



A Structural Model Predicting Risky Behavior Through Social Media Use, School Climate, Peer Support, and Family Support

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INTRODUCTION

- Prior research on social media use has also indicated a strong relationship between the use of social media and alcohol consumption (Moreno and Whitehill, 2014). Furthermore, the use of social media has been linked to a number of negative (e.g. Sherlock and Wagstaff, 2018; Lee-Won, Herzog, & Park, 2015) and positive (e.g. Brailovskaja & Margraf, 2016) emotional outcomes.
- When it comes to nature vs. nurture, research has demonstrated that nurture has a strong effect on adolescent behavior. Typically, adolescents who demonstrate high levels of behavioral problems tend to have low perceived family support with parents who display higher levels of parental stress and poor parenting practices (Kuhn & Laird, 2014). Furthermore, a positive relationship between families and children has been shown to buffer against risky behaviors committed by children. Children who report having a "great" relationship with both of their parents were nearly twice as likely to avoid risky behaviors such as using alcohol, tobacco, and having sex (McBride et al., 2005).
- Similar to family support, perceived peer support has been shown to mediate the relationship between peer conflict and risk taking behavior. Furthermore, low perceived peer support has been associated with an increase in risk taking behavior (Telzer, Fuligni, Leiberman, Miernicki, & Galván, 2015).
- Moreover, a number of studies have shown a strong relationship suggesting that a positive school climate effectively buffers against a magnitude of negative outcomes such as risky behavior (e.g. Klein, Cornell, & Konold, 2012; Wang, Selman, Dishion, & Stormshak, 2010).
- The unique relationship among the variables described above has yet to be examined in the research literature.

Present Study

- The present study predicts the mediating role of family support in the relationship between school climate, peer support, and social media with risky behaviors among adolescents in four countries in Europe: Germany, Czech Republic, Latvia, and Malta.
- Additionally, differences between the four countries are expected based on GDP.
- Data from the four countries were fitted into a structural equation model using SPSS Amos

METHOD

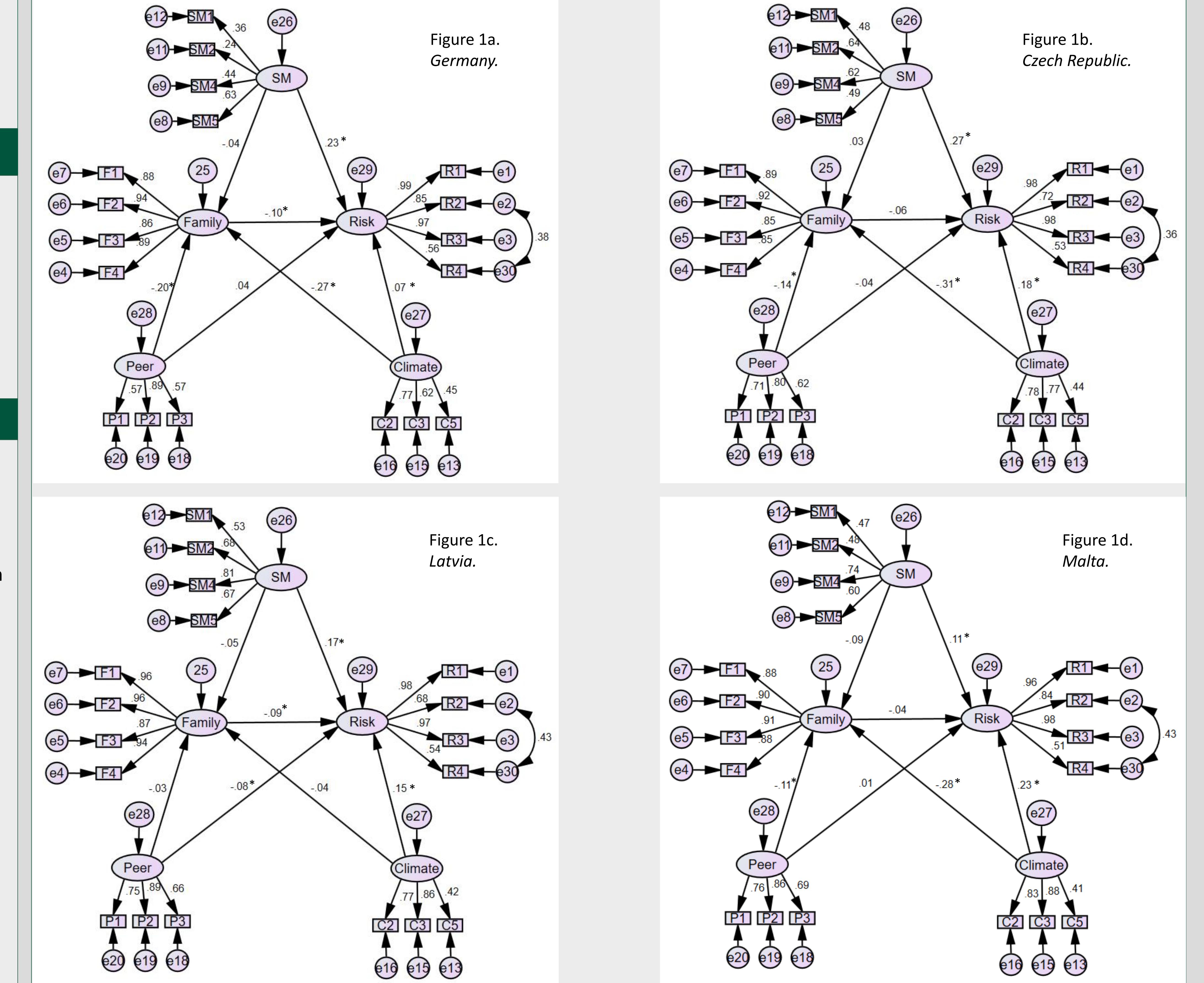
- Participants**
 - Data were utilized from the Health Behaviors in School-Aged Children (HBSC) public-use dataset consisting of adolescents from four European countries based on GDP ($N = 4,654$).
 - 252 multivariate outliers were detected and therefore removed from the final analyses. Final sample sizes and demographic information are listed below:
 - Germany ($n = 1,566$, $M_{age} = 15.36$, $SD_{age} = .34$, 50.8% female)
 - Czech Republic ($n = 1,292$, $M_{age} = 15.37$, $SD_{age} = .33$, 51.1% female)
 - Latvia ($n = 1,297$, $M_{age} = 15.61$, $SD_{age} = .31$, 58.7% female)
 - Malta ($n = 499$, $M_{age} = 15.71$, $SD_{age} = .28$, 55.3% female)
- Procedures**
 - Data was extracted from 2013-2014 HBSC datasets.
 - SPSS Amos was used to fit five datasets to a structural equation model.
- Measures**
 - Items examining risky behavior, family support, and life satisfaction were used (see Table 1).

Results

Table 1.
Information for subscales used.

Subscale	Name (# of Items)	Item Example	α	Higher Scores indicate
School Climate	C (5)	How do you feel about school at present?	.68	Participants feel more welcomed at school
Peer Support	P (3)	"Most of the students in my class(es) are kind and helpful"	.79	Participants perceive peers to be supportive
Social Media Use	SM (4)	"How often do you actively contact your friends using instant messaging?"	.63	Higher levels of social media use
Risky Behaviors	R (4)	"On how many days (if any) have you smoked cigarettes? Please tick one box for each line. In the last 30 days?"	.85	Participants partake in more risky behaviors
Family Support	F (4)	"My family really tries to help me."	.95	Participants feel more family support

Figure 1.
Structural equation models by nation with standardized regression weights.



Note. SM = Social Media Use. Family = Family Support. Risk = Risky Behavior. Peer = Peer Support. Climate = School Climate. * $p < .05$

Results Continued

- Germany: The full model yielded good to excellent model fit ($\chi^2 = 641.702$, $N = 1,566$, $df = 127$, $p < .001$; GFI = .96; TLI = .96; RMSEA = .05). In the unmediated model, only social media use significantly predicted risky behaviors ($\beta = .23$, $p < .05$). However, social media use did not predict family support in the full model and therefore no mediation occurred (see Figure 1a).
- Czech Republic: The full model showed similar goodness-of-fit compared to Germany ($\chi^2 = 539.011$, $N = 1,292$, $df = 127$, $p < .001$; GFI = .96; TLI = .96; CFI = .97; RMSEA = .05); however, the relationship between family support and risky behaviors was not significant (see Figure 1b) showing no mediating effect.
- Latvia: Goodness-of-fit indexes for the full model show good model fit ($\chi^2 = 641.064$, $N = 1,297$, $df = 127$, $p < .001$; GFI = .95; TLI = .96; CFI = .97; RMSEA = .06). In the unmediated model, social media use ($\beta = .18$, $p < .05$), peer support ($\beta = -.07$, $p < .05$), and school climate ($\beta = .15$, $p < .05$) all predicted risky behaviors. However, the variables did not predict the mediator in the full model (see Figure 1c).
- Malta: The full model yielded good model fit ($\chi^2 = 326.297$, $N = 499$, $df = 127$, $p < .001$; GFI = .94; TLI = .95; CFI = .96; RMSEA = .06). Significant paths in the full model can be found in figure 1d. Family support to risky behaviors was not significant and therefore no mediation took place. However, social media ($\beta = .12$, $p < .05$) and school climate ($\beta = .24$, $p < .05$) predicted risky behaviors in the unmediated model.

Discussion

- The present study analyzed the mediating role of family support on the relationship between social media use, peer support, and school climate with risky behaviors within European adolescents. No mediation was found within any of the four nations being examined. However, social media use and school climate significantly predicted risky behaviors across all four countries. The items associated with risky behaviors may be a potential explanation for this positive relationship. The items consisted of questions regarding alcohol and tobacco consumption. The Czech Republic and Latvia are the third and fourth highest consumers of alcohol in Europe with each person over the age of 15 drinking nearly three times the world average set by the world health organization (2019). Malta, one of the lowest consumers in Europe, drinks at about the world average (Anderson & Baumberg, 2006).
- Measuring alcohol and tobacco consumption could be one possible limitation of the current study as it may not be considered risky behavior in some European settings. However, this further demonstrates the need for additional research on risk-taking behaviors in this setting.
- The present study implies that family support does not mediate the relationship between social media use, school climate, and peer support with risky behaviors. However, across the European nations, social media use and school climate positively predicted risk taking behaviors defined by alcohol and tobacco consumption. Schools and parents wishing to reduce adolescents exposure to tobacco and alcohol may aim to intervene through social media and school.

Contact Information

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