The Mediating Role of School Liking on the Relationship Between Perceived Financial Stability and Life Satisfaction

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INTRODUCTION

- Prior research has shown that school satisfaction (one's subjective and cognitive appraisal of the quality of school life) and perceived financial stability (PFS) are strongly linked with overall life satisfaction (Baker & Maupin, 2009). Therefore, it is imperative to examine how both influence an individual's mental and emotional well-being.
- A supportive social climate has also been linked to higher school satisfaction. This may also act as a protective factor against stress and psychological distress (Baker, 1998).
- Studies have also found a positive correlation between school-based behavioral engagement (i.e., attendance and participation) and academic performance. This indicates that students who spend more time engaged in the school environment perform academically better (Wand, Tian, & Huebner, 2019).
- Furthermore, a nation's Gross Domestic Product (GDP) per capita has been shown to be positively associated with subjective happiness and well-being (Ngamaba, 2016).
- However, there is little to no literature on how school satisfaction influences the relationship between (PFS) and life satisfaction among elementary school children in nations of varying GDP.
- By understanding how PFS and school satisfaction are predictive of overall life satisfaction, schools can develop programs and services for disadvantaged students that enhance their psychological well-being.

Present Study

- The present study investigated the mediating role of school liking on the relationship between perceived financial stability (PFS) and life satisfaction among elementary school students in three nations of varying gross domestic product (GDP): Germany, Slovakia, and the Republic of Moldova.
- Hypotheses:
  - H1: It was expected for there to be differences between countries based on GDP on the three variables of interest.
  - H2: It is hypothesized that PFS will have a positive relationship with life satisfaction among elementary school students, with school liking mediating this relationship.

METHOD

- The present study utilized data from the Healthy Behaviors in School Aged Children dataset from 2014 (N = 15,892, M_{age} = 13.51, SD_{age} = 1.60, boys = 50.3%, girls = 49.7%).
- Data from three countries were chosen based on their GDP per capita:
  - Germany (highest GDP): n = 5,541, M_{age} = 13.51, SD_{age} = 1.65, boys = 50.6%, girls = 49.4%
  - Slovakia: n = 5,784, M_{age} = 13.48, SD_{age} = 1.50, boys = 49.8%, girls =50.2 %
  - The Republic of Moldova: n = 4,567, M_{age} = 13.56, SD_{age} = 1.66, boys = 50.3%, girls = 49.7%
- Variables:
  - Variable information can be found in table 1.
- Data analysis:
  - A one-way MANOVA and a series of mediation analyses were implemented to analyze the data and test the hypothesis.
  - Furthermore, intraclass correlation coefficients (ICCs) were computed to determine if the data was clustered into municipalities within the nations.

Tables and Figures

Table 1
Variables of Interest

Variable	Question	Interpretation
Perceived Financial Stability (PFS)	"How well off do you think your family is?"	Higher levels indicate higher perceived financial stability.
Life Satisfaction (LS)	"Here is a picture of a ladder. The top of the ladder '10' is the best possible life for you and the bottom '0' is the worst possible life for you. In general, where on the ladder do you feel you stand at the moment? Tick the box next to the number that best describes where you stand."	Higher levels indicate higher life satisfaction.
School Liking (SL)	"How do you feel about school at present?"	Higher levels indicate more positive feelings about school.

Table 2
Tests of between subjects effects

Effect	Sum of Squares	df	Mean Square	F	p	η^2
PFS	207.1	2	103.557	137.69	.001	.014
Error	11950.1	15889	0.752			
Life Satisfaction	2507	2	1253.34	339.56	.001	.000
Error	58647	15889	3.69			
School Liking	970.8	2	485.40	620.41	.001	.046
Error	12431.4	15889	.78			

Table 4
Tamhane's T2 multiple comparisons test

Variable	Country	Slovakia	Republic of Moldova
PFS	Germany	-0.25 (0.02) [-0.29, -0.21]	-0.03 (0.03) [-0.07, 0.01]
	Slovakia		0.22 (0.02) [0.18, 0.26]
Life Satisfaction	Germany	-0.04 (0.04) [-0.13, 0.05]	-0.90 (0.04) [-0.99, -0.81]
	Slovakia		-0.86 (0.04) [-0.95, -0.77]
School Liking	Germany	0.47 (0.02) [0.43, 0.51]	-0.08 (.02) [-0.12, -0.04]
	Slovakia		-0.56 (0.02) [-0.60, -0.51]

Note. Standard error in parentheses. 95% Confidence Intervals in brackets.

Table 3
Cohen's *d* effect sizes

Variable	Country	Slovakia	Republic of Moldova
PFS	Germany	0.294	0.032
	Slovakia		-0.255
Life Satisfaction	Germany	-0.019	-0.476
	Slovakia		-0.452
School Liking	Germany	-0.529	0.102
	Slovakia		0.598

Note. 95% Confidence Intervals in brackets

Figure 1.
Example path diagram.

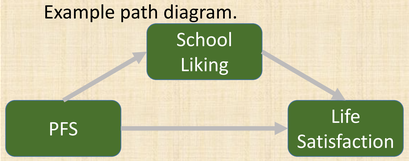

Table 5
Means and Standard Deviations

Country	PWS	Life Satisfaction	School Liking
Germany	3.72 (0.87)	7.38 (1.97)	3.09 (0.79)
Slovakia	3.97 (0.82)	7.41 (1.99)	2.62 (0.97)
Republic of Moldova	3.75 (0.92)	8.27 (1.78)	3.17 (0.87)

Note. Standard deviations in parentheses

Table 6
Standardized regression weights for the path analyses

Model	Sample Size	PFS -> SL	SL -> LS	PFS -> LS (Full Model)	PFS -> LS (Direct Model)	Aroian Test	Freedman-Schatzkin Test (df)	Mediation
Full	15,892	0.103*	0.271*	0.258*	0.297*	12.564*	29.901 (15890)*	9.40%
Germany	5,541	0.168*	0.344*	0.228*	0.286*	11.621*	25.370 (5539)*	20.21%
Moldova	4,567	0.173*	0.167*	0.301*	0.329*	8.160*	11.730 (4565)*	8.78%
Slovakia	5,784	0.103*	0.189*	0.319*	0.338*	6.829*	15.513 (5782)*	5.76%

Note. *p < .001

Results

- MANOVA:
  - Assumptions were tested and met through Bartlett's test of sphericity ($\chi^2(3) = 2829.19$, $p < .001$). Additionally, Box's M was significant ($M = 607.83$, $p < .001$), indicating the covariance matrices are significantly different.
  - Pillai's Trace was used to test for multivariate differences. The multivariate test (Pillai Trace (2) = .135, F (6, 31,776) = 382.86, p < .001) along with all three univariate tests were statistically significant (see table 2).
  - Cohen's d effect sizes were small to negligible for the PFS and life satisfaction. School liking yielded medium to negligible effect sizes (see table 3).
  - Lastly, results of the Tamhane's T2 post hoc tests can be found in table 4.
- Path analysis:
  - SL significantly mediated the relationship between PFS and LS in all three nations and the full sample. The percentage of mediation ranged from 5.8% and 20.2% (see table 6).
- Multilevel modeling:
  - ICCs were calculated to determine if the data is clustered within municipalities within the individual nations. All ICC's yielded low values (≤ .01) and therefore no multilevel modeling was conducted.

Discussion

- The results of this study support both hypotheses.
  - First, significant differences were found across the nations of interest for all three variables. Contrary to prior research, a negative relationship was found with GDP and life satisfaction. The Republic of Moldova, the nation with the lowest GDP per capita, had the highest average life satisfaction. This may be supported by prior research that shows that economic inequality (the gap between the wealthy and those facing poverty) does not impact subjective well-being while living in poverty does adversely effect well-being (Evans et al., 2017).
  - Second, school liking mediated the relationship for all countries to varying degrees which highlights the importance of the school environment on children's well-being.
- Lastly, multilevel modeling within the nations could not be conducted due to low ICCs. One possible explanation for this is the abundance of groups with relatively few participants (Depaoli & Clifton, 2015).

Limitations and Future Directions

- This study utilized a pre-existing dataset, thus limiting the variables and constructs that researchers can focus on.
- Future studies should further examine the role of the school environment on students' life satisfaction in addition to variations by nations in order to gain more generalizable results.
- Furthermore, efforts should be made to investigate potential clusters within nations that may yield differing results.

Contact Information

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