Research Article

Student Subjective Wellbeing, School Functioning, and Psychological Adjustment in High School Adolescents: A Latent Variable Analysis

Gökmen Arslan¹ and Muhammet Coşkun²

Abstract

Well-being is a multi-faceted construct that encompasses all aspects of healthy and successful human functioning across multiple domains. The purpose of the present study was to investigate the predictive power of student subjective wellbeing on several specific adolescent school and psychological adjustment indicators: school achievement, academic satisfaction, prosocial behavior, and internalizing and externalizing problems. Participants included 223 adolescents, comprising of 54.9% girls, ranging in age from 13 to 18 years (M= 15.67, SD= 1.21). Findings from the LVPA indicated that student subjective wellbeing was significantly associated with youth school functioning and adjustment outcomes, ranging from small-to-large effect size (R^2 range = .05 to .42). Student subjective wellbeing had the strongest predictive effect on prosocial behavior, followed by academic satisfaction, psychological health problems, and school achievement. With regard to the first–order models, school connectedness and joy of learning significantly predicted student academic satisfaction, prosocial behavior, and psychological adjustment problems. However, the predictive effect of these variables on student school achievement was non–significant. Educational purpose and academic efficacy were significant predictors of all adolescent outcomes. Taken together, these results suggest that student subjective wellbeing is an essential resource for improving youth academic functioning and psychological health.

Keywords: Subjective wellbeing, school functioning, psychosocial adjustment, positive psychology, adolescence

Well-being is a multi-faceted construct that encompasses all aspects of healthy and successful human functioning across multiple domains (Renshaw et al., 2015; Renshaw & Arslan, 2016; Kansky & Diener, 2017). Subjective well-being is identified as a subtype of human well-being (Zhang & Renshaw, 2020) and has been traditionally operationalized via self-reports of individual's private well-being, including both emotional experiences and cognitive evaluations, including frequent positive affect, greater life satisfaction, and infrequent negative affect (Diener, 1984; Kansky & Diener, 2017; Moore & Diener, 2019). However, recent approaches have expanded this traditional operationalization of subjective well-being to include both private (thoughts and feelings) and

public (verbal and physical actions) wellbeing domains (see Renshaw et al., 2015, for a brief review). For example, Seligman (2011) has identified five essential elements of subjective well-being, namely PERMA model: positive emotion, engagement, relationships, meaning, and accomplishment. Furlong et al. (2014) have offered a similar model of subjective well-being for youth to include self-reports of both private (e.g., self-efficacy, optimism) and public wellbeing behaviors (e.g., persistence, behavioral self-control). The purpose of the current study is to advance this particular line of subjective wellbeing research by exploring the predictive effect of student subjective wellbeing on academic and psychological adjustment of high school Turkish adolescents.

Corresponding Author: Muhammet Coşkun, Department of Guidance and Psychological Counseling, Faculty of Education, Kafkas University, Kars, Turkey.

Email: muhammetcoskun0794@gmail.com

¹Department of Guidance and Psychological Counseling, Burdur Mehmet Akif Ersoy University, Burdur, Turkey ²Department of Guidance and Psychological Counseling, Kafkas University, Kars, Turkey

While student subjective wellbeing is already associated with numerous positive outcomes like better school adjustment and outcomes (Arslan & Duru, 2017; Shoshani & Slone, 2013), psychological needs satisfaction (Tian et al., 2014), and increased meaning in life (Yalçın & Malkoç, 2015), it is negatively related to problematic behaviors (Odaci & Çikrikçi, 2014), psychological vulnerability (Satici, 2016), and serious psychological adjustment problems (Antaramian et al., 2010; Suldo et al., 2011). Given the unique psychosocial aspects and developmental needs of adolescence, it is essential to understand factors contributing to student adjustment and wellbeing to provide mental health services in school settings. As increased wellbeing promotes healthy functioning in teachers (Arslan, 2018), it may also have a similar significance for student adjustment for a healthy school climate. Moreover, keeping the time related changes in wellbeing over different timelines (Pethtel, Moist, & Baker, 2018), contributing the youth's wellbeing research may enable us to specifically understand the wellbeing dynamics of adolescents better.

Student subjective wellbeing is used to identify students' self-appraisals of private and public wellbeing behaviors (i.e., academic efficacy. school connectedness, educational purpose, and joy of learning) within the school context (Renshaw & Chenier, 2018; Kaplan, 2017). The literature has supported that student subjective wellbeing is an important resource for youth school functioning, particularly academic achievement. School functioning is a broad construct referring to a student's ability to make activities that promote participation in the academic and social experiences in school (Arslan & Tanhan, 2019; Strein & Kuhn-McKearin, 2013). In the present study, school achievement, academic satisfaction, and prosocial behavior are considered as important positive aspects of student school functioning. Previous research showed that student subjective wellbeing was associated with various youth school-specific outcomes, as academic such achievement, school belonging, motivation, and academic self-concept (Arslan, 2016; Arslan & Duru, 2017; Renshaw et al., 2015; Renshaw & Arslan, 2016; Renshaw & Chenier, 2019). Renshaw and Chenier (2018) for example reported that student subjective wellbeing-a second-order measurement model- was a substantive predictor of each school-reported outcomes (e.g., grade point average; standardized achievement test scores). However, after removing the contribution

of the second-order model, academic efficacy proved to be the most robust predictor of all outcomes, educational purpose and joy of learning were significant predictors for a few school outcomes, and school connectedness was a non-significant predictor in any case (Renshaw & Chenier, 2018). Arslan (2016) indicated the effect of educational purpose and academic efficacy on student self-report academic achievement. Nevertheless, effect of subjective wellbeing on academic achievement is contraversive. In a meta-analysis of 47 studies, both low achieving and high achieving students may report to have high and low subjective wellbeing (Bücker et al., 2018). You et al. (2014) also revealed that youth subjective wellbeing was associated with student actual academic performance derived from school-reported data, although this effect provided a markedly smaller effect size compared to previous research reporting the relationship between wellbeing and self-reported academic achievement.

Student subjective wellbeing is additionally associated with a variety of youth psychological adjustment challenges (Suldo & Shaffer, 2008) . Psychological adjustment here refers to the absence or presence of internalizing symptoms (e.g. depression) and/or externalizing problems (e.g., conduct problems). Subjective wellbeing was for example significantly predictive of youth prosocial behavior, internalizing problems, externalizing behavior, and personal adjustment (Arslan, 2019c; Arslan & Renshaw, 2018; Furlong et al., 2013; Jones et al., 2013; Kaplan, 2017; Renshaw et al., 2015; Telef & Furlong, 2017). Kaplan (2017) reported that student subjective wellbeing was significantly predictive of adolescent psychological health challenges, including depression, anxiety, hostility, negative self-concept, and somatization. Similarly, Arslan and Renshaw (2018) indicated that student subjective wellbeing was a substantive predictor of youth alcohol use, antisocial behaviors, suicidal tendencies, nutrition habits, tobacco use, and school dropout. Specifically, academic efficacy and educational purpose were found to be important aspects of subjective wellbeing had pivotal relations with student behavioral functioning (Arslan & Renshaw, 2018). You et al. (2014) reported that youth subjective wellbeing measuring by social-emotional health strengths was strongly predictive of emotional and behavioral challenges (i.e., internalizing problems, inattention/hyperactivity, and school problems). Therefore, adolescents who reported greater subjective

wellbeing are more likely to have lower levels of psychological adjustment difficulties compared to those with less wellbeing (Suldo & Huebner, 2006). These results suggest that the association between the various indicators of wellbeing and school functioning and psychological adjustment appears to be multifaceted and complex. Given this complexity, research dealing with student subjective wellbeing is both theoretically and empirically critical to provide mental health services in school settings. Therefore, further research is warranted to more firmly establish the association between student subjective wellbeing and particular valued outcomes of youths.

Within the theoretical and empirical context sketched above, the purpose of the present study was to investigate the predictive power of student subjective wellbeing-the second-order factor model versus the first-order factors model---on several specific adolescent school and psychological adjustment indicators: school achievement, academic satisfaction, prosocial behavior, and internalizing and externalizing problems. Although previous findings have provided evidence regarding the relation of youths' wellbeing to various general classes of academic and psychological health behavior, the association between student subjective wellbeing and school and adjustment outcomes has relatively unexplored, particularly among Additionally, considering the Turkish youths. covitality framework (Arslan, 2019b; Renshaw et al., 2014) suggesting that student subjective wellbeing (i.e., second-order factor model) has stronger predictive effect in relation to valued adolescent outcomes than first-order factor models (e.g., social connectedness, educational purpose), results from this study would help guide future research as well as contribute to develop positive psychology-based prevention and intervention strategies for fostering youths' school functioning and psychological health in the school settings.

Method

Participants

Participants included 223 adolescents attending a public high school in an urban city of Turkey. The sample comprised of 54.9% girls and 45.1% boys, ranging in age from 13 to 18 years (M= 15.67, SD= 1.21). The socioeconomic status (SES) of students was reported as follows: low SES = 12.9%, average SES = 29.8% and upper SES = 57.3%. A paper–and–pencil survey was first created using the study measures and demographic items. Prior to data collection process,

ethical approval was taken from the Ministry of Education. After that, all students were informed about the purpose of the study and the scales by distributing informed consent forms, and the survey was administered to participants who volunteered to participate in the study.

Measures

Student Subjective Wellbeing. The Student Subjective Wellbeing Questionnaire (SSWQ) (Renshaw et al., 2015) comprises of 16 self-report items (e.g., "I am a successful student", "I feel happy when I am working and learning at school") that measure four school-specific positive psychological domains: joy of learning (4 items), educational purpose (4 items), school connectedness (4 items), and academic efficacy (4 items). All SSWQ items are rated using a 4-point Likert-type scale (1 = almost never to 4 = almostalways). The scale has demonstrated strong internal reliability estimates and convergent validity with other indicators of student wellbeing with Turkish adolescents (Renshaw & Arslan, 2016).

Psychological Adjustment. The Youth Internalizing Behavior Screener (YIBS) was used to measure adolescent emotional problems (Arslan, 2020). The scale consists of 10 self-report items (e.g., "I feel depressed and pessimistic") that are responded using a 4-point Likert type scale (almost never = 1 to almost always = 4). The YIBS has provided adequate-tostrong internal and latent construct reliability for using among Turkish adolescents (Arslan, 2020). Students' behavioral problems was measured using the Youth Externalizing Behavior Screener (YEBS; Arslan, 2019). All scale items are scored using a 4-point Likert type scale, ranging from 1 = almost never to 4 = almost always (e.g., "I often make others angry or annoyed"). The scale has adequate-to-strong internal and latent construct reliability estimates with Turkish children and adolescents (Arslan, 2019).

School Functioning. Student school functioning was measured using the Student Prosociality Scale (SPS), the Academic Satisfaction Scale (ASS), and Grade Point Average (GPA). The SPS is a 4–item self-report scale developed to measure youth prosocial behavior within the school setting (e.g., "I help other kids who seem to be having a hard time"; Renshaw, 2014). All items are responded using a 4-point Likert-type scale (1= almost never to 4 = almost always). The SPS has adequate internal and latent construct reliability estimates with Turkish adolescents (Arslan & Tanhan, 2019).

Scale	М	SD	Skew.	Kurt.	α
Student subjective wellbeing	50.83	9.00	54	47	.92
School connectedness	12.52	3.05	71	13	.83
Joy of learning	12.33	2.83	57	22	.78
Educational purpose	13.17	2.74	84	06	.81
Academic efficacy	12.47	2.67	47	39	.84
School achievement	77.60	9.40	05	36	_
Academic satisfaction	18.23	5.27	68	16	.91
Prosocial behavior	13.72	2.71	-1.51	2.00	.82
Internalizing problems	19.77	4.78	.68	.75	.75
Externalizing problems	21.16	7.04	.41	27	.89

Student grade point average in the past year at school was used to assess school achievement of youths. A single item was asked measuring their transcript grade point average, reflecting their performance across all academic courses (range = 0 to 100). Higher scores show greater student achievement in school.

The ASS was used to measure adolescent satisfaction with academic life (Schmitt et al., 2008). The scale is a 5-item self-report scale (e.g., "All in all, I am satisfied with the education I can get in this school"), and all items are scored using a 5-point Likert types scale (strongly disagree= 1 to strongly agree= 5). Balkis (2013) investigated the psychometric properties of the scale with Turkish sample and found that the ASS had strong internal reliability estimate.

Data Analyses

Prior to performing the primary analyses, descriptive statistics and correlation analysis were conducted. Skewness and kurtosis values were used to evaluate the normality assumption, and the scores of these lower than |2| indicate the assumption of normality is met (D'Agostino et al., 1990). Pearson correlation analysis subsequently was performed to investigate the associations between the variables of the study. As a second step, a latent variable path analysis (LVPA) was conducted to explore the predictive effect of the student subjective wellbeing on youth psychosocial and academic outcomes identified by internalizing and externalizing problems, school achievement, academic motivation, and prosocial behavior. Findings from this analysis were interpreted using several data-model fit statistics as well as standardized path estimates (β) and their associated squared-multiple correlations (R^2): CFI and TLI values between .90 and .95= adequate and values > .95 = close fit; RMSEA values between .05 and

.08= adequate and values < .05= close fit (Hooper et al., 2008; Kline, 2015). The magnitude of R^2 was additionally interpreted via traditional effect size standards (Cohen, 1988): .00–.009 = negligible, .01–.059 = small, .06–.139 = medium, > .14 = large. All statistical analyses were performed using SPSS version 25 and AMOS version 24.

Results

Descriptive statistics indicated that skewness and kurtosis scores ranged between -1.51 and 2.00, and all variables had relatively normal distribution (D'Agostino et al., 1990). Internal reliability (α) of the scales were between .75 and .92, representing adequate-to-strong internal reliability estimates, as shown in Table 1.

First, separate independent samples t-test was performed to see the gender differences regarding the present study variables. Significant gender differences were only captured in academic achievement and prosocial behavior. Academic achievement level of girls (M = 79.24, SD = 8.90) were significantly higher than boys (M = 75.91, SD = 9.64) [t (183) = 2.441, p < .05]. Similarly, girls (M = 14.15, SD = 2.76) reported to have more prosocial behaviors than boys (M = 13.20, SD = 2.58) [t (208) = 2.570, p < .05].

Further, correlation analysis results revealed significant and small-to-large associations between study variables. Student subjective wellbeing indicators had positive and significant correlations with school achievement, academic motivation, and prosocial behavior, and negative correlations with psychological health problems (i.e., internalizing and externalizing problems). Likewise, school achievement, satisfaction, and prosocial behavior were negatively associated with youth internalizing and externalizing problems, see Table 2.

Table 2. Correlation results

Scale	1	2	3	4	5	6	7	8	9	10
1. SSW	_	.77**	.85**	.83**	.77**	.17*	$.48^{**}$.51**	25**	38**
2. SC		_	.56**	.53**	.45**	.05	$.50^{**}$.51**	18**	31**
3. JL			_	.71**	.53**	.10	$.40^{**}$.41**	25**	29**
4. EP				_	.52**	$.18^{*}$.44**	.46**	26**	26**
5. AE					_	.37**	.29**	.39**	18*	33**
6. SRAA						_	.15*	.23**	16*	06
7. ASS							_	.42**	16*	22**
8. PSB								_	- .31 ^{**}	21**
9. IBP									_	.54**
10. EBP										_

Note. JL = Joy of learning, SC = School connectedness, EP = Educational purpose, AE = Academic efficacy, and SSW = Student subjective wellbeing, ASS= Academic satisfaction, SRAA= School achievement, IBP= Internalizing problems, EBP= Externalizing problems, PSB= Prosocial behavior. *p < .05, **p < .001.

A series of LVPA models were carried out to test the association between subjective wellbeing indicators and adolescent outcomes. Findings from these analyses indicated that all latent variable models provided adequate data-model fit statistics, as showing in Table 3. Standardized regression estimates indicated that student subjective wellbeing was significantly associated with youth school functioning and adjustment outcomes, ranging from small-to-large effect size (R^2 range = .05 to .42). Student subjective wellbeing had the strongest predictive effect on prosocial behavior ($\beta = .65$), followed by academic satisfaction ($\beta = .56$), psychological health problems (β = -.46), and school achievement (β = .22). With regard to four sub-domains, school connectedness and joy of learning significantly predicted student academic satisfaction (β = .57 for SC and β = .51 for JL), prosocial behavior ($\beta = .61$ for SC and $\beta = .53$ for JL), and psychological adjustment problems ($\beta = -.39$ for SC and $\beta = -.44$ for JL). However, the predictive effect of these variables on student school achievement was non-significant (β = .06 for SC and β = .14 for JL). Educational purpose and academic efficacy were

significant predictors of all adolescent outcomes: school achievement ($\beta = .50$ for EP and $\beta = .32$ for AE), academic motivation ($\beta = .21$ for EP and $\beta = .40$ for AE), prosocial behavior ($\beta = .59$ for EP and $\beta = .50$ for AE), and psychological health problems ($\beta = -.40$ for EP and $\beta = -.35$ for AE). All student wellbeing domains had the strongest association with prosocial behavior, followed by academic satisfaction and psychological health problems. Taken together, these results suggest that student subjective wellbeing is an essential resource for improving youth academic functioning and psychological health.

Discussion

The present study sought to explore the predictive effect of student subjective wellbeing on school functioning and psychological adjustment of Turkish high school adolescents. First of all, investigation of student subjective wellbeing and school functioning/adjustment relationship is mostly reflective of past research (Huebner et al., 2000; Shoshani & Slone, 2013; Suldo et al., 2011), and they are in line with current findings.

Table 3. Model fit statistics of the hypothesized path models

Model	χ^2	df	CFI	TLI	RMSEA [90% CI]
Model 1: Joy of learning —> SPO	163.07	96	.96	.94	.056 [.041070]
Model 2: School connectedness —>SPO	208.43	96	.93	.90	.072 [.059086]
Model 3: Educational purpose —> SPO	180.46	96	.94	.92	.063 [.048076]
Model 4: Academic efficacy —> SPO	167.36	96	.95	.94	.057 [.043072]
Model 5: Student wellbeing —> SPO	207.52	96	.93	.90	.072 [.058085]

Note. SPO= Adolescent school and adjustment outcomes

								_			
Outroumos		Student Subjective Wellbeing Components									
Outcomes	SC β	R^2	JL β	R^2	EP β	R^2	ΑΕ β	R^2	$SSW\beta$	R^2	
Academic satisfaction	.57**	.33	.51**	.26	$.50^{**}$.25	.32**	.10	.56	.32	
School achievement	.06	.01	.14	.02	.21*	.05	$.40^{**}$.16	.22	.05	
Prosocial behavior	.61**	.37	.53**	.28	.59**	.35	$.50^{**}$.24	.65	.42	
Psychological adjustment	39**	15	44**	.19	40^{**}	.16	35**	.12	46	21	

Table 4. Path coefficients and multiple correlations from the latent variable path analysis

Note. Interpretation of $R^2 = .00-.009$ = negligible, .01-.059 = small, .06-.139 = medium, > .14 = large. JL = Joy of Learning Scale, SC = School Connectedness Scale, EP = Educational Purpose Scale, AE = Academic Efficacy Scale, and SSW = Student Subjective Wellbeing Scale. *p < .05, **p < .00

With regard to sub-dimensions of student subjective wellbeing, findings from the study indicated that school connectedness and joy of learning were significantly strongly predictive of student academic and satisfaction, prosocial behavior, and psychological adjustment problems. In detail, school connectedness was captured to be positively associated with academic satisfaction (Zullig et al., 2011), and found to be the predictor of prosocial behavior in adolescents (Murnaghan et al., 2014; Oldfield et al., 2016; Osterman, 2000). Similarly, notable amount of related research emphasized the crucial role of school connectedness in preventing psychological adjustment problems of adolescents like psychological distress and depression, while it provides positive outcomes like enhanced resilience (Dang, 2014; Loukas et al., 2009; Oldfield et al., 2016). For joy of learning, limited amount of studies exists in the literature. For instance,

joy of learning was negatively correlated with problem behaviors (Arslan & Renshaw, 2018). However, to the best knowledge, the current paper is the first study that investigated joy of learning interaction with prosocial behavior and academic satisfaction. Thus, more research on the reasons and consequences of joy of learning should be carried out to compare and contrast the present initial findings. However, the predictive effect of these variables on student school achievement was non-significant. On the other hand, first, previous findings mainly took attention to facilitating role of connectedness in promoting school academic achievement (McNeely et al., 2002; Nasir et al., 2011). However, it is also known that level of school connectedness decreases when students get older (Wilkinson-Lee et al., 2011), and this may be the cause behind the current non-significant relationship.





Note. Academic satisfaction, school achievement and prosocial behavior latent constructs were identified using their items. Youth externalizing and internalizing problems composite scores were used to identify the psychological adjustment latent construct.

Moreover, joy of learning is also shown to be promoting motivation to learn (Pekrun et al., 2009), and positively correlated with academic self-efficacy and achievement (Pekrun et al., 2004). Nevertheless, it also reduces over years, and even sixth graders hold significantly lower joy of learning compared to early graders (Ehrhardt-Madapathi et al., 2018). In a meta analytic study, Bücker et al. (2018) summarized that student subjective wellbeing and academic achievement necessarily feed each other, but there is possibility to find both significant and nonsignificant associations between these variables. Considering these all, some factors like time related decrease in school connectedness and joy of learning might be the reason behind the non-significant relationship of these variables with academic achievement in high schoolers. Further research should address this issue.

The study results also revealed that educational purpose and academic efficacy were significant predictors of all adolescent outcomes: school achievement, academic motivation, prosocial behavior, and psychological health problems. Indeed, all student wellbeing domains had the strongest association with prosocial behavior, followed by academic satisfaction and psychological health problems. For academic selfefficacy, in series of longitudinal studies, it was concluded that both academic self-efficacy and academic achievement contributes to each other reciprocally (Alivernini & Lucidi, 2011; Caprara et al., 2011). Likewise, past research underlined the positive effect of academic self-efficacy on academic motivation (Alivernini & Lucidi, 2011), as well. There is no equal study examining academic self-efficacy with prosocial behavior, but it is already known that general self-efficacy belief is the significant predictor of prosocial behavior (Caprara & Steca, 2005; Falanga et al., 2014). Again, both academic self-efficacy and general self-efficacy were found to be related to various psychological adjustment problems such as depressed effect of peer victimization (Thijs & Verkuyten, 2008), stress (Zajacova et al., 2005), and decreased undesirable behavior and depression (Wang, 2009). Effect of educational purpose on school functioning and adjustment is compatible with early findings, as well. Setting educational goals itself (being a good student or acquiring new things at school) help adolescents to stay away from antisocial behaviors (López-Romero & Romero, 2010). In addition, it negatively predicts some problem behaviors in school setting like alcohol use and school dropout (Arslan & Renshaw, 2018), and found to be positively associated with academic achievement

(Arslan, 2016). However, there is still limited amount of research conducted on educational purpose in the literature, and more studies are needed to draw more robust conclusions on this variable.

Lastly, the present study showed that student subjective wellbeing was significantly associated with all youth school functioning and adjustment outcomes, ranging from small-to-large effect size. Student subjective wellbeing had the strongest predictive effect on prosocial behavior, followed by academic satisfaction, psychological health problems, and school achievement. As touched upon above, relationships of student subjective well-being indicators (joy of learning, educational purpose, school connectedness, academic efficacy) with school functioning and adjustment outcomes are in line with past findings in the related literature. Overall, the present study readdressed these links that are crucial for youth's mental health. As a result, better student subjective wellbeing is associated with increased positive school functioning and youth development (Bird & Markle, 2012; Lewis et al., 2009; Shaunessy et al., 2006; Shoshani & Slone, 2013), and decreased internalizing and externalizing psychological problems (Antaramian et al., 2010; Suldo et al., 2011; Suldo & Shaffer, 2008). Given the covitality model proposing "the sum is greater than the parts" (Arslan, 2019a; Furlong et al., 2014), these findings point out the importance of student subjective wellbeing for having healthy school functioning and adjustment in adolescents.

Conclusion

Current study contributed to understanding student subjective wellbeing in relation to school functioning and psychological adjustment of Turkish adolescents. Overall, it can be concluded that student subjective wellbeing plays a crucial role for youth school functioning and adjustment outcomes with small to high effect size range. These findings are mostly in line with past research findings in the related literature, but these crucial links for adolescents' mental health were readdressed within a collectivistic Turkish culture. In that sense, these findings are expected to be contributive in terms of both theoretical and practical implications. Possible implications of the current findings are discussed in the subheading below.

Limitations and Implications

Like all studies, there are several limitations of the current study that should be noted down. To begin with, it is a cross-sectional study that does not allow us inferring causal relationships, and the data was gathered

Arslan & Coşkun

using self-report measures. Further longitudinal and experimental design studies should test the present hypotheses to come up with causal outcomes. Furthermore, sample of the current study only consists of adolescent group of high school students in Turkish culture, and this limits the generalization of the results. To this end, replicating the study with other groups from different cultures will enable researchers to see the applicability of results into broader contexts.

Despite of these limitations, the present research clarifies new questions and provides information that may contribute to mental health field. Exploring ways and factors help individuals flourish and build a better life is very valuable. It also helps people to take their guards against falling down in life general. With this in mind, present paper showed how important to hold healthy level of student subjective wellbeing not only for facilitating better school functioning, but also for guard against psychological adjustment taking problems. By taking this into consideration, school stakeholders, especially the school psychological counselors should be aware of these findings while arranging their intervention programs (e.g. individual and group counselling, psychoeducation with all school stakeholders etc.).

Compliance with Ethical Standards

Ethical Standards

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID

Gökmen Arslan¹⁰ https://orcid.org/0000-0001-9427-1554

Muhammet Coşkun¹⁰ https://orcid.org/0000-0001-6556-6783

> Received: June 26, 2020 Accepted: August 7, 2020 Published Online: August 16, 2020

References

- Alivernini, F., & Lucidi, F. (2011). Relationship between social context, self-efficacy, motivation, academic achievement, and intention to drop out of high school: A longitudinal study. *Journal of Educational Research*. 104(4), 241-252. https://doi.org/10.1080/00220671003728062
- Antaramian, S. P., Scott Huebner, E., Hills, K. J., & Valois, R. F. (2010). A dual-factor model of mental health: Toward a more comprehensive understanding of youth functioning. *American Journal of Orthopsychiatry*. 80(4), 462-472. https://doi.org/10.1111/j.1939-0025.2010.01049.x
- Arslan, G. (2016). Relationship between sense of rejection, academic achievement, academic efficacy, and educational purpose in high school students. *Egitim ve Bilim*, 41(183), 293–304. https://doi.org/10.15390/EB.2016.5562
- Arslan, G. (2018). Understanding the associations between positive psychological functioning at work and cognitive wellbeing in teachers. *Journal* of Positive School Psychology. 2(2), 113-127. https://www.journalppw.com/index.php/JPPW/art icle/view/22
- Arslan, G. (2019a). Exploring the effects of positive psychological strengths on psychological adjustment in adolescents. *Child Indicators Research*, *12*(4), 1449–1464. https://doi.org/10.1 007/s12187-018-9589-5
- Arslan, G. (2019b). Positive psychological traits, school functioning, and psychological adjustment in elementary schoolchildren. *Journal of Psychologists and Counsellors in Schools*, 29(2), 139–150. https://doi.org/10.1017/jgc.2018.24
- Arslan, G. (2019c). Development and validation of the Youth Externalizing Behavior Screener: A brief and effective measure of behavioral problems. *International Journal of School & Educational Psychology*, 7(sup1), 64–74. https://doi.org/10.10 80/21683603.2018.1466747
- Arslan, G. (2020). Measuring emotional problems in Turkish adolescents: Development and initial validation of the Youth Internalizing Behavior Screener. *International Journal of School & Educational Psychology*, 1–10. https://doi.org/10 .1080/21683603.2019.1700860
- Arslan, G., & Duru, E. (2017). Initial development and validation of the School Belongingness Scale.

Child Indicators Research, *10*(4), 1043–1058. https://doi.org/10.1007/s12187-016-9414-y

- Arslan, G., & Renshaw, T. L. (2018). Student subjective wellbeing as a predictor of adolescent problem behaviors: a comparison of first-order and second-order factor effects. *Child Indicators Research*, *11*(2), 507–521. https://doi.org/10.1007 /s12187-017-9444-0
- Arslan, G., & Tanhan, A. (2019). Ergenlerde okul aidiyeti, okul işlevleri ve psikolojik uyum arasındaki ilişkinin incelenmesi. *Yaşadıkça Eğitim*, 33(2), 318–332. https://doi.org/10.33308/2667 4874.2019332127
- Balkis, M. (2013). Academic procrastination, academic life satisfaction and academic achievement: The mediation role of rational beliefs about studying. *Journal of Cognitive and Behavioral Psychotherapies.* 13(1), 57-74.
- Bird, J. M., & Markle, R. S. (2012). Subjective wellbeing in school environments: Promoting positive youth development through evidence-based assessment and intervention. *American Journal of Orthopsychiatry*. 82(1), 61-66. https://doi.o rg/10.1111/j.1939-0025.2011.01127.x
- Bücker, S., Nuraydin, S., Simonsmeier, B. A., Schneider, M., & Luhmann, M. (2018). Subjective well-being and academic achievement: A metaanalysis. *Journal of Research in Personality*. 74, 83-94. https://doi.org/10.1016/j.jrp.2018.02.007
- Caprara, G. V., & Steca, P. (2005). Self-efficacy beliefs as determinants of prosocial behavior conducive to life satisfaction across ages. *Journal of Social and Clinical Psychology*. 24(2), 191-217. https://doi .org/ 10.1521/jscp.24.2.191.62271
- Caprara, G. V., Vecchione, M., Alessandri, G., Gerbino, M., & Barbaranelli, C. (2011). The contribution of personality traits and self-efficacy beliefs to academic achievement: A longitudinal study. *British Journal of Educational Psychology*. *81*(1), 78-96. https://doi.org/10.1348/2044-8279.002004
- Cohen, J. (1988). *Statistical power analysis for the behavioralsciences* (2nd ed.). Lawrence Erlbaum.
- D'Agostino, R. B., Belanger, A., & D'Agostino, R. B. (1990). A suggestion for using powerful and informative tests of normality. *The American Statistician*, 44(4), 316. https://doi.org/10.2307 /2684359
- Dang, M. T. (2014). Social connectedness and selfesteem: Predictors of resilience in mental health

among maltreated homeless youth. *Issues in Mental Health Nursing*. 35(3), 212-219. https://doi.org/10.3109/01612840.2013.860647

- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542–575. https://doi.org/10.1037/0033-2909.95.3.542
- Ehrhardt-Madapathi, N., Pretsch, J., & Schmitt, M. (2018). Effects of injustice in primary schools on students' behavior and joy of learning. Social Psychology of Education. 21(2), 337-369. https://doi.org/10.1007/s11218-017-9416-8
- Falanga, R., Caroli, M. E. De, & Sagone, E. (2014). Humor styles, self-efficacy and prosocial tendencies in middle adolescents. *Procedia-Social* and Behavioral Sciences. 127, 214-218. https://doi.org/10.1016/j.sbspro.2014.03.243
- Furlong, M. J., You, S., Renshaw, T. L., O'Malley, M. D., & Rebelez, J. (2013). Preliminary development of the Positive Experiences at School Scale for elementary school children. *Child Indicators Research*, 6(4), 753–775. https://doi.org/10.1007 /s12187-013-9193-7
- Furlong, M. J., You, S., Renshaw, T. L., Smith, D. C., & O'Malley, M. D. (2014). Preliminary development and validation of the social and emotional health survey for secondary school students. *Social Indicators Research*, 117(3), 1011–1032.
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53–60.
- Huebner, E. S., Funk, B. A., & Gilman, R. (2000). Cross-sectional and longitudinal psychosocial correlates of adolescent life satisfaction reports. *Canadian Journal of School Psychology*. 16(1), 53-64.

https://doi.org/10.1177/082957350001600104

- Jones, C. N., You, S., & Furlong, M. J. (2013). A Preliminary examination of covitality as integrated well-being in college students. *Social Indicators Research*, 111(2), 511–526. https://doi.org/10 .1007/s11205-012-0017-9
- Kansky, J., & Diener, E. (2017). Benefits of well-being: Health, social relationships, work, and resilience. *Journal of Positive Psychology and Wellbeing*, 1(2), 129-169.
- Kaplan, Y. (2017). School-specific subjective wellbeing and emotional problems among high school adolescents. *Journal of Positive Psychology*

& Wellbeing, 1(1), 1–9.

- Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford .
- Lewis, A. D., Huebner, S. E., Reschly, A. L., & Valois, R. F. (2009). The incremental validity of positive emotions in predicting school functioning. *Journal* of Psychoeducational Assessment. 27(5), 397-408. https://doi.org/10.1177/0734282908330571
- López-Romero, L., & Romero, E. (2010). Goals during adolescence and their relationship with antisocial behavior. *Spanish Journal of Psychology*. *13*(1), 166-177.
 - https://doi.org/10.1017/S1138741600003759
- Loukas, A., Ripperger-Suhler, K. G., & Horton, K. D. (2009). Examining temporal associations between school connectedness and early adolescent adjustment. *Journal of Youth and Adolescence*. *38*(6), 804-812. https://doi.org/10.1007/s10964-008-9312-9
- McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting school connectedness: Evidence from the national longitudinal study of adolescent health. *Journal of School Health*. 72(4), 138-146. https://doi.org/10.1111/j.1746-1561.20 02.tb06533.x
- Moore, S., & Diener, E. (2019). Types of Subjective Well-Being and Their Associations with Relationship Outcomes. *Journal of Positive Psychology & Wellbeing*, 3(2), 112–118.
- Murnaghan, D., Morrison, W., Laurence, C., & Bell, B. (2014). Investigating mental fitness and school connectedness in Prince Edward Island and New Brunswick, Canada. *Journal of School Health*. 84(7), 444-450. https://doi.org/10.1111/josh.1 2169
- Nasir, N. S., Jones, A., & McLaughlin, M. (2011). School connectedness for students in low-income urban high schools. *Teachers College Record*. 113(8), 1755-1793.
- Odaci, H., & Çikrikçi, Ö. (2014). Problematic internet use in terms of gender, attachment styles and subjective well-being in university students. *Computers in Human Behavior.* 32, 61-66. https://doi.org/10.1016/j.chb.2013.11.019
- Oldfield, J., Humphrey, N., & Hebron, J. (2016). The role of parental and peer attachment relationships and school connectedness in predicting adolescent mental health outcomes. *Child and Adolescent Mental Health*. 21(1), 21-29. https://doi.org/10.1111/camh.12108

- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70(3), 323–367.
- Pekrun, R., Elliot, A. J., & Maier, M. A. (2009). achievement goals and achievement emotions: Testing a model of their joint relations with academic performance. *Journal of Educational Psychology*. *101*(1), 115-135. https://doi.org/10.1037/a0013383
- Pekrun, R., Goetz, T., Perry, R. P., Kramer, K., Hochstadt, M., & Molfenter, S. (2004). Beyond test anxiety: Development and validation of the Test Emotions Questionnaire (TEQ). Anxiety, Stress and Coping. 17(3), 287-316. https://doi.org/10.1080/10615800412331303847
- Pethtel, O. L., Moist, M., & Baker, S. (2018). Time perspective and psychological well-being in younger and older adults. *Journal of Positive School Psychology*, 2(1), 45-63. http://journalppw.com/index.php/JPPW/article/vie w/51
- Renshaw, T. L., & Arslan, G. (2016). Psychometric properties of the Student Subjective Wellbeing Questionnaire with Turkish adolescents: A generalizability study. *Canadian Journal of School Psychology*, 31(2), 139–151. https://doi.org/10.1 177/0829573516634644
- Renshaw, T. L., & Chenier, J. S. (2018). Further validation of the Student Subjective Wellbeing Questionnaire: Comparing first-order and secondorder factor effects on actual school outcomes. *Journal of Psychoeducational Assessment*, 36(4), 392–397. https://doi.org/10.1177/0734282916678 494
- Renshaw, T. L., & Chenier, J. S. (2019). Screening for student subjective well-being: An analog evaluation of broad and targeted models. *Journal* of Psychoeducational Assessment, 37(6), 803–809. https://doi.org/10.1177/0734282918795797
- Renshaw, T. L., Furlong, M. J., Dowdy, E., Rebelez, J., Smith, D. C., O'Malley, M. D., Lee, S.-Y., & Strøm, I. F. (2014). Covitality: A synergistic conception of adolescents' mental health. In *Handbook of positive psychology in schools, 2nd ed.* (pp. 12–32). Routledge/Taylor & Francis Group.
- Renshaw, T. L., Long, A. C. J., & Cook, C. R. (2015).Assessing adolescents' positive psychological functioning at school: Development and validation of the Student Subjective Wellbeing

Journal of Positive School Psychology

Questionnaire. School Psychology Quarterly, 30(4), 534–552. https://doi.org/10.1037/spq00000 88

- Satici, S. A. (2016). Psychological vulnerability, resilience, and subjective well-being: The mediating role of hope. *Personality and Individual Differences*. 102, 68-73. https://doi.org/10.1016/j. paid.2016.06.057
- Schmitt, N., Oswald, F. L., Friede, A., Imus, A., & Merritt, S. (2008). Perceived fit with an academic environment: Attitudinal and behavioral outcomes. *Journal of Vocational Behavior*. 72(3), 317-335. https://doi.org/10.1016/j.jvb.2007.10.007
- Seligman, M. E. P. (2011). Flourish: A Visionary New Understanding of Happiness and Well-being. Free Press.
- Shaunessy, E., Suldo, S. M., Hardesty, R. B., & Shaffer, E. J. (2006). School functioning and psychological well-being of international baccalaureate and general education students a preliminary examination. *Journal of Advanced Academics*. *17*(2), 76-89. https://doi.org/10.4219/jsge-2006-683
- Shoshani, A., & Slone, M. (2013). Middle school transition from the strengths perspective: Young adolescents' character strengths, subjective wellbeing, and school adjustment. *Journal of Happiness Studies*. 14(4), 1163-1181. https://doi.org/10.1007/s10902-012-9374-y
- Strein, W., & Kuhn-McKearin, M. (2013). School function assessment. In V. F.R. (Ed.), *Encyclopedia of autism spectrum disorders* (pp. 2658–2662). Springer New York. https://doi.org/10.1007/978-1-4419-1698-3_168
- Suldo, S. M., & Huebner, E. S. (2006). Is extremely high life satisfaction during adolescence advantageous? *Social Indicators Research*. 78(2), 179-203. https://doi.org/10.1007/s11205-005-8208-2
- Suldo, S. M., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model of mental health in youth. *School Psychology Review*. *37*(1), 52-68.
- Suldo, S., Thalji, A., & Ferron, J. (2011). Longitudinal academic outcomes predicted by early adolescents' subjective well-being, psychopathology, and mental health status yielded from a dual factor model. *Journal of Positive Psychology*. 6(1), 17-30. https://doi.org/10.1080/17439760.2010.53677 4

- Telef, B. B., & Furlong, M. J. (2017). Adaptation and validation of the Social and Emotional Health Survey–Secondary into Turkish culture. *International Journal of School & Educational Psychology*, 5(4), 255–265. https://doi.org/10.1 080/21683603.2016.1234988
- Thijs, J., & Verkuyten, M. (2008). Peer Victimization and academic achievement in a multiethnic sample: The role of perceived academic selfefficacy. *Journal of Educational Psychology*. *100*(4), 754-764. https://doi.org/10.1037/a0013155
- Tian, L., Chen, H., & Huebner, E. S. (2014). The longitudinal relationships between basic psychological needs satisfaction at school and school-related subjective well-being in adolescents. *Social Indicators Research*. 119(1), 353-372. https://doi.org/10.1007/s11205-013-0495-4
- Wang, M. Te. (2009). School climate support for behavioral and psychological adjustment: Testing the mediating effect of social competence. *School Psychology Quarterly*. 24(4), 240-251. https://doi.org/10.1037/a0017999
- Wilkinson-Lee, A. M., Zhang, Q., Nuno, V. L., & Wilhelm, M. S. (2011). Adolescent emotional distress: The role of family obligations and school connectedness. *Journal of Youth and Adolescence*, 40(2), 221–230. https://doi.org/10.1007/s10964-009-9494-9
- Yalçın, İ., & Malkoç, A. (2015). The relationship between meaning in life and subjective well-being: forgiveness and hope as mediators. *Journal of Happiness Studies*, 16(4), 915–929. https://doi.org/10.1007/s10902-014-9540-5
- You, S., Furlong, M. J., Dowdy, E., Renshaw, T. L., Smith, D. C., & O'Malley, M. D. (2014). Further validation of the Social and Emotional Health Survey for high school students. *Applied Research in Quality of Life*. 9(4), 997-1015. https://doi.org/10.1007/s11482-013-9282-2
- Zajacova, A., Lynch, S. M., & Espenshade, T. J. (2005). Self-efficacy, stress, and academic success in college. In *Research in Higher Education*. 46(6), 677-706. https://doi.org/10.1007/s11162-004-4139-z
- Zhang, D. C., & Renshaw, T. L. (2020). Personality and college student subjective wellbeing: A Domainspecific approach. *Journal of Happiness Studies*. 21(3), 997-1014. https://doi.org/10.1007/s10902-

019-00116-8

Zullig, K. J., Huebner, E. S., & Patton, J. M. (2011). Relationships among school climate domains and school satisfaction. *Psychology in the Schools*. 48(2), 133-145. https://doi.org/10.1002/pits.20532