*Katarzyna Tomaszek**

Why it is important to engage students in school activities? Examining the mediation effect of student school engagement on the relationships between student alienation and school burnout

Abstract: *Student engagement and burnout have become the latest focus of attention among researchers and practitioners. This is because both are seen as the main factors connected with the meaningful and purposeful educational activities that lead to high learning outcomes and better physical and mental health. Specifically, burnout decreases, and engagements heightened these characteristics.*

The aim of the present study was to explore the relationships between alienation, engagement and burnout in an educational context. Additionally, the mediation role of school engagement on the association between alienation and burnout was tested.

The study was conducted among 109 early adolescents, aged 13–15 years ($N_{Female}=52$). ESSBS (Elementary Student School Burnout Scale), PAI (Alienation Inventory – Short Form) and SSEM (Student School Engagement Scale) were used to measure the levels of burnout, alienation and engagement, respectively.

The results indicated that higher alienation was associated with lower engagement and with higher school burnout. Student engagement, productivity and belonging significantly mediated the links between alienation total score, normlessness, powerlessness and school burnout. The path analysis revealed that normlessness significantly predicted student engagement (-.44) and school burnout (-.20). The model explained 31% of the variances for school engagement, and 46% of the variances for school burnout.

In conclusion, alienated students – especially those suffering from normlessness – feel disconnected and overwhelmed by school duties. In addition, to diminish the risk of alienation and burnout in a school context of students, educational practitioners should include school engagement (especially belonging and productivity) improvement as one of the most significant protective factors.

Keywords: student alienation, student engagement, school burnout, mediation

Introduction

This study analyses the three major constructs that are connected to the students' performance and mental health i.e. alienation, engagement and burnout. Although all have a long history of research in psychology, relatively few studies have analysed these variables simultaneously and in the school context. The aim is thus to expand our understanding of the associations between these constructs.

Alienation: The concept of alienation has a long interdisciplinary history. *Alienare*, the Latin origin of alienation, literally means making something for others to take away and refers to at least three prevailing ways to understand what a concept is: (1) the transfer of something to another person; (2) the expression used usually to describe mental disorders; (3) the expression used to show

negative changes in human relationships (interpersonal estrangement, separation, disliking, and withdrawing) (Schacht, 1970). The classical theory of Karl Marx is concentrated on alienated labour – it means that the worker's life becomes something hostile and alien (Marx, 1964). The labouralienation's process is defined as a complex process, the transformation from a simple human product to something that has a power over the worker 's life, and that destroying the human connectedness to things created by them (Marx, 1974; Özel, 2008; Duong, 2017). The philosophical concept of alienation has next been applied to analyses of politics, culture, and human relationships. Most of the common and basic understandings of alienation refer to estrangement, withdrawing, isolation, distancing or detachment from others or things (Chiaburu et al., 2014). Fromm (1994), whose

* **Uniwersytet Pedagogiczny im. KEN w Krakowie**

Corresponding author: Katarzyna Tomaszek, katarzyna.tomaszek@up.krakow.pl

concept's origins were founded on Marx's theory, considered alienated individuals as people who are separated and cannot be their own acting agent.

The above described loss of connectedness was next extended to relations in work, human bonds, elements from people's environment and from the self itself (Nair & Vohra, 2012).In Mann's work (2001) alienation was understood as the state of experience of being deprived of social relations or an activity to which one should and want to belong. The problem of alienation has also been recognised as a strong barrier to educational success (McInerney, 2009; Türk,2014). It negatively affects learning behavior and school performance, but also teacher – students relationships and school career in terms of increasing school dropouts (Legault, Green-Demers & Pelletier, 2006; Hascher& Hadjar, 2018). The conceptualisation of the alienation process contains a decreasing sense of belonging, which means loss of engagement in learning, satisfaction from teachers and classmates relationships at school (Hascher&Hadjar, 2018). The authors specified three core domains to which school alienation is linked: academic learning, teachers, and classmates. Each domain contains cognitive and affective aspects. The behavioral aspects of school alienation (e.g. learning amotivation, low student participation and engagement, disciplinary problems) are recognised as consequences of school alienation (Hascher& Hadjar, 2018).One of the most popular and seminal theory of alienation was proposed by Melvin Seeman (1959). The author identified five alternative meanings of this construct connected with deprivation conditions: powerlessness, meaninglessness, normlessness, isolation, and self-estrangement. This concept was extended by Kmiecik-Baran (1995) and applied in educational context. She defined alienation as a multidimensional construct that express subjective beliefs of students about the lack of satisfying relationships with important areas of social reality, such as people, self, norms, values and own values.

Alienation & Engagement: School engagement is widely identified as an important factor of school performance, educational achievements, intrinsic motivation for learning, high quality of learning and student'sactive participation in classroom work (Zepke& Leach, 2010; Kahu,2013; Miranda-Zapata et al., 2018).School engagement is also recognised as a school connectedness, which results in a sense of belonging to the school environment (Steward, 2009; Thomas, 2012).According to Mann (2001),students are alienated when they feel apathy towards activities that are proposed for them by teachers in order to improve their learning. Bryson and Hand (2007) claimed that alienation, which they termed disengagement, lies on one side of the continuum, the polar opposite site being engagement.

An important perspective on alienation and engagement as two opposite phenomenon was given Jennifer Case (2008). In her model alienation was characterised by the disconnectedness from relationships that students might desire or expect to experience in school environment (Case, 2008). She identified six areas of such absenteeism

of connectedness: to one's studies, to the broader university/school life, to home, to the career, to one's classmates, and to the teacher (Case, 2007). This perspective was later redefined by Bezuidenhout et al. (2011). In their model four dimensions of alienating learning experiences were developed: (i) personal attributes (focus on negative experiences and lacking of skills, feelings of inadequacy), (ii) home circumstances (poor or difficult family backgrounds), (iii) workplace (being disempowered, criticised by teachers and restricted in their ability) and (iv) institution (lack of better opportunities). In addition, student engagement was a strong protective factor that mitigates the risk of school burnout, school dropout and substance abuse (Nurmi& Salmela-Aro, 2002; Zeng et al., 2016).

Alienation &School burnout: Studying can be very demanding and stressful for students. School burnout is a syndrome that stems from overwhelming educational demands that are too high to complete for students (Yang & Farn, 2005). More precisely, school burnout consists of three factors: emotional exhaustion due to school demands, cynical attitude towards school, and feelings of inadequacy as a student (Salmela-Aro et al., 2009).Their research indicated that school burnout increases withdrawal behaviours and mental health problems, whereas it decreases school achievements, intrinsic motivations, commitments, and academic self- efficiency (Salmela-Aro et al., 2009; Akar, 2018).Some researchers claimed that alienation and burnout are two similar or even identical constructs (Karger, 1981). Indeed, past studies confirmed a strong positive correlation between alienation and burnout in the occupational context, with the strongest connections between burnout and two alienation dimensions: self--estrangement and meaninglessness (Powel, 1994). Alienation was also recognised as a predictor of burnout from studying (Osin, 2015). However, very little is known about the simultaneously tested relationship between alienation, burnout and engagement among adolescents.

The purpose of this study: Alienation – Student engagement – School burnout

This article has contributed to the line of past research by proposing that lack of school engagement(disengagement) acts as an underlying mechanism through which alienation results in the school burnout syndrome. What is more, there is an assumption in this article that school engagement is an important personal resource that reduces the negative effects of student's stress related to school performance (measured by school burnout scale).The main purpose of this study was to test the mediating effect of student engagement on the relationships between alienation indicators and school burnout (see Fig.1.). Specifically, the associations between alienation, engagement, and burnout among early adolescents were tested. It was expected that the higher level of alienation, the lower the level of engagement and the higher the level of school burnout. Additionally, a negative relationship was expected between students' engagement and burnout.
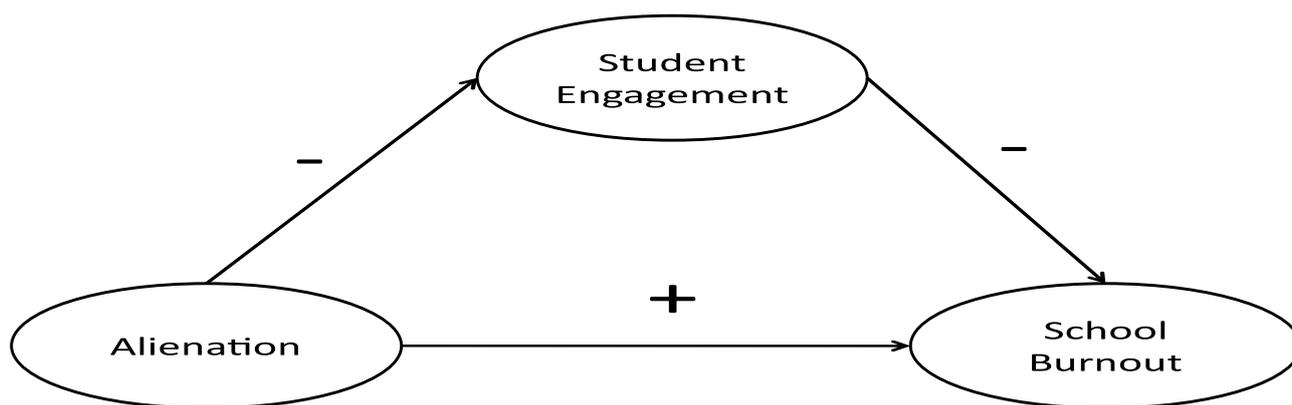
Figure 1. Schematic relationship between tested variables – simple mediation model

According to many researchers, gender also plays a significant role in the level of school engagement and school burnout (Backović et al., 2012; King, 2016). For that reason, gender was controlled in the path analysis.

Methods

Participants and Procedure

The sample consisted of 109 early adolescents, aged 13–15 years (M=14.51, SD = .57), and 52% of the participants were male(N_{Female}=52; N_{male}=57). The only condition of participation in the study was the age of the students i.e. being in the early adolescent period. The students were in the 2nd (48 participants), and 3rd (61 participants) grade of secondary school. After a short introduction which included the purpose of the study and the way of using of the data of the study, the paper – pencil version of the questionnaires were distributed during lessons, and the fulfillment of the methods lasted about forty minutes. The students received no payment or credit points for their participation. The sample completed three Polish versions of the scales: the Student School Engagement Scale (SSEM), the Elementary Student School Burnout Scale (ESSBS), and the Alienation Inventory – Short Form (PAI). Additionally, the respondents were asked about gender, age, school performance, the quality of school and family relationships.

Measures

ESSBS – has been developed by Ayse Aypay (2011) to determine the burnout level of the students. The scale consists of 26 items that are categorised into four subscales: Burnout from School (BSA), Burnout from Family (BSF), Inadequacy in School (IIS), and Loss of Interest in School (LIS).Higher points obtained from the subscales show that the burnout is on the low level, lower points show that the burnout is high. Cronbach's Alpha internal consistency coefficient for the general burnout level is equal to .88, and for the subscales ranged between .67 and .81 (Tomaszek & Muchacka-Cymerman, 2018).

PAI– is a15 item alienation short inventory created by Krystyna Kmiecik-Baran (2000)on the basis of Seeman's theory of alienation as a multidimensional construct.

PAI allows to account for general level of alienation among students and its five dimensions: Normlessness (Anomy, N),Meaninglessness (M), Powerlessness (P), Self-estrangement (Se) and Isolation (I). The reliability of total score measured by Cronbach's Alpha coefficient equals to .88, while the sub-dimensions range from .28 to .98.

SSEM – is the Student School Engagement Measurement by Cynthia Hazel et al. (2012) that includes 22 items on a 10-point Likert scale of response choice. The scale measures three dimensions of engagement among pupils: Aspirations, Belonging and Productivity. Cronbach's Alfa for the general level of school engagement is equal to .89, and for the dimensions of engagement range from .76 to .84.

Data analysis

Statistical Package for Social Sciences (SPSS) v. 22 was used for most statistical data analyses. First, descriptive statistics were applied to examine the normality of the collected data. The skewness (from 0.1 to 1.97) and kurtosis (from 0.14 to 5.66) were found to be in an acceptable range for almost all the tested variables, except alienation total score (skewness – 1.97 and kurtosis – 5.66). However, with large sample sizes (> 30), the violation of the normality assumption does not cause major problems, and does not significantly affect the tested dependencies (Pallant et al., 2007; Ghasemi& Zahediasl, 2012). Secondly, basic correlation Pearson's analyses were used to identify statistically significant associations between the studied variables. Multiple linear regression analyses were used to analyse any mediating effects of variables and to analyse the predictive strengths of the tested variables. Sobel Tests were calculated to confirm the indirect effect of independent on dependent variable via mediator. Finally,the path model was tested by SPPS 21 Amos Graphics program with Maximum Likelihood Method for parameter estimation to check the links between all variables.

Results

Pearson's analysis: According to the results there were significant negative correlations among alienation

total score, normlessness and powerlessness and almost all student engagement indicators, except aspirations (r=-.19, p<.05 to -.67,p<.0001), and school burnout total score, burnout from studying and loss of interest in school (r= -.21, p<.05to-.49,p<.0001). Higher normlessness was also significantly connected with the rest burnout indicators: BSF and ISS (r=-.28 and r= -.30, for both p <.001, respectively).Higher social isolation was associated only with lower level of burnout due to family and inadequacy in school (r=.19, p <.05 and r= .26, p <.001, respectively). Higher self-estrangement correlated with lower engagement and belonging (r=-.22, p <.05 and r= -.28, p <.001, respectively). Finally, higher meaninglessness correlated with lower productivity, aspirations and student engagement (r=-.22, p<.05 to -.28,p<.001) and with lower loss of interest in school (r = -.35, p <.0001). Higher student engagement indicators (except aspirations) significantly correlated with lower school burnout indicators (r=.27, p<.001 to.65,p<.0001). Aspirations was significantly associated only with lower level of burnout due to studying, loss of interest in school and school burnout total score (r=.29, p<.001 to.40,p<.0001) (see Tab.1).

Mediation analysis: Mediation effects of student engagement on the relationship between alienation indicators and school burnout were examined by calculating several multiple linear regression models. First, the role of student engagement total score on the associations between alienation indicators and school burnout total score were tested. Secondly, the dimensions of student engagement were examined in order to investigate the significance of mediating effects on the alienation and student burnout relationship.

The mediation effect of the alienation indicators on school burnout via student engagement: According to regression analyses, three alienation indicators significantly predicted the student school burnout level: Alienation Total Score, Normlessness, and Powerlessness. Others, such as Social Isolation, Meaninglessness and Self-estrangement did not have significant results with the School burnout level. Consequently, several sets of analyses were conducted to test mediating effects.

Alienation & Burnout via Engagement: The direct effects of the alienation total score on student engagement and school burnout were significant with F = 21.49, ΔR^2=.16, p=0.0001 and F= 9.44, ΔR^2=.07, p=.003, respectively. In the first regression model, alienation significantly predicted the student engagement with ß = -.41, p<.0001 and student school burnout ß =-.29, t=-3.07, p=.003.Student school burnout was significantly predicted by lack of student engagement F= 76.73, ΔR^2=.41, p<.0001, ß = .65, t=8.76, p<.0001.In the regression model conducted to evaluate the association between the combine of the alienation total score and school engagement, statistics for the model were significant with F=30.08, ΔR^2=.41, p=.0001; but only school engagement yielded significant result with school burnoutß = .64, p=.0001; as expected, alienation standardised coefficient was lower and insignificant ß = -.03, p=.76. The mediation effect was

Table 1. The correlations between Alienation and Student engagement and School burnout (N=109)

N=106	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. N	-														
2. P	.29**	-													
3. I	-.07	.04	-												
4. Se	.12	.19*	.16	-											
5. M	.19*	.30**	-.01	.40***	-										
6. Al	.52***	.60***	.37***	.68***	.70***	-									
7. PR	-.34***	-.19*	.08	-.17	-.22*	-.29**	-								
8. B	-.67***	-.35***	.09	-.28**	-.28**	-.52***	.53***	-							
9. A	-.12	-.14	.04	-.06	-.10	-.13	.41***	.37***	-						
10. SE	-.49***	-.28**	.09	-.22*	-.27**	-.41***	.91***	.79***	.61***	-					
11.BSA	-.42***	-.21*	.05	-.08	-.12	-.27**	.51***	.56***	.33***	.60***	-				
12.BFF	-.28**	-.06	.26**	.03	-.04	-.03	.31***	.30***	.08	.32***	.35***	-			
13. ISS	-.30**	-.12	.19*	.04	-.05	-.08	.42***	.27**	-.04	.35***	.40***	.47***			
14. LIS	-.39***	-.28**	.07	-.30**	-.35***	-.44***	.33***	.72***	.40***	.57***	.57***	.35***	.15	-	
15. SB	-.48***	-.23*	.17	-.11	-.18	-.29**	.54***	.64***	.29**	.65***	.86***	.70***	.63***	.71***	-

*p < .05; **p < .01; ***p < .001

Note: Normlessness (N); Powerlessness (P); Social Isolation (I); Self-estrangement (Se);Meaninglessness (M), Alienation (Al); Productivity (PR); Belonging (B); Aspirations (A); Student School Engagement (SE); Burnout from School (BSA); Burnout from Family (BFF); Inadequacy in School (IIS); Loss of Interest in School (LIS; Student School Burnout(SB)

noted. Sobel Test's results was equal Z = 4.11, p = .00001. The results of bootstrap method also supported the meditational hypothesis(B=.24, SE = .04; 95%CI [.16; .32]), the value of zero is outside of the confidence interval. The indirect effect of alienation on school burnout is significant (see Tab. 2).

Normlessness& Burnout via Engagement: The second step was to examine the extent to which normlessnessand student engagement predict the student school burnout level. In this regression model, normlessness significantly predicted the score of student burnout (ß= -.48, t= -5.65, p= .0001, ΔR^2 = .22, F = 31.90, p= .0001), and student engagement (ß= -.49, t=-5.86, p= .0001, ΔR^2 = .24, F = 34.37, p= .0001). The partial mediation effect emerged as the combination of normlessness and student engagement. The normlessness standardised coefficient was significant

Table 2. The mediation effect of the alienation indicators on school burnout via student engagement (N= 109)

	Independent Variable: Alienation		F	ΔR^2	ß	p
Direct effects	Alienation – School Engagement		21. 49***	.16	-.41	.0001
	Alienation – Student School Burnout		9.44**	.07	-.29	.003
	School Engagement – Student School Burnout		76.73***	.41	-.19	.004
	Alienation & School Engagement – Student School Burnout		30.08***	.41	Alienation -.03	.763
					School Engagement .64	.0001
Indirect effect	Alienation – School Engagement – Student School Burnout	Sobel Test	Effect		SE	p
			4.11		.15	.0003
		Bootstrap Method	Effect	SE	95% CI	p
			.24	.04	[.16; .32]	.0001
	Independent Variable: Normlessness		F	ΔR^2	ß	p
Direct effects	Normlessness – School Engagement		34.37***	.24	-.49	.0001
	Normlessness – Student School Burnout		31.90***	.22	-.48	.0001
	Normlessness & School Engagement – Student School Burnout		43.66***	.44	Normlessness -.21	.012
					School Engagement .54	.0001
Indirect effect	Normlessness – School Engagement – Student School Burnout	Sobel Test	Effect		SE	p
			3.64		6.06	.00027
		Bootstrap Method	Effect	SE	95% CI	p
			.20	.04	[.13;.29]	.0001
	Independent Variable: Powerlessness		F	ΔR^2	ß	p
Direct effects	Powerlessness – School Engagement		9.24**	.07	-.28	.003
	Powerlessness – Student School Burnout		5.83*	.04	-.23	.017
	Powerlessness & School Engagement – Student School Burnout		38.35***	.41	Powerlessness -.05	.526
					School Engagement .63	.0001
Indirect effect	Powerlessness – School Engagement – Student School Burnout	Sobel Test	Effect		SE	p
			2.88		0.48	.00427
		Bootstrap Method	Effect	SE	95% CI	p
			.23	.04	[.16;.31]	.003

but lower ß = -.21, p=.012. The result of Sobel test was statistically significant (Z = 3.64, p= .0002), which confirmed the partial mediating effect of student engagement on the relationship between normlessnessand school burnout. In addition, the results of bootstrap method also indicated that the indirect effect was significant (B = .20, SE = .04, 95% CI [.13;.29], p = .0001) (see Tab. 2).

Powerlessness & Burnout via Engagement: The last regression models were conducted to evaluate the association between the combination of powerlessness and student engagement and school burnout. As expected, powerlessness significantly predicted school engagement (F=9.24, ΔR^2=.07, p=.003, ß = -.28, t=-3.04), and school burnout (F=5.83, ΔR^2=.04, p=.017, ß = -.23, t=-2.42). In the regression model that tested both independent variable and moderator, only student engagement appears to be significant predictor of school burnout. According to this and the results of the Sobel Test (Z = 2.88, p = .004), mediation effect was detected. The results of the bootstrap method confirmed this hypothesis – the indirect effect was significant andconfidence interval did not include zero: B=.23, SE=.04 95% CI [.16;.31] (see Tab. 2).

The mediation effect of the alienation indicators i.e. productivity, belonging and aspirations on school burnout via student engagement dimensions: The results indicated that Alienation insignificantly predicted School burnout after entering student engagement indicators in the regression model, consistent with full mediation. 27% of the variance in school burnout was accounted for by the predictors (ΔR^2= .27). The indirect effect was tested using a percentile bootstrap estimation approach with 5,000 resamples, implemented with the PROCESS macro Version 3 (Hayes, 2017).The results indicated the indirect coefficients were significant for Productivity (B= .17, SE = .05, 95% CI = [.07, .28]),and Belonging (B = .51, SE = .10, 95% CI = [.31, .70]), but not for Aspirations (B = -.02, SE = .18, 95% CI = [-.31,.36]). Alienation was associated with school burnout that were approximately .17 points for Productivity, and .51 point for Belonging – higher as mediated by those mediators (see Tab. 3).

Table 3. Direct and Indirect effects of alienation on school burnout with student engagement indicators as mediators

	B	SE	CI	p
Alienation	.16	.18	[-.17;.55]	.385
Productivity	.17	.05	[.07;.28]	.001
Belonging	.51	.10	[.31;.70]	.0001
Aspirations	-.02	.18	[-.32;.36]	.860

Path analysis: The last part of the analysis was performed to check the path model that examined all the variables simultaneously. The tests of multivariate normality of variables in the model indicated a normal distribution. Insignificant chi-square statistic $\chi2$ = 5.118, *df* = 4, p= .275 demonstrated that the model is not different from the structure of the data. The other goodness-of-fit indices for the model also confirmed that the model well fitted to the data: CFI = .991,GFI = .987, RMSEA = .051, SRMR = .049. Estimates of squared multiple correlations output for School Engagement was equal to.31, and for school burnout was equal to .46. The significant links were noted between school burnout and student engagement (.20). From all the dimensions of alienation, only normlessness significantly predicted student engagement (-.44) and school burnout (-.20). Other variables in the model, such as self- estrangement, meaninglessness, powerlessness and gender, were insignificantly associated with school burnout (see Fig. 2).

Discussion

There is an agreement among researchers that early identification of school alienation is of great importance for their current and later educational performance and plans, active participation in school society, and is considered as a prevention factor of school burnout and school dropout syndromes (Mau, 1989; Morinaj et al., 2017; Hascher & Hadjar, 2018). Moreover, this construct
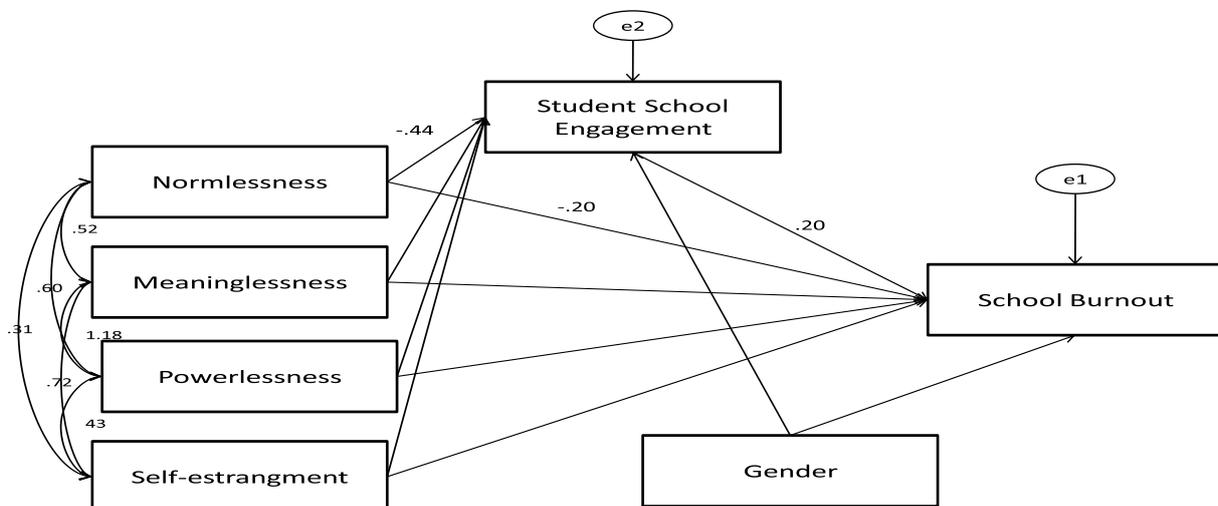
Path Model characterized the links between tested variables
Note: Only significant links were noted in the model

has recently gained more attention as educators and social workers have noted that better understanding of the phenomenon is related to better mental health and less behavioral problems among juveniles (Burdek & Ławska, 2016; Tomé et al., 2018).

The main objective of the present study was to exam the mediating role of engagement in the link between alienation indicators and school burnout level. This research supplements the existing literature by examining the association between these variables simultaneously. The results show that higher alienation (especially normlessness) is connected with lower engagement (except aspirations), and with higher school burnout (especially burnout from studying and loss of interest in school activity). As was expected, higher student engagement (except aspirations) were significantly correlated with lower school burnout. Secondly, in this study the mediating role of student school engagement on the links between alienation total score, normlessness, powerlessness and school burnout among early adolescents was confirmed. Additionally, it was found that only two school engagement indicators – productivity and belonging – mediate the association between alienation and school burnout. Alienation was connected with school burnout, and this association was approximately about .17 points for Productivity, and .51 point for Belonging, higher as mediated by those mediators. Lastly, the path analysis revealed that although all alienation indicators were tested in the model, only normlessness significantly predicted student engagement (-.44) and school burnout (-.20). What is more, gender pathway emerged as an insignificant predictor of school engagement and school burnout. The model explained 31% of the variances for school engagement, and 46% of the variances for school burnout.

In accordance with the literature, this study confirmed that alienated students, especially those suffering from normlessness, feel disconnected and overwhelmed by school duties, and previous research supported these finding. Johnson (2005) stated that learning alienation demonstrates an inverse relation to academic performance because of incongruence with curricula and the lack of opportunities to establish meaningful connections. Similarly, Hascher & Haganauer (2010) claimed that school alienation is due to adolescents lacking a feeling of subjective relevance and bonding with school, and Studsrød & Bru (2009) connected this stage with the developmental crisis of parenting bonds during adolescence. The theoretical framework of the *stage-environment fit* concept created by Eccles also supports the results (Eccles & Roeser, 2011).It is worth noting that according to this theory there are several ways of adolescents' perception of their school environment: (1) the first groupof youth are able to enjoy and benefit from most of their experiences at school; (2) the second group of youth muddle along and cope as best they can with the stress and demands of the moment; (3) the third group of youth find school an alienating and unpleasant place that is difficult to enjoy and benefit from (Eccles & Roeser, 2011, p. 225).

The stage-environment concept explains adolescent school and family relationship problems experienced by some of the youth due to a regressive change in thesesocial bonds. Specifically, the authors describe the mismatch between parents', teachers' and adolescents' views of autonomy (Gutman & Eccles, 2007). What is more one of the reason for these difficulties lay in the lack of decision-making opportunities and participation in the learning process at school and in the family everyday life problems. From the Mann's alienation theoretical perspective, the student's alienation may be considered as a strategy for self-preservation (Jones, 2017).For some students, the low learning motivation and school engagement and diminishing the role of knowledge provided by teachers may be the only way to conserve themselves by them. According to Tarquin & Cook-Cottone (2008), student alienation stems from a feeling of estrangement from the learning process, and the effects of this disconnection are apathy and low school achievements. Alienation among youth is connected with their subjective experience of being wrongly excluded or disconnected from school groups (e.g. classmates, teachers) or school activities (e.g. participation in class work) (Tarquin & Cook-Cottone, 2008). Additionally, as the Mau (1992) study stated, alienated students may deny schools norms in a way beneficial to their classmates, and these characteristics are very close or even similar to the student burnout process. Researchers have identified that burnout student have difficulties in committing to the task provided by teachers, are cynical and feel detached and dissatisfied with their work/school duties (Leiter & Maslach, 2003; Garratt-Reed et al., 2018).

Limitations

This study has several design and measurement limitations. First of all, the results could be subjected to sampling error because of the small number of participants. Thus, generalisation of the findings is limited until replicated with a larger sample. Additionally, replications with diverse samples from several middle and high schools and with a larger number of participants, such as not only early adolescent but also late adolescents, are needed before the results can be generalised. Secondly, the cross-sectional study was used to obtained the data, so it is impossible to make causal inferences. Thirdly, the self--rating scales were used for collecting the data so it is possible that the participants misunderstood the items in the methods. What is more, the last limitation connected with the self-reporting methods is the level of honesty among the participants while answering the items. Furthermore, longitudinal studies might be required in Poland, and special importance should be given to assessing the multiple psychosocial comorbidities associated with school alienation and school burnout during adolescence. It is also recommended to investigate whether alienation and burnout among youth are somehow related to adolescents' attitude towards the learning process, and towards teachers' and parents' support and demand requirements for school achievements.

Implications

Despite these limitations, this study confirms the previous existing knowledge about the association between alienation and burnout, and alienation and engagement, and contributes new knowledge to previous empirical work in these areas. This research has argued that a focus on school alienation and school engagement provides a better understanding of school burnout among adolescents. Implications for educational practitioners include the need for a more concerned attitude towards the positive effect of school engagement as a protective factor for adolescents' burnout. Teachers and parents should stimulate meaningful participation of the adolescents in purposeful educational activities. It seems to be crucial and obvious that educators should pay more attention on the fit to each other's expectations of adolescents' learning achievements and their natural need for autonomy to prevent and alleviate school alienation and burnout. Finally, students, teachers and parents should be guided and trained to distinguish the different symptoms of alienation and burnout in the school context.

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