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Prevalence and Correlates of Self-Handicapping Tendencies among Physical Education Preservice Teachers

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Abstract

The study examined the prevalence and correlates of self-handicapping tendencies among physical education preservice teachers from one university. The study utilized a cross-sectional research design. The participants were a purposive sample of physical education preservice teachers (67% male and 33% female) from one university in midwestern United States. An adapted version of the short version of the Self-Handicapping Scale (SHS) served as the data source. The SHS score served as the response variable. The predictor variables were gender, the number of credit hours attempted, the number of credit hours passed, the Cumulative Grade Point Average (GPA), and GPA in the physical education content area. Results showed that 11.11% of the participants reported high levels of self-handicapping tendencies. The SHS had significantly low negative correlations with two predictors: the number of credit hours attempted and the number of credit hours passed. Conversely, SHS showed moderate significant positive correlations with cumulative GPA and the GPA in the physical education content area. The SHS scores for males and females were similar.Teacher education programs can help future teachers adopt coping strategies, thereby reducing their tendency to engage in self-handicapping strategies.

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INTRODUCTION

Self-handicapping refers to strategies individuals use to avoid task performance should they fail (Berglas & Jones, 1978). Individuals employ this strategy to protect their self-esteem and to control threats caused by fear of failing in academic work (Török et al., 2018). As Urdan and Midgley (2001) asserted, self-handicapping is common in educational settings because individuals are often required to demonstrate their skills in public. Individuals are more likely to self-handicap if they are unsure about their ability and that the impending task is ego-oriented (Zuckerman & Tsai, 2005), resulting in poor academic performance (Adil et al., 2020).

In education, students engage in academic self-handicapping to protect their self-esteem in anticipation of failure (Berglas & Jones, 1978). Self-handicapping among students may include strategies such as procrastination, minimal effort, and the setting of unattainable goals (Urdan & Midgley, 2001). Schwinger et al. (2021) attribute student use of self-handicapping strategies to personality traits, developed early in life. Barutçu Yıldırım and Demir (2020) reported procrastination as the most powerful predictor of self-handicapping among a group of university students, even though self-compassion, test anxiety, and self-esteem also explained self-handicapping.

Research indicates increasing trends of anxiety in students from elementary school to higher education (Putwain & Daly, 2014). The key factor to anxiety manifestation is a learner's degree of uncertainty about the outcome of a task performance (Cassady et al., 2024). Often, the anxiousness is because of the individual's "intolerance" of the feeling of uncertainty and not the uncertainty itself (Cassidy et al., 2024). Carleton (2016) argued that such intolerance is the inability of the individual to accept the lack of clear information in doubtful situations. According to del Mar Ferradás et al. (2016), ego-oriented goals result in behavioral and claimed self-handicapping and that mastery-related goals have a negative association with both behavioral and claimed self-handicapping. The implication is that students with mastery goals would more likely attribute their failures to factors within their control (Schwinger et al., 2014), and less likely to self-handicap.

Self-handicapping has the potential to impact academic work negatively. For example, it can result in diminished academic achievement and lower student engagement (Schwinger et al., 2014). Implicit beliefs about intelligence have been shown to predict self-handicapping (Snyder et al., 2014). Family support has also been shown to be positively associated with academic adjustment (Wintre & Yaffe, 2000) and female students' handicapping behaviors (El-Ghoroury, 2012). Lower levels of family support were found to be related to higher self-handicapping scores (Robinson et al., 2023). Not only would self-handicapping hamper academic performance, but it would also negatively impact student's health, well-being, and self-confidence (Török et al., 2018). Furthermore, studies show that self-handicapping reduced negative attributions to ability (positive) but led to more negative attributions about personal characteristics (Luginbuhl & Palmer, 1991).

There is evidence to show that interventions can be effective in reducing self-handicapping behaviors among students. Interventions in fostering mastery-approach goals (Schwinger et al., 2014), cognitive-behavioral techniques (Schwinger et al., 2021), and growth mindset (Dweck, 2006; Han, 2024) have been shown to reduce the amount of self-handicapping and its negative impact on academic achievement. Török et al. (2022) report that participants with an initially fixed mindset who received a growth mindset induction benefited from the intervention (growth mindset manipulation). This suggests that a growth mindset is a protective factor against self-handicapping (Török et al., 2022; Snyder et al., 2014; Rickert et al., 2014), as promoting a growth mindset among students would be beneficial in reducing self-handicapping.

Furthermore, Standage et al. (2011) reported that an ego-climate resulted in significantly more self-handicapping claims than those in a task-climate group in a secondary physical education setting. Because the physical education class has the potential to raise concerns about one's self-esteem due to activities being performed in public (Standage et al., 2011). Self-handicapping has been researched in physical education classes (Standage et al, 2011) and among athletes (Ommundsen, 2001). However, research on physical education preservice teachers is scarce. Therefore, there is a need to examine self-handicapping among physical education preservice teachers.

The self-worth theory (SWT) and attribution theory (ABT) served as integrative theoretical frameworks for the study. These frameworks explain motivational, cognitive, and contextual factors that affect self-handicapping behaviors. Notwithstanding the limitations of the SWT and the ABT, their use in the present study would provide insight into the prevalence and correlates of physical education preservice teachers' self-handicapping tendencies.

The SWT (Covington, 1992) examines strategies individuals use to protect their self-esteem against future failures. The first principle of SWT is the use of achievement behaviors by individuals to protect their self-esteem when there is an impending task performance (Covington, 1992). Applying this principle to teacher education, preservice teachers may adopt self-defeating behaviors, such as procrastination (Bezci &Sungur, 2023), to preserve their self-esteem. The second principle states that an individual's competence is linked to external validation. For example, preservice teachers' self-worth will be dependent on their grades or feedback provided by their instructors. The SWT's strengths lie in its ability to explain self-sabotage in academic contexts and its ability to explain the connection between observable behaviors and the protection of one's self-esteem. A major limitation of the SWT is that it downplays the role of intrinsic motivation in an individual's behavior.

According to the ABT (Weiner, 1985), individuals ascribe their successes or failures to internal or external factors. Self-handicappers would blame external factors for their failures, rather than their abilities. A second principle of ABT relates to whether beliefs are stable or unstable. A self-handicapping preservice teacher, for example, would say, "I am just not good at basketball," implying a fixed or stable belief (Dweck, 2006). In contrast, a preservice teacher with a growth mindset would say, "I can get better at basketball with hard work." A third principle relates to the extent to which individuals have control over task performance. Students are more likely to be motivated if they assign outcomes to things they can control, such as their efforts. For example, a physical education preservice teacher may say, "I can improve my aerobic fitness level if I practice." The main strengths of ABT are that it can be applied to various educational settings, and it enhances data-based training through feedback for teacher candidates. The theory has some drawbacks. Its critics argue that it is simplistic and insensitive to socio-emotional and institutional factors such as policy and school culture.

Using a cross-sectional descriptive research design, the study examined the prevalence and correlates of self-handicapping tendencies among physical education preservice teachers from one university in the midwestern United States. Identifying factors that put preservice teachers at risk of self-handicapping would assist in identifying effective interventions to counter these tendencies (Schwinger et al., 2014).

The study was conducted to answer the following research questions:

1. What are the self-handicapping tendencies among a group of physical education preservice teachers?
2. To what extent do self-handicapping tendencies among male and female physical education preservice teachers differ?
3. What are the correlates of physical education preservice teachers' self-handicapping tendencies?.

METHODS

The study utilized a cross-sectional research design. The participants were 54 physical education preservice teachers (67% male and 33% female) purposively sampled from one university in the midwestern United States. The participants were in various stages of the physical education program and had taken 34–156 credit hours at the time of the study.

An adapted version of the 10-item short version of the Self-Handicapping Scale (SHS) (Rhodewalt et al., 1984) served as the data source. The SHS was scored on a 5-point Likert scale from "Strongly Disagree" (1) to "Strongly Agree" (5). A high SHS score represented a high level of self-handicapping tendency. The median of the 10 items (tendencies) represented the overall SHS score for each participant. That is, the SHS score served as the response variable. The predictor variables were gender, the number of credit hours attempted, the number of credit hours passed, the Cumulative Grade Point Average (GPA), and GPA in the physical education content knowledge area.

The Human Subjects Committee at the authors' institution approved the study. After we received the preservice teachers' written consent, they completed the questionnaire in the classroom once. We informed the preservice teachers that their participation in the study was voluntary and that they may decline to complete the questionnaire without any penalty. Additionally, we notified participants that their participation or non-participation would not affect their grades in the courses they were enrolled in at the time of the study.

We analyzed the data using descriptive and inferential statistics. First, we used the median of the 10 items on the SHS to calculate (the overall) frequencies and percentages of preservice teachers who reported low, moderate, and high self-handicapping tendencies. The cut-off points for the 5-poiing Likert scale were: low (1-2.49), moderate (3.5-4.49), and high (4.5-5.0). Second, we calculated the frequencies and percentages of preservice teachers with low, moderate, and high

SHS scores for each of the 10 items on the scale. Third, we calculated correlation using Spearman Correlation method and displayed the results in a correlation matix. The choice of Spearman Correlation technique was due to the ordinal nature of the response variable, the SHS score. Fourth, we conducted a Wilcoxon rank-sum test to determine whether there was a median difference between male and female on the SHS score. We used the Wilcoxon rank-sum as a nonparametric alternative to the two-sample t-Test. The distribution of the SHS scores for male and female were not normally distributed, and also the response variable is measured on an ordinal scale.

RESULTS AND DISCUSSION

Preservice Teachers' Levels of Self-Handicapping Tendencies

Table 1. Preservice Teachers' Levels of Self-Handicapping Tendencies

Variables	Low N/%	Moderate N/%	High N/%
Overall Score	26(48.15)	22(40.74)	6(11.11)
I tend to make excuses when I do something wrong.	26(48.15)	18(33.33)	10(18.52)
I tend to put things off to the last minute	12(22.22)	14(25.93)	28(51.85)
I always try to do my best no matter what.	31(57.41)	10(18.52)	13(24.07)
I suppose I feel "under the weather" more often than most people.	44(81.48)	5 (9.26)	5(9.26)
I am easily distracted by noise or my daydreaming when I try to read.	12(22.22)	13(24.07)	29(53.71)
I try not got get too intensely involved in competitive activities, so it won't hurt too much if I lose or do poorly.	44(81.48)	4(7.41)	6(11.11)
I would do a lot better if I tried harder.	19(35.18)	15(27.78)	20(37.04)
I sometimes enjoy being mildly ill for a day or two.	40(74.07)	5(9.26)	9(16.67)
I tend to rationalize when I don't live up to others' expectations.	28(51.85)	15(37.04)	11(11.11)
I overindulge in food and drink more often than I should.	23(42.59)	18(33.33)	13(24.07)

The first research question examined the self-handicapping tendencies among a group of physical education preservice teachers. **Table 1** represents data on self-handicapping tendencies among the preservice teachers. Overall, 11.11% of the preservice teachers reported high SHS scores. The self-handicapping strategies with high SHS scores were "Being distracted by noise and daydreaming" (53.70%) and "Putting things off to the last minute" (51.85%). Alternatively, the self-handicapping tendencies with the highest percentages of PEPT reporting low SHS scores were "I suppose I feel 'under the weather' more often than most people" (81.48%) and "I try not got get too intensely involved in competitive activities, so it won't hurt too much if I lose or do poorly" also 81.48%.

Very few preservice teachers reported high levels of self-handicapping. This is consistent with previous studies that reported a moderate presence of self-handicapping behavior among undergraduate students (Khan et al., 2014; Wyse et al., 2023). Their study further suggested that the effects of self-handicapping behaviors were greater among students over 25 years old and male students. However, Bravata et al. (2020) reported an 82% prevalence rate of the impostor syndrome among a group of students.

Influence of Gender on SHS Scores

The second research question examined the differences in the self-handicapping tendencies among male and female physical education preservice teachers. **Table 2** represents the results of the Wilcoxon rank-sum test for male and female preservice teachers. The table shows the median scores (first and third quartiles) for females (3.00) and males (2.00). Based on the test, there was no significant difference (p-value > .050) between the median scores for the distribution of scores between males and females.

The finding in the present study was that the SHS scores for males and females did not differ. Results from previous studies on the prevalence of self-handicapping among males and females are mixed. The finding from the present study is consistent with other studies that reported similar self-handicapping tendencies among males and females (Robinson et al., 2023; Schwinger et al., 2014; Turner et al., 2002). In contrast, other studies reported that females were less likely than males to engage in academic self-handicapping (Yu & McLellan, 2019). Furthermore, some research reported stronger self-handicapping tendencies among females relative to males (Ganda & Boruchovitch, 2015; Ommundsen, 2004).

Table 2. Wilcoxon Rank-Sum Test for Gender and Self-Handicapping Score

Variable	N	F (N =181)	M (N=161)	P-value2
SHS Score	54	3.00 (2.00-3.00)	2.00 (2.00-3.00)	0.2450

Correlates of Self-Handicapping Score

The SHS score had a low, significant negative correlation with two predictors: the number of credit hours attempted (ρ = -.410) and the number of credit hours passed (ρ = -.318). Conversely, SHS showed moderately significant positive correlations with cumulative GPA (ρ = .770) and the physical education content knowledge area GPA (ρ = .657). As the number of credit hours attempted and passed increased, the likelihood of engaging in self-handicapping tendencies decreased. Since high SHS scores represent high levels of self-handicapping, a decrease in self-handicapping with an increase in the number of credit hours attempted and passed would likely reduce anxiety levels among the preservice teachers.

The finding that SHS **Table 3** was positively associated with cumulative GPA and GPA in the physical education content area was surprising, as we expected preservice teachers with high GPAs to be less prone to test anxiety and less likely to report self-handicapping tendencies. A plausible reason for this finding is that preservice teachers with high GPAs may feel pressured to maintain their high GPAs. The pressure may be set by themselves or set by others such as peers and instructors (Menard et al., 2023). The fear of failure to maintain high achievement could result in self-handicapping to protect their self-esteem. This finding conflicts with previous studies that reported a negative association between self-handicapping behaviors and academic achievement (Schwinger et al., 2014; Steel, 2007).

Table 3. Spearman Correlation for Credit Hours, GPAs, and Self-Handicapping Score

Variables	1	2	3	4	5
Hours Attempted(1)		.961**	-.658**	-.401**	-.410**
Hours Passed(2)			-.463**	-.269	-.318*
Cumulative GPA(3)				.657**	.770**
Physical education GPA(4)					.657**
Self-Handicapping Score(5)					

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The current study utilized a forced-choice quantitative questionnaire for data collection. Future research should employ qualitative methodologies such as interviews or focus groups to gain insight into the antecedents of self-handicapping among preservice teachers. Another suggestion for future research would be to conduct longitudinal studies to determine patterns of self-handicapping tendencies among preservice teachers as they progress in their teacher education program. Finally, physical education teacher education program components, such as instructional techniques, theory and practice of sport, or field experience courses, for example, pose varying degrees of challenges to preservice teachers. Therefore, future research should examine the various components of the teacher education program in which preservice teachers would be prone to exhibiting self-handicapping tendencies.

CONCLUSION

We draw four conclusions based on the results of the current study. First, very few preservice teachers in the study exhibited high levels of self-handicapping tendencies. Second, male and female preservice teachers reported similar self-handicapping scores. Third, SHS was negatively correlated with the number of credit hours attempted and the number of credit hours passed. Fourth, SHS was positively associated with cumulative GPA and GPA in the physical education content area. Teacher education programs can help future teachers adopt coping strategies to minimize the tendency to engage in self-handicapping.

Recommendations

Teacher educators should focus on addressing academic self-handicapping tendencies (Robinson et al., 2023). We recommend that teacher educators reduce highly competitive pressures in their programs to reduce self-handicapping tendencies among preservice teachers. Second, teacher educators should utilize growth mindset pedagogy to reduce self-handicapping behaviors such interventions are shown to reduce the prevalence of fixed-mindset beliefs (Yeager et al., 2019). Third, the promotion of preservice teachers' self-esteem should be an important component of any intervention aimed at reducing self-handicapping (Chen et al., 2018). Fourth, we recommend that teacher education programs provide physical education preservice teachers with peer teaching, field experiences, and feedback to enhance their teaching capabilities and boost their confidence, minimizing their reliance on self-handicapping strategies. Fifth, we physical education teacher education programs should provide stress management and anxiety

reduction interventions to reduce the likelihood of preservice teachers self-handicapping to cope with the pressure of learning to teach.

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