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# IS A GOOD STUDENT ALSO A HAPPIER ONE? TRADITIONAL MEASURES OF SCHOOL FUNCTIONING AS PREDICTORS OF STUDENTS' WELL-BEING

*by Yael Israel-Cohen, Gabriela Kashy-Rosenbaum, Oren Kaplan*

## **Abstract**

Academic achievement, behavior, and school connectedness have long been considered central measures for assessing students' optimal functioning in school. With the growing interest in positive education and its' inclusion of well-being as a central educational goal, attention has been turned to the extent to which these traditional measures of school functioning are related to students' well-being. Based on a sample of 314 Israeli middle school students from one school, this study focuses on the relationship between the latter measures of school functioning and students' well-being, operationalized as life satisfaction, positive and negative affect, hope, and gratitude. Using structural equational modelling, our findings revealed that GPA, teachers' reports of disruptive behavior, and students' reports of school connectedness predict students' well-being, with school connectedness as the strongest predictor of all five well-being measures. This suggests that a sense of connectedness is more crucial to students' well-being than their academic achievements or behavior in school. Surprisingly, students' disruptive behavior as reported by teachers was slightly, but significantly, positively associated with life satisfaction, hope and positive affect. Further inquiry into this curious finding revealed that disruptive behavior is related to higher well-being primarily for students of middle range academic attainment (GPA of 64-84) when controlling for connectedness to school. Based on this finding, we suggest that within the school context better behavior among average achievers may be a potential sign of a maladaptive response to being left outside the schools' radar while disruptive behavior among average achievers may in fact be the more resilient response. Attention is given to this interpretation of the finding as well as to more general implications of the importance of school connectedness for students' well-being.

## Introduction

Traditionally, students who do well in class, do not act disruptively, and are well adjusted among their classmates are considered good students and rarely targeted for special attention from teachers or administrators (Galassi & Akos, 2007). It follows that while these students make up the bulk of the student body, they are in many ways transparent to a system that deals and focuses to a large extent on children with academic or disciplinary problems. An example of this can be seen in the handling of the parent conferences for such students. Both teachers and parents have noted that this meeting may run the risk of lacking real substance as there may be little to discuss about students who have no apparent problem to be fixed and/or no particularly low grade to be improved (Galassi & Akos, 2007; Israel-Cohen, Kashy-Rosenbaum, Navaro, Kasorla, & Kaplan, 2014; Omer, 2002). What appears to be the lack of serious attention to engagement with positive outcomes and students' overall well-being in their assessment is symptomatic of a larger question, and that is, what should the measures of students' success be? Are the traditional measures of school functioning sufficient? May systemic attention on problems result in the enactment of problems by students as a way to draw some attention and be noticed in the system? With the growth of the positive psychology movement over the last years, a paradigm shift has taken hold within psychology which sheds light onto these questions.

Positive psychology is the study of positive attributes, psychological assets, and strengths (Seligman, & Csikszentmihalyi, 2000) and engages the questions "what is going right" in people's lives and what leads individuals and groups to flourish (Sheldon & King, 2001). A central critique of traditional psychology put forth by some researchers in positive psychology is that the field has adopted a single-minded focus, both in theory and practice, on negative outcomes, pathology, and the potential of overcoming problems. School psychology as well has placed an enormous emphasis on negative outcomes and on how to fix them. Students' overall well-being and a focus on students' strengths have traditionally been marginalized as both a goal and approach within educational frameworks (Froh, Huebner, Youssef, & Conte, 2011; Galassi & Akos 2007).

It is important to mention in this context that by default of the deficiency-based model, psychological services (both in schools and generally) have been relevant for only a fraction of the population. That is, if 80% of the youth in a given year are free of mental illness (Keyes & Lopez, 2009), traditional psychological services are in a certain sense irrelevant for the masses. Concomitantly, the arguably single minded focus on prevention of negative mental states has led to the question, "is alright an adequate goal for our children's well-being? Does alright really equate to being mentally healthy?" (Howell, Keyes, & Passmore, 2013, p. 59). All in all, this lack of attention within psychological services to the bulk of the student population which does not exhibit signs of negative mental health is yet another example of the transparency of some students within the system.

## Positive Education

The call for an educational agenda that promotes both traditional skills and well-being, or happiness, is often referred to as positive education (Noble & McGrath, 2008; Seligman, Ernst, Gillham, Reivich, & Linkins, 2009). While traditional psychology clearly has important benefits for a limited population, the benefits of positive education, with its focus on fostering positive mental health within schools, may have more direct relevance for the masses. Through positive education, students who may not need prevention programs or particular attention for social problems but who could be happier and flourishing are targeted. In this sense, positive education provides a significant paradigm shift as it 1) brings to the center greater attention to the emotional states of an at-times overlooked critical mass of students and 2) transposes the primarily deficiencies based model of school functioning with a strengths based model (Froh et al., 2011; Galassi & Akos, 2007; Howell et al., 2013; Terjesen, Jacofsky, Froh, DiGuseppe, 2004). Apropos the example of the potentially ineffective parent conference that opened this paper, if measures of personal strengths and aspects of general well-being were to be included in the educational goals and measurements of students' success, this meeting would be less likely to lead to a dead end as "problem searching" would not be the default focus (Israel-Cohen et al., 2014).

Yet, even for those who are not convinced of the need for "happiness learning" in a wider educational agenda, students' well-being can clearly not be ignored. Depression is on the rise among adolescents. According to the UN World Health Organization (WHO) depressive disorders will be the leading disease world-wide by 2030 (WHO, 2012). Presently, 11.2% of adolescents in the US experience some form of mood disorder (Merikangas et al., 2010, p. 983) which has clear direct negative effects on both their academic and social success. On the flip side, there is evidence that well-being and other indicators of positive mental health are correlated with traditional measures of school functioning (as will be briefly elaborated on below).

In light of the above, the question of how traditional measures of school functioning are associated with students' general subjective well-being is of central importance to anyone concerned with the goals of education in a wider perspective. The objective of this paper is to understand how these constructs are related, asking the question is a "good student" also a happier one who experiences higher subjective well-being? Such insights have practical implications for school psychologists, teachers, and administrators who may not only be concerned with students' overall well-being but who are also interested in gaining a better grasp on which components of school functioning could be targeted to help students foster greater well-being.

## Well-Being Construct

Generally speaking, well-being is an ambivalent concept. There is no clear definition for what falls into this construct. Yet, often included as core aspects of well-being are positive and negative affect and life satisfaction. Together, these measures commonly form the construct of subjective well-being (SWB), in which positive and negative affect serve as the emotional components and life satisfaction as a cognitive evaluative component (Diener 2000; Diener, Suh, Lucas, & Smith, 1999; Park, 2004). In this study, SWB measures were included as part of our wider construct of well-being. Two additional measures also included in this construct were gratitude and hope, both frequently employed in the positive psychology literature as central components of well-being (Gilman, Huebner, & Furlong, 2009; Moore & Lippman, 2005; Norrish & Vella Brodrick 2009). Gratitude is understood as a focus on and appreciation of the positive in one's life (Wood, Froh, & Geraghty, 2010) and has repeatedly been tied to numerous well-being measures such as life satisfaction, positive affect, hope (Lambert, Fincham, & Stillman, 2012; Wood, Maltby, Gillett, Linley, & Joseph 2008). Hope is a measure that reflects perceived successful agency and pathways to desired goals (Snyder, 2002; Snyder et al., 1991) and has also been identified as a central part of well-being (Magaletta & Oliver, 1999; Snyder, Rand, & Sigmon, 2002).

## School Functioning and Well-Being

School connectedness, or how much an adolescent feels supported and accepted in their school, has repeatedly been tied to greater mental health and well-being (Bond et al., 2007; Ernestus, Prelow, Ramrattan, & Wilson, 2014; Jose, Ryan, & Pryor, 2012; Shochet, Dadds, Ham, & Montague, 2006; You et al., 2008). Moreover, the importance of school connectedness as a predictor of well-being echoes a wider literature on the important role of social ties and sense of belonging as central predictors of mental health (Carter, McGee, Taylor, & Williams, 2007; Kawachi, & Berkman, 2001; Keyes, 1998).

To a lesser extent, academic achievement and behavior at school have also been tied to different aspects of adolescents well-being (see for example Froh, Emmons, Card, Bono, & Wilson, 2011; Gilman, Dooley, & Florell, 2006; Howell, 2009; Snyder, 2002). Yet, it is in no way clear that there should be a strong linear relationship between well-being and academic achievement. That is, while one could convincingly argue that mental negative health is strongly correlated with bad grades as students' are emotionally and socially preoccupied (Fergusson, & Woodward, 2002; Symons, Cinelli, James, & Groff, 1997), it does not necessary follow that better grades should always be associated with better mental health. In fact, a strong case could be made that the "straight A" student who is overwhelmed by academic pressures is at greater risk of having lower well-being than the average student who may be less driving by academic success (Levine, 2006). Hence, when considering the relationship between school functioning and well-being, it is important to take into account a more complex measure of school functioning.

# The Present Study

Positive education posits that well-being be included as a central goal of education. As such, it is important to understand how well being is connected to other very central measures of success in school. Using Structural Equational Modeling (SEM), this study examines the associations between these two constructs by posing the question, is a “good student” also a happier one? While various studies have examined the relationship between specific measures of school functioning and measures of well-being, the uniqueness of this study is the integration of these measures into a single model. In this study, we hypothesized that all three measures of traditional school functioning (behavior at school, connectedness to school, and school GPA), would be tied to greater well-being, with school connectedness as the most salient predictor.

## Methodology

### *Participants and procedure*

This study is based on a sample of 314 Israeli middle school students (40% female) from one school in a neighborhood of low to middle socioeconomic status. Of the students, 39% were in seventh grade, 35% in eighth grade, and 26% in ninth grade. Measures of life satisfaction, positive and negative affect, gratitude, hope, and school connectedness were distributed to students during class time by the first author and a team of research assistants. Reports of GPA and behavior were obtained from students' report cards. Approval to distribute the questionnaires and access to student records was obtained from the school board, school principal, and ethics committee. Parents were informed of the study and given the opportunity to refuse their child's participation and/or to ask any questions regarding the research. Missing data which accounted for between 2% to 4.2% of the cases for all variables were handled with case-wise maximum likelihood estimation completed using the imputing method of Regression Estimated Statistics (Acock, 2005; Allison, 2001).

## Measurements

Operationalizing the construct of traditional assessment of school functioning, we used measures of students' grade point average (GPA), behavior scores (reported by their teachers), and students' reports of connectedness to school. GPA and behavior scores were obtained from the end of the semester report card. The distribution of GPA scores were skewed slightly to the left (Skewness = -0.35, Kurtosis = -0.59), ranging from 43 to 98, with a mean score of 75.97 (SD = 12.67), *MED* = 78, *c.v.* = 0.17.

Students' behavior scores ranged from 1 to 3, mean 2.78 ( $SD = 0.48$ ),  $MED = 3$ ,  $c.v. = 0.17$ , with higher ranking representing better behavior (82%). For the purposes of the current statistical analyses, the intermediate and the lower behavior categories were merged (18%), transforming the ordinal scale of 3 degrees to a dummy variable.

For the *connectedness to school* measure, we used a short 6-item version of the Connectedness to School Scale (McNeely, 2005) assessed on a 5-point Likert scale (e.g. "I feel close to the people at my school"; "The teachers at my school care about me"; "I feel safe at school"). The connectedness to school scale has been validated in numerous studies with adolescent populations (Moore & Lippman, 2005). In our study,  $\alpha = .82$ . The distribution of students' school connectedness scores were skewed to the left (Skewness = -0.62, Kurtosis = 0.22), ranging from 1 to 5, with a mean score of 3.77 ( $SD = 0.79$ ),  $MED = 3.83$ ,  $c.v. = 0.21$ .

As noted previously, operationalizing the construct of students' *well-being*, we used the measures: positive and negative affect, life satisfaction, gratitude, and hope.

*Positive and negative affect.* Participants completed the widely used 20-item Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988), 10 items measuring positive affect (PA) and 10 items measuring negative affect (NA). The participants were asked to rank the extent to which they felt each emotion over the past month on a 5-point Likert scale ranging from "not at all" to "extremely." Higher scores indicated more positive affect and more negative affect. Both scales have been shown to exhibit excellent psychometric properties. In our sample, NA  $\alpha = .83$  and PA  $\alpha = .82$ . Students' NA scores had a right tailed distribution (Skewness = 0.62, Kurtosis = -0.10), ranging from 1 to 4.5, with a mean score of 2.15 ( $SD = 0.75$ ),  $MED = 2.05$ ,  $c.v. = 0.35$ . Students' PA scores had a normal distribution (Skewness = -0.54, Kurtosis = 0.09), ranging from 1 to 5, with a mean score of 3.42 ( $SD = 0.76$ ),  $MED = 3.50$ ,  $c.v. = 0.22$ .

*Life satisfaction.* Participants completed the 5-item Students' Life Satisfaction Scale (Huebner, 1991) rating their global life satisfaction on a scale of 1-7 (e.g. "my life is going well"; "I would like to change many things in my life"). The SLSS was designed for students in grades 3-12 and has been validated in numerous studies with diverse adolescent populations (Huebner, Suldo, & Valois, 2005). The Cronbach's alpha ranges from .73 to .84 in different studies (Huebner, 1991; Huebner et al., 2005). In our study,  $\alpha = .80$ . The distribution of students' life satisfaction scores were skewed to the left (Skewness = -1.36, Kurtosis = 2.47), ranging from 1 to 6, with a mean score of 4.92 ( $SD = 0.89$ ),  $MED = 5.14$ ,  $c.v. = 0.18$ .

*Gratitude.* Participants completed a 5-item Gratitude Questionnaire (McCullough, Emmons, & Tsang, 2002), rather than the original 6-item scale, following recommendations for youth populations (Chen, Chen, Kee, & Tsai, 2009; Froh et al., 2011). In light of a study showing that in the Israeli population item 3 was also problematic, possibly due to the experience of gratitude in a hostile political environment (Israel-Cohen, Uzefovsky, Kashy-Rosenbaum, & Kaplan, 2015), we used the data from a 4-item measure of gratitude. Gratitude was assessed on a 7-point Likert scale ranging

from “strongly disagree” to “strongly agree” (e.g. “I have so much in life to be thankful for”; “I am grateful to a wide variety of people”). Scores could range from 1 to 7, with higher scores indicating higher gratitude. The reliability of the 5-item scale in a youth population ranges from .76 to .85 (Froh et al., 2011). In this study,  $\alpha = .64$  using the 4-item scale. The distribution of the gratitude scores were slightly skewed to the left (Skewness = -0.44, Kurtosis = -0.22), with a mean score of 5.17 ( $SD = 1.17$ ),  $MED = 5.25$ ,  $c.v. = 0.23$ .

*Hope.* Participants completed the 6-item Children’s Hope Scale (Snyder et al., 1997) assessed on a 6-point Likert scale from “never” to “all the time” (e.g. “I can think of many ways to get the things in life that are most important to me”; “When I have a problem, I can come up with lots of ways to solve it.”). The scores ranged from 1 to 6, with higher scores indicating higher hope. In our study,  $\alpha = .80$ . The distribution of the hope scores were slightly skewed to the left (Skewness = -0.91, Kurtosis = 0.98), ranging from 1.5 to 6, with a mean score of 4.73 ( $SD = 0.83$ ),  $MED = 4.83$ ,  $c.v. = 0.18$ .

## Data Analysis

To confirm that our measures were distinct from one another, we calculated the inter correlations between the independent variables. Correlation ranged from .19 to .47, confirming that there was no multicollinearity. We performed path analysis using AMOS 21.01 Structural Equation Modeling software (SEM) to examine the relationships between the two constructs and to assess the overall model fit. Path analysis was assessed with measurement error and path coefficients were measured using the maximum likelihood method (ML) estimates. Assessing the fit of our theoretical model with the data, we followed procedures recommended by Kline (1998) by examining several goodness-of-fit indices: The SEM goodness-of-fit index (GFI), the comparative fit index (CFI), the standardized root mean square error of approximation (RMSEA) and the chi-squared ratio divided by degrees of freedom of the model. A model is judged to fit a dataset well if the CFI and GFI are greater than .95, the RMSEA is less than .05 (Bollen & Curran, 2006), and the chi-squared ratio / df indicated better model fit when ratio is  $< 3.0$  and not significant. Using these guidelines, we were able to assess the fit for the overall model and for each proportion of the model separately. To estimate the total explained variance of student well-being by school functioning we calculated canonical correlations between the two sets of variables (Hardoon, Szedmak, & Shawe-Taylor, 2004).

## Results

### *Descriptive statistics*



Means and standard deviation are shown in Table 1. Overall, students experienced moderate-high levels of school connectedness, life satisfaction, hope, positive affect, gratitude and school GPA. They experienced positive behavior at school and low-moderate levels of negative affect.

Bivariate correlations are shown in Table 2. Correlations between the traditional measures of school functioning and well-being measures revealed significant positive linear relations in particular for connectedness to school and all measures of students well-being: Life Satisfaction,  $r = .45, p < .001$ ; Hope,  $r = .46, p < .001$ ; Positive Affect,  $r = .39, p < .001$ ; Negative Affect,  $r = -.36, p < .001$ ; Gratitude,  $r = .23, p < .001$ . Furthermore, weak significant relations were also found between school GPA to Life Satisfaction,  $r = .12, p = .020$ ; Hope,  $r = .13, p = .012$ ; Positive Affect,  $r = .13, p < .011$ ; Negative Affect,  $r = -.14, p = .009$ .

### ***Evaluating the proposed model***

Figure 1 shows the standardized path coefficients estimated by SEM illustrating the associations between traditional school functioning measures and well-being.

#### *Hypothesis 1*

Hypothesis 1 was that school connectedness would be positively related to student well-being measures. For the portion of the model predicting student subjective well-being measures with school connectedness, all of the five path coefficients were significant and positively correlated. School connectedness showed significant positive associations with life satisfaction, hope, positive affect and gratitude, and a significant negative association with negative affect. These results provide full support for hypothesis 1.

#### *Hypothesis 2*

Hypothesis 2 was that school GPA would be positively related to student subjective well-being measures. For the portion of the model predicting student well-being measures by school GPA, three of the five well-being path coefficients were significant and correlated as expected. School GPA was significantly positively associated with life satisfaction, hope and positive affect. These results provide partial support for hypothesis 2.

#### *Hypothesis 3*

Hypothesis 3 was that students' behavior at school would also be positively related to well-being measures. For the portion of the model predicting student subjective well-being measures by student behavior at school, three of the five subjective well-being path coefficients were significant but negatively correlated, i.e., disruptive school behavior was associated with higher life satisfaction, hope and positive affect. These findings were contrary to our hypothesis and will be elaborated on later in this paper.

### ***Evaluating model fit***

All suggested indexes showed a good fit for the data in the proposed model ( $\chi^2 = 6.34$ ,  $df = 7$ ,  $\chi^2/df = 0.96$ ,  $p = .457$ ;  $GFI = .995$ ;  $CFI = 1.00$ ;  $RMSEA = .000$ ) The ML-estimated equation accounted for a substantial proportion of the variance in students' well-being:  $R^2 = .22$  for life satisfaction;  $R^2 = .23$  for hope;  $R^2 = .16$  for positive affect;  $R^2 = .13$  for negative affect;  $R^2 = .05$  for gratitude.

To assess fit for the individual portions of the model, we compared the observed correlation with the correlations reproduced by the SEM procedure. The examination of these correlation residuals allowed us to examine the degree to which the different portion of the model accounted for the original correlations (Kline, 1998). Taken together, the proposed model fit indexes and the correlation residuals suggest that the relationships posited in the model account for a substantial amount of the covariation in the data. The pattern of correlation residuals indicated relatively good fit for the portions of the model predicting well-being by school connectedness and by school GPA, supporting our hypothesis that students' with greater connectedness to school and students' with better grades also have greater well-being. Yet, the same pattern was not reflected in the model for school behavior, which was negatively correlated with well-being (indicating that better student behavior was tied to lesser well-being).

### ***Partial correlations***

In order to deepen our understanding of the counter-intuitive findings concerning the negative path coefficients of students' behavior with three measures of well-being (contrary to the non-significant linear correlations between the variables), we conducted a supplemental analysis of partial correlation between student school behavior and well-being measures controlling for school connectedness and GPA (at three levels of GPA groups: Failing GPA scores [GPA of 43-64], middle range GPA scores [GPA of 65-84], and high GPA scores [GPA of 85-98]).

As can be seen in Table 3, partial correlations between behavior at school and well-being measures controlled for by school connectedness at three levels of GPA scores revealed a significant negative linear relations with life satisfaction,  $r = -.19$ ,  $p < .05$ ; Hope,  $r = -.18$ ,  $p < .05$ ; Positive Affect,  $r = -.18$ ,  $p < .05$ , only in middle GPA scores students. The meaning of this finding is that for students of average academic attainment, negative behavior at school is beneficial for their well-being as demonstrated in Table 3. An interpretation of this finding will be offered in the discussion.

## **Discussion**

This study focused on the relationship between traditional measures of school functioning and students' subjective well-being within a single model. Students' school

connectedness has repeatedly been identified as an important vehicle through which other school functioning outcomes can be yielded. Highlighting our findings, the model presented in this paper confirms this relationship through the correlations of school connectedness with behavior and with academic achievement. Moreover, the strong correlations between school connectedness and all well-being measures in the model suggest that of all school functioning measures, school connectedness is the most central vehicle through which to increase students' general sense of well-being.

Part of the uniqueness of this study lies in its methodology. By placing school connectedness within a model that accounts for its co-variation with other school functioning measures and associations with multiple indicators of well-being, we are able to gain a nuanced picture into the relationship between constructs. It should also be emphasized that an additional strength of this paper is investigating this relationship using indicators beyond self-reports. Academic achievement was measured by real GPA and behavior by teachers' assessments on students' report cards. Self-reports were utilized for the truly subjective assessments of subjective well-being and feelings of school connectedness.

As expected, GPA was weakly but positively correlated with well-being measures (i.e. hope, life satisfaction, and positive affect). Surprisingly, school behavior was negatively associated with these well-being measures. In order to gain a better understanding of this counter-intuitive finding, we conducted further analysis which suggested that this relationship was in fact primarily valid for students who were of average academic achievement. Offering an interpretation of this phenomenon, we return to the points made in the introduction regarding the transparency of the average achiever within the school system.

In general, both high and low achievers, in contrast to students of average achievement, tend to be given extra attention and resources in the school system. Most schools offer gifted classes for advance students and extra help/tutoring for the underachieving students. In other words, both low and high academic achievers are on the constant radar of the schools' teaching and administrative teams – and rightly so. Yet, a possible unintended consequence of this is that the average students are in a sense made transparent. For reasons which have to do with a deficiencies-based model of school functioning and psychological services primarily for at-risk populations, the bulk of the student body may fall outside of the school's radar. We suggest that our finding on the association between disruptive behavior and well-being is best understood within this context.

One explanation is that average academic achievers may be “acting up” as a way of demanding otherwise neglected attention from their school surroundings. That is, the negative behavior of average students can be understood as a defense mechanism protecting them from becoming “invisible” to the school staff and surroundings. In this sense, drawing attention to one's self, even negative attention, when the alternative is to be ignored, may be a sign of mental health within this context.

Alternatively, we can speculate that the correlation between not acting-up (i.e. better behavior) in this context and poorer subjective well-being is tied to a higher risk of the quiet average achiever - i.e. the student who remains transparent - to be more prone for depression, an internalized behavior, than a student who shows signs of externalizing behavior. While these interpretations are highly speculative, if true, the findings seem to offer some evidence pointing to the problem with a primarily deficiencies based model of school functioning and the need to be more cognizant of what school factors are involved in students' positive mental health.

It should be noted that a central weakness of this study is its reliance on a measure of behavior that is limited in its ability to grasp a range of behavior problems. We assume that teachers tend to rank students' behavior based primarily on disruptive behavior. Yet, the lack of a more clear instrument to measure behavior at school may have the unintended consequence of diluting important distinctions within the categories of behavior reported by teachers and within the variable used in the model. We suggest that further research continue to investigate the relationships between behavior and well-being in a nuanced manner that can account for variations in achievement and school connectedness.

Finally, we conclude with a summary of two practical implications of this study. One is the centrality of fostering students' connectedness to school as a mechanism enhancing students' well-being. The second is the insight that better behavior among average achievers within the school context may be a potential sign of a maladaptive response to being left outside the schools' radar while disruptive behavior among average achievers may in fact be the more resilient response.

## References

- Acock, A. C. (2005). Working with missing values. *Journal of Marriage and Family*, 67(4), 1012-1028 .
- Allison, P. D. (2001). *Missing data* (Vol. 136). Thousand Oaks, CA: Sage publications.
- Bollen, K. A., & Curran, P. J. (2006). *Latent curve models: A structural equation perspective* (Vol. 467). Hoboken, NJ: John Wiley & Sons.
- 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.
- Carter, M., McGee, R., Taylor, B., & Williams, S. (2007). Health outcomes in adolescence: Associations with family, friends and school engagement. *Journal of Adolescence*, 30(1), 51-62 .
- Chen, L. H., Chen, M. Y., Kee, Y. H., & Tsai, Y. M. (2009). Validation of the Gratitude Questionnaire (GQ) in Taiwanese undergraduate students. *Journal of Happiness Studies*, 10(6), 655-664 .
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34 .
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276 .
- Ernestus, S. M., Prelow, H. M., Ramrattan, M. E., & Wilson, S. A. (2014). Self-system processes as a mediator of school connectedness and depressive symptomatology in African American and European American adolescents. *School Mental Health*, 6(3), 175-183 .
- Fergusson, D. M., & Woodward, L. J. (2002). Mental health, educational, and social role outcomes of adolescents with depression. *Archives of General Psychiatry*, 59(3), 225-231 .
- Froh, J. J., Emmons, R. A., Card, N. A., Bono, G., & Wilson, J. A. (2011). Gratitude and the reduced costs of materialism in adolescents. *Journal of Happiness Studies*, 12(2), 289-302 .
- Froh, J. J., Huebner, E. S., Youssef, A. J., & Conte, V. (2011). Acknowledging and appreciating the full spectrum of the human condition: School psychology's (limited) focus on positive psychological functioning. *Psychology in the Schools*, 48(2), 110-123 .

- Furlong, M. J., Gilman, R., & Huebner, E. S. (2009). *Handbook of positive psychology in schools*. New York, NY: Routledge.
- Galassi, J. P., & Akos, P. (2007). *Strengths-based school counseling: Promoting student development and achievement*. New York, NY: Routledge.
- Gilman, R., Dooley, J., & Florell, D. (2006). Relative levels of hope and their relationship with academic and psychological indicators among adolescents. *Journal of Social and Clinical Psychology, 25*(2), 166-178 .
- Hardoon, D., Szedmak, S., & Shawe-Taylor, J. (2004). Canonical correlation analysis: An overview with application to learning methods. *Neural Computation, 16*(12), 2639-2664 .
- Howell, A. J. (2009). Flourishing: Achievement-related correlates of students' well-being. *The Journal of Positive Psychology, 4*(1), 1-13 .
- Howell, A. J., Keyes, C. L., & Passmore, H. A. (2013). Flourishing among children and adolescents: Structure and correlates of positive mental health, and interventions for its enhancement. In C. Proctor & P. A. Linley, *Research, Applications, and Interventions for Children and Adolescents* (pp. 59-79). New York, NY: Springer.
- Huebner, E. S. (1991). Initial development of the student's life satisfaction scale. *School Psychology International, 12*(3), 231-240.
- Huebner, E. S., Suldo, S. M., & Valois, R. F. (2005). Children's life satisfaction. In K. A. Moore & L. H. Lippman, (Eds.). *What do children need to flourish?: Conceptualizing and measuring indicators of positive development*. New York, NY: Springer.
- Israel-Cohen, Y., Kashy-Rosenbaum, G., Navaro, H., Kasorla, J. & Kaplan, O. (2014). Revisiting the Goals and Structure of the Parent, Teacher, Student Meetings: Strengths-Based School Interventions. *Social Issues in Israel, 18*, 85-105. [Hebrew]
- Israel-Cohen, Y., Uzefovsky, F., Kashy-Rosenbaum, G., & Kaplan, O. (2015). Gratitude and PTSD symptoms among Israeli youth exposed to missile attacks: examining the mediation of positive and negative affect and life satisfaction. *The Journal of Positive Psychology, 10*(2), 99-106 .
- Jose, P. E., Ryan, N., & Pryor, J. (2012). Does social connectedness promote a greater sense of well-being in adolescence over time? *Journal of Research on Adolescence, 22*(2), 235-251 .
- Kawachi, I., & Berkman, L. F. (2001). Social ties and mental health. *Journal of Urban Health, 78*(3), 458-467 .

- Keyes, C. L., & Lopez, S. J. (2009). Toward a science of mental health. In S.J. Lopez & C. R. Snyder (Eds). *Oxford handbook of positive psychology* (pp. 89-95). New York, NY: Oxford University Press.
- Keyes, C. L. M. (1998). Social well-being. *Social Psychology Quarterly*, *61*(2), 121-140 .
- Kobau, R., Seligman, M. E., Peterson, C., Diener, E., Zack, M. M., Chapman, D., & Thompson, W. (2011). Mental health promotion in public health: Perspectives and strategies from positive psychology. *American Journal of Public Health*, *101*(8), e1-e9.
- Kline, R. B. (1998). Software review: Software programs for structural equation modeling: Amos, EQS, and LISREL. *Journal of Psychoeducational Assessment*, *16*(4), 343-364.
- Lambert, N. M., Fincham, F. D., & Stillman, T. F. (2012). Gratitude and depressive symptoms: The role of positive reframing and positive emotion. *Cognition & Emotion*, *26*(4), 615-633 .
- Levine, M. (2006). *The price of privilege: How parental pressure and material advantage are creating a generation of disconnected and unhappy kids*. New York, NY: HarperCollins.
- Lippman, L. H., Moore, K. A., & McIntosh, H. (2011). Positive indicators of child well-being: a conceptual framework, measures, and methodological issues. *Applied Research in Quality of Life*, *6*(4), 425-449 .
- Magaletta, P. R., & Oliver, J. (1999). The hope construct, will, and ways: Their relations with self-efficacy, optimism, and general well-being. *Journal of Clinical Psychology*, *55*(5), 539-551 .
- McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*, *82*(1), 112 .
- McNeely, C. (2005). Connection to school. In K. A. Moore & L. H. Lippman (Eds.), *What do children need to flourish?: Conceptualizing and measuring indicators of positive development*. (pp. 289-303). New York, NY: Springer.
- Merikangas, K. R., He, J. P., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., & Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: Results from the National Comorbidity Survey Replication–Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, *49*(10), 980-989 .

- Moore, K. A., & Lippman, L. H. (Eds.). (2005). *What do children need to flourish?: Conceptualizing and measuring indicators of positive development*. New York, NY: Springer.
- Noble, T., & McGrath, H. (2008). The positive educational practices framework: A tool for facilitating the work of educational psychologists in promoting pupil wellbeing. *Educational and Child Psychology, 25*(2), 119-134 .
- Norrish, J. M., & Vella-Brodrick, D. A. (2009). Positive psychology and adolescents: Where are we now? Where to from here? *Australian Psychologist, 44*(4), 270-278 .
- Omer, H. (2002). *Rehabilitating Parental Authority*. Tel Aviv, Israel: Moden Publishing. [Hebrew]
- Park, N. (2004). The role of subjective well-being in positive youth development. *The Annals of the American Academy of Political and Social Science, 591*(1), 25-39 .
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*(1), 5-14.
- Seligman, M. E., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. *Oxford Review of Education, 35*(3), 293-311 .
- Sheldon, K. M., & King, L. (2001). Why positive psychology is necessary. *American Psychologist, 56*(3), 216 .
- Shochet, I. M., Dadds, M. R., Ham, D., & Montague, R. (2006). School connectedness is an underemphasized parameter in adolescent mental health: Results of a community prediction study. *Journal of Clinical Child and Adolescent Psychology, 35*(2), 170-179 .
- Snyder, C., Rand, K. L., & Sigmon, D. R. (2002). Hope theory. *Handbook of Positive Psychology, 257-276* .
- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry, 13*(4), 249-275 .
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology, 60*(4), 570 .
- Snyder, C. R., Hoza, B., Pelham, W. E., Rapoff, M., Ware, L., Danovsky, M., & Stahl, K. J. (1997). The development and validation of the Children's Hope Scale. *Journal of Pediatric Psychology, 22*(3), 399-421 .



- Symons, C. W., Cinelli, B., James, T. C., & Groff, P. (1997). Bridging student health risks and academic achievement through comprehensive school health programs. *Journal of School Health, 67*(6), 220-227 .
- Terjesen, M. D., Jacofsky, M., Froh, J., & DiGiuseppe, R. (2004). Integrating positive psychology into schools: Implications for practice. *Psychology in the Schools, 41*(1), 163-172 .
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6), 1063 .
- Wood, A. M., Froh, J. J., & Geraghty, A. W. (2010). Gratitude and well-being: A review and theoretical integration. *Clinical Psychology Review, 30*(7), 890-905 .
- Wood, A. M., Maltby, J., Gillett, R., Linley, P. A., & Joseph, S. (2008). The role of gratitude in the development of social support, stress, and depression: Two longitudinal studies. *Journal of Research in Personality, 42*(4), 854-871 .
- World Health Organization: Depression a Global Crisis. (2012, October 10). Retrieved from [http://www.who.int/mental\\_health/management/depression/wfmh\\_paper\\_depression\\_wmhd\\_2012.pdf?ua=1](http://www.who.int/mental_health/management/depression/wfmh_paper_depression_wmhd_2012.pdf?ua=1)
- You, S., Furlong, M. J., Felix, E., Sharkey, J. D., Tanigawa, D., & Green, J. G. (2008). Relations among school connectedness, hope, life satisfaction, and bully victimization. *Psychology in the Schools, 45*(5), 446-460.

Academic achievement, behavior, and school connectedness have long been considered central measures for assessing students' optimal functioning in school. With the growing interest in positive education and its' inclusion of well-being as a central educational goal, attention has been turned to the extent to which these traditional measures of school functioning are related to students' well-being. Based on a sample of 314 Israeli middle school students from one school, this study focuses on the relationship between the latter measures of school functioning and students' well-being, operationalized as life satisfaction, positive and negative affect, hope, and gratitude. Using structural equational modelling, our findings revealed that GPA, teachers' reports of disruptive behavior, and students' reports of school connectedness predict students' well-being, with school connectedness as the strongest predictor of all five well-being measures. This suggests that a sense of connectedness is more crucial to students' well-being than their academic achievements or behavior in school. Surprisingly, students' disruptive behavior as reported by teachers was slightly, but significantly, positively associated with life satisfaction, hope and positive affect. Further inquiry into this curious finding revealed that disruptive behavior is related to higher well-being primarily for students of middle range academic attainment (GPA of 64-84) when controlling for connectedness to school. Based on this finding, we suggest that within the school context better behavior among average achievers may be a potential sign of a maladaptive response to being left outside the schools' radar while disruptive behavior among average achievers may in fact be the more resilient response. Attention is given to this interpretation of the finding as well as to more general implications of the importance of school connectedness for students' well-being.

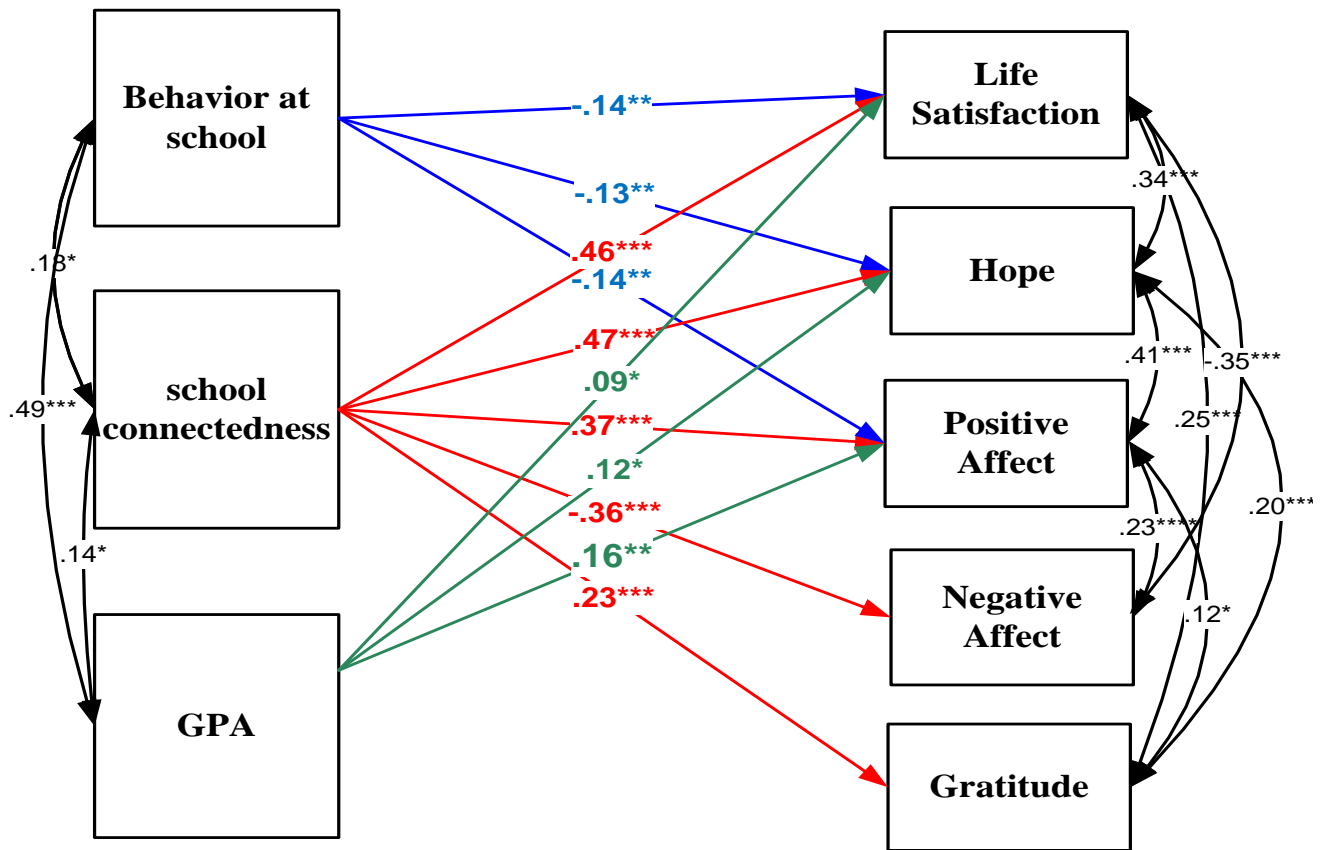


Figure 1. Path-analytic framework of student well-being.

Note. Path coefficients are standardized.

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

Cannocorr correlation = .61,  $R^2 = .38$

Table 1

*Pearson Correlations Between Traditional School Functioning Measures and Well-Being Measures (n = 314)*

	<i>M</i>	<i>SD</i>	<i>Potential Scale</i>	
			<i>MIN</i>	<i>MAX</i>
<b><i>Dependent variables</i></b>				
Life Satisfaction	4.92	0.89	1	7
Hope	4.73	0.83	1	6
Positive affect	3.42	0.76	1	5
Negative affect	2.15	0.75	1	5
Gratitude	5.17	1.17	1	7
<b><i>Independent variables</i></b>				
Behavior at school	2.78	0.48	1	3
Connectedness to school	3.77	0.79	1	5
School GPA	75.97	12.67	0	100

*M* = mean, *SD* = standard deviation

Table 2

*Pearson Correlations Between Traditional School Functioning Measures and Well-Being Measures (n = 314)*

	<i>Life Satisfaction</i>	<i>Hope</i>	<i>Positive affect</i>	<i>Negative affect</i>	<i>Gratitude</i>
Behavior at school <sup>a</sup>	.01	.03	.01	.07	-.02
Connectedness to school	.45***	.46***	.39***	-.36***	.23***
School GPA	.12*	.13*	.13*	-.14**	.04

<sup>a</sup>Spearman Correlation.

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

Table 3

*Partial Correlations for Behavior at School and Well-Being Measures Controlled by Connectedness to School at Three GPA Groups (n = 314)*

<b>GPA groups</b>	<b>Life Satisfaction</b>	<b>Hope</b>	<b>Positive affect</b>	<b>Negative affect</b>	<b>Gratitude</b>
GPA of 43-64 (n = 55)	-.12	-.11	-.04	.11	.16
GPA of 65-84 (n = 149)	-.19*	-.18*	-.18*	.01	-.02
GPA of 85-98 (n = 86)	-.12	-.02	-.11	.12	-.12

\* $p < .05$