Instructions for authors, subscriptions and further details:

http://ijep.hipatiapress.com

Exploring the Association between School Belonging and Emotional Health among Adolescents

Gökmen Arslan[1]

1) Hope Psychology: Counseling and Development Center, Turkey.

PLEASE SCROLL DOWN FOR ARTICLE

Exploring the Association between School Belonging and Emotional Health among Adolescents

Gökmen Arslan
Hope Psychology: Counseling and Development Center

Abstract

The purpose of the present study is to investigate the association between school belonging and wellbeing, distress, and emotional health status yielded from a bidimensional model among adolescents. Participants comprised of 413– 49.7% female and 50.3% male– adolescents, ranging in age between 11 and 18 years (M = 13.96, SD = 1.64). Findings from the preliminary analyses showed a large positive association between school belonging and emotional wellbeing variables, whereas a moderate negative association between school belonging and emotional distress variables. Additionally, primary analyses demonstrated that adolescents with high levels of the school belonging have low levels of the emotional distress, yet high levels of the emotional wellbeing. Significant main effects for emotional wellbeing, emotional distress, and bidimensional emotional health were observed across all school belonging scales. A larger effect size for the bidimensional emotional health main effect was found for school belonging, comparing with unidimensional emotional wellbeing and distress. Results of the study provide important implications for research and practice in term of mental health services.

Keywords: school belonging, bidimensional model, emotional wellbeing, psychological distress.

Hipatia Press
www.hipatiapress.com

Explorando la asociación entre la pertenencia a la escuela y la salud emocional entre los adolescentes

Gökmen Arslan
Hope Psychology: Counseling and Development Center

Resumen

El propósito del presente estudio es investigar la asociación entre la pertenencia a la escuela y el bienestar, la angustia y el estado de salud emocional producido a partir de un modelo bidimensional entre los adolescentes. Participantes compuestos por 413 –49.7% mujeres y 50.3% hombres– adolescentes, con edades comprendidas entre 11 y 18 años ($M = 13,96$, $DE = 1,64$). Los resultados de los análisis preliminares mostraron una asociación positiva grande entre las variables pertenecientes a la escuela y el bienestar emocional, mientras que una asociación negativa moderada entre la pertenencia a la escuela y las variables de angustia emocional. Además, los análisis primarios demostraron que los adolescentes con altos niveles de pertenencia a la escuela tienen bajos niveles de angustia emocional, sin embargo, altos niveles de bienestar emocional. Se observaron efectos principales significativos para el bienestar emocional, la angustia emocional y la salud emocional bidimensional en todas las escalas de pertenencia a la escuela. Se encontró un mayor efecto para el efecto principal de la salud emocional bidimensional para la pertenencia a la escuela, en comparación con el bienestar emocional unidimensional y la angustia. Los resultados del estudio proporcionan importantes implicaciones para la investigación y la práctica.

Palabras clave: pertenencia a la escuela, modelo bidimensional, bienestar emocional, angustia psicológica.

Hipatia Press
www.hipatiapress.com

The need to belong is a fundamental human motivation (Baumeister & Leary, 1995) that refers to an important psychological construct including formative implications for both individuals' healthy development and wellbeing (Slaten, Ferguson, Allen, Brodrick, & Waters, 2016). The sense of belonging is described as significant affiliations between individuals and their surroundings–peoples, groups, or places, such as school belonging (Hagerty, Lynch-Sauer, Patusky, Bouwsema, & Collier, 2002). School belonging is based on the experiences of valued involvement, and fit between a student and the school environment (Arslan & Duru, 2016; Hagerty et al., 2002). Thus, it refers to students' subjective perceptions of being accepted, respected, included, and supported by others in their school surroundings (Goodenow, 1993). Students with high levels of the sense of belonging perceive themselves as important, meaningful, and valuable part of their school environment (Arslan & Duru, 2016). School belonging is significantly associated with positive educational experiences (e.g. achievement, motivation, academic efficacy; Arslan, 2016; Goodenow & Grady, 1993; McMahon, Parnes, Keys, & Viola, 2008), psychological outcomes (e.g. depression, anxiety; Arslan, 2017; Babakhani, 2014; Bond et al., 2007; Shochet, Smith, Furlong, & Homel, 2011), behavioral problems (e.g. violence, substance use; Balkıs, Duru, & Buluş, 2005; Bond et al., 2007), and wellbeing indicators (e.g. life satisfaction; Arslan, 2017; Moffa, Dowdy & Furlong, 2016). Many longitudinal studies have supported this evidence, indicating the effect of school belonging on youths' mental health and wellbeing (e.g. Gillen-O'Neel & Fuligni, 2013; Shochet et al., 2011; Tian, Zhang, Huebner, Zheng, & Liu, 2015). The need–to–belong theory (Baumeister & Leary, 1995) that is useful in understanding how the school belonging may associate with wellbeing and distress, arguing that the need to belong is a fundamental human motivation that promotes one's mental health and wellbeing. To this approach, the need to form and maintain strong and positive interpersonal relationships have a vital role in healthy development and wellbeing. However, the failure to satisfy this need causes various social, emotional and behavioral undesirable outcomes (see Baumeister & Leary, 1995). The framework has discussed the sense of belonging based on the two substantial dimensions, indicating a balance between individuals' negative and positive perceptions–social exclusion and

social inclusion (Malone, Pillow, & Osman, 2012). These factors, as measures of relational value, have importance to the youth positive development and wellbeing (Leary, 2005). For example, being accepted or included is related to more positive outcomes, such as happiness, contentment, and calm, whereas being excluded is associated with intense negative experiences, including depression, jealousy, and loneliness (Baumeister & Leary, 1995; Osterman, 2000). For all of this, it is substantial to gain a more detailed understanding of the sense of belonging and its effects at school.

School Belonging and Emotional Health

Traditional approach conceptualizes mental health using a unidimensional model, which is characterized as the absence of psychopathology such as depression or anxiety (Renshaw, Eklund, Bolognino, & Adodo, 2016). However, the bidimensional model of mental health, which has also named the dual-factor (Greenspoon & Sasklofske, 2001; Suldo & Shaffer, 2008) or two-continua model (Westerhoff & Keyes, 2010), offers a more comprehensive and complex conception of human mental health (Renshaw & Cohen, 2014). The model explores human mental health using two distinct-yet-related dimensions, including wellbeing and psychopathology indicators (Moore et al., 2015) and makes important contributions to the understanding of students' healthy and successful development (Renshaw & Cohen, 2014). Given the studies suggesting that the bidimensional model is more useful than traditional mental health model for youth positive development and wellbeing (Renshaw & Cohen, 2014; Suldo & Shaffer, 2008; Suldo, Thalji, & Ferron, 2011), the model may provide a more comprehensive picture for adolescents' current and future mental health (Moffa et al., 2016). Research has supported that the bidimensional model has a significant predictive effect on various student outcomes, such as academic achievement, school attendance, interpersonal connectedness, physical health, and adaptive social functioning (Renshaw & Bolognino, 2016). In addition, longitudinal effects of the model–subjective wellbeing and psychopathology– on many school outcomes (e.g. academic achievement, absences, and discipline problems) has been reported (Suldo et al., 2011). Given this theoretical framework, student mental health status

should be assessed using not only psychopathology but also using both psychopathology and wellbeing indicators together.

Previous research indicated that a high sense of school belonging was related to increased positive academic experiences (e.g., Arslan & Duru, 2016; Bond et al., 2007; Goodenow & Grady, 1993; Neel & Fuligni, 2013; Sanchez, Colon, & Esparza, 2005), reduced psychological difficulties and improved adjustment (e.g. substance use; internalizing/externalizing problems, absenteeism; Moffa et al., 2016; Napoli, Marsiglia, & Kulis, 2003; Pittman & Richmond, 2007; Rostosky, Owens, Zimmerman, & Riggle, 2003), and increased wellbeing (e.g. life satisfaction, Arslan & Duru, 2016; Lam, Chen, Zhang, & Liang, 2015). Napoli et al. (2003) reported that a strong sense of school belonging is associated with low level of substance use, such as alcohol, cigarette, and marijuana use in adolescents. Pittman and Richmond (2007) found the predictive effect of high school belonging on adolescents' academic outcomes and psychological adjustment, including grades, academic competence, self-worth, internalizing and externalizing problems. Likewise, Arslan and Duru (2016) reported the predictive effect of school belonging on subjective wellbeing and loneliness, as well as that school belonging was also associated with school-specific wellbeing (e.g. academic efficacy, educational purpose). In addition, many longitudinal outcomes have supported this evidence, indicating that school belonging is associated with various academic, psychological and behavioral consequences in adolescents (e.g. Gillen-O'Neel & Fuligni, 2013; Moffa et al., 2016; Shochet et al., 2011). Despite this literature, its potential impacts on emotional health have remained relatively unexplored, and there has not been as much research on the association between school belonging and bidimensional emotional health.

Considering the literature noted above, previous studies have investigated the predictive validity on various student outcomes in adolescents (e.g. Arslan, 2016; Moffa et al., 2016; Napoli et al., 2003; Pittman & Richmond, 2007; Rostosky et al., 2003). However, its potential impacts on youths' emotional health have remained relatively unexplored, and the potential predictive effects of it on wellbeing and distress indicators has not been thoroughly examined. Therefore, additional research is warranted to examine how school belonging might be utilized to predict youth's emotional health using bidimensional model. By investigating students' sense of belonging at school, school counselors or other professions may

determine school-based prevention and intervention strategies. In this way, students' level of sense of belonging may contribute to promoting their emotional health based on the bidimensional model.   To this end, the purpose of the present study reports the association between school belonging and wellbeing, distress, and emotional health status yielded from a bidimensional model among adolescents.

Method

Participants

Sample of the study comprised of 413 students (49.7% female) attending two public schools (66% secondary school) in a small city of Turkey. Participants ranged in age between 11 and 18 years ($M = 13.96$, $SD = 1.64$). The students reported socioeconomic status (SES) of their family as follows: Low SES = 18.1%, Moderate SES = 47.9%, and Upper SES = 33.9%. All students were invited to participate in the study, yet approximately 55% of adolescents consented to participate in the study. After the participants were informed about research purpose and instruments, a paper–pencil survey that was created using measures and demographic variable items (see, the Measure subsection) was distributed to the students who volunteered to participate in the study.

Measures

School Belongingness Scale (SBS). The SBS is a 10 item self-report survey developed to measure sense of school belonging in Turkish adolescents, and consists of two sub–dimensions: acceptance and exclusion (e.g. "I feel that I do not belong this school", "I have close/sincere relationships with my teachers and friends"). All items are responded using 4-point Likert–type scale, ranging from 1 (*almost never*) to 4 (*almost always*), and after reversing negative items, total scores denote the overall school belonging. Previous research indicated that the scale had sound psychometric properties, strong internal reliability ($\alpha = .86$), and convergent validity with school-specific subjective wellbeing indicators (e.g., school connectedness,

academic efficacy), loneliness, and life satisfaction (Arslan and Duru, 2016). Observed scale characteristics with this sample are presented in Table 1.

Positive and Negative Experience Scale (PNES). The PNES is a 12-item self–report instrument developed to assess positive (6 items; e.g. "Positive", "Good") and negative feelings (6 items; e.g. "Unpleasant", "Sad"), and all items are scored using 5-point Likert–type scale, ranging from 1 *"very rarely or never"* to 5 *"very often or always"* (Diener et al., 2009). Telef (2013) adapted the scale for Turkish adolescents, demonstrating the good data–model fit statistics, adequate internal reliability (positive affect α = .84 and negative affect α = .75), and convergent validity with criterion variables (e.g. loneliness, life satisfaction). Furthermore, observed scale characteristics with this sample are presented in Table 1.

Psychological Wellbeing and Distress Scale (PWDS). The PWDS was also used to measure psychological wellbeing and distress in adolescents. The PWDS is a 10-item self-report behavior rating scale designed to assess two dimensions of bidimensional mental health: psychological wellbeing and psychological distress (e.g. "Have you got on well at school?", "Feeling low"). All items are rated using 5-point Likert–type scale, ranging from 1 to 5 (response format of first seven items: 1 = *never* to 5 = *always* and other three items: 1 = *rarely or never* to 5 = *about every day*; Renshaw & Bolognino, 2016). Previous research investigating psychometric properties of Turkish version of the PWDS showed that the scale had psychometrically adequate properties, strong internal reliability (PW α = .86 and PD α = .83) and construct reliability (PW H = .86 and PD H = .87), and predictive validity with criterion variables (Arslan & Renshaw, 2018). Observed scale characteristics with the present sample are presented in Table 1.

Data analyses
Prior to conducting the primary analyses, observed scale characteristics, and bivariate correlations were examined. Following, emotional health groups were created using standardized composite scores, and participants were classified into one of four possible emotional-health-status groups. After all scale composite scores were transformed into *z*-scores, the standardized composite scores were summed to create meta–composite scores for emotional wellbeing (psychological wellbeing $_z$ + positive affect $_z$) and

emotional distress (psychological distress $_z$ and negative affect $_z$). Like previous research (Renshaw et al., 2016; Renshaw & Cohen 2014), the participants were classified as *low to moderate* range (standardized composite scores ≤ 1 *SD*) and *at-risk to clinical* range (standardized composite scores ≥ 1 *SD*) emotional distress, and *languishing to low* range (standardized composite scores < –1 *SD*) and *moderate to flourishing* range (standardized composite scores ≥ –1 *SD*) emotional wellbeing. Following, these groups were used to create the participants' bidimensional health statues (*healthy emotionality*, *unhealthy emotionality*, *mixed emotionality*, and *diminished emotionality*). Following these preliminary analyses, a series univariate analysis of variance (ANOVA) was conducted to examine the differential effects of bidimensional emotional health status on school belonging. All data analyses were performed using SPSS version 22.

Results

Preliminary analyses

Findings from preliminary analyses indicated that all variables had relatively normal distribution (skewness and kurtosis scores ≤ |1|; see Table 1). Next, bivariate correlation analysis was conducted, and the results showed significant, large positive association between school belonging and emotional wellbeing variables (psychological wellbeing and positive affect), and the significant moderate negative association between school belonging and emotional distress variables (psychological distress and negative affect). In addition, results demonstrated significant, moderate negative relations between social exclusion (sub-dimension of school belonging) and emotional wellbeing outcomes; significant, moderate negative relations between social exclusion (sub-dimension of school belonging) and emotional distress outcomes; significant, large positive relations between social inclusion (sub-dimension of school belonging) and emotional wellbeing outcomes, and small-to-moderate negative relations between social inclusion (sub-dimension of school belonging) and emotional distress outcomes. Observed scale characteristics and bivariate correlations between study variables are presented in Table 1.

Table 1

Results of Descriptive Statistics and Correlations (r)

Variable	Descriptive statistics				Correlation (r)						
	M	SD	Skew.	Kurt.	1.	2.	3.	4.	5.	6.	7.
1. School belonging	32.21	4.67	−.34	−.45	1	-.74	.83	.60	.54	-.39	-.43
2. Social Exclusion	7.18	2.30	1.04	.43		1	-.35	-.34	-.37	.43	.41
3. Social inclusion	14.61	3.37	−.16	−.76			1	.60	.51	-.25	-.33
4. Psychological wellbeing	18.50	4.90	−.52	−.54				1	.70	-.42	-.45
5. Positive affect	23.31	5.04	−.64	−.26					1	-.48	-.53
6. Psychological distress	9.49	4.53	1.27	1.05						1	.64
7. Negative affect	12.85	4.53	.56	−.07							1

Note. All correlation (*r*) values are significant at the .001 level (2-tailed).

Primary Analyses

Given the procedures in data analyses subsection, the majority of students were classified as being healthy emotionality compared to other bidimensional emotional health groups (see Table 2). Additionally, observed variable characteristics of the School belonging and emotional health status of participants are presented in Table 3.

Table 2

Bidimensional emotional health status of participants

Emotional distress	Emotional wellbeing	
	Languishing-to-Low	Moderate-to-Flourishing
Low-to-Moderate	Diminished Emotionality (*n* =57)	Healthy Emotionality (*n* = 239)
At-Risk-to-Clinical	Unhealthy Emotionality (*n* = 58)	Mixed Emotionality (n = 39)

Table 3

School belonging and emotional health status of participants

Variables	Healthy Emotionality		Unhealthy Emotionality		Diminished Emotionality		Mixed Emotionality	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Social exclusion	6.49	1.93	9.59	2.79	7.89	2.65	10.00	4.33
Social inclusion	15.88	2.96	12.05	2.89	11.80	2.64	14.97	3.34
School belonging	34.38	3.74	27.50	4.81	28.89	3.84	30.61	4.68

Overall findings from a series of ANOVA indicated significant main effects of emotional wellbeing, emotional distress, and bidimensional emotional health classifications on students' overall school belonging and its sub-dimensions, ranging from moderate to large effect size (see Table 4).

Table 4

Univariate analysis of variance results

Independent Variable	Dependent Variable	*F*	*p*	R^2	*g* [95 % CI]
Emotional wellbeing	Social exclusion	35.00	<.001	.08	.65[.38, .92]
	Social inclusion	135.12	<.001	.25	1.29[1.58, .99]
	Overall belonging	150.13	<.001	.28	1.36[1.77, .95]
Emotional distress	Social exclusion	100.94	<.001	.21	1.10[1.35, .85]
	Social inclusion	22.66	<.001	.06	.57[.25, 89]
	Overall belonging	75.37	<.001	.16	.95[.51, 1.40]
Bidimensional Emotional Health	Social exclusion	39.82	<.001	.24	–
	Social inclusion	46.58	<.001	.26	–
	Overall belonging	54.47	<.001	.34	–

First, the results showed that there was a significant difference between emotional wellbeing groups for social inclusion (F (1, 395) = 135.12, $p<.001$, $R^2 = .25$, Hedge's $g = 1.29$), social exclusion (F (1, 395) = 35.00, $p<.001$, $R^2 = .08$, Hedge's $g = .65$), and overall school belonging (F (1, 395) = 139.66, $p<.001$, $R^2 = .26$, Hedge's $g = 1.30$). Thereafter, the main effect of emotional distress was significant for social inclusion (F (1, 404) = 21.74, $p<.001$, $R^2 = .05$, Hedge's $g = .57$), social exclusion (F (1, 404) = 92.17, $p<.001$, $R^2 = .19$, Hedge's $g = 1.10$), and overall school belonging (F (1, 404) = 77.66, $p<.001$, $R^2 = .16$, Hedge's $g = 1.01$). Finally, the results demonstrated significant main effects of bidimensional emotional health classifications on students' social exclusion (F (3, 389) = 39.82, $p<.001$, $R^2 = .24$), social inclusion (F (3, 389) = 46.58, $p<.001$, $R^2 = .26$), and overall school belonging (F (3, 389) = 65.52, $p<.001$, $R^2 = .34$). In order to compare the selected bidimensional emotional health groups, post hoc analyses were conducted using a Bonferroni adjustment. Findings from post hoc comparisons indicated that there was no significant difference between all groups for social exclusion. However, significant comparisons were observed between all groups for social inclusion and overall school belonging. Moreover, Hedge's g results demonstrated large effect sizes for the comparisons between all bidimensional emotional health groups in social inclusion; large effect sizes for the comparisons between healthy emotionality–unhealthy emotionality as well as moderate effect sizes for the comparisons between healthy emotionality– diminished emotionality in social exclusion, and moderate–to–large effect sizes for the comparisons between all bidimensional emotional health groups in overall school belonging, see Table 5.

Table 5

Comparisons results for bidimensional emotional health groups

Dependent Variable	Group		M Diff.			
	(A)	(B)	(A-B)	SE	p	g [95 % CI]
Social exclusion	HE	UE	−3.10	.37	<.001	1.46[1.70, 1.21]
	HE	DE	−1.41	.37	<.001	.67[.91, .43]
	ME	UE	−.41	.52	.85	.12[.58, .81]
Social inclusion	HE	UE	3.79	.43	<.001	1.28[.95, 1.62]
	HE	DE	4.10	.43	<.001	1.40[1.07, 1.74]
	ME	UE	2.86	.61	<.001	.93[.32, 1.54]
Overall belonging	HE	UE	6.89	.59	<.001	1.73[1.28, 2.18]
	HE	DE	5.49	.60	<.001	1.46[1.02, 1.88]
	ME	UE	3.11	84	<.001	.65[.30, 1.60]

Note. M Diff. Mean difference, HE healthy emotionality, UE unhealthy emotionality, ME mixed emotionality, DE diminished emotionality.

Discussion

The purpose of the present study is to investigate the association between school belonging and wellbeing, distress, and emotional health status yielded from a bidimensional model among adolescents. Given the literature suggesting the link between school belonging and various educational, emotional, and behavioral outcomes in adolescents, it is substantial to gain a more detailed understanding of the sense of belonging and its effects at school. Despite this literature, its potential impacts on emotional health have remained relatively unexplored. To this end, the purpose of the present study was to report the association between school belonging and emotional health status as conceptualized by the bidimensional model of mental health among adolescents. Findings from preliminary analyses showed a significant and large positive association between school belonging and emotional wellbeing variables, whereas a moderate negative association between school belonging and emotional distress variables. Additionally, primary

analyses demonstrated further evidence supporting that bidimensional emotional health had also larger effect sizes (R^2) in comparison with the unidimensional distress and wellbeing effect sizes for school belonging.

Findings from the present study indicated the significant main effects for emotional wellbeing, emotional distress, and bidimensional emotional health across all school belonging scales. An emotional health classifications main effect was observed across all dependent variables, suggesting that students' emotional wellbeing, emotional distress, and bidimensional emotional health were significantly related to key indicators of school belonging–social inclusion and social exclusion. Both R^2 and Hedge's g results illustrated moderate–to–large effect sizes for all emotional health variables on social exclusion and inclusion. Furthermore, the results indicated larger effect sizes for the bidimensional emotional health main effect than the unidimensional distress and wellbeing across social exclusion and inclusion. Participants characterized as at-risk-to-clinical reported the higher social exclusion; however, they identified as moderate-to-flourishing had the highest social inclusion. Consistent with the outcomes, research indicated that individuals who were socially excluded had lower emotional wellbeing and higher emotional distress than who those were accepted (Aydın et al., 2014). The need–to–belong framework is consistent with this study results showing that being included is strongly related to positive outcomes while being excluded is closely associated with intense negative experiences (Baumeister & Leary, 1995). The quality of social relationships has a potential to influence on youth emotional health; however, social exclusion refers to emotionally and psychically negative relations with others (Ladd & Kochenderfer-Ladd 2016). Therefore, students who are excluded within their school surroundings are more likely to suffer from difficulties in emotional health than those who are accepted (Arslan & Duru, 2016; Baumeister and Leary 1995). Additionally, given the results of overall school belonging, significant main effects of emotional wellbeing, emotional distress, and bidimensional emotional health classifications were observed on students' school belonging. Both bidimensional and unidimensional emotional health had the strongest effect on participants' school belonging. The results also demonstrated larger effect size for the bidimensional emotional health main effect than the unidimensional distress and wellbeing across school belonging. Moreover, Hedge's g results demonstrated moderate–to–large effect sizes for the comparisons between all bidimensional emotional health

groups in overall school belonging. Considering the comparisons results, the significant comparisons were observed between all groups for school belonging, indicating that youth identified as healthy emotionality had the highest scores of the school belonging than other emotional health status.

Similar to outcomes from this study, previous research showed that students identified as unhealthy or vulnerable had higher levels of risk for academic and behavioral outcomes, including low levels of school belonging compared to other emotional health groups (Antaramian, Huebner, Hills, & Valois, 2010; Moffa et al., 2016). For example, Renshaw and colleagues (2016) reported that the bidimensional model of emotional health had the significant effects on social connectedness, academic achievement, and physical health among college students, and participants identified as "healthy emotionality" reported higher social connectedness, physical health, and life satisfaction compared to those identified as "unhealthy emotionality and diminished emotionality". Thereafter, comparing with unidimensional emotional wellbeing and distress, the larger effect size for the bidimensional emotional health main effect was found across school belonging. Consistent with this outcome, research demonstrated the longitudinal effectiveness of this model on many school outcomes in adolescents, such as academic achievement, absences, and discipline problems (Suldo et al., 2011). The bidimensional model had a significant predictive effect on various school outcomes, such as academic achievement, school attendance, interpersonal connectedness, physical health, and adaptive social functioning (Renshaw & Bolognino, 2016). Moffa and colleagues (2016) investigated whether adolescent complete mental health groups differ on their self-reported sense of school belonging, demonstrating that youths characterized by low life satisfaction and elevated distress had the lowest school belonging, while those who had high life satisfaction, regardless of psychological distress level, reported the highest school belonging. They also reported the longitudinal predictive effect of school belonging to students' social-emotional wellbeing and internal distress. Likewise, another study by Suido and Shaffer (2008) showed that adolescents with high subjective wellbeing and low psychopathology had better positive educational outcomes (e.g. reading skills, school attendance, and academic goals), social support, physical health, and fewer social problems compared to vulnerable peers without clinical levels of mental illness but with low wellbeing. Taken together, consistent with the literature,

findings from the present study illustrated further evidence, providing insight into understanding the association between school belonging and emotional health among adolescents.

Conclusions and Limitation

The purpose of the present study is to investigate the association between school belonging and emotional health status as conceptualized by the bidimensional model of mental health among adolescents in Turkey. Outcomes of the study provide a few significant implications for future research and practice of mental health work in the context of mental health services at schools. First, findings from the present study suggest that school belonging is an important component of students' emotional health status. Significant main effects for emotional wellbeing, emotional distress, and bidimensional emotional health were observed across all school belonging scales. Specifically, emotional wellbeing has the larger effect size in comparison with the emotional distress effect size for school belonging. With this knowledge, school counselors or other mental health professionals may determine school-based prevention and intervention strategies. Traditionally, mental health research and practice have focused on the symptoms of psychopathology (Keyes, 2005), and subjective wellbeing is not considered as a domain of functioning that warrants assessment and intervention practices (Renshaw et al., 2016). Considering the outcomes of this study demonstrating that emotional wellbeing is more important than emotional distress, school counselors and mental health professionals might integrate subjective wellbeing interventions with school-based traditional practices (Moffa et al., 2016; Renshaw et al., 2016). Following, the larger effect size for the bidimensional emotional health main effect was observed for school belonging, compared with unidimensional emotional wellbeing and distress. To this end, school–based mental health service providers may consider school belonging to be a differentiating construct among emotional health groups, and they provide prevention and intervention strategies aimed at bolstering adolescents' belonging and connections to school (Moffa et al., 2016). For example, considering the negative outcomes associated with low levels of school belonging, such as educational difficulties, social and emotional behavior problems (e.g. Anderman, 2003; Arslan 2016; Deci &

Ryan 1991; Finn, 1989; Osterman, 2000), school counselors might develop school–based prevention and intervention strategies aimed to promote students' sense of belonging at school setting. School–based mental health service providers can use these programs to enhance youths' subjective wellbeing, whereas reducing the emotional distress in school settings.

Despite findings from the present study suggesting significant both theoretical and practical implications, the outcomes should be considered in light of several methodological limitations. First of all, the sample of the study consisted of adolescents that were obtained via convenience sampling; therefore, these are significant limitations for the generalizability of the results of the study. To this end, future research is required to replicate and generalize the study results in a diverse and large sample that are obtained via different sampling methods (e.g. random sampling). Next, considering that all variables of the present study were based on responses from self-report measures, which suggests the possibility of common method bias. Furthermore, a cross-sectional analytic approach was conducted in present study; therefore, longitudinal designs can be conducted to understand the association between emotional health and school outcomes, such as school belonging, academic efficacy, academic achievement, and motivation. Finally, the cut-off scores for emotional health groups were created using standardized composite scores. Although these were empirically based, further research might be employed to replicate and generalize the study results using different classification approaches.

References

Anderman, L. H. (2003). Academic and social perceptions as predictors of change in middle school students' sense of school belonging. *Journal of Experimental Education, 72*(1), 5–22. doi: 10.1080/00220970309600877

Antaramian, S. P., Huebner, E. S., 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. doi: 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. *Educatıon and Scıence*, *41*(183), 293-304. doi: 10.15390/EB.2016.5562

Arslan, G. (2017). School-based social exclusion, affective wellbeing, and mental health problems in adolescents: A Study of mediator and moderator role of academic self-regulation. *Child Indicator Research.* Advance online publication. doi: 10.1007/s12187-017-9486-3

Arslan, G., & Duru, E. (2016). Initial Development and Validation of the School Belongingness Scale. *Child Indicators Research*. Advance online publication. doi:10.1007/s12187-016-9414-y

Aydın, O., Şahin, D., Güzel, H. Y., Abayhan, Y., Kaya, A. G., & Ceylan, S. (2013). Ait olma ihtiyacının ve haberdar olmanın psikolojik dışlanmaya gösterilen tepkiler üzerindeki etkileri. *Turk Psikoloji Dergisi, 28*(72), 21–31.

Babakhani, N. (2014). Perception of class and sense of school belonging and self-regulated learning: A causal model. *Procedia-Social and Behavioral Sciences*, *116*, 1477-1482. doi: https://doi.org/10.1016/j.sbspro.2014.01.420

Balkıs, M., Duru, E., & Buluş, M. (2005). Şiddete yönelik tutumların özyeterlik, medya, şiddete yönelik inanç, arkadaş grubu ve okula bağımlılık duygusu ile ilişkisi. *Ege Eğitim Dergisi*, *6*(2), 81-97.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological bulletin*, *117*(3), 497. doi: http://dx.doi.org/10.1037/0033-2909.117.3.497

Bond, L., Butler, H., Thomas, L., Carlin, J., Glover, S., Bowes, G., & Patton, G. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health, and academic outcomes. *Journal of Adolescent Health*, *40*(4), 357-e9-e18. doi: 10.1016/j.jadohealth.2006.10.013

Deci, E. L., & Ryan, R. M. (1991). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78. doi:10.1037/0003-066X.55.1.68

Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research, 59*(2), 117–142. doi: http://dx.doi.org/10.3102/00346543059002117

Gillen-O'Neel, C., & Fuligni, A. (2013). A longitudinal study of school belonging and academic motivation across high school. *Child Development*, *84*(2), 678-692. doi: 10.1111/j.1467-8624.2012.01862.x

Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools*, *30*(1), 79-90. doi: 10.1002/1520-6807(199301)30:1<79::AID-PITS2310300113>3.0.CO;2-X

Goodenow, C., & Grady, K. E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *The Journal of Experimental Education*, *62*(1), 60-71. doi: 10.1080/00220973.1993.9943831

Greenspoon, P. J., & Sasklofske, D. H. (2001). Toward an integration of SWB and psychopathology. *Social Indicators Research, 54*, 81–108. doi: http://dx.doi.org/10.1023/A:1007219227883

Hagerty, B. M., Lynch-Sauer, J., Patusky, K. L., Bouwsema, M., & Collier, P. (1992). Sense of belonging: A vital mental health concept. *Archives of psychiatric nursing*, *6*(3), 172-177. doi: https://doi.org/10.1016/0883-9417(92)90028-H

Keyes, C. L. (2005). Mental illness and/or mental health? Investigating axioms of the complete state model of health. *Journal of consulting and clinical psychology*, *73*(3), 539-548. doi: 10.1037/0022-006X.73.3.539

Ladd, G. W., & Kochenderfer-Ladd, B. (2016). Research in educational psychology: Social exclusion in school. In P. Riva & J. Eck (Eds.), *Social exclusion: Psychological approaches to understanding and reducing its impact* (pp. 109–132). New York: Springer.

Lam, U. F., Chen, W. W., Zhang, J., & Liang, T. (2015). It feels good to learn where I belong: School belonging, academic emotions, and academic achievement in adolescents. *School Psychology International*, *36*(4), 393-409. doi: 10.1177/0143034315589649

Leary, M. R. (2005). Sociometer theory and the pursuit of relational value: Getting to the root of self-esteem. *European review of social*

psychology, 16(1), 75-111. doi:
http://dx.doi.org/10.1080/10463280540000007

Malone, G. P., Pillow, D. R., & Osman, A. (2012). The general
belongingness scale (GBS): Assessing achieved
belongingness. *Personality and Individual Differences*, *52*(3), 311-
316. doi:10.1016/j.paid.2011.10.027

Maslow, A. H. (1943). A theory of human motivation. *Psychological
review*, *50*(4), 370-396.

McMahon, S. D., Parnes, A. L., Keys, C. B., & Viola, J. J. (2008). School
belonging among low-income urban youth with disabilities: Testing
a theoretical model. *Psychology in the Schools, 45*(5), 387-401. doi:
10.1002/pits.20304

Moffa, K., Dowdy, E., & Furlong, M. J. (2016). Exploring the Contributions
of School Belonging to Complete Mental Health Screening. *The
Educational and Developmental Psychologist*, *33*(01), 16-32.
doi:10.1017/edp.2016.8

Moore, S. A., Widales-Benitez, O., Carnazzo, K. W., Kim, E. K., Moffa, K.,
& Dowdy, E. (2015). Conducting universal complete mental health
screening via student self-report. *Contemporary School
Psychology*, *19*(4), 253-267. doi: 10.1007/s40688-015-0062-x

Napoli, M., Marsiglia, F. F., & Kulis, S. (2003). Sense of belonging in
school as a protective factor against drug abuse among Native
American urban adolescents. *Journal of Social Work Practice in the
Addictions*, *3*(2), 25-41. doi: 10.1300/J160v03n02_03

Neel, C. G. O., & Fuligni, A. (2013). A longitudinal study of school
belonging and academic motivation across high school. *Child
Development*, *84*(2), 678-692. doi: 10.1111/j.1467-
8624.2012.01862.x.

Osterman, K. F. (2000). Students' need for belonging in the school
community. *Review of educational research*, *70*(3), 323-367. doi:
https://doi.org/10.3102/00346543070003323

Pittman, L. D., & Richmond, A. (2007). Academic and psychological
functioning in late adolescence: The importance of school
belonging. *The Journal of Experimental Education*, *75*(4), 270-290.
doi: 10.3200/JEXE.75.4.270-292

Renshaw, T. L., & Arslan, G. (2018). Testing the Psychological Wellbeing
and Distress Screener with Turkish adolescents. *International*

Journal of School & Educational Psychology.
doi:10.1080/21683603.2017.1414007

Renshaw, T. L., & Bolognino, S. J. (2016). The College Student Subjective Wellbeing Questionnaire: A brief, multidimensional measure of undergraduate's covitality. *Journal of Happiness Studies*, *17*(2), 463-484. doi: 10.1007/s10902-014-9606-4

Renshaw, T. L., & Cohen, A. S. (2014). Life satisfaction as a distinguishing indicator of college student functioning: Further validation of the two-continua model of mental health. *Social indicators research*, *117*(1), 319-334. doi: 10.1007/s11205-013-0342-7

Renshaw, T. L., Eklund, K. R., Bolognino, S. J., & Adodo, I. (2016). Bidimensional emotional health in college students: A comparison of categorical and continuous analytic approaches. *Journal of Psychopathology and Behavioral Assessment*. Advance online publication. doi: 10.1007/s10862-016-9558-6

Rostosky, S. S., Owens, G. P., Zimmerman, R. S., & Riggle, E. D. (2003). Associations among sexual attraction status, school belonging, and alcohol and marijuana use in rural high school students. *Journal of Adolescence*, *26*(6), 741-751. doi: 10.1016/j.adolescence.2003.09.002

Sánchez, B., Colón, Y., & Esparza, P. (2005). The role of sense of school belonging and gender in the academic adjustment of Latino adolescents. *Journal of youth and Adolescence*, *34*(6), 619-628. doi: 10.1007/s10964-005-8950-4

Shochet, I. M., Smith, C. L., Furlong, M. J., & Homel, R. (2011). A prospective study investigating the impact of school belonging factors on negative affect in adolescents. *Journal of Clinical Child & Adolescent Psychology*, *40*(4), 586-595. doi: 10.1080/15374416.2011.581616

Slaten, C. D., Ferguson, J. K., Allen, K. A., Brodrick, D. V., & Waters, L. (2016). School belonging: A review of the history, current trends, and future directions. *The Educational and Developmental Psychologist*, *33*(01), 1-15. doi: 10.1017/edp.2016.6

Suldo, S. M., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model of mental health in youth. *School Psychology Review*, 37, 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. *The Journal of Positive Psychology, 6*(1), 17-30. doi: 10.1080/17439760.2010.536774

Telef, B. B. (2013). The scale of positive and negative experience: A validity and reliability study for adolescents. *Anatolian Journal of Psychiatry*, *14*(1), 62-68. doi: 10.5455/apd.36692

Tian, L., Zhang, L., Huebner, E. S., Zheng, X., & Liu, W. (2016). The longitudinal relationship between school belonging and subjective well-being in school among elementary school students. *Applied Research in Quality of Life*, *11*(4), 1269-1285. doi: 10.1007/s11482-015-9436-5

Gökmen ARSLAN, PhD, is researcher in the Hope Psychology: Counseling and Development Center, Isparta, Turkey.

Contact Address: E-mail: gkmnarslan@gmail.com.tr