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Mediating role of self-handicapping behaviors between academic Psychological Capital and academic performance among university students

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ABSTRACT. Questa ricerca ha investigato il ruolo mediatore dei comportamenti di self-handicapping tra il capitale psicologico (PsyCap) accademico e la performance accademica in un campione di studenti universitari (N = 300). Le componenti del PsyCap accademico sono state operazionalizzate tramite la Life Orientation Test-Academics Scale, la subscala di autoefficacia della Students' Approach to Learning Scale, la Academic Resilience Scale e la Academic Hope Scale, mentre i comportamenti di self-handicapping sono stati valutati attraverso la Self-Handicapping Scale-Revised. La media cumulativa dei voti degli studenti (CGPA) dei semestri precedenti ha fornito l'operazionalizzazione del loro rendimento accademico. Il modello di misurazione ha rivelato un buon adattamento ai dati e il modello strutturale ha evidenziato effetti diretti positivi del PsyCap accademico e l'effetto negativo dei comportamenti di self-handicapping sul rendimento accademico. I comportamenti di self-handicapping hanno mediato tra il PsyCap accademico e la CGPA: il PsyCap accademico ha migliorato la CGPA con la riduzione dei comportamenti di self-handicapping. È stata effettuata una riflessione sulle implicazioni dello studio e sulle raccomandazioni per la ricerca futura.

SUMMARY. The present research explored the mediating role of self-handicapping behaviors between academic PsyCap and academic performance in a purposive sample of university undergraduates (N = 300). The components of academic PsyCap were operationalized through Life Orientation Test-Academics Scale, the self-efficacy subscale from Students' Approach to Learning Scale, Academic Resilience Scale and Academic Hope Scale, while self-handicapping behaviors were assessed through Self-Handicapping Scale-Revised. Student's cumulative grade point average (CGPAs) in the previous semesters provided the operationalization of their academic performance. The measurement model of the study revealed a good fit to the data and the structural model indicated positive direct effects of academic PsyCap and the negative effect of self-handicapping behaviors on academic performance. Self-handicapping behaviors mediated between academic PsyCap and CGPA such that academic PsyCap improved CGPA by reducing self-handicapping behaviors. Implications of the study and recommendations for future research have been reflected upon.

Keywords: *Academic PsyCap, Self-handicapping behaviors, Academic performance*

INTRODUCTION

The positive performance impact of psychological capital in work and organizational settings has undoubtedly been established, yet the application of psychological capital for the improvement of academic performance needs to be empirically validated. Psychological capital plays a crucial role in improving the academic performance of students, and it is a very strong source for organizational excellence which is unfortunately still neglected in academic settings. Because of this negligence and lack of research on psychological capital within educational organizations, it is essential to continue the empirical investigation of psychological capital within academic settings. Therefore, Luthans and his colleagues' work (e.g., Luthans 2002; Youssef & Luthans, 2011) on psychological capital in organizational settings needs to be extended to the educational milieu, because students - the future employees need to foster psychological capital if they aspire to efficiently cope with the rapidly changing modern society and academic demands of study life. However, to the best of our knowledge, studies examining the associations among positive psychological capacities and academic achievement in university undergraduates are quite rare and it is even more scarce in Pakistan. Therefore, the present study aims at exploring and broadening the paradigm of POB (Positive Organizational Behavior; Luthans, 2002) to the realm of academic settings. The main objective of the study is to explore the dynamic interplay between PsyCap and the academic achievement of university students. Moreover, this study has adopted a balanced perspective of positive behavior by focusing on the human vulnerability of self-handicapping behavior in relation to PsyCap and academic achievement.

Psychological Capital (PsyCap)

Luthans, Youssef and Avolio (2007) have conceived psychological capital as a developmental and positive state of an individual accompanied by confidence/self-efficacy (one's belief that one could be successful at challenging tasks by putting necessary effort), optimism (an individual makes positive attribution that he/she will be successful in future), hope (an individual continues effort to achieve the goal despite difficulty or discouragement and change the direction to be successful); and resilience (when the individual is surrounded by problems then withstanding and even rebounding back for the accomplishment of success). Thus, PsyCap is a superordinate construct that is unique, measurable, developable, and can be capitalized upon for improving task performance.

The focal point of psychological capital is an individual's personal strengths and positive qualities. It is believed that it leads to a better and improved performance of the individual (Luthans, Youssef et al., 2007). PsyCap may motivate individuals intrinsically (Adil, Ameer & Ghayas, 2019; Siu, Bakker & Jiang, 2014) and according to the self-determination theory (Deci & Ryan, 2012), intrinsic motivation has a greater influence on performance related to goal achievement rather than any other external pressure. Students who have psychological capital know their goals because of which they are intrinsically motivated. They work with motivation and may experience a state of flow in doing their tasks resulting in better performance (Adil, Ameer & Ghayas, 2020).

– *Psychological capital and academic performance*. As suggested by the educational scholar, when the psychological resources are used in the educational setting, they result in positive behavior (Pajares, 2001). The scholars have found that hope, optimism, self-efficacy, and resiliency are the positive personal resources that lead to improved academic performance (Bandura, 1997; Masten & Reed, 2002; Seligman, 2006; Snyder, 2005). The role of personal resources is well documented in the job demands-resources model (JD-R model; Bakker & Demerouti, 2008) that has traditionally been used to explain how job demands job/personal resources may trigger the processes of burnout and engagement. The former leads to poor work outcomes whereas the latter results in improved job performance and desirable work attitudes.

  Ngusci et al. (2020) adapted the JD-R model to the academic setting and they noted several parallels between the academic activities and activities in work/organizational settings. Ngusci et al. conceived students' well-being and efficiency as the result of two conditions: study demands (e.g., studying for tests, starting new projects, carrying out training, completing assignments, attending classes, managing the study load) and study resources (meta-competencies, networking, social feedback, relationships with professors). Specifically, social and personal resources (e.g., proactivity, networking, PsyCap), as well as technical and structural ones (e.g., technical skills and knowledge), allow handling the demands. Taken together,

demands and resources trigger two opposite processes: academic burnout and study engagement, respectively. Burnout may lead to poor academic performance whereas engagement may lead to improved academic achievement. The adaptation of the JD-R model to the educational and academic setting by Ngusci et al. (2020) warrants more research to explore the influence of PsyCap as a personal resource on academic outcomes since the majority of the research on PsyCap has been undertaken in organizational settings.

Past studies have shown that psychological capital can enhance academic performance. In a sample of university students of management studies, Luthans, Avolio, Avey and Norman (2007) observed that students who were rich in PsyCap were more likely to secure higher cumulative grade point averages (CGPA's; from now on this acronym will be used). Another study by Luthans, Luthans and Jensen (2012) found that psychological capital positively predicted CGPAs of university students of business studies and PsyCap training might foster the growth and success of the business students. Similarly, Adil et al. (2020) found that academic PsyCap was a positive predictor of CGPAs of Pakistani university undergraduate students.

Vanno, Kaemkate and Wongwanich (2014) carried out research on exploring the influence of positive psychological capital on student-related outcomes. Providing experiential evidence on the relationship between academic performances, perceived group psychological capital, and individual psychological capital was the central objective of the study. The sample of the study was 418 Thai undergraduate students. The findings of the study indicated that academic PsyCap positively predicted academic performance and individual level of PsyCap positively mediated between group psychological capital and academic achievement.

Self-handicapping

Researchers have defined self-handicapping in a variety of ways, however, most of the researchers agree on the point that it may involve constructing barriers to successful performance on those tasks which have great valence for the individuals (e.g., Covington, 1992; Rhodewalt, 1994). These types of obstacles in performance could be a corollary to inaction (failing to study for the exam) or action (e.g., getting drunk the night before an exam). Usually, self-handicapping behaviors take place before or simultaneously with the achievement task (Núñez, Freire, del Mar Ferradás, Valle & Xu, 2021).

According to Adil et al. (2020), any situation that may involve an ability testing process may foster self-handicapping behavior. Educational settings constitute excellent real-world milieus for observing self-handicapping behaviors because students are continuously exposed to such situations and tasks which not only test their competence and ability but also make this information public. Moreover, students' performance on such tasks has a tremendous influence on their academic outcomes such as their grading, CGPAs, completion of the degree, prospects of higher studies, and job. According to Núñez et al. (2021), self-handicapping behavior allows students to keep their self-worth intact in the eyes of others because the cause of the poor performance would be the handicap. In addition, their projected self-image in the eyes of their teachers and peers is at stake, which they need to preserve. This preservation of projected self-image is the real objective of the self-handicappers. Finally, educational milieus provide an opportunity to study not only the self-handicapping dispositions but also the probable circumstantial factors that may foster self-handicapping behavior.

Self-handicapping can be effective in the short term, as it allows the student to preserve their self-worth in their own eyes and their social setting (Török, Szabó & Tóth, 2018). However, using it repeatedly usually leads to notable academic harm -e.g., poor performance, dropping out (Akar, Dogan & Üstüner, 2018; Clarke & MacCann, 2016), which ends up undermining the students' feelings of self-worth (Zuckerman & Tsai, 2005).

– *Self-handicapping and academic performance*. Results of field research on the association between academic performance and self-handicapping suggest mixed findings. Some studies found non-significant results (Rhodewalt & Hill, 1995) whereas others found moderately negative (Schwinger & Stiensmeier-Pelster, 2012) and substantial negative relationships (Midgley & Urdan, 1995, 2001). This huge variation in findings has precluded scholars from generalization regarding the average size of the association between self-handicapping and achievement; which, in turn, had made it hard to derive any implications of self-handicapping in educational settings.

Some researchers have demonstrated that self-handicapping behavior arises from a rancorous circle whereby handicapping results in lower achievement, which in turn further exacerbates the need for handicapping (Zuckerman, Kieffer & Knee, 1998). Self-handicapping, for instance, has been associated with negative and ineffective coping mechanisms, heightened levels of withdrawal, and poorer study routines. Furthermore, self-handicapping had demonstrated a reciprocal relationship with poor adjustment over time, which furnished empirical evidence for the vicious cycle of self-handicapping (Zuckerman et al., 1998).

Numerous research studies suggest that self-handicapping may negatively influence important academic outcomes and processes such as motivation and performance (Martin, Marsh & Debus, 2001; Zuckerman et al., 1998). Since self-handicapping behavior may lead to reduced effort or simply abounding the effort for a particular task, therefore, it is quite likely that the self-handicappers will demonstrate relatively poor performance on the given tasks. Beck, Koons and Milgrim (2000) observed that students with a high degree of self-handicapping behaviors were likely to procrastinate more and study less, which led to poor academic performance and poor overall course grades. High self-handicappers reduce effort and express more stress before the exam, and their exam performance is worse than the low self-handicappers (McCrea & Hirt, 2001). Self-handicapping was found as a negative predictor of both exam performance and GPA (Elliot & Church, 2003). Self-handicappers reported a low level of self-esteem, school adjustment and achievement, high level of norm-breaking behavior, and poor teacher relations (Maatta, Stattin & Nurmi, 2002), and they are more prone to cheating (Ozgungor, 2008). Yildirim and Demir (2020) found test anxiety as a positive predictor of self-handicapping in a sample of Turkish undergraduate students. According to Núñez et al. (2021), self-handicapping is a motivational strategy that partially explains students' poor behavioral engagement with homework in the absence of parental support.

– S*elf-handicapping and PsyCap*. Self-efficacy is an important component of PsyCap and self-efficacious students are less likely to be indulged in self-handicapping behaviors. A meta-analytic study by Schwinger, Wirthwein, Lemmer and Steinmayr (2014) integrated the findings of 36 studies (N = 25,550) involving 49 independent effect sizes on academic performance, self-esteem, self-handicapping, and goal orientation. Findings showed that self-handicapping was negatively associated with self-esteem and different educational outcomes (academic achievement). Soltani, Jamali, Khojastehniam and Dargahi (2016) found that academic self-efficacy and academic resilience (the two components of PsyCap) negatively predicted academic procrastination. Moreover, Adil et al. (2020) found that university undergraduates who were rich in academic PsyCap experienced a low degree of self-handicapping behavior, which in turn led to improved academic performance.

Given the aforementioned literature, the present study postulated the following hypotheses:

1. Academic PsyCap will predict CGPA positively;
2. Academic PsyCap will predict self-handicapping behavior negatively;
3. Self-handicapping behaviors will predict CGPA negatively;
4. Self-handicapping behaviors will mediate between academic PsyCap and CGPA such that PsyCap will improve the CGPA by reducing self-handicapping behaviors.

METHOD

Participants

The sample of the present study was drawn through purposive sampling and was comprised of 300 students of the University of Sargodha. The students of the 5-8th semesters of BS Honor (4-year program) and MSc (2-year program) were included in the study. Both boys (n = 150) and girls (n = 150) from regular programs (n = 150) and self-support programs (n = 150) were included in the sample. The mean age of students was 22.13 years (SD = 2.99 years).

First of all, the official letter of permission for data collection was obtained from the Department of Psychology, University of Sargodha. Most of the participants were contacted in the classrooms while others were contacted in the canteens, library, and on the sports grounds. To collect data from them, rapport was built so that they might feel comfortable and cooperate to respond honestly. The nature, objectives, and the salience of the present study were explained to the participants and while taking their informed consent, they were assured of the confidentially of

their responses on the instruments. Afterward, demographic information was taken. Then participants were given instructions regarding filling the questionnaire. They were assisted wherever they needed help in the questionnaire to give the appropriate response. On average 45 minutes were taken by the participants to complete the questionnaire. In the end, participants were humbly thanked for their cooperation and time.

Instruments

- *Academic PsyCap Measure*. The components of academic PsyCap were measured through the Perceived self-efficacy subscale from *Student Approaches to Learning Scale, Life Orientation Test-Academics Scale*, *Academic Hope Scale*, and *Academic Resilience Scale*. The scores on these four scales were summated after reversely coding the negative items. This summated score provided a measure of academic PsyCap. The same summated scale had already been used as a reliable measure of academic PsyCap (see Adil et al., 2019, 2020). The whole measure comprised 25 items with a uniform 5-point Likert type agreement scale. The alpha reliability coefficient of the scale in the present study was .80. The details of the constituent scales of academic PsyCap measure are as follows:
- *Perceived self-efficacy subscale from Student Approaches to Learning Scale*. The academic self-efficacy component of academic PsyCap was measured through a 4-item subscale of Perceived self-efficacy from the *Students' Approaches to Learning Scale* (Marsh, Hau, Artelt, Baumert & Peschar, 2006). There was no reverse-scored item on the scale. The authors reported a satisfactory level of internal consistency for this scale (Cronbach's α = .87). "I am certain I can master the skills being taught" is a sample item of this scale.
- *Life Orientation Test-Academics Scale*. The academic optimism component of academic PsyCap was measured through the *Life Orientation Test-Academics Scale* (Chang, Bodem, Sanna & Fabian, 2011). The scale was comprised of six items. Item 2, 4, and 5 were inversely phrased, so they were reverse coded. According to Chang et al. (2011), the scale demonstrated a satisfactory level of internal consistency (Cronbach's α = .77). "I'm always optimistic about my academic future" is a sample item on this scale.
- *Academic Hope Scale.* Developed by Shorey and Snyder (2004), the *Academic Hope Scale* comprising of nine items was used to measure the academic hope component of academic PsyCap. The scale had no reverse-coded items. The authors of the scales reported a Cronbach's α = .79 for this scale. "I can think of many ways to make good grades" is sample item on this scale.
- *Academic Resilience Scale*. Academic resilience was assessed through the *Academic Resilience Scale* developed by Martin and Marsh (2006). The scale was comprised of six items. Martin and Marsh reported acceptable fit values for CFA of the scale (CFI = .97; NNFI = .97). The authors of the scale also established an excellent standard of internal consistency (Cronbach's α = .89). There were no reverse-scored items on the scale. "I am good at bouncing back from a poor mark in my academic work" is a sample item on this scale.
- *Self-handicapping Scale-Revised. Self-handicapping Scale-Revised* (Urdan & Midgley, 2001) was used to measure academic self-handicapping in the sample of the present study. The scale comprises of 6 items with 5-point Likert type response options (1 = "Definitely false of me" and 5 = "Definitely true of me"). None of the items was reverse coded. The authors' reported alpha coefficient of reliability was .87. All items were summed up to yield a composite score on self-handicapping. "Some students put off doing their academic work until the last minute so that if they do not do well on their work, they can say that is the reason. How true is this of you?" is a sample item on this scale.
- *Academic performance*. Academic performance was measured through a single item open-ended question that asked the respondents to report their CGPA of their previous semester. The reported CGPAs of participants were also confirmed by the office of the departmental controller of examinations.

Analysis

The obtained data were subjected to statistical analyses through IBM SPSS V-24 and IBM Amos V-23. An examination of the missing value revealed no missing values in the data. Furthermore, the data were normally distributed and no outliers were identified. Descriptive statistics, internal consistency of the scales, and interscale correlations were computed through IBM SPSS. The proposed hypotheses and the mediational model of the present study was tested through path analysis in IBM Amos employing maximum

likelihood (ML) estimation procedures with bias-corrected ML confidence intervals computed from 2000 bootstrap samples. The path analysis was based on covariance rather than correlation matrices.

RESULTS

The data were subjected to statistical analyses. The descriptive statistics, correlation matrix, and alpha coefficients were computed through SPSS whereas the proposed hypotheses were tested through Amos.

Table 1 displays means, standard deviations, ranges, skewness, and alpha coefficients for each measurement instrument utilized in the current research. From standard deviation scores, it can be discerned that mean scores were representatives of their respective distribution and minimal differences between actual and potential ranges suggest that the range of responses was not restricted. All the instruments demonstrated high levels of internal consistency, which suggested that the measures used in the present study were reliable.

The correlation matrix in Table 2 shows that all variables were correlated with one another in the expected directions.

Table 1 – Mean, standard deviations, and alpha reliability coefficients of the scales (N = 300)

Scales	*M*	*SD*	Range		*Sk*[a]	α
			Actual	Potential		
CGPA	2.85	.44	1.96-3.96	0-4	.12	–
Self-handicapping Scale	11.09	4.90	0-20	0-24	–.35	.78
Academic PsyCap Scale	64.25	9.81	21-82	0-100	–.62	.80
Age	21.70	1.16	19-26	–	.20	–

Legenda. [a] = Standard error of skewness = .14

Table 2 – Intercorrelations of the variables of the present study (N = 300)

Variables	1	2	3	4
1. Academic PsyCap	–	–.13*	.30***	–.08
2. Self-handicapping behavior	–	–	–.42***	.08
3. CGPA	–	–	–	.12*
4. Age	–	–	–	–

*p<.05; ***p<.001.

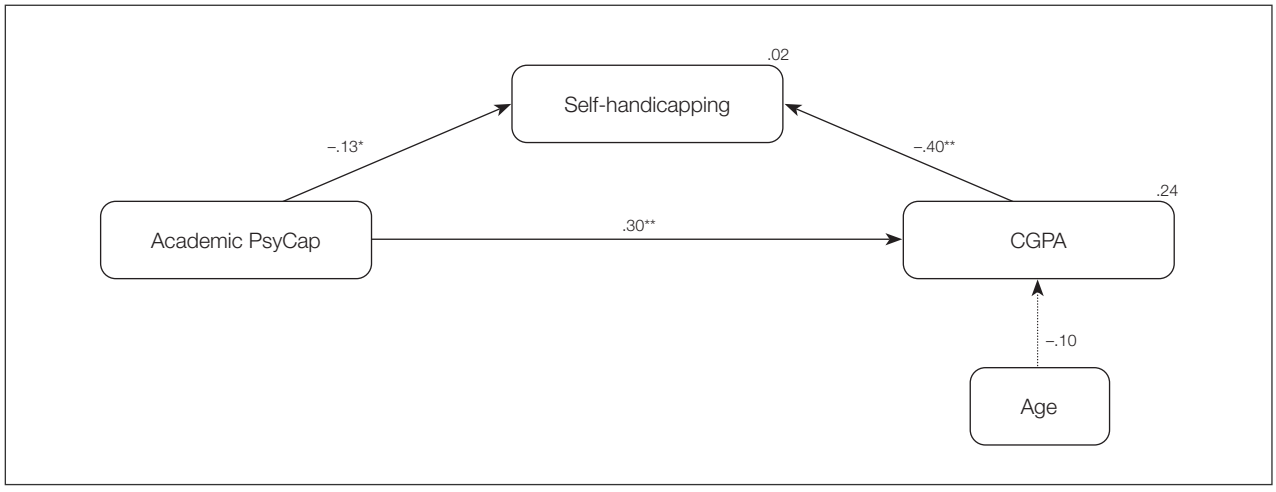
Table 3 shows the standardized coefficients of direct and indirect paths of the structural model of the present study. The model demonstrates a good fit to the data (χ^2 = 5.39, *df* = 2, *p* = .067, CFI = .96, NFI = .94, RMSEA = .075). Academic PsyCap demonstrates the positive direct effect on CGPA and the negative direct effect on self-handicapping behavior. Self-handicapping has negative direct effects on CGPA. Finally, academic PsyCap demonstrated positive indirect effects on CGPA through self-handicapping behaviors.

Path model of the present research is represented in Figure 1.

Table 3 – Standardized path coefficients of direct and indirect effects (N = 300)

Paths	*β*	95% CI		*p*
		LL	UL	
Academic PsyCap ⟶ Self-handicapping behavior	−.13	−.22	−.01	.048
Academic PsyCap ⟶ CGPA	.30	.21	.40	.007
Self-handicapping behavior ⟶ CGPA	−.40	−.49	−.30	.007
Academic PsyCap ⟶ Self-handicapping behavior ⟶ CGPA	.05	.02	.08	.022
Age ⟶ CGPA	−.01	−.02	.03	.87

Figure 1 – Path model of the present research



Note. The values of standardized path coefficients are given on each path. Solid paths show significant whereas dashed path shows non-significant direct effects. The values of R^2 are given on the upper right corners of the endogenous variables. Age was taken as the control variable.

DISCUSSION

The findings of the present study provided empirical support for all the hypothesized relationships. Our first hypothesis was supported as psychological capital emerged as the positive precursor of academic achievement. The job demands-resources model (JD-R model, Bakker & Demerouti, 2008) may offer a pertinent explanation for this finding of the present study. The JD-R model suggests that in educational settings, personal resources may refer to those attributes of an individual that may turn study demands into challenges, may reduce the aversive influences of study demands, or may assist the students in meeting their study demands. PsyCap, as a personal resource, may revive individuals by facilitates their speedy recovery from past failures, which may enable them to be devoted, be more focused, and be more immersed in their tasks (Siu et al., 2014). PsyCap may enable university students to meet their study demands because PsyCap involves individuals' positive agentic resources, which facilitate them in their striving for achievements and development (Sweetman & Luthans, 2010).

A plausible explanation for the positive association between academic achievement and PsyCap may delineate academic PsyCap as positively feedbacking on students' academic performance. Stajkovic (2006) noted that a common confidence core runs across all the constituent elements of PsyCap (resilience, hope, self-efficacy, and optimism). Therefore, students rich in PsyCap may have greater self-confidence that may lead to mastery experiences resulting in a further increase in self-efficacy and other constituents of psychological capital. Relevant literature supports this line of reasoning because various studies demonstrated that PsyCap had a positive influence on various desired student outcomes such as academic achievement (Luthans et al., 2012; Malone, 2010) and creativity (Tsai et al., 2012).

Findings of the present study indicated that self-handicapping not only predicted CGPA negatively, it also mediated between academic PsyCap and CGPA. These results provided support to our third and fourth hypotheses. Findings from numerous studies converge on the conclusion that academic self-handicapping is negatively related to such salient educational outcomes and processes as academic achievement and motivation (e.g., Martin et al., 2001; Zuckerman et al., 1998). Findings of various studies have generally indicated that people who indulge in self-handicapping strategies are more likely to have poor self-esteem, have less clear and poorly organized academic goals, and come up with low levels of academic achievement (Hendrix & Hirt, 2009; Schwinger et al., 2014). In the educational milieu, self-handicapping behaviors are usually depicted by procrastination, lack of focus on the lecture, incomplete projects and assignments, no reading of the course contents, poor time management for study hours, being indifferent to the attendance in the class, and insufficient preparation for examinations (Smith, Hardy & Arkin, 2009). According to the literature, these strategies may negatively influence learning and threaten students' performance (Gadbois & Sturgeon, 2011; Schwinger et al., 2014).

Self-handicapping and self-regulation cycle (Rhodewalt & Tragakis, 2002; Rhodewalt & Vohs, 2005) provides a theoretical model for explaining the association among academic self-handicapping, academic PsyCap, and achievement. This model suggests that distal drives such as unclear self-conceptions about ability or low levels of self-efficacy (a core component of academic PsyCap) may lead to poor performance expectations in the upcoming examinations that may result in a pessimistic approach to the examinations. This pessimistic approach may serve as proximal predictors of using self-handicapping strategies for protecting the self-concept. This means that academic PsyCap may reduce the chances of one's being indulged in self-handicapping behaviors.

Rhodewalt and Tragakis (2002) found that instead of being concerned with the actual performance, self-handicappers are more apprehensive about their self-esteem. Owing to this imbalanced focus, people may choose handicaps, which may serve to protect their self-esteem but invariably lead to poor performance. The poor performance may have a cyclic influence on one's self-conceptions of competence i.e., self-efficacy, and owing to this feedback, a fresh cycle of a vulnerable self-concept, self-handicapping as a means to self-protection, and resultant poor performance may ensue (Zuckerman et al., 1998).

CONCLUSION AND IMPLICATIONS

The findings of the present study suggested some salient implications for both theory expansion and practice of educational psychology. Results of the present study suggested academic PsyCap as an invaluable source of boosting

academic performance by reducing self-handicapping behaviors. Owing to the malleable nature of psychological capital, it can be cultivated and fostered in our students. Our findings indicated academic PsyCap as a very powerful predictor of students' CGPA; intervention programs for boosting students' academic achievement must incorporate PsyCap training to develop this valuable personal resource of the students. Specific micro-level programs for developing PsyCap in organizational settings have been designed by Luthans, Avey, Avolio, Norman and Combs (2006). This program may be adapted to educational settings.

The results of the present study also suggested that self-handicapping behaviors constitute a debilitating source of poor academic outcomes. Such behaviors may keep students' self-evaluations intact but may deprive them to take on challenges and to thrive in the face of stressful events. Consequently, a vicious circle ensues and self-handicapped students may habitually start avoiding demanding circumstances, owing to which they might have been deprived of many opportunities. On the pragmatic side, these results suggest that students should be made cognizant of their self-handicapping behaviors and they should be trained in overcoming the temptations of self-handicapping behaviors.

Limitations and recommendations

The present study has its share of limitations, and the following section is meant to highlight its salient limitations.

1. This study has utilized a cross-sectional design. Therefore, the cause-and-effect relationship cannot be inferred about the variables in regression models. Future studies should employ a longitudinal design so that causal interpretations of the findings may be made more confidently. However, it should be noted that the causal ordering of various constructs in the present study has been made in accordance with pertinent theory and relevant research support.
2. All the variables of the current study were measured through self-report instruments, which may result in an inflated relationship. Future research may employ a multi-method approach.
3. The sample of the current study was only limited to undergraduate students of the University of Sargodha, which is certainly not representative of the whole university student population of Pakistan. This might have compromised the generalization potential of the present study. Future studies must recruit a representative sample of Pakistani university students, which may not only help enhance the external validity of the findings but also may yield insight into the dynamics by which personal resources and their academic outcomes may vary across universities.
4. The survey research design does not provide any controlling method for managing the extraneous variables, which constituted another limitation of the present study. The probable role of temporal and situational factors (for example, financial issues, unstable home, and familial relationships, interpersonal conflicts, periods of examinations, etc.) participants were exposed to at the time of data collection might have influenced the findings of the current research.
5. The constructs of the present study should be examined at their facet levels in future studies. Various dimensions of academic PsyCap might probably have been related to other constructs in different fashions than their corresponding super-ordinate construct of PsyCap. This may help elucidate the fine subtleties of relationships among constructs of the present research.
6. Finally, there are several avenues for future research related to the results of the current investigation. As academic PsyCap turned out to be an important predictor of academic performance, future research should also explore the potential role of other constructs of positive psychology concerning academic outcomes. The positive character strength of wisdom and creativity holds promise for positive influence on academic outcomes such as study engagement and academic performance. Furthermore, the incremental validity of academic PsyCap against intelligence (IQ) score should be established in future studies.

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