

THE RELATIONSHIP BETWEEN STUDENTS' SOCIAL ACCEPTANCE, ACADEMIC SELF-HANDICAPPING AND ACADEMIC ACHIEVEMENT IN MIDDLE ADOLESCENCE

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Abstract:

The relation between students' peer relations and their academic performance is well documented in childhood. In adolescence, the findings of the present studies are not so clear and are mostly focused on the students in early adolescence. The purpose of this study was to examine the relation between different measures of peer relations (social preference, social impact, and peer perceived popularity) and students' academic achievement, testing the possible mediating role of students' academic self-handicapping. In addition, we investigated whether students of different sociometric groups differ in academic achievement and academic self-handicapping. 534 Slovenian students participated in the study. No relationship between measures of peer relations, academic self-handicapping, and academic achievement was found. The results of this study provide some evidence about the independence of social and academic performance in middle adolescence and indicate that the findings about its relatedness from childhood and early adolescence cannot be generalized to students in middle adolescence.

Keywords: academic achievement, academic self-handicapping, middle adolescence, peer relations, students

SOCIAL AND ACADEMIC VARIABLES IN EDUCATIONAL RESEARCH

The relation between peer relations and students' academic performance was extensively examined in the last three decades. The results of these studies (e.g. Hatzuchtistou & Hopf, 1996; Ollendick, Weist, Burden, & Greene, 1992; Wentzel, 1991; Wentzel & Asher, 1995; Wentzel & Cadwell, 1997) indicate positive relation between peer relations and students' academic performance; the students feeling more accepted by their peers also achieve more (e.g. Chen, Chang, & He, 2003; Guay, Boivin, & Hodges, 1999; Wentzel, 1993; Wentzel & Caldwell, 1997). Also, the results of different studies (e.g. Wentzel, 1991) consistently show that sociometrically popular students are those usually achieving better outcomes and that rejected students are frequently those having learning difficulties. These findings were most consistent when academic outcomes were measured by students' grades (Hatzuchtistou & Hopf, 1996; Wentzel, 1991; Wentzel & Cadwell, 1997), although peer acceptance was also found to be related to standardized test achievements (Austin & Draper, 1984), as well as to students' intelligence (Wentzel, 1991). Students of lower sociometric in-class status, especially rejected students, represent a group of higher risk for learning difficulties and school drop-out (Hatzuchtistou & Hopf, 1996; Ollendick et al., 1992). This holds especially true for aggressive rejected students (Wentzel & Asher, 1995).

Recently, students' academic performance was investigated also in the relation to peer perceived popularity as another measure of peer relation that is distinct to social acceptance. Students social acceptance is a dyadic construct and represents an indicator of students' likeability, whereas popularity is defined as a reputational construct involving power and sta-

tus in the group (Lease, Kennedy, & Axelrod, 2002) and is closer to the sociometric measure of social impact (Cillessen & Marks, 2011). However, based on the existing research findings (e.g. Hopmeyer Gorman, Schwartz, Nakamoto, & Mayeux, 2011; Košir and Pečjak, 2007), it seems that academic achievement is more strongly related to social acceptance, whereas the correlations to peer perceived popularity are small and mostly nonsignificant. Similarly, de Bruyn & Cillessen (2006) report that early adolescents distinguish two types of popular peers: “populistic” (popular but not necessarily well liked) and “prosocial-popular” (popular and well-liked), whereas the first group is perceived as academically disengaged and the latter as academically engaged.

From the developmental point of view, most of the studies that examined the relation between students’ social status and their academic (and non-academic) performance included children and most of the findings mentioned above can be generalized only to this developmental period. Studies that investigated the correlates of social status in adolescents were mostly focused on early adolescence; these studies (e.g. Frenzt, Gresham and Elliot, 1991 Hopmeyer Gorman et al., 2011) indicate that most of the relations between academic variables and sociometric status mentioned above are similar in adolescence. However, Wentzel (1994) reports a negative relation between students’ responsible academic behaviour and their peer acceptance in early adolescence. As indicated by Juvonen (1996), in transition to adolescence, the clash between social and academic goals is possible. Such incongruities occur when students try to simultaneously satisfy the expectations of teachers and of peers which can sometimes collide. Also, the incongruities between students’ academic values and those of their friends can appear. As emphasized by Juvonen (1996), such situations have still not been sufficiently investigated and deserve more research attention.

Košir, Sočan and Pečjak (2007) examined the relation between social acceptance, perceived popularity and academic achievement in three different age groups: late childhood, early adolescence and middle adolescence. In middle adolescence, they found significant low positive correlations between academic achievement and social preference and between academic achievement and perceived popularity. In both younger age groups the relation between social and academic variables was stronger (the stronger was in the youngest age group), indicating that students’ age is an important moderator of the relation between social and academic variables.

Therefore, since the relation between social acceptance and academic achievement seems to be age-specific and the research examining this relation in middle adolescents is scarce, the purpose of the current study was to further investigate the relationship between two different measures of peer relations – i.e. social acceptance and peer perceived popularity - and academic achievement in students in middle adolescence. Specially, our aim was to explore whether students’ academic self-handicapping that is described in the next section could possibly explain low correlations between peer acceptance and academic achievement reported by the previous research.

ACADEMIC SELF-HANDICAPPING AS A MEDIATOR BETWEEN SOCIAL AND ACADEMIC VARIABLES?

Martin, Marsh, Williamson and Debus (2003) point out that competitive educational environments where rewards are explicitly tied to achievements and where performance depends on overachieving others are likely to promote self-protection strategies among students. For an individual school work does not always mean only doing his/her best. It is often connected with high achievement pressure and with public comparison, e.g. competition and evaluation, with information that refers to ability being often publicly displayed. Berglas and Jones (1978) define self-handicapping as “any action or choice of performance

setting that enhances the opportunity to externalize failure and to internalize success" (p. 406). Urdan and Midgley (2001) identify a range of academic self-handicapping behaviours, such as: withdrawing effort, not seeking help when required, not taking risks, and giving up after encountering a challenge. Martin et al. (2003) interviewed students and found that first year university students who were identified as high self-handicappers seized opportunities to engage in distractions while those low in self-handicapping actively resisted distractions. Self-handicapping is led by two principles of attribution (Berglas, 1987, Kelley, 1972; Jones and Berglas, 1978).

Firstly, the discounting principle means that self-handicapping provides an alibi for anticipated poor academic performance. By putting in front impediments such as lack of effort or being drunk the night before exam, self-handicappers are able to blur the connection between ability and performance and to proactively alter the meaning or implications of the anticipated failure. Through such strategic manoeuvring, individuals are able to avoid disconfirmation of a desired self-conception. Indeed, Covington and Omelich (1979) found that following failure, individuals are judged as less incompetent when they invest little effort but have an excuse available. Secondly, the augmentation principle holds that self-handicappers are also able to rely on the favourable implications of successful performance (Baumeister and Scher, 1988), meaning success in spite of impediment represents high ability. However, academic self-handicapping is found to be negatively related to academic achievement (e.g. Midgley, Arankumar, & Urdan, 1996).

THE CURRENT STUDY

Thus, the function of academic self-handicapping is not just self-protection but also to create a favourable public image. In adolescence, it can also be regarded as an impression management strategy that promotes a desirable social standing in peer group. In this light, it seems meaningful to investigate students' academic functioning in relation to its meaning for students' social status in the classroom. Also, as Hopmeyer Gorman et al. (2011) noted, the circumstances in which academic performance is associated with liking versus disliking among peers are not sufficiently explored yet. Especially in adolescence, high-achievement at school can be incompatible with the values and behavioural orientation of the larger peer group.

The purpose of this study is to investigate the nature of the relationship between students' social acceptance and their academic performance in middle adolescence, examining academic self-handicapping as a possible mediator. Also, we were interested whether students of different sociometric groups differ in academic achievement and academic self-handicapping.

METHOD

Participants

The participants were 534 students from 21 classrooms of three Slovenian secondary schools (mean age 17.18 years; SD = 0.74; 41.9 % male). The substantial majority of students were Slovenian. Only students who returned signed parental permission forms participated in the study.

MEASURES

Measures of peer relations

Three peer nomination criteria were used: “Name three peers in your classroom you like most,” “Name three peers in your classroom you like least,” and “Name three most popular classmates in your classroom”. Nominations on these three criteria were calculated for each student. The number of nominations for each student was standardized within classrooms. Different peer nomination measures were calculated.

Social preference was used as a crucial measure of students' social acceptance. It was defined as a difference between standardized positive (like most) and negative (like least) nominations and is a measure of student's relative likableness (Coie, Dodge, & Coppotelli, 1982).

Social impact is defined as a sum of standardized positive (like most) and negative (like least) nominations and reflects students' social visibility; students with high scores are regarded as highly visible members of the social group (Terry, 2000).

Peer perceived popularity is defined as standardized most popular nominations.

Sociometric classification. On the basis of preference and impact scores we classified the students into five sociometric status categories (popular, rejected, neglected, controversial, and average) according to the criteria described by Coie et al. (1982).

Academic achievement

Students were asked to provide information about their GPA in the previous school year.

Academic Self-Handicapping

Academic Self-Handicapping Scale (Midgley et al., 1996), which is composed of six items designed to assess behavioural self-handicapping in the academic domain was used as a measure of students' academic self-handicapping. Students assess the items on the five-point scale ranging from *never* (1) to *always* (5). Items include self-handicapping behaviour, the reason for creating a specific obstacle and the *a priori* timing of the strategy. Self-handicapping is, hence, clearly distinguished from the attributions. Midgley et al. (1996) reported high internal consistency of the scale (Cronbach's alpha = .84), which was confirmed by other researchers, e.g. Thomas and Gadbois (2007). The instrument was adapted into Slovenian (Šimek & Kobal Grum, 2011). Cronbach's alpha of the Slovenian translation (.71) indicated adequate reliability (Šimek & Kobal Grum, 2011).

PROCEDURE

The data was collected in the middle of the school year (in April and May). The questionnaire for students was administered collectively in the classrooms by one of the authors who was also available to assist students. The time available to complete the questionnaire was unlimited. The majority of students completed the questionnaires in ten to fifteen minutes.

RESULTS

Table 1 Means, standard deviations, reliabilities and correlations (total sample)

	<i>M</i>	<i>SD</i>	1	2	3	4	5
<i>Time 1</i>							
1. Social preference	0.00	1.53	-				
2. Social impact	0.00	1.23	.00	-			
3. Peer perceived popularity	0.00	0.98	.24*	.17*	-		
4. Academic achievement	3.19	0.89	.05	-.02	.05	-	
5. Academic self-handicapping	1.88	0.50	-.05	.01	-.08	-.16*	(.62)

Note. Academic achievement and academic self-handicapping range from 1 to 5 with higher values reflecting a greater magnitude of the variable. Alpha reliability coefficient of academic self-handicapping scale is shown on the diagonal.

* $p < .01$.

Means and standard deviations as well as correlations between variables are shown in Table 1. Students report a quite low level of academic self-handicapping. However, the most puzzling data from Table 1 are zero correlations between almost all variables included in the study. Indeed, the only significant correlations are the correlations between academic achievement and academic self-handicapping and between peer perceived popularity and social preference on one side and social impact on another. The correlation between academic achievement and academic self-handicapping is also low and negative: students with higher achievements report less academic self-handicapping.

Thus, in our study, social and academic variables are completely unrelated dimensions of students' lives at school. The possibility of any obvious nonlinear trends of relations between variables was excluded using scatterplots.

When comparing different sociometric groups in their academic achievement and academic self-handicapping, the same picture emerges. Students from different sociometric groups (i.e. popular, rejected, neglected, controversial, and average) do not differ significantly nor in their achievement ($F(4, 529) = 1.20$; $p = .31$) neither in academic self-handicapping ($F(4, 529) = 0.57$; $p = .68$).

In this situation of zero correlations between variables, the use of any more complex statistical measures (i.e. regression) that would test the possible mediating role of academic achievement between social acceptance and academic achievement would be completely meaningless.

DISCUSSION

The aim of our research was to examine the relationship between students' peer relations and their academic performance in middle adolescence. Specially, we were interested in whether the low correlations between social and academic variables found in previous studies could be possibly explained by the use of academic self-handicapping strategies mediating the relation between social acceptance and academic achievement.

Although low correlations between different measures of peer relations and academic achievement were expected, the results of our study are surprising. The correlations between all variables included in the study were near zero, with the exception of significant correlations between social preference and social impact with peer perceived popularity (correlations of similar size were found also in previous studies, e.g. Košir & Pečjak, 2005) and corre-

lation between academic achievement and academic self-handicapping. Students with higher achievements report lower level of academic self-handicapping. However, the correlation is low, and it is lower than reported in previous studies (Midgley & Urdan, 1995; Midgley et al., 1996; Midgley & Urdan, 2001; Šimek & Kobal Grum, 2011).

Hereinafter, we analyse some factors that could contribute to the low correlations between constructs included in the study. Students generally report a low level of academic self-handicapping (mean answer is 1.88 on a five-point scale) with little variability in their answers ($SD = 0.50$). This consistency in their self-assessments of academic self-handicapping could in some part contribute to low correlations between academic self-handicapping since it creates a condition that is similar to the well-known range restriction condition. Of course we did not exclude students with more extreme levels of academic self-handicapping, however, the validity of using self-report as a measure of self-handicapping can be questionable since self-handicapping represents a self-protection strategy and is therefore prone to biases in self-assessment. These biases could possibly lead to underestimation of their use of academic self-handicapping in some students. Also, Academic Self-Handicapping Scale used in this study exhibited reliability that is lower than reported in previous studies (Midgley et al., 1996; Thomas and Gadbois, 2007; Šimek & Kobal Grum, 2011) which is another sign that could question also the validity of academic self-handicapping measure.

However, the reasons mentioned above do not explain low correlations between peer relationship measures and academic achievement that were assessed using objective, valid, and established measures. Thus, in our sample, students' peer relations and their academic achievement were completely unrelated spheres of their school functioning. It seems that the intertwining between social and academic variables that is typical for childhood and less for early adolescence transforms into complete independence as students reach middle adolescence. However, for any conclusions about developmental trends in the relation between social and academic variables in students longitudinal data would be needed.

Since our research problem was carefully formulated on the basis of previous research and open questions about the relationship between social acceptance and academic performance in adolescence, and the research was performed properly and on a large enough sample (i.e. the Type II error is not likely), we strongly believe that our results represent important information about (non)relatedness between measures of students' peer relations in the classroom, their use of self-handicapping strategies, and academic achievement. This information can be important both for researchers as well as practitioners (teachers, school counsellors) that work with students in middle adolescence, indicating that strategies that are based on addressing the interdependence of students' academic and/or social goals are not effective for enhancing students' social and academic behaviour. Moreover, the findings can contribute to the reduction of the publication bias that represents a significant problem in psychological research since it reduces the opportunity for replication of research results by different studies through equal publication of successful and failed replications and thus influences the credibility of the process of psychological science (Ferguson & Heene, 2012).

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Odnos prihvaćenosti, samohendikepiranja i školskog postignuća kod učenika u srednjoj adolescenciji

Sažetak: Povezanost odnosa s vršnjacima i školskog postignuća u djetinjstvu dobro je istražena i dokazana. Istraživanja u adolescenciji nisu jednoznačna i uglavnom su usmjerena na učenike u razdoblju rane adolescencije. Cilj ovog istraživanja bio je utvrditi odnos različitih mjera odnosa s vršnjacima (socijalna preferencija, socijalni utjecaj i percipirana popularnost) i školskog postignuća te provjeriti medijacijsku ulogu samohendikepiranja. Također je ispitivano razlikuju li se učenici s obzirom na različit sociometrijski status u školskom postignuću i samohendikepiranju. U istraživanju je sudjelovalo 534 učenika iz Slovenije. Nije dobivena povezanost između mjera odnosa s vršnjacima, samohendikepiranja i školskog postignuća. Rezultati istraživanja pružaju određene dokaze o neovisnosti socijalne i školske izvedbe u srednjoj adolescenciji i ukazuju da se postojeća povezanost u djetinjstvu i ranoj adolescenciji ne može generalizirati na razdoblje srednje adolescencije.

Ključne riječi: školsko postignuće, samohendikepiranje, srednja adolescencija, odnosi s vršnjacima, učenici

Beziehung zwischen sozialer Akzeptanz, akademischem Self-Handicapping und akademischer Leistung bei Schülern in der mittleren Adoleszenz

Zusammenfassung: Die Verbundenheit der Beziehung zu Gleichaltrigen und der akademischen Leistung ist für Schüler in der Kindheit gut dokumentiert. Die Ergebnisse der vorliegenden Studien über Schüler in der Adoleszenz sind nicht so klar und konzentrierten sich hauptsächlich auf die Schüler in der frühen Adoleszenz. Das Ziel dieser Studie war es, die Beziehung zwischen den verschiedenen Maßnahmen der Beziehung zu Gleichaltrigen (soziale Präferenz, soziale Auswirkung und wahrgenommene Popularität) und akademischer Leistung zu untersuchen, und dabei die mögliche vermittelnde Rolle des Self-Handicapping zu prüfen. Wir untersuchten auch, ob es Unterschiede in akademischer Leistung und akademischem Self-Handicapping zwischen den Schülern verschiedener soziometrischer Gruppen gibt. Die Teilnehmer der Studie waren 534 slowenische Schüler. Es wurde keine Verbindung zwischen verschiedenen Maßnahmen der Beziehung zu Gleichaltrigen, akademischem Self-Handicapping und akademischer Leistung gefunden. Die Ergebnisse dieser Studie liefern einige Beweise für die Unabhängigkeit der sozialen und akademischen Leistung und mittlerer Adoleszenz, ebenso wird gezeigt, dass die Erkenntnisse über Verbundenheit von Kindheit und früher Adoleszenz nicht auf Schüler in mittlerer Adoleszenz verallgemeinert werden können.

Stichwörter: akademische Leistung, akademisches Self-Handicapping, mittlere Adoleszenz, Beziehungen zu Gleichaltrigen, Schüler