating effect is accounted for the relationship between learned helplessness and flourishing ($z = 3.50$, $p < .01$). With regard to self-handicapping, it retains its independent effect after adding mindfulness, however the effect decreases. The conducted analyses show that the effect of self-handicapping on flourishing is partially mediated by mindfulness.

4. Discussion

All three hypotheses were confirmed: Learned helplessness and self-handicapping predict lower perceived flourishing and mindful mindset. Mindfulness on its hand promotes flourishing and has effect on learned helplessness and self-handicapping. The effect of learned helplessness on flourishing is fully mediated and of self-handicapping on flourishing – partially mediated by mindfulness. The perceived and generalized lack of control and anxiety about the unknown provoke learned helplessness and, respectively, self-handicapping and the related negative outcomes. This gives grounds to make a possible assumption about the role of mindful mindset, leading to more adaptive coping and higher flourishing.

Despite the limitations of this study – in particular the small sample, comprising only teachers, and the low learned helplessness and self-handicapping for the respondents, we consider the results give some important highlights for school setting. Mindful mindset and flourishing are important both for teachers and students and the outlined pathway of promoting flourishing and reducing learned helplessness and self-handicapping by the means of fostering mindfulness has practical implications. The confirmed effect of mindfulness programmes and interventions [27], [28], [30] and the accounted role of teachers [7], [8], [17], [20] for prevention of ineffective give raise to a wide range of interventions that can be implemented.

They can be equally beneficial for students and teachers and promote personal proactive attitude, performance and well-being in long-term. Well-being of teachers is crucial for their interaction and support of students. Furthermore, the accounted role of teachers for positive self-regulation and self-performance modelling by prevention of learned helplessness and self-handicapping [22], [24] is an important line of consideration.

REFERENCES

[1] Seligman M. E. P., *Helplessness: On depression, development, and death.* San Francisco, CA: Freeman, 1975.

[2] Peterson C. & Seligman M. E., Causal explanations as a risk factor for depression: Theory and evidence. *Psychological Review,* 91(3), 1984, pp. 347–374. doi: 10.1037/0033-295X.91.3.347.

[3] Peterson C., Maier S. F., & Seligman M. E. P., *Learned Helplessness: A Theory for the Age of Personal Control*. Oxford: Oxford University Press., 1993.

[4] Maier S. F. & Watkins L. R., Stressor controllability and learned helplessness: the roles of the dorsal raphe nucleus, serotonin, and corticotropin-releasing factor. *Neuroscience & Biobehavioral Reviews*, 29(4-5), 2005, pp. 829–841.

[5] Peterson C., *Learned helplessness*. Wiley Online Library, 2010

[6] Yates S., Teacher identification of student learned helplessness in mathematics. *Math Ed Res J* 21, 2009, pp.86–106. doi: 10.1007/BF03217554.

[7] He H., Students' Learned Helplessness and Teachers' Care in EFL Classrooms. Frontiers in Psychology, 12, 2921. doi: 10.3389/fpsyg.2021.806587.

[8] Raufelder D., Regner N. & Wood M. A.,Test anxiety and learned helplessness is moderated by student perceptions of teacher motivational support. *Educational Psychology*, 38(1), 2018, pp.54–74. doi: 10.1080/01443410.2017.1304532.

[9] Smith T. W. ,Snyder C. R. & Handelsman M. M., On the self-serving function of an academic wooden leg: Test anxiety as a self-handicapping strategy. *Journal of Personality and Social Psychology*, 42, 1982, pp. 314–321.

[10] Smith T. W., Snyder C. R. & Perkins S. C., The self-serving function of hypochondriacal complaints: Physical symptoms as self-handicapping strategies. *Journal of Personality and Social Psychology*, 44, 1983, pp. 787–797.

[11] Rhodewalt F. & Fairfield M. L., Claimed self-handicapping and the self-handicapper: The relation of reduction in intended effort to performance. *Journal of Research in Psychology,* 25, 1991, 402-407.

[12] Tice D. M. & Baumeister R. F., Self-esteem, self-handicapping, and self-presentation: The strategy of inadequate practice. *Journal of Personality*, *58*, 1990, pp. 443–464.

[13] Tice D. M., Esteem protection or enhancement? Self-handicapping motives and attributions differ by trait self-esteem. Journal of Personality and Social Psychology, 60, 1991, pp. 711–725. doi: 10.1037/0022-3514.60.5.711.

[14] McCrea, S. M. & Hirt, E. R., The Role of Ability Judgments in Self-Handicapping. *Personality and Social Psychology Bulletin,* 27(10), 2001, pp. 1378-1389.

[15] Zuckerman M., & Tsai F.F., Costs of self-handicapping. *Journal of Personality,* 73, 2005, pp. 411-442.

[16] Arazzini-Stewart M., De George-Walker L., Self-handicapping, perfectionism, locus of control and self-efficacy: A path model. *Personality and Individual Differences*, 66*,* 2014, pp. 160-164.

[17] Schwinger M., Wirthwein L., Lemmer G. & Steinmayr R., Academic self-handicapping and achievement: A metaanalysis. *Journal of Educational Psychology*, 106(3), 2014, pp. 744-761. doi: 10.1037/a0035832.

[18] Török, L., Szabó, Z. & Toth, L., A critical review of the literature on academic self-handicapping: theory, manifestations, prevention and measurement. *Social Psychology of Education,* 21, 2018. doi: 10.1007/s11218-018-9460-z.

[19] Thomas C. & Gadbois S, Academic self-handicapping: The role of self-concept clarity and students' learning strategies. *The British journal of educational psychology,* 77, 2007, pp. 101-19. 10.1348/000709905X79644.

[20] Siegel P.A., Scillitoe J., & Parks-Yancy R., Reducing the tendency to self-handicap: The effect of self-affirmation. *Journal of Experimental Social Psychology*, 41, 2005, pp. 589-597.

[21] Seligman, M. E. P., *Authentic happiness*. New York, NY: Free Press, 2002.

[22] Seligman M. E. P., *Flourish: A visionary new understanding of happiness and well–being*. New York, NY: Free Press, 2011.

[23] Duraiappah A.K., van Atteveldt N.M., Borst G., Bugden S., Ergas O., Gilead T., Gupta L., Mercie J., Pugh K., Singh N.C., and Vickers E. A. (Eds.), Reimagining Education: The International Science and Evidence based Education Assessment. New Delhi: UNESCO MGIEP, 2022. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000380981

[24] Rehal B., & van Nieuwerburgh C., Understanding the factors that contribute to educator flourishing. *International Journal of Wellbeing*, 12(2), 2022, pp. 36-87. doi: 10.5502/ijw.v12i2.1931.

[25] Teasdale J., Segal Z., & Williams J., How does cognitive therapy prevent depressive relapse and why should attentional control (mindfulness) training help? *Behaviour Research and Therapy,* 33, 1995, pp. 25–39.

[26] Langer, E., *Mindfulness.* Cambridge, MA: Da Capo Press., 1989.

[27] Brown K. & Ryan R., The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology,* 84(4), 2003, pp. 822–848.

[28] Bailey N., Chambers R., Hassed C., Jones A., Owen J., & Wootten A., Evidence Based Guidelines for Mindfulness in Schools - a Guide for Teachers and School Leaders, 2018. Retrieved from from

https://static1.squarespace.com/static/5a2f40a41f318d38ccf0c819/t/5b28988170a6ad07781beeb9/1529387171804/smiling-mind-mindfulness-guidelines-for-schools-whitepaper.pdf

[29] Sheinman N. & Russo-Netzer P., Mindfulness in Education: Insights Towards an Integrative Paradigm, 2021, doi: 10.1007/978-3-030-64537-3_24.

[30] Gutierrez A.S., Krachman S.B., Scherer E., West M.R., & Gabrieli J.D., Mindfulness in the Classroom: Learning from a School-Based Mindfulness Intervention through the Boston Charter Research Collaborative, 2019. Retrieved from https://transformingeducation.org/wp-content/uploads/2019/01/2019-BCRC-Mindfulness-Brief.pdf

[31] Diener E., Wirtz D., Tov W., Kim-Prieto C., Choi D., Oishi S., & Biswas-Diener R., New measures of well-being: Flourishing and positive and negative feelings. *Social Indicators Research,* 39, 2009, pp. 247-266.

[32] Feldman G., Hayes A., Kumar S., Greeson J., & Laurenceau J., 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, 2007, pp. 177–190.

[33] Quinless F.W. & Nelson M.A.M., Development of a measure of learned helplessness. *Nursing Research,* 37(1), 1988, pp. 11-15.

[34] Rhodewalt F., Self-handicappers: Individual differences in the preference for anticipatory self-protective acts. In: R. Higgins, C. R. Snyder, and S. Berglas, (Eds.), *Self-Handicapping: The Paradox That Isn't*, New York: Guilford Press, 1990, pp. 69-106.

[35] Baron R. M. & Kenny D. A., The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1986, pp. 1173-1182. doi: 10.1037/0022-3514.51.6.1173.