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Competitiveness and Motivation for Education in Academic Self-Handicapping

Abstract

Previous research examined only the role of interpersonal competition in academic self-handicapping. Therefore, from the multidimensional perspective, the goal of the presented research on academic self-handicapping was to determine the role of (1) different attitudes to competition, (2) the reasons that motivate people for competition and (3) the reasons for avoidance of competition. We also aimed at distinguishing the roles of different types of motivation for education in academic self-handicapping, according to the level of self-determination. Participants were 748 high school students.

In academic self-handicapping the results confirmed the relevance of distinguishing among different dimensions of competitiveness. Those denoted by selfworth protection proved to be more characteristic of academic self-handicapping than those depicted by testing one's own limits and by high importance of the quality of task accomplishment. Regarding motivation for education, amotivation played the important role. Intrinsic motivation correlated with academic self-handicapping negatively, but extrinsic motivation showed no significant correlation. Important implications for refinements of pedagogical practice are discussed.

Keywords: *competitiveness, motivation for education, academic self-handicapping, high school students*

Introduction

The first goal of the presented research on academic self-handicapping (ASH) was to determine the role of different attitudes to competition (Ryckman, Hammer, Kaczor and Gold, 1990; Ryckman, Hammer, Kaczor and Gold, 1996), the role of the reasons that motivate people for competition (Franken and Brown, 1995) and the role of the reasons for the avoidance of competition (Franken and Prpich, 1996). And secondly, given a lack of data on the relationship between ASH and different types of motivation for education, we wished to differentiate the role of different types of motivation from the perspective of self-determination theory (Deci and Ryan, 2000).

Competitiveness

Earlier theories emphasise the one-dimensional perspective of competitiveness (Deutsch, 1949; Kohn, 1986; Johnson and Johnson, 1989), while more recent research is based on the findings of its multi-dimensional structure (Ryckman et al., 1990; 1996).

Ryckman (Ryckman et al., 1990; 1996) differentiated two competitive orientations. Hyper-competitiveness is defined as negative and neurotic competitiveness, depicted by hostile, aggressive, manipulative and exploitive behavior toward others. On the other hand, personal development competitiveness reflects healthy competitive orientation. Such individuals may place high value on winning, but they have learned to compete *with* others. The main emphasis is on the discovery of one's potentials.

Franken and Brown (1995) defined five motives for people's participation in a competitive situation: (1) a need to win, (2) improving performance, (3) motivation to put forth effort, (4) preference for difficult tasks, and (5) the wish to perform well.

In exploring the motivation for avoidance of competition, Franken and Prpich (1996) stated three reasons. Self-image concerns refer to the individual's fear related to the outcome: fear of failing or looking bad. Performance concerns refer to the individual's fear related to the process of performing a task: self-conscious-ness, nervousness and the need to meet high expectations of others. Franken and Brown (1995) stated that if the competitive situation triggers ego-orientation, the individual can dislike competition due to self-image concerns, and accordingly, if the competitive situation triggers task-orientation, the individual avoids competition because it may disturb the process of performing a task. One of the important reasons for disliking competition is that competition involves evaluation, and

evaluation can interfere with the ability to master, learn, or perform (Franken and Prpich, 1996). Distraction of attention due to evaluation refers to sensitivity to being watched, self-focused attention, approval/disapproval, and strength/weakness focusing.

Motivation for education

In exploring motivation theorists have made a distinction between intrinsic and extrinsic motivation (e.g., Deci, Vallerand, Pelletier and Ryan, 1991). Later, in the light of a multidimensional view of motivation, self-determination theory proposed four types of extrinsic motivation (Deci and Ryan, 2000). External regulation refers to behavior that is determined through rewards and constraints. Introjected behaviors are controlled in part by the environment, but also by internal contingencies (e.g., ego enhancement, guilt, shame, or obligation). Identified regulation refers to behaviors that are performed by choice because the individual finds them to be important. Integrated regulation occurs when regulations are assimilated with the self, though the goals are still extrinsic.

Vallerand et al. (1992) proposed a tripartite taxonomy of intrinsic motivation. Motivation to know refers to the desire to perform an activity for the enjoyment one receives while learning new things. Motivation to accomplish refers to the satisfaction one receives from accomplishing new things. Finally, individuals who participate in an activity for the satisfaction derived while experiencing pleasurable intellectual or physical sensations are motivated to experience stimulation.

Amotivation refers to a lack of intentionality. As education amotivated individuals do not believe that they can influence future events, they avoid school obligations (Deci and Ryan, 2000).

Academic self-handicapping

Jones and Berglas (1978) defined self-handicapping as "any action or choice of performance setting that enhances the opportunity to externalize failure and to internalize success" (p. 406). Self-handicapping is led by two principles of attribution. The discounting principle means that "by creating an impediment to performance, the self-handicapper minimizes the implications of failure because failure is discounted - that is, it is attributed to the obstacle rather than to low ability" (Baumeister and Scher, 1988, p.8). The augmentation principle holds that self-handicappers are also able to rely on the favorable implications of successful performance (Baumeister and Scher, 1988), meaning success in spite of impediment represents high ability. Urdan and Midgley (2001; Karner-Huţuleac, 2014) identified a range of ASH behaviors, such as: withdrawing effort, not seeking help when required, not taking risks, and giving up after encountering a challenge.

Research Problem

Since previous research examined only the role of interpersonal competition in ASH - participants self-handicapped more if they anticipated public comparison of the results (e.g., Kimble et al., 1998), from the multidimensional dispositional perspective the goal of the presented research was to determine the role of (1) different attitudes to competition (Ryckmann et al., 1990; 1996), (2) reasons that motivate people for competition (Franken and Brown, 1995), and (3) the reasons for the dislike of competition (Franken and Prpich, 1996).

Furthermore, previous research does not differentiate the roles of different types of intrinsic and extrinsic motivation in ASH. For instance, Midgley, Arunkumar and Urdan (1996) found a positive correlation between extrinsic goals and ASH, and Thomas and Gadbois (2007) reported a negative correlation between ASH and perceptions of the intrinsic value of learning. We hypothesized that ASH was associated with less autonomous types of extrinsic motivation for education, as well as with amotivation.

Research Methodology

Participants

748 secondary-school students from Slovenia participated in the study: 371 (49.6%) boys and 377 (50.4%) girls. Their age range was 15 to 19 (M= 16.95, SD=1.20).

Research instruments

With the exception of the Hypercompetitiveness Scale and Personal Development Competitiveness Scale, which were translated into Slovenian by Kobal et al. (2004), all the instruments were translated into Slovenian according to the International Test Commission recommendations (Bucik, 2000).

Academic Self-Handicapping. The instrument was the Academic Self-Handicapping Scale (Midgley et al., 1996), which comprises 6 items designed to assess ASH in the academic domain. Cronbach's alpha of Slovenian translation (.71) indicates adequate reliability.

Academic Motivation. The Academic Motivation Scale – High school version (AMS-HS 28; Vallerand et al., 1992) is a 28-item scale measuring intrinsic and

extrinsic motivation as well as amotivation. The scale consists of seven subscales, each consisting of four items representing a response to the question: 'Why do you go to school?' With PCA and according to the Kaiser criterion, we extracted 5 factors – and not 7 as in the original factor structure (Vallerand et al., 1992). Considering the results of factor analysis, it was, firstly, not possible to distinguish subtypes of intrinsic and extrinsic motivation, and secondly, it was not possible to compute scores for autonomous/controlled motivation. With extraction limited to three factors we were able to distinguish an original three-factor structure: intrinsic motivation, extrinsic motivation and amotivation. Reliability for the intrinsic motivation total scale with 12 items was .90, for extrinsic motivation total scale with 12 items.

Competitiveness. The 26-item Hypercompetitive Attitude Scale (HCA; Ryckman et al., 1990) was used to measure hypercompetitiveness. Adequate reliability of the HCA (i.e., alpha coefficient .65-.87) was reported in English samples (Ryckman et al., 1990; Thornthon et al., 2011); for the Slovenian version of the scale the reliability was .71 (Kobal et al., 2004) and in the presented research .82. The 15-item Personal Development Competitive Attitude Scale (PDCA; Ryckman et al., 1996) was used to measure personal development competitiveness. For the Slovenian scale the reliability was .69 (Kobal et al., 2004) and for the presented research .84. Ryckman et al. (1996) assessed strong support for the construct validity of the scale and also for the discriminant validity, for both competitiveness constructs are proven to be orthogonal. We applied a 19-item Competitiveness/ Mastery Questionnaire (CMQ; Franken & Brown, 1995) to measure five different reasons for participating in competitive situations. With PCA and according to the Kaiser criterion, four factors were extracted; items of Improving performance and of Performing well joined in the same factor, which was named Improving performance on a task well done. In the presented research internal consistency of the subscales showed adequate: for Need to win the alpha-coefficient was .79, for Motivation to put forth effort .74, for Improving performance on a task well done .75 and for Preference for difficult tasks .65. To measure reasons for avoidance of competition three instruments were used. The 8-item Self-Image Concerns Scale (SIC; Franken and Prpich, 1996) was used to measure self-image concerns. Franken and Prpich (1996) reported high reliability of the scale (.89), which was determined also for the Slovenian version (.87). In order to measure perceived negative influences of the competitive situation on the process of task execution itself, the 4-item Performance Concerns Scale (PC; Franken and Prpich, 1996) was applied. If compared to Franken and Prpich's (1996) reported reliability (.84), the reliability of the Slovenian version of the scale was similar (.80). With the 16-item

Distraction of Attention Scale (DIST; Franken and Prpich, 1996) we measured distraction of attention due to evaluation. Franken and Prpich (1996) reported high internal consistency of the scale (.90), which was determined also for the Slovenian version (.86).

Procedure

The research was done with the agreement of high-school principals during regular class hours, where teachers were absent. The study was introduced to participants as research on student motivation and their collaboration was explained as voluntary and anonymous. No participant refused collaboration.

Results

Correlations among academic self-handicapping and included variables

The correlations among the variables are shown in Table 1. ASH was most strongly and positively correlated with the hypercompetitiveness, amotivation, distraction of attention, and with self image concerns. The participants higher in ASH reported lower satisfaction that comes from improving performance on a task well done, lower preference for difficult tasks, lower intrinsic motivation, and lower personal development competitiveness. No significant relationship with ASH was found for the motivation to put forth effort or for extrinsic motivation for education.

Variable	ASH
Hypercompetitiveness	.275**
Personal development competitiveness	074*
Performance concerns	.087**
Self-image concerns	.206**
Distraction of attention	.207**
Need to win	.144 **
Motivation to put forth effort	051
Preference for difficult tasks	132**
Improving performance on a task well done	251**
Intrinsic motivation	113**
Extrinsic motivation	.006
Amotivation	.266**

Table1. Bivariate correlations among the variables

Note. *Correlation is significant at the .05 level (two-tailed); **correlation is significant at the .01 level (two-tailed).

Variables predicting self-handicapping

We used stepwise multiple regression to determine which of the independent variables contribute significantly to the multiple regression model. An inclusion criterion of p=.90 removed Personal development competitiveness, Need to win, Motivation to put forth effort, Extrinsic motivation, Intrinsic motivation, Self-image concerns, Preference for difficult tasks and Performance concerns.

Each of the four steps in the analysis showed a significant change in the variance accounted for the ASH (R2 change ranged from .077 in the first model to .178 in the last model, with F for all four models p<.001). Table 2 indicates that a combination of four (out of twelve) predictors in the final regression model accounted for 18% of the variance in ASH. The strongest positive predictors of ASH proved to be hypercompetitiveness, amotivation for education and distraction of attention. Improving performance on a task well done emerged as a negative predictor of ASH.

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Predictor	β	b	SE b	t
Constant		6.847	1.455	4.706*
Hypercompetitiveness	.219	.067	.011	6.247*
Amotivation	.206	.150	.026	5.798*
Distraction of attention	.138	.052	.013	4.038*
Improving performance on a task well done	133	111	,030	-3.679*

 Table 2. Final model of stepwise multiple regression for variables predicting academic self-handicapping

Note. Adjusted R2 = .178; F (4,738) = 39.67, p < .001 (using the stepwise method). *p < .001.

Discussion

The role of the reasons for avoidance of competition in academic self-handicapping

In our research, among the reasons for dislike of competition, regression analysis showed distraction of attention as an important (positive) predictor of ASH. According to the findings that self-handicappers see failure as a final proof of low ability (Rhodewalt, 1994), the presented results show that self-handicappers in competitive situations focus on information concerning failure, which interferes with attention and task-focusing. By increasing the likelihood of failure, inner distractors threaten the self-handicapper's ability image and hence increase the functionality of ASH.

Furthermore, as it is positively correlated with performance concerns, our results show that ASH in a competitive situation may also represent the means of creating "breathing space" necessary for focusing on a task (Deppe and Harackiewicz, 1996, pp. 874).

As expected, self-image concerns did not emerge as an important positive predictor of ASH. The self-handicapper does not seem to be concerned about the deleterious consequences of competition referring to the outcome itself; by ASH s/he tries to alleviate failure by circumstances in which it originated.

Among the reasons for avoiding the participation in competitive situations, ASH is predicted by distraction of attention. We may assume that defensive selfesteem represents the reason for the lack of concern for performance and selfimage outcome. ASH appears to represent a means of creating and maintaining defensive self-esteem, i.e. the illusion of unrealized potentials.

The role of attitudes to competition in academic self-handicapping

Regression analysis showed hypercompetitiveness as a positive predictor of ASH; preventing failure regardless of means seems to be of central importance in ASH. Creating obstacles to successful performance appears to be a hypercompetitive way of manipulating oneself and others. Hypercompetitive and ASH individuals both value relative achievement and perceive others as obstacles to their self-worth (Ryckman et al., 1990). Accordingly, correlation analysis showed low personal development competitiveness being characteristic of academic self-handicappers, and negatively correlated with all three reasons for avoidance of competition.

The role of the reasons for participating in competition in academic self-handicapping

Among the reasons for participating in competition, improving performance on a task well done showed the highest correlation with ASH and stepped out as the only negative predictor of ASH. Other two reasons for participating in competitive situations showed low but significant correlations with ASH: the preference for difficult tasks negative and the need to win positive correlation. We may conclude that long-term satisfaction in developing one's abilities in competitive situations enhances development of better coping with school work, and, hence, lower need for ASH.

Our results show ASH as being very low and positively correlated with the need to win, which is characterized by goal attainment with correct performance

(Šimek, 2008; Šimek and Kobal, 2011). At the same time, ASH showed higher correlations with hypercompetitiveness, characterized by goal attainment regardless of means. Hypercompetitiveness as a positive predictor indicates that ASH is more about preventing failure regardless of means.

Our results confirm the relevance of distinguishing between dimensions of competitiveness that by focusing students on demonstrating ability/preventing failure increase the need for ASH, and between those that positively influence the learning process, enhance task-orientation and are perceived as an enthusiastic challenge of interpersonal comparison.

Positive aspects of competition in the field of education have been emphasized for only more than a decade (Fülöp, 2006). It seems important to emphasize that also for competition, and not as traditionally thought only for cooperation, learning is of great importance. Because it defines the sole nature of the competitive process, learning of the positive relationships among rivals and diverting from hypercompetitive values must be emphasized.

The role of motivation for education in academic self-handicapping

Amotivation proved to be a positive predictor of ASH. It increases the likelihood of failure in school situations (Deci and Ryan, 2000), which jeopardizes the role of abilities and to a great extent threatens the individual's self-esteem. Our results show ASH as representing a way of maintaining the image of unrealized potentials in amotivated individuals. In this sense, ASH can be the last possibility for teachers to channel that avoidance-orientation in task-orientation.

Our findings show that intrinsic motivation is negatively correlated with ASH (extrinsic motivation was not significantly correlated with ASH). Similarly, other researchers report self-handicappers' low level of intrinsic goals (Thomas and Gadbois, 2007) and low level of perceived self-efficacy (Bandura, 1997). If academic self-handicappers do not spend a lot of time developing their ability in that domain, we may assume that this leads to the low perceived efficiency and to a higher need for self-worth protection.

The results of factor analysis did not allow us to distinguish subtypes of extrinsic and intrinsic motivation, so we could not prove our assumption of ASH as being associated with less autonomous types of extrinsic motivation for education. The question of the role of autonomy of motivation for education in ASH, apart from the insight at the level of three main types, remains open.

References

Bandura, A. (1997). Self-Efficacy: The exercise of control. New York: Freeman & Co.

- Baumeister, R.F., & Scher, S.J. (1988). Self-defeating behavior patterns among normal individuals. *Psychological Bulletin*, 104, 3–22.
- Bucik, V. (2000). Principles of the cross-cultural adaptation of an inventory: the case of the Pavlovian Temperament Survey. *Psihološka obzorja*, 9(3), 67–78.
- Deci, E.L. & Ryan, R.M. (2000). The "what" and "why" of goal pursuits. *Psychological Inquiry*, 11, 227–268.
- Deci, E.L., Vallerand, R.J., Pelletier, L.G., & Ryan, R.M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26, 325–346.
- Deci, E.L. (1975). Intrinsic motivation. New York: Plenum Press.
- Deppe, R.K., & Harackiewicz, J.M. (1996). Self-handicapping and intrinsic motivation. *Journal of Personality and Social Psychology*, 70, 868–876.
- Deutsch, M. (1949). A theory of cooperation and competition. *Human Relations*, *2*, 129–152.
- Franken, R.E., & Brown, D.J. (1995). Why do people like competition? *Personality and Individual Differences*, 19(2), 175–184.
- Franken, R.E., & Prpich, W. (1996). Dislike of competition and the need to win. *Journal of Social Behavior and Personality*, 11(4), 695–712.
- Fülöp, M. (2001). Teachers' perception of the role of competition in their respective countries: Hungary, Japan and USA. *Children's Social and Economic Understanding*, 4(3), 142–159.
- Fülöp, M. (2006). Competition and cooperation in the psychological literature. In: A.Ross, M. Fülöp& M. Pergar Kuščer (Eds.) *Teachers' and pupils' constructions* of competition and cooperation. Ljubljana: Pedagoška fakulteta.
- Johnson, D.W., & Johnson, R.T. (1989). *Cooperation and competition: Theory and research*. Minnesota: Interaction.
- Jones, E.E., & Berglas, S. (1978). Control of attributions about the self through selfhandicapping strategies. *Personality and Social Psychology Bulletin*, 4, 200–206.
- Karner-Huțuleac, E. (2014). Perfectionism and Self-handicapping in Adult Education. *Procedia- Social and Behavioral Sciences*, 142, 434–438.
- Kimble, C., Kimble, E.A., & Croy, N.A. (1998). Development of Self-Handicapping Tendencies. *Journal of Social Psychology*, 138(4), 524–34.
- Kobal, D., Kolenc, J., Lebarič, N. & Žalec, B. (2004). *Self-concept between motivation and competition: interdisciplinary approach*. Ljubljana: Študentska založba.

- Kohn, A. (1986). *No Contest. The Case against Competition*. Houghton Mifflin Company: Boston.
- Midgley, C., Arunkumar, R., & Urdan, T.C. (1996). If I don't do well tomorrow, there's a reason. *Journal of Educational Psychology*, 88, 423–434.
- Midgley, C., & Urdan, T. (1995). Predictors of middle school students' use of selfhandicapping strategies. *Journal of Early Adolescence*, 15, 389–411.
- Rhodewalt, F. (1994). Conceptions of ability, achievement goals, and individual differences in self-handicapping behavior. *Journal of Personality*, 62, 67–85.
- Ryckman, R.M., Hammer, M., Kaczor, L.M., & Gold, J.A. (1990). Construction of a hypercompetitive attitude scale. *Journal of Personality Assessment*, 55, 630–639.
- Ryckman, R.M., Hammer, M., Kaczor, L.M. & Gold, J.A. (1996). Construction of a personal development competitive attitude scale. *Journal of Personality Assessment*, 66, 374–386.
- Šimek, D. (2008). Academic self-handicapping among high-school students. In: PODLESEK, Anja, KOMIDAR, Luka (Eds.). Abstracts. *Psihološka obzorja*, 17, 63–64. Društvo psihologov Slovenije: Ljubljana.
- Šimek, D., & Kobal Grum, D. (2011). Competitiveness and motivation for education in self-handicapping. *Studia psychologica*, 53/1, 83–96.
- Thomas, C.R. & Gadbois, S.A. (2007). Academic self-handicapping. *British Journal* of *Educational Psychology*, 77, 101–119.
- Thornton, B., Ryckman, R.M. & Gold, J.A. (2011). Competitive orientations and the Type A Behavior Pattern. Psychology, 5/2, 411–415.
- Urdan, T. & Midgley, C. (2001). Academic self-handicapping: What we know, what more there is to learn, *Education Psychology Review* 13(2) (2001), 115–138.
- Vallerand, R.J., Pelletier, L.G., Blais, M.R., Briere, N.M., Senecal, C.B. & Vallieres, E.F. (1992). The Academic Motivation Scale. *Educational and Psychological Measurement*, 52, 1003–1017.