International Journal of Education and Practice
2018 Vol. 6, No. 4, pp. 192-199
ISSN(e): 2310-3868
ISSN(p): 2311-6897
DOI: 10.18488/journal.61.2018.64.192.199

THE INFLUENCE OF PERFECTIONISM ON ACADEMIC SELF-CONCEPT

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Article History
Received: 7 May 2018
Revised: 19 July 2018
Accepted: 29 August 2018
Published: 8 October 2018

Keywords
perfectionism
Academic self-concept
Academic achievement
Self-concept
Self-doubt

ABSTRACT

In today's academic environment, there is a tenacious effort to better educate our children. Unfortunately, federal and local budget constraints often limit our ability to create highly effective learning environments. As educators, it becomes our task to identify cost effective activities that will have a positive impact on our student's education. A child's academic self-concept is an important factor to academic success. Further, the rating of performance and desire for perfection are activities found in most every academic situation. The purpose of the present study was to explore the influence of perfectionism on academic self-concept. From a sample of one hundred and thirty five college students, the present study found evidence that a student's academic self-concept is positively influenced by high personal standards, being organized, and low self-doubt. Educators could consider incorporating cost effective activities known to influence organization skills, personal standards, and self-doubt into education curriculum.

Contribution/Originality: The present study contributes to existing literature related to college students' academic self-concept. The study provides evidence of factors that may impact academic self-concept. Educators should consider these factors when developing curriculum designed to optimize student performance.

1. INTRODUCTION

In fiscal year (FY) 2015, public elementary and secondary schools in the United States received $54.7 billion from the federal government (Cornman *et al.*, 2017). Despite this invest, the U.S. ranked 24th in science, and 39th in mathematics performance in the 2015 Programme for International Students Assessment (Organization for Economic Co-operation and Development (OECD), 2016). As educators, we need to explore ways to improve student success in a cost-effective manner. There is ample evidence that a student's academic self-concept impacts academic achievement (Reynolds, 1988; Khalaila, 2015; Meshkat and Hosseini, 2015). There is also evidence that self-concept is a malleable trait (Markus and Kunda, 1986). It would seem that finding ways to improve academic self-concept would be a worthwhile endeavor. The challenge becomes finding cost effective activities that could increase academic self-concept. As part of this challenge, we investigated a personality trait that is part of most academic situations.

Within the academic environment, the rating of performance is standard practice. Students are rated on most every aspect of their academic career with an objective of performing at near perfect levels on multiple tasks and activities. It's not unusual for teachers to hear students talk about the need to earn A's. Does the need to be perfect

help or hinder academic success? Evidence is mixed when exploring the relationship between perfectionism and academic success (Elion *et al*., 2012; Rice *et al*., 2013; Cowie *et al*., 2018). It is possible that perfectionism may play an indirect role in academic success through a student's academic self-concept. The purpose of the present study was to investigate the influence of perfectionism on a student's academic self-concept.

1.1. Perfectionism

Characterized as a personality disposition, perfectionism is the act of striving for precision and having exceedingly high expectations (Frost *et al*., 1990). Current evidence suggests perfectionism can be both problematic and beneficial to performance (Martinelli *et al*., 2017; Akar *et al*., 2018). For example, Closson and Boutilier (2017) found specific aspects of perfectionism to be associated with procrastination, while other factors were associated with academic engagement.

A popular theoretical framework of perfectionism, the Multidimensional Perfectionism Scale (FMPS) emphasizes high standards that are accompanied by overly critical evaluations of one's own behaviors (Frost *et al*., 1990). This is expressed in an over concern for mistakes and uncertainty regarding appropriate actions. Frost *et al*. (1990) also believe perfectionists place a considerable value on their parents' expectations and tend to overemphasize order, organization, and neatness. The FMPS consists of six subscales; Concern for Mistakes (CM), Personal Standards (PS), Parental Expectations (PE), Parental Criticism (PC), Doubts about actions (D), and Organization (O). Researcher's find the factors of the FMPS to be associated with either adaptive or maladaptive perfectionism (Stallman and Hurst, 2011; Castro *et al*., 2017; Akar *et al*., 2018). Adaptive perfectionism can be thought of as factors that enhance performance, while maladaptive perfectionism hinders performance. Adaptive perfectionism includes two dimensions of perfectionism; Personal Standards, and Organization. Maladaptive perfectionism includes four dimensions; Concern over Mistakes, Doubt, Parental Expectations, and Parental Criticism.

In consideration of adaptive and maladaptive perfectionism, Rice *et al*. (2015) explored perfectionism on longitudinal patterns of stress. In a sample of 432 college freshman, results revealed adaptive perfectionists were likely to have low to moderate stress, while maladaptive perfectionists were more likely to experience high stress. In addition, the low stressed adaptive perfectionists had higher grade point averages (GPAs) than other groups. In another study, researchers investigated an association between perfectionism, self-esteem and personality characteristics. Adaptive perfectionism was found to be associated with the personality characteristic of conscientiousness. Maladaptive perfectionism was associated with lack of self-esteem (Stumpf and Parker, 2000).

1.2. Academic Self-Concept

Academic self-concept can be defined as incorporating ones feelings, perceptions, and attitudes relative to their academic ability (Reynolds, 1988). It's a measure of a student's confidence in their academic abilities and is associated with cognitive performance (Stankov and Lee, 2017) but also future academic goals (Wilson *et al*., 2014). In a sample of 589 undergraduate students, Reynolds (1988) found a correlation between the students' academic self-concept and GPA. Meshkat and Hosseini (2015) investigated the relationship between academic self-concept and test performance in a sample of 320 high school students. Results revealed a positive association between academic self-concept and test performance. In another study of 170 nursing students, Khalaila (2015) found higher self-concept to be directly associated with higher academic achievement.

1.3. Perfectionism and Academic Self-Concept

An individual's academic self-concept is viewed as a sub-component of his/her self-concept. Specifically, academic self-concept is specific to the academic domain, while self-concept is more of a general viewpoint. Bandura (1997) stated "Self-concept is a composite view of oneself that is presumed to be formed through direct experience

and evaluations adopted from significant others" (p. 10). Researchers have found relationships between perfectionism and general self-concept (Eusanio *et al.*, 2014) self-efficacy (Stoeber *et al.*, 2008; Akar *et al.*, 2018) and self-esteem (Koivula *et al.*, 2002). For example, in a study of 244 premed and medical students, researchers found a negative relationship between perfectionism and academic self-efficacy, ultimately causing academic burnout (Yu *et al.*, 2016) In another study of 100 undergraduate students, Stoeber *et al.* (2008) found maladaptive perfectionism was associated with low self-efficacy, while adaptive perfectionism was found to be associated with high self-efficacy. The relationships between general self-concept, general self-efficacy, and perfectionism provides the foundation for an investigation into factors that influence domain specific academic self-concept.

1.4. The Present Study

The purpose of the present study was to investigate the influence of perfectionism on a student's academic self-concept. It was hypothesized that, (H_1) *Maladaptive perfectionism will be negatively associated with academic self-concept*, and (H_2) *Adaptive perfectionism will be positively associated with academic self-concept.*

2. METHODS

2.1. Participants

The sample included undergraduate students attending a private Southern United States university enrolled in an introductory psychology course. One hundred and thirty-five participants (102 women, 33 men) with a mean age of 20.19 (SD = 2.59, range: 18-34) completed the study. Three, 6, 68, 31, and 27 participants identified themselves as American Indian / Alaska Native, Asian / Pacific Islander, Black, Hispanic, and White respectively.

2.2. Materials

The present study included the Multidimensional Perfectionism Scale (FMPS; Frost *et al.* (1990)) and the Academic Self Concept Scale (ASCS; Reynolds (1988)). The FMPS is a 35 item Likert-type scale. The scale has six subscales designed to highlight specific aspects of perfectionism. The Cronbach's α estimate of reliability for the six subscales ranges from .77 to .93 (Frost *et al.*, 1990).

The Academic Self Concept Scale is a 40 item Likert-type scale developed to measure the academic aspect of general self-concept in college students. The values range from 1 (strongly disagree) to 4 (strongly agree). The scale includes 22 positively phrased "self-promoting" items and 18 negatively phrased "self-criticizing" items. The Cronbach's α estimate of reliability for the entire scale is .92 (Reynolds, 1988).

2.3. Procedure

The research protocol was approved by the university Institutional Review Board (IRB). Questionnaires were prepared in a paper format and completed in a group setting in a standard classroom. Participants were given ample time and instructed to complete the questionnaires to the best of their ability. At the start of the study, participants reviewed and signed a research consent form. Upon receipt of the consent form, the researcher distributed an envelope that contained the questionnaires. The participant completed the questionnaires, placed the documents back in the envelope and inserted the envelope into a large box located by the door of the classroom. At the end of each session, the researcher collected the envelopes from the box and prepared the documents for data input.

3. RESULTS

The mean score on the Academic Self-Concept Scale (ASCS) was 117.57 (SD = 16.06) which is consistent with previously reported norms (Reynolds, 1988). The Cronbach's α for the ASCS was .93. There were no gender differences in scores on the ASCS.

The mean score on the Multidimensional Perfectionism Scale (FMPS) was 84.32 (SD = 17.31) which is consistent with previously reported norms (Frost *et al.*, 1990). The Cronbach's α for the FMPS was .77. There were no gender differences in scores on the FMPS.

To investigate the associations between academic self-concept and the perfectionism sub-scales, a series of Pearson correlations were computed. As shown in Table 1, academic self-concept was positively related to Personal Standards (PS), and Organization (O). In addition, academic self-concept was negatively related with Concern over Mistakes (CM), Parental Criticism (PC), and Doubts about actions (D). The four sub-scales that represent maladaptive perfectionism (CM, PE, PC, D) were all related. Similarly, the two subscales that represent adaptive perfectionism (PS, O) were related.

Table-1. Correlations between academic self-concept and perfectionism subscales.

		CM	PE	PC	D	PS	O
ASC	Academic self-concept	-.247**	-.134	-.308**	-.512**	.360**	.392**
CM	Concern for Mistakes	-	.301**	.500**	.559**	.403**	.016
PE	Parental Expectations		-	.450**	.179*	.180*	-.009
PC	Parental Criticism			-	.494**	.006	-.146
D	Doubt about Actions				-	.000	-.144
PS	Personal Standards					-	.404**
O	Organization						-

**$p < .01$, * $p < .05$

(H_1) *Maladaptive perfectionism will be negatively associated with academic self-concept.* To determine the unique contribution of maladaptive perfectionism on academic self-concept, a stepwise multiple regression was performed. The criterion variable was the score on the ASCS while the predictor variables were Concern over Mistakes (CM), Parental Expectations (PE), Parental Criticism (PC), and Doubts about actions (D). Results revealed that Doubts about actions was the only variable that significantly predicted academic self-concept, $\beta = -.512$, $t(132) = -6.845$, p=.000. Doubts about actions also explained a significant portion of the variance in academic self-concept $R = .512$, $R^2 = .262$, $F(1,132) = 46.857$, $p = .000$.

(H_2) *Adaptive perfectionism will be positively associated with academic self-concept.* To determine the unique contribution of adaptive perfectionism on academic self-concept, a stepwise multiple regression was performed. The criterion variable was the score on the ASCS while the predictor variables were Personal Standards (PS), and Organization (O). As shown in Table 2, results revealed that Organization (Model 1) significantly predicted academic self-concept. Organization also explained a significant portion of the variance in academic self-concept $R = .392$, $R^2 = .154$, $F(1,132) = 23.984$, $p = .000$. Results also revealed that Personal Standards and Organization (Model 2) significantly predicted academic self-concept. Personal Standards and Organization also explained a significant portion of the variance in academic self-concept $R = .454$, $R^2 = .206$, $F(1,132) = 17.021$, $p = .000$.

Table-2. Regression Coefficients, adaptive perfectionism and academic self-concept

	B	***SE B***	***β***
Model 1			
Constant	86.226	6.527	
Organization	1.318	.269	.392*
Model 2			
Constant	71.078	8.169	
Organization	1.004	.283	.299*
Personal Standards	.868	.295	.247*

* $p < .005$

4. DISCUSSION

Adaptive perfectionism can be viewed as the desire to strive for achievement. Individuals with a tendency towards adaptive perfectionism, are organized and have high personal standards. Maladaptive perfectionism can be viewed as a tendency to doubt ones actions, be overly concerned about making mistakes, and not meeting expectations.

With respect to the first hypothesis (H_1), *Maladaptive perfectionism was negatively associated with academic self-concept.* The maladaptive perfectionism subscale of Doubts about actions influenced academic self-concept. Specifically, high Doubts about actions (i.e., high self-doubt) was associated with low academic self-concept. Interestingly, the maladaptive subscales of Parental Expectations, Parental Criticism, and Concern over Mistakes had no influence on academic self-concept. The finding that Doubts about actions influenced academic self-concept is consistent with research that considers self-doubt to be a component of self-concept (Morony *et al.*, 2013) and anxiety (Stankov *et al.*, 2014). However, the finding that Doubts about actions influenced domain specific academic self-concept is an important finding. Educators could integrate cost effective classroom activities that have been shown to reduce self-doubt. Writing about high-point experiences (Jennings and McLean, 2013) and consistent affirmation of their capabilities (Fan and Williams, 2010) are two examples.

With respect to the second hypothesis (H_2), *Adaptive perfectionism was positively associated with academic self-concept.* The adaptive perfectionism subscales of Personal Standards and Organization influenced academic self-concept. Specifically, high Personal Standards and Organization were associated with high academic self-concept. This result provides further evidence to the value of personal standards to a child's academic success. Researchers have found high personal standards to be associated with academic achievement (Accordino *et al.*, 2000) and academic engagement (Shim *et al.*, 2016). Educators may want to include a cost-effective task of creating high but also appropriate personal standards as part of a curriculum.

The finding that Organization influenced academic self-concept is significant. The value of organization skills can be found in studies of children with attention-deficit / hyperactivity disorder (ADHD). Langberg *et al.* (2008) found an organization skills training program improved homework management skills in a sample of 4th to 7th grade children with ADHD. Organization skills training that included note taking, use of daily planner, and binder organization was part of a successful summer treatment program for adolescents with ADHD (Sibley *et al.*, 2012). The present study provides evidence to the value of organization skills to academic self-concept. Additional research (Langberg *et al.*, 2008) provides evidence to the value of organizational skills to general academic success. It would appear that the inclusion of organizational skills training in a curriculum would yield multiple benefits to academic achievement. Surprisingly, to our knowledge, most curriculums do not include organizational skills training.

4.1. Study Strengths and Limitations

A strength of the research is its generality to the broader ethnic population which lies in the diversity of the present sample consisting of 20% White, 50% Black, 24% Hispanic and 6% American Indian / Alaska Native, or Asian / Pacific Islander. Some limitations of the research should be noted; there were a limited number of male participants (24%) in the study. In addition, only undergraduate students from a Southern university were included in the present research.

5. CONCLUSION

Future studies could explore the direct and indirect effects of perfectionism on academic achievement while considering academic self-concept as a mediator. This could be of value in explaining the inconsistent findings of the direct relationship between perfectionism and academic achievement. Additionally, as recommended by Yu *et al.* (2016) and similar to research conducted by Chand *et al.* (2018) researchers could use cognitive behavioral

therapy (CBT) to reduce maladaptive perfectionism. More specifically, researchers could create an intervention that includes organization skills training and reduction self-doubt activities. Researchers could then explore changes in perfectionism tendencies and the resulting increases in academic self-concept.

In today's academic environment, there is a tenacious effort to better educate our children. Unfortunately, federal and local budget constraints often limit our ability to create highly effective learning environments. As educators, it becomes our task to identify cost effective activities that will have a positive impact on our student's education. The present study provides evidence that academic self-concept is influenced by setting high personal standards, being organized, and having low self-doubt. Educators can include many cost-effective activities that could help students set high and appropriate standards, be organized, and have reduced self-doubt. It is possible that the most cost effective and potentially rewarding activity of an educator, beyond the act of teaching, is to increase the confidence in his/her students.

Funding: This study received no specific financial support.
Competing Interests: The authors declare that they have no competing interests.
Contributors/Acknowledgement: Both authors contributed equally to the conception and design of the study.

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