

Conference Paper

How School Climate Aspects Affect the Development of Adolescence's Psychological Well-being

Budi Astuti¹, Arina Mufrihah², and Lily Alfiah²¹Universitas Negeri Yogyakarta²STKIP PGRI Sumenep

Abstract

We examined how each school climate aspect affect adolescence's psychological well-being by emphasizing that school climate is the quality of school process which is can be either support or worsen the adolescence's psychological well-being. In achiving the research purposes we used two kinds of instruments namely Inventory of School Climate-Student (ISC-S) and The Scale of Eudaimonia. From the simple regression analysis we found that there is a significant relationship between school climate and adolescence's psychological well-being; meanwhile from the partial regression analysis the results are vary where three of school climate aspects do not affect adolecence's psychological well-being and seven others significantly affect adolescence's psychological well-being.

Keywords: School Climate; Psychological Well-being; Eudaimonia; Development of Adolescence; Health Behavior.

Corresponding Author:

Budi Astuti

budi_astuti@uny.ac.id

Received: 2 May 2019

Accepted: 19 June 2019

Published: 3 July 2019

Publishing services provided by
Knowledge E

© Budi Astuti et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICMEd Conference Committee.

1. Introduction

Psychological well-being in adolescence becomes a concern, interest, and special study mainly related to social environments such as schools, peers, and parents to get a key insight into the health-related behaviors of young people. Psychological well-being focuses on testing dimensional constructs [4] and characteristics [39] about how humans function effectively as themselves and their relationships with the social environment [1, 2] to predict the benefits and excesses of the social environment that affect the sexual relations of well-being in adolescence [3].

Understanding of health and risk behavior in adolescence will provide a variety of better opportunities so the adolescence are able to function as positive human beings either through physical health, education, employment, social involvement, discovery and fulfillment of needs [3]. Entering the secondary school level is a transition period

 OPEN ACCESS

in which teenagers get various challenges and demands from the teacher, peers, and academic expectations [5, 6, 40]. Thus, healthy behavior and risk in adolescence becoming a study in the well-being field associated with the school as a social context.

The support needed by students in schools can be provided through the school climate [7] through improving the relationship between students and the school environment in the form of relatedness, competence, and autonomy [8] by implementing the five most fundamental domains of school climate, namely: order, safety, and discipline; academic outcomes; social relationships; school facilities; and school connectedness [9–11].

Many adolescence who got negative experience of psychological changes were influenced by negative perceptions of the school climate due to mismatch between teenagers' necessity and the opportunities provided in the school environment. While studies of school teenagers who perceive the social climate positively produce a decrease in emotional and behavioral problems [12, 13]. School climate is a vital component in the school that can predict students' behavioral and health development both physically and psychologically. When students perceive a positive school climate, it will have a good impact on well-being aspects [13, 14].

School climate is the most visible way to gain insight and understanding of school processes [15]. It is the quality of the school environment [10, 11, 16–18, 41]. A positive and sustainable school climate will be able to encourage youth learning and development to be productive, contributive, and gain the satisfaction in schools so that they are characterized as school healthy climate [19].

In this study, psychological well-being is understood as a dimensional construct of adolescence which is used as an approach to understanding how humans function effectively as themselves and their relationships with the school climate with 5 domains to be tested the contribution or influence on the development of adolescence's psychological well-being. Then the results will give some benefits to educators in an understanding of the school climate influence on psychological well-being and how to develop school climate aspects to increase the adolescence's psychological well-being.

2. Literature Review

The results of research extensively on the effects of school climate showed that the school climate has a great influence on mental health in the form of student self-esteem [20], self-concept [21, 22], learning, and well-being of students [23]. Furthermore, such

variables related school climate as classroom climate, dispositional optimism, hope, depression, and life satisfaction of students showed significant interrelationships in the predictions of well-being [24].

School climate has implications for personal well-being, collective well-being, and well-being in interpersonal relations [25] and contributes to quality of life [26], academic outcomes, personal development, acceptance and life satisfaction, well-being [23–25, 27, 28], students' psycho-social [29], quality of peer relations and personal safety problems [30, 31]. In addition, a number of studies also showed that a positive school climate is effective as a risk prevention and health promotion effort [17], and with the same topic found associations between positive school climate and students' well-being students [27, 32]. Students who don't like school are students tend to experience academic failure and are at risk of behavioral and psychosomatic problems, and experience a decrease in quality of life [14, 33, 34].

The other researchers have found an interrelatedness between school climate and student self-esteem [20], drop-out rate [35], externalizing and internalizing behavior [12, 36], absenteeism, and academic achievement [37]. Teacher support and perceptions about school have an impact on the positive or negative student autonomy in making academic and socio-emotional adjustments [38]. These findings underscore the importance of the school context in the development, well-being, and success of students.

The previous studies on the school climate were examined as a single variable without breaking down the contribution from each indicator. In addition, mental health aspects and healthy behavior as dependent variables are seen not as indicators of psychological well-being, but as a single variable seen as a stand-alone problem object. So it is different from this study which tests the effect of school climate based on its indicators to determine the magnitude of the influence contribution of each indicator on psychological well-being.

3. Material & Methodology

3.1. Data

The data was collected from a private school in Yogyakarta with a sample of 63 students. The data collection technique was done by asking for research samples to fill the research instruments in the form of "Inventory of School Climate-Student" (ISC-S)

[30] and the eudaimonia scale that will be compiled by the researchers refer to the eudaimonia dimension developed by Ryff [40].

ISC-S consisting of 50 items of questions designed to refer to school climate indicators including: Teacher Support, Consistency and Clarity of Rules and Expectations, Student Commitment and Achievement Orientation, Negative Peer Interactions, Positive Peer Interactions, Disciplinary Harshness, Student Input in Decision Making, Instructional Innovation – Relevance, Support for Cultural Pluralism, and Safety Problems. The scale of psychological well-being for early adolescence refers to the six dimensions, namely: Autonomy, Environmental Mastery, Personal Growth, Positive Relations with Others, Purpose in Life, and Self-Acceptance. The choice of each statement item has 5 options, namely 1 = never, 2 = ever, 3 = sometimes, 4 = often, and 5 = always. The research data was processed and analyzed using multiple regression analysis. The multiple linear regression equation is as follows: $Y' = a + b_1X_1 + b_2X_2 + \dots + b_nX_n$

3.2. Method

The type of research used is non-experimental quantitative research which examined the correlation of school climate variable and the eudaimonia variable of adolescent students in a senior high school where the relationship of the two variables is positive relations, which means that the values of a variable increase, the values of which also increase, or vice versa the values of the variables to be tested will both go down. The research variables are 2 (bivariate) but would be tested not only between 2 variables but also the effect of the indicators of X variable on Y variable.

4. Results and Discussion

4.1. The analysis of simple linear regression

The result of the regression analysis is obtained through the value of t-count by the testing steps as follows: H_0 means there is a significant influence between school climate and psychological well-being and H_a means there is no significant influence between school climate and psychological well-being. H_0 is accepted if $-t_{table} < t_{count} < t_{table}$ and H_0 is rejected if $-t_{count} < -t_{table}$ or $t_{count} > t_{table}$.

By 2-sided testing (significance = 0.025) the results are obtained for t table of 1.998, the results of the test are $2.336 > 1.998$ means H_0 is rejected or in other words, there is significant influence between the school climate and psychological well-being. The

TABLE 1: The result of a simple Linear Regression Test of Effect of School Climate on Psychological Well-Being.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1					
	(Constant)	78.999	12.211	6.470	.000
	SCHOOL CLIMATE	.186	.080	.284	.023

a. Dependent Variable: EUDAIMONIA

independent variables (School Climate) significantly influence the dependent variable (Psychological Well-being). Significant means that the influence occurred can be applied (generalized) to the population.

4.2. Multiple linear regression analysis (The output of school climate indicators to psychological well-being)

4.2.1. Multiple correlation analysis (R)

The value of R ranges from 0 to 1, if the value getting closer to 1 means the relationship occurred is stronger. While, if the value is closer to 0, it means the relationship is weaker.

TABLE 2: The result of R-test.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.588 ^a	.345	.222	10.754

a. Predictors: (Constant), Safety Problems, Teacher Support, Negative Interaction, Positive Interaction, Student Commitment, Decision Making, Consistency of Rules, Disciplinary, Cultural Pluralism, Instructional Innovation

b. Dependent Variable: EUDAIMONIA

The result model summary shows the R number is 0.588. It can be interpreted that there is a moderate relationship between the school climate based on the analysis of each indicator and psychological well-being.

4.2.2. Analysis of determination (R²)

Based on the table below, it was obtained the number of R² (R Square) is 0.345 or (34.5%).

TABLE 3: The Result of R² Test.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.588 ^a	.345	.222	10.754

a. Predictors: (Constant), Safety Problems, Teacher Support, Negative Interaction, Positive Interaction, Student Commitment, Decision Making, Consistency of Rules, Disciplinary, Cultural Pluralism, Instructional Innovation

b. Dependent Variable: EUDAIMOINIA

It shows that the contribution percentage to the influence of the school climate is based on the analysis of each school climate indicator to psychological well-being is 34.5%. It means that variations of ten indicators of the school climate simultaneously can explain 34.5% of the variation in the dependent variable (psychological well-being).

4.2.3. Testing of regression coefficient together (F test)

Through the output result of regression analysis, F-value can be known as follow:

TABLE 4: The Result of the F Test.

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3234.067	10	323.407	2.796	.007 ^a
	Residual	6129.683	53	115.654		
	Total	9363.750	63			

a. Predictors: (Constant), Safety Problems, Teacher Support, Negative Interaction, Positive Interaction, Student Commitment, Decision Making, Consistency of Rules, Disciplinary, Cultural Pluralism, Instructional Innovation

b. Dependent Variable: EUDAIMOINIA

The level of significance using $\alpha = 5\%$ of the Anova table shows F count is 2.796. While the F table is 3.171. Ho testing criterion is accepted if F count < F table and Ho is rejected if F count > F table. The test result is F count < F table (2.796 < 3.171) means that there is no significant influence between school climate seen from the ten indicators analysis together on psychological well-being.

4.2.4. Partial regression coefficient test (t-test)

The criterion of Ho testing is accepted if t-table < t count < t table and Ho is rejected if -t count < -t table or t count > t table.

TABLE 5: t-Test Result.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	61.539	13.946		4.413	.000
	Teacher Support	.570	.516	.187	1.104	.275
	Consistency of Rules	-.497	.537	-.134	-.925	.359
	Student Commitment	2.465	.562	.619	4.386	.000
	Negative Interaction	-.549	.771	-.093	-.713	.479
	Positive Interaction	.689	.782	.146	.881	.382
	Disciplinary	.498	.417	.188	1.195	.238
	Decision Making	-.129	.528	-.045	-.244	.808
	Instructional Innovation	-.167	.815	-.046	-.205	.838
	Cultural Pluralism	-.123	.632	-.031	-.195	.846
	Safety Problems	-.666	.655	-.138	-1.016	.314

a. Dependent Variable: EUDAIMONIA

The results are: (a) The teacher support, positive peer interaction, and disciplinary harshness partially does not have a significant effect on psychological well-being and (b) there are a partially significant effect between these aspects (consistency and clarity of rules and expectations, student commitment/ achievement orientation, negative peer interactions, student input in decision making, instructional innovation/ relevance, support for cultural pluralism, safety problems) and psychological well-being.

4.3. Discussion

Through the analysis of simple linear regression, this research shows that there is significant influence between the school climate and psychological well-being. These results appropriate with the predictions and evidence of previous studies that a positive school climate can form positive psychological well-being among adolescence [12, 13, 27, 32]. Therefore the function of adolescence as individuals can develop effectively because of the encouragement of the school climate as a circle of social relations for adolescence [1]. It means the teachers' support, peers, and parents [2, 4–6] can explain the development of well-being dimensions (purpose in life, autonomy, personal growth, environmental mastery; positive relationships, and self-acceptance [40].

Then, in the results of multiple regression demonstrated a more detailed results regarding the magnitude of each school climate indicator to the psychological well-being. Moreover, There are school climate indicators that do not affect the psychological well-being of adolescence. On the results of the R test, the analysis of each school climate indicator has a moderate relationship to psychological well-being.

The results of R test analysis differ from other studies which state that the school climate has a large influence [20–23] and it is significant for well-being[24]. But the conclusion does not mean that this study claims that the school climate does not have a significant effect on the psychological well-being of adolescence because the R test is a test for each of the 10 school climate indicators for psychological well-being of teenagers. The result of R_2 (R Square) is 0.345 or (34.5%) illustrated the contribution percentage of the school climate indicators to psychological well-being. Therefore, it is interpreted that ten indicators of the school climate simultaneously are able to explain as much as 34.5% variation of the psychological well-being variable.

In this case, the relationship of each school climate domain partially which has a significant relationship with psychological well-being of adolescence illustrates that there is a positive process in school[15] which is represented by the clarity and consistency of the rules imposed, achievement orientation on students, the role of students in decision making and teacher support for the cultural pluralism in the school environment. Peer relationships and safety problems that have a significant influence on psychological well-being are in line with the results of research by Brand [30] and Bonny [31].

The number comparison of school climate indicators that have influence and not on psychological well-being of adolescence is still more dominated by indicators that have an understandable influence that the school teachers and peers are in productive interaction and school climate environment and can give a satisfaction for students [19]. While, on the indicators that do not have a significant effect can be explained that students' negative perceptions of school occurred because of discrepancy between what students expect from school and what students actually get from school. It can impact on decreasing the quality of students' live and other aspects of well-being [13, 14].

The empirical facts about how the school climate affects the psychological well-being of adolescence in high school resulting from this study provide an overview and recommendations for schools that the school climate, especially for non-influential indicators needs to be revisited because more supportive system for students can improve the effective relationship between students and schools in relatedness, competence, and autonomy [8–11].

5. Conclusion

The school climate talks about the various qualities in the school environment can encourage the development of psychological well-being in a positive direction. The school climate that has many indicators is a challenge for the school so that all aspects

can contribute positively to the growth and personal function of adolescence. Schools need to study and improve aspects that have not been running optimally in a sustainable by understanding that psychological well-being also has dimensional constructs that cannot be assessed merely by numbers. Therefore the further research on similar topic needs to gain an understanding of how the school climate processes applied differently in each school can encourage the development of positive psychological well-being, thus it can provide a better discussion about the support provided by the school where the school climate is more than just physical facilities. Further research should look forward at what lies behind the school building to create aspects of the school climate that can help adolescence develop domains of psychological well-being.

References

- [1] Ryff, Carol D. and Burton H. Singer. 2008. "Know Thyself and Become What You Are: A Eudaimonic Approach to Psychological Well-Being." *Journal of Happiness Studies* 9(1):13–39.
- [2] Khaw, D. and M. Kern Berkeley. 2014. "A Cross-Cultural Comparison of the PERMA Model of Well-Being." *Journal of Psychology at Berkeley University*.
- [3] Currie, C., C. Zanotti, A. Morgan, ... D. Currie-Health Behaviour in, and undefined. 2009. "Social Determinants of Health and Well-Being among Young People." *WHO Regional Office for Europe*.
- [4] Feiner, Robert D. et al. 1994. "Restructuring the Ecology of the School as an Approach to Prevention During School Transitions." *Prevention in Human Services* 10(2):103–36.
- [5] Midgley, Carol and Kimberley C. Edelin. 1998. "Middle School Reform and Early Adolescence *Well-being*: The Good News and the Bad." *Educational Psychologist* 33(4):195–106.
- [6] Seidman, Edward, LaRue Allen, J. Lawrence Aber, Christina Mitchell, and Joanna Feinman. 1994. "The Impact of School Transitions in Early Adolescence on the Self-System and Perceived Social Context of Poor Urban Youth." *Child Development* 65(2):507–22.
- [7] Malecki, Christine Kerres and Michelle Kilpatrick Demaray. 2003. "What Type of Support Do They Need? Investigating Student Adjustment as Related to Emotional, Informational, Appraisal, and Instrumental Support." *School Psychology Quarterly*.
- [8] Briere, F. N., S. Pascal, V. Dupere, and M. Janosz. 2013. "School Environment and Adolescence Depressive Symptoms: A Multilevel Longitudinal Study." *PEDIATRICS*.

- [9] Zullig, Keith J., Tommy M. Koopman, Jon M. Patton, and Valerie A. Ubbes. 2010. "School Climate: Historical Review, Instrument Development, and School Assessment." *Journal of Psychoeducational Assessment*.
- [10] Thapa, Amrit, Jonathan Cohen, Ann Higgins-D'Alessandro, and Shawn Guffey. 2012. "School Climate Research Summary." *National School Climate Center* Number 3.
- [11] Thapa, A., J. Cohen, S. Guffey, and A. Higgins-D'Alessandro. 2013. "A Review of School Climate Research." *Review of Educational Research*.
- [12] Kuperminc, Gabriel P., Bonnie J. Leadbeater, and Sidney J. Blatt. 2001. *School Social Climate and Individual Differences in Vulnerability to Psychopathology among Middle School Students*. Vol. 39.
- [13] Way, Niobe, Ranjini Reddy, and Jean Rhodes. 2007a. "Students' Perceptions of School Climate During the Middle School Years: Associations with Trajectories of Psychological and Behavioral Adjustment." *American Journal of Community Psychology* 40(3-4):194–213.
- [14] Samdal, O., D. Nutbeam, B. Wold, and L. Kannas. 1998. *Achieving Health and Educational Goals through Schools-a Study of the Importance of the School Climate and the Students' Satisfaction with School*.
- [15] Reynolds, D. and C. Teddlie. 2002. "An Introduction to School Effectiveness Research." *The International Handbook of School Effectiveness Research*.
- [16] Hoy, Wayne K. 1990. "Organizational Climate and Culture: A Conceptual Analysis of the School Workplace." *Journal of Educational and Psychological Consultation* 1(2):149–68.
- [17] Cohen, Jonathan, Elizabeth M. McCabe, Nicholas M. Michelli, and Terry Pickeral. 2001. *School Climate: Research, Policy, Practice, and Teacher Education*.
- [18] Willms, J. Douglas and Marie-Andre Somer. 2001. "Family, Classroom, and School Effects on Childrens Educational Outcomes in Latin America." *School Effectiveness and School Improvement* 12(4):409–45.
- [19] Sweetland, Scott R. and Wayne K. Hoy. 2000. "School Characteristics and Educational Outcomes: Toward an Organizational Model of Student Achievement in Middle Schools." *Educational Administration Quarterly*.
- [20] Hoge, DR, EK Smit, SL Hanson-Journal of Educational, and undefined 1990. n.d. "School Experiences Predicting Changes in Self-Esteem of Sixth-and Seventh-Grade Students." *Psycnet.apa.org*.
- [21] Reynolds, D., D. Jones, S. St Leger, and S. Murgatroyd. 1980. "School Factors and Truancy in L. Hersov, & I. Berg (eds.) Out of School."

- [22] Rutter, Michael. 1979. *Fifteen Thousand Hours*: Secondary Schools and Their Effects on Children. Harvard University Press.
- [23] McLellan, Lyndall, Chris Rissel, Neil Donnelly, and Adrian Bauman. 1999. "Health Behaviour and the School Environment in New South Wales, Australia." *Social Science & Medicine*.
- [24] Lagacé-Séguin, Daniel G. and Marc Robert L. D'Entremont. 2010. "A Scientific Exploration of Positive Psychology in Adolescence: The Role of Hope as a Buffer against the Influences of Psychosocial Negativities." *International Journal of Adolescence and Youth*.
- [25] Ruus, VR, M. Veisson, M. Leino, ... L. Ots-Social Behavior and, and undefined 2007. n.d. "Students' Well-being, Coping, Academic Success, And School Climate." *Ingentaconnect.com*.
- [26] Millstein, SG, EO Nightingale, AC Petersen- JAMA, and undefined 1993. n.d. "Promoting the Healthy Development of Adolescence." *Jamanetwork.com*.
- [27] Haahr, JH, TK Nielsen, ST Jakobsen, and ME Hansen. 2005. "Explaining Student Performance: Evidence from the International PISA, TIMSS and PIRLS Surveys."
- [28] Virtanen, M. et al. 2009. "Staff Reports of Psychosocial Climate at School and Adolescence' Health, Truancy and Health Education in Finland." *European Journal of Public Health* 19(5):554–60.
- [29] Haynes, Norris M., Christine Emmons, and Michael Ben-Avie. 1997. "School Climate as a Factor in Student Adjustment and Achievement." *Journal of Educational and Psychological Consultation* 8(3):321–29.
- [30] Brand, Stephen, Robert Felner, Minsuk Shim, Anne Seitsinger, and Thaddeus Dumas. 2003. "Middle School Improvement and Reform: Development and Validation of a School-Level Assessment of Climate, Cultural Pluralism, and School Safety." *Journal of Educational Psychology*.
- [31] Bonny, Andrea E., Maria T. Britto, Brenda K. Klostermann, Richard W. Hornung, and Gail B. Slap. 2000. *Ado-Lescent Health. ABBREVIATIONS. SCS, School Connectedness Score; Add Health, National Longitudinal Study of Adolescence Health*. Vol. 106.
- [32] Shochet, Ian M., Mark R. Dadds, David Ham, and Roslyn Montague. 2006a. "School Connectedness Is an Underemphasized Parameter in Adolescence Mental Health: Results of a Community Prediction Study." *Journal of Clinical Child & Adolescence Psychology* 35(2):170–79.
- [33] Andrews, FM. 1986. "Research on the Quality of Life."

- [34] Hung, Anna H., Aaron M. Luebbe, and Paul D. Flaspohler. 2015. "Measuring School Climate: Factor Analysis and Relations to Emotional Problems, Conduct Problems, and Victimization in Middle School Students." *School Mental Health*.
- [35] Fortin, Laurier, Diane Marcotte, Pierre Potvin, Égide Royer, and Jacques Joly. 2006. "Typology of Students at Risk of Dropping out of School: Description by Personal, Family and School Factors." *European Journal of Psychology of Education* 21(4):363–83.
- [36] Kuperminc, Gabriel P., Bonnie J. Leadbeater, Christine Emmons, and Sidney J. Blatt. 1997. "Perceived School Climate and Difficulties in the Social Adjustment of Middle School Students." *Applied Developmental Science* 1(2):76–88.
- [37] Wood, Nathan B., Frances Lawrenz, Douglas Huffman, and Matt Schultz. 2006. "Viewing the School Environment through Multiple Lenses: In Search of School-Level Variables Tied to Student Achievement." *Journal of Research in Science Teaching* 43(3):237–54.
- [38] Jia, Yueming et al. 2009. "The Influence of Student Perceptions of School Climate on Socioemotional and Academic Adjustment: A Comparison of Chinese and American Adolescence." *Child Development* 80(5):1514–30.
- [39] Huppert, F.A., So, T.T., 2013. Flourishing across Europe: Application of a new conceptual framework for defining *well-being*. *Soc. Indic. Res.* 110, 837–861.
- [40] Ryff, Carol D. 2014. "Psychological Well-Being Revisited: Advances in the Science and Practice of Eudaimonia". *Psychotherapy and Psychosomatics*. 83: 10-28.
- [41] Opdenakker, Marie-Christine and Jan Van Damme. 2000. "Effects of Schools, Teaching Staff and Classes on Achievement and *Well-being* in Secondary Education: Similarities and Differences Between School *Outcomes*." *School Effectiveness and School Improvement* 11(2):165–96.