SCHOOL CLIMATE AND ATTENDANCE PROBLEMS: THE MEDIATING ROLE OF STUDENT'S ACADEMIC AND INTERPERSONAL COMPETENCE

Luana Sorrenti
Department of Clinical and Experimental Medicine, University of Messina (Italy)
sorrentil@unime.it
Concettina Caparello
Department of Health Sciences, University Magna Graecia of Catanzaro (Italy)
concettina.caparello@unicz.it
Carmelo Francesco Meduri
Department of Health Sciences, University Magna Graecia of Catanzaro (Italy)
carmelofrancesco.meduri@unicz.it
Angelo Fumia
Department of Clinical and Experimental Medicine, University of Messina (Italy)
angelofumia@gmail.com
Pina Filippello
Department of Clinical and Experimental Medicine, University of Messina (Italy)
gfilippello@unime.it

ABSTRACT

A positive school climate promotes regular attendance through strong relationships, a sense of belonging, diversity promotion, clear rules, and safety, leading to improved relational and educational outcomes. This study explores how perceived academic and interpersonal competence mediate the relationship between school climate components and absenteeism, using Havik's (2015) model. A cross-sectional study of 539 Italian high school students employed structural equation modelling with latent variables to examine these mediations. Results indicated that perceptions of interpersonal competence mediated the relationship between Peer Connectedness ($=.16$, $p<.01$) and Affirming Diversity ($=-.05$, $p<.05$) with Truancy. Perceived academic competence mediated the relationship between School Connectedness and Subjective Health ($=-.12$, $p<.01$), Truancy ($=-.14$, $p<.01$), and School Refusal ($=-.14$, $p<.01$). The findings highlight the importance of promoting a positive school climate and enhancing students' competences to reduce absenteeism.

Keywords: school climate; relational and academic competence; school attendance problems

RESUMEN

Clima escolar y problemas de asistencia: el papel mediador de la competencia académica e interpersonal del estudiante. Un clima escolar positivo promueve la asistencia regular a través de relaciones sólidas, un sentido de pertenencia, promoción de la diversidad, reglas claras y seguridad, lo que conduce a mejores resultados relacionales y educativos. Este estudio explora cómo la competencia académica e interpersonal percibida media la relación entre los componentes del clima escolar y el ausentismo, utilizando el modelo de

havik (2015). Un estudio transversal de 539 estudiantes de secundaria italianos empleó modelos de ecuaciones estructurales con variables latentes para examinar estas mediaciones. Los resultados indicaron que las percepciones de competencia interpersonal mediaron la relación entre la conexión con los pares (=.16, $p<.01$) y la afirmación de la diversidad (=-.05, $p<.05$) con el absentismo escolar. La competencia académica percibida medió la relación entre la conectividad escolar y la salud subjetiva (=-.12, $p<.01$), el absentismo escolar (=-.14, $p<.01$) y el rechazo escolar (=-.14, $p<.01$). Los hallazgos resaltan la importancia de promover un clima escolar positivo y mejorar las competencias de los estudiantes para reducir el absentismo.

Palabras clave: clima escolar; competencia relacional y académica; problemas de asistencia escolar

INTRODUCTION

School attendance is crucial for students' educational and personal development (Heyne et al., 2019). However, when students experience persistent absenteeism or irregular attendance patterns, their academic achievements and overall well-being may suffer, potentially leading to the manifestation of School Attendance Problems (SAPs; Heyne et al., 2019). The framework proposed by Havik et al. (2015) underscores specific categories, including Somatic, Subjective Health, Truancy, and Refusal Reasons, as critical in comprehending the underlying factors contributing to students' school absenteeism. Somatic Reasons encompass physical health conditions (e.g., chronic illnesses, acute ailments, and physical injuries) that hinder students' ability to attend school. Subjective Health Reasons encompass students' perceptions and experiences of health (psychological symptom and psychosomatic symptoms) which, though not necessarily diagnosed by medical professionals, significantly impact school attendance. In addition to health-related reasons, absenteeism can stem from Truancy and Refusal Reasons. Truancy Reasons refers to typically unexcused absences and do not involve transparent communication with the school. Reasons for truancy may include disinterest in school, peer influences encouraging skipping school, and engagement in activities outside of school during school hours. Conversely, Refusal Reasons are characterized by a student's unwillingness to attend school due to emotional distress (traumatic experiences related to school, social isolation, and academic pressure or fear of failure) or anxiety disorders (separation anxiety and social anxiety). Unlike Truancy, Refusal Reasons are often communicated openly by the student or their parents.

In accordance with Havik et al. (2015), it is important to examine school absenteeism through individual, family, school, and social factos. Among school factors, it is important to highlight the role played by a good and positive school climate and the students' perception of their academic and interpersonal competence (Aldridge, & Ala'I, 2013; Daily, et al., 2020). A positive school climate, characterized by the establishment of social bonds with teachers and other students, student's sense of belonging within the school environment, respect, acceptance, and appreciation of the diversity of cultures, clear and consistent rules creating a safe school environment, and enabling and promoting students to seek help (Aldridge, & Ala'I, 2013), plays an important role in promoting student school attendance (Hamlin, 2021; Daily, et. al., 2020; Cairns, 1990). Conversely, a school climate characterized by poor student-teacher relationships, a lack of clarity about rules, a rigid environment, and an inability to ask for and/or offer help can contribute to students' absenteeism (Kearney, 2008). The school climate is certainly an important factor in shaping students' perceptions of their interpersonal and academic competences (Wang, & Holcombe, 2010). Students' subjective belief about their own abilities, skills, and efficacy in academic tasks and activities (students' perceptions of their academic competences) is related to school attendance. Previous studies underline that students with a positive perception of their academic abilities are generally more motivated to attend school, engage with their studies, and participate in class activities, which can reduce attendance problems (Daily, et. al., 2020; Durham, & Connolly, 2017; Fryer, et. al., 2018). Conversely, those who doubt their academic skills might lack the intrinsic motivation to attend or engage fully in school activities, and high levels of anxiety and stress about academic performance can make school attendance more daunting, leading to physical symptoms or a desire to escape school-related activities, resulting in absences. On the other hand, students' perceptions of their interpersonal competence, which refers to the ability of students to interact effectively

with others, and skills such as communication, empathy, conflict resolution, and the ability to form and maintain relationships, plays a significant role in school attendance (Daily, et. al., 2020). Students who view themselves as competent in interpersonal interactions are often more engaged in school activities. They tend to have better relationships with peers and teachers, which can contribute to a more positive school experience and encourage regular attendance. Conversely, students who struggle with social skills or perceive themselves as lacking in this area might avoid school to escape social challenges or bullying, leading to increased absenteeism (Hamlin, 2021). Therefore, a positive school climate, which correlates with a good sense of academic and personal competence, is beneficial for students' school life and seems to promote students' school attendance (Hamlin, 2021; Daily, et. al., 2020; Cairns, 1990).

However, to date, the literature lacks a comprehensive model that explains the relationships between students' perceived academic and interpersonal competence, school climate, and School Attendance Problems (SAPs). The purpose of our study is to examine the mediating role of students' perceptions of academic and interpersonal competence in the relationship between a positive school climate (Teacher Support, Peer Connectedness, School Connectedness, Affirming Diversity, Rule Clarity, and Reporting and Seeking Help) and SAPs (Somatic Reasons, Subjective Health Reasons, Truancy Reasons, and Refusal Reasons). Based on previous research and in accordance with the model of SAPs proposed by Havik et al. (2015), we expect that one or more dimensions of school climate would have a direct relationship with students' perceptions of academic and interpersonal competence and, in turn, an indirect relationship with some reasons for SAPs. We hypothesize that dimensions of school climate (Teacher Support, Peer Connectedness, School Connectedness, Affirming Diversity, Rule Clarity, and Reporting and Seeking Help) are related with students' perceptions of academic and interpersonal competence and consequently related with different reasons for SAPs.

METHODS

Participants

The participants in this study included 539 Italian high school students with an average age of 16.05 years (SD = .99). Students reported an average of 23.11 absences (SD = 11.82). School achievement was assessed based on the average grade obtained across all subjects during the current school year. In Italy, school achievement is represented as a numerical grade derived from the arithmetic means of all subject grades, ranging from 0 to 10. Grades below 6 are considered insufficient, 6 is sufficient, 7 is fair, 8 is good, 9 is distinguished, and 10 is excellent. The average school grade in our sample was 7.40 (SD=.90). Additionally, 95.4 % (514) of the students were of Italian nationality and 4.6% (25) are foreign student, all of whom spoke Italian. Students with intellectual disabilities or special educational needs were excluded from the study.

Instruments

A demographic questionnaire was utilized to collected basic demographic information from participants, including their age, nationality, and educational level.

The Assessing Reasons for School Non-attendance (ARSA; Havik et al., 2015) is a self-administered 17-item questionnaire designed to assess the reasons for student's school non-attendance. It consists of four subscales measuring: Somatic Symptoms (e.g., "How often have you been absent from school in last three months because you had a bad cold or flu?"), Subjective Health Complaints (e.g., "How often have you been absent from school in last three months because you had a stomach ache?"), Truancy (e.g.,"How often have you been absent from school in last three months because you were going to work on something you found boring?"), and School Refusal (e.g., "How often have you been absent from school in last three months because you were afraid or worried about something at school?"). Students respond to each item using a 4-point Likert scale, ranging from "never" (0) to "quite often" (3).

The What's Happening In This School? (WHITS; Aldridge & Ala', 2013) questionnaire is a self-administered 49-item questionnaire designed to assess school climate based on students' perceptions of the feeling welcome

and connected at school. It comprises six subscales measuring: Teacher Support (e.g., "At this school teachers treat my fairly"), Peer connectedness (e.g., "At this school I get along with other students"), School Connectedness (" At this school I feel included at school"), Affirming Diversity (e.g., "At this school my cultural background is respected by students"), Rule Clarity (e.g., "At this school the rules at this school are clear to me"), and Reporting and seeking help (e.g., "At this school I am confident to talk to a teacher if I am bullied"). Students rate each item on a 5-point Likert scale, ranging from 1(Almost never), to 5 (Almost always).

Two subscales of the Perception of Competence in life domains scale (PCLDS; Losier et al., 1993) were utilized to measure the perception of interpersonal competence academic competence. Example of items include: Interpersonal competence "In many of my life domains, I feel I am not good enough"; academic competence "In general, I have difficulty doing my school work well". Students respond to each items using a 7-point Likert scale, ranging from 1 (not agree at all) to 7 (very strongly agree).

Procedure

This study was conducted in accordance with the ethical recommendations of the Italian Association of Psychology (AIP) and adhered to the principles of the Declaration of Helsinki (2013). Ethical approval was obtained from the University of Alicante (Protocol number: UA-2023-06-29-4). Written informed consent was secured from all participants prior to their inclusion in the study. Only those who returned signed consent forms were allowed to participate. The questionnaires were administered in a single session lasting between 15 and 20 minutes. The privacy and anonymity of participant responses were strictly maintained to ensure confidentiality. This research was part of the Erasmus Project (Grant number: 2022-1-ES01-KA220-SCH-000088733), which provided financial support for the research, authorship, and/or publication of this article.

Data Analysis

To conduct structural equation modelling (SEM) of the latent variables, RStudio with the lavaan package was employed (Rosseel, 2012). SEM approach allows multiple dependent variables to be tested simultaneously and has been demonstrated to be superior to traditional univariate and multivariate approaches (Iacobucci et al., 2007; Kline, 2011). Moreover, this approach provides the opportunity to specify latent variables rather than measured variables because measurement errors are removed from latent variable, which represent the common variance among multiple indicators (Coffman & MacCallum, 2005).

RESULTS

Mediation

Structural Equation Modeling (SEM) with latent variables was used to explore the mediating role of students perceived academic and interpersonal competence in the relationship between different components of school climate- such as Teacher Support, Peer Connectedness, School Connectedness, Affirming Diversity, Rule Clarity, and Reporting and Seeking Help-, and reasons for absenteeism, including Somatic Reasons, Subjective Health Reasons, Truancy Reasons, and School Refusal Reasons. This approach enabled a analysis of how school climate reduce absenteeism indirectly through its impact on students' sense of competence.

The estimation of our model yielded a good fit: 2 (1014) = 2377.088, p = .000, CFI = .90, SRMR = .05, RMSEA (90%CI) = .05 (.047, .053). The results (**Figure 1**) indicated several significant relationships: students' perceptions of academic competence were negatively predicted by Peer Connectedness (=-.17, p= <. 05) and positively predicted by School Connectedness (=.35, p= <. 001); Students' perceptions of interpersonal relationships competence were positively predicted by Peer Connectedness (=.64, p= <. 001) and School Connectedness (=.18, p= <. 05), and negatively predicted by Affirming Diversity (=-.21, p= <. 01); Subjective Health Reasons were negatively predicted by students' perceptions of academic competence (=-.34, p= <. 001); Truancy Reasons were negatively predicted by students' perceptions of academic competence (=-.41, p= <. 001) and positively pre-

dicted by students' perceptions of interpersonal competence (=.26, p= <. 01); School Refusal Reasons were negatively predicted by students' perceptions of academic competence (=-.39, p= <. 001), Teacher Support (=-.16, p= <. 05), and positively predicted by Affirming Diversity (=.24, p= <. 01).

Mediation analysis (**Table 2**) revealed that both students' perceptions of interpersonal and academic competence played a mediating role between school climate and SAPs. Specifically, students' perceptions of interpersonal competence mediated the relationship between Peer Connectedness and Truancy Reasons (=.16, p= <.01) and between Affirming Diversity and Truancy Reasons (=-.05, p= <. 05). While, students' perceptions of academic competence mediated the relationship between School Connectedness and Subjective Health Reasons (=-.12, p= <.01), Truancy Reasons (=-.14, p= <.01), and Refusal Reasons (=-.14, p= <.01).

Figure 1. Full Mediation Model
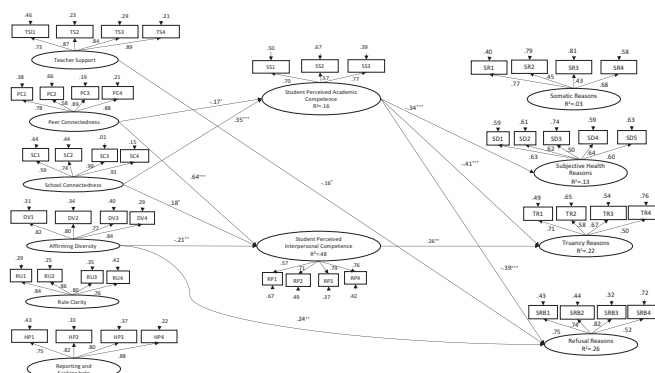
Note: ***$p \leq .001$**, **$p \leq .01$, *$p \leq .05$. Coefficients shown are standardized direct path coefficients. The insignificant paths have not been inserted. Coefficients' Correlation: Teacher Support <--> Peer Connectedness: .36***; Teacher Support <--> School Connectedness: .54***; Teacher Support <--> Affirming Diversity: .42***; Teacher Support <--> Rule Clarity: .56***; Teacher Support <--> Reporting and Seeking Help: .64 ***; Peer Connectedness <--> School Connectedness: .74***; Peer Connectedness <-->Affirming Diversity: .47***; Peer Connectedness <-->Rule Clarity:.40***; Peer Connectedness <--> Reporting and Seeking Help: .46 ***;School Connectedness <--> Affirming Diversity: .55***; School Connectedness <--> Reporting and Seeking Help: .60 ***; Affirming Diversity <--> Rule Clarity:.64***; Affirming Diversity <--> Reporting and Seeking Help: .57 ***; Rule Clarity<--> Reporting and Seeking Help: .75***; Somatic Reasons <--> Subjective Health Reasons: .67***; Somatic Reasons <--> Truancy Reasons: .22**; Somatic Reasons <--> Truancy Reasons: .25***; Somatic Reasons <--> Refusal Reasons: .25***; Subjective Health Reasons <--> Truancy Reasons: .44***; Subjective Health Reasons <--> Refusal Reasons: .48***; Truancy Reasons <--> Refusal Reasons: .40***.

Table 2. Path estimates, SEs and 95% Cis

	β	SE	Lower bound (BC) 95% CI	Upperbound (BC) 95% CI	p
Direct Effect					
Peer Connectedness → Student Perceived Academic Competence	-.17	.13	-.48	-.01	≤.05
School Connectedness → Student Perceived Academic Competence	.35	.16	.26	.89	≤.001
Peer Connectedness → Student Perceived Interpersonal Competence	.64	.12	.59	1.08	≤.001
School Connectedness→ Student Perceived Interpersonal Competence	.18	.13	.01	.54	≤.05
Affirming Diversity→ Student Perceived Interpersonal Competence	-.21	.08	-.42	-.09	≤.01
Student Perceived Academic Competence → Subjective Health Reasons	-.34	.04	-.25	-.10	≤.001
Student Perceived Academic Competence → Truancy Reasons	-.41	.06	-.37	-.13	≤.001
Student Perceived Interpersonal Competence → Truancy Reasons	.26	.06	.06	.29	≤.01
Student Perceived Academic Competence → Refusal Reasons	-.39	.04	-.35	-.17	≤.001
Teacher Support → Refusal Reasons	-.16	.05	-.33	-.03	≤.05
Affirming Diversity → Refusal Reasons	.24	.07	.06	.34	≤.01
Indirect Effect via Student Perceived Interpersonal Competence					
Peer Connectedness → Truancy Reasons	.16	.01	.04	.26	≤.01
Affirming Diversity → Truancy Reasons	-.05	.02	-.09	-.01	≤.05
Indirect Effect via Student Perceived Academic Competence					
School Connectedness → Subjective Health Reasons	-.12	.03	-.18	-.03	≤.01
School Connectedness → Truancy Reasons	-.14	.05	-.27	-.05	≤.01
School Connectedness → Refusal Reasons	-.14	.05	-.26	-.05	≤.01

DISCUSSION

Various contextual factors and individual characteristics play a key role in school absenteeism. In line with existing literature, our study examines how different contextual aspects of the school climate are important for students' personal perceptions of their competences, which subsequently correlate with various reasons for absenteeism. While previous research has examined the relationship between these variables separately (Daily, et. al. 2020; Hamlin, 2021; Havik, et. al., 2015; Kearney, 2008), our study integrates these factors into a single model to analyse how different components of school climate contribute to students' perceptions of their interpersonal and academic competences and their association with absenteeism, aligning with SAPs model proposed by Havik et al. (2015)

Consistent with our hypothesized model, our results confirm the mediating role of students' perceptions of interpersonal and academic competence in the link between various components of school climate and different reasons for absenteeism. Specifically, our study underlines that significance of Peer Connectedness and School Connectedness in fostering students' perceptions of academic and interpersonal competence, thereby promoting reasons for absenteeism related to Truancy. Peer Connectedness, as highlighted in previous studies (Waters, et. al., 2010; Daily, et. al., 2020), plays a crucial role in shaping students' interpersonal competences, fostering positive social interactions (Juvonen, et. al.,2012; Aldrige, et. al, 2016; Thapa, Cohen, Guffey, & Higgins-

D'Alessandro, 2013; Wang, & Holcombe, 2010). However, excessive time spent with friends may lead to unjustified absences (Henry, & Huizinga, 2007). Unlike previous studies indicating weak peer relationships correlate with Truancy (Baskerville, 2021), our study reveals that strong peer relationships promote good interpersonal competences, potentially fostering friendship bonds that inadvertently contribute to Truancy. These social bonds could promote peer interest and encourage engagement in fun and extracurricular activities during school hours, thus facilitating absenteeism.

Our results also show that School Connectedness reduces truancy and mitigates absenteeism due to Subjective Health Reasons and Refusal Reasons. Consistent with previous studies, students' sense of belonging and involvement in the school setting promote their belief in academic competence, consequently reducing various reasons for non-attendance (Kearney, 2008; Abdullah, et. al., 2020; Waters, et. al., 2010; Daily, et. al., 2020). Furthermore, our results underline that promoting cultural diversity enhance students' perception of interpersonal skills, thereby reducing truancy-related absenteeism. Likely, exposure to a culturally diverse environment fosters empathetic, communicative, and relational skills, fostering interest in the school development (Kutsyuruba, et. al., 2015; Liang, et. al., 2020), consequently diminishing absenteeism due to Truancy Reasons (Smink, & Reimer, 2005).

Despite the positive effects of a good school climate on absenteeism, our results indicate no significant relationship between school climate components, perceptions of competence, and somatic reasons for absenteeism. This discrepancy may stem from the nature of somatic reasons, often pertaining to physical conditions beyond the school's control, such as illness or pre-existing health issues, thus limiting the influence of school-related factors. In summary, fostering a positive school climate that nurtures a sense of belonging and active engagement promotes academic competence and reduces absenteeism, primarily for truancy-related reasons. However, addressing somatic reasons may necessitate collaboration with external expect beyond the school environment.

CONCLUSION

In conclusion, our study highlights the relationships between various components of the school climate, students' perceptions of competence, and reasons for absenteeism. We found that promoting a positive school climate, characterized by strong peer and school connectedness, significantly increases students' perceptions of academic and interpersonal competence, consequently reducing absenteeism primarily driven by truancy. Additionally, promoting cultural diversity promotes students' interpersonal skills, further reducing truancy-related absenteeism. However, while a positive school climate can reduce absenteeism, our findings underline a limited relationship with somatic reasons, which are often due to external factors beyond the school's control.

While this study provides valuable insights into the relationship between school climate, students' perceptions of competence, and absenteeism, several limitations must be acknowledged. Firstly, the cross-sectional nature of our research design limits our ability to infer causal relationships. For these reasons, future longitudinal studies are necessary to determine the directionality of the observed effects and to analyse the stability of these relationships over time. Secondly, our study is based on self-reported data, which may introduce bias. Future research should, therefore, incorporate a multi-method approach, including teacher and parental reports, as well as objective measures of school attendance. Thirdly, the generalizability of our findings may be limited by the demographic composition of our sample, which was confined to a specific geographic and socio-economic context. Studies involving a more diverse array of participants from different regions and backgrounds would help to determine the applicability of our findings across various populations. Finally, while we examined the impact of school climate on absenteeism, our study did not explore other environmental factors, such as family dynamics.

Although this study has limitations, it underlines the importance of promoting a supportive school setting that promotes a sense of belonging and active engagement, ultimately increasing academic success and reducing absenteeism. In the future, interventions aimed at promoting the school climate should focus on increasing peer and school connectedness while enhancing cultural diversity. Schools should implement programs to increase

connectedness and promote training for teacher fort creating inclusive, supportive, and engaging classroom, aiming to reduce absenteeism. Moreover, the implementation of structured peer training, such as mentoring programs, could promote peer connectedness, resulting in an increment in interpersonal relations and reduce absenteeism. This approach would promote the development of interpersonal and academic skills, which are essential to the personal and educational development of each student. Additionally, promoting cultural diversity can increase understanding and respect among students and thus promote an inclusive school climate. Addressing somatic reasons for absenteeism may require collaboration with external expert, emphasizing the need for a comprehensive approach to addressing student absenteeism. By implementing targeted strategies to improve school climate and address specific reasons for absenteeism, educators and policymakers can effectively support students' academic and social development, promoting a positive and inclusive learning environment for all.

REFERENCES BIBLIOGRAPHIC

Abdullah, N., Bakar, A. Y. A., & Mahmud, M. I. (2020). School Refusal or Truancy Challenges: A Special Need for the Collaboration? *Creative Education, 11*(11), 2199. https://doi.org/10.4236/ce.2020.1111159

Aldridge, J. M., Fraser, B. J., Fozdar, F., Ala'i, K., Earnest, J., & Afari, E. (2016). Students' perceptions of school climate as determinants of wellbeing, resilience and identity. *Improving schools, 19*(1), 5-26. https://doi.org/10.1177/1365480215612616

Aldridge, J., & Ala'l, K. (2013). Assessing students' views of school climate: Developing and validating the What's Happening In This School?(WHITS) questionnaire. *Improving schools, 16*(1), 47-66. https://doi.org/10.1177/1365480212473680

Baskerville, D. (2021). Truancy begins in class: Student perspectives of tenuous peer relationships. *Pastoral Care in Education, 39*(2), 108-124. https://doi.org/10.1080/02643944.2020.1788125

Bauer, L., Liu, P., Schanzenbach, D. W., & Shambaugh, J. (2018). Reducing chronic absenteeism under the every student succeeds act. Brookings Institution, 1-31.

Borowski, T. G. (2018). Relationships among Student Social-Emotional Competence, Academic Performance, and Attendance (Doctoral dissertation, University of Illinois at Chicago).

Cairns, E. (1990). The relationship between adolescent perceived self competence and attendance at single sex secondary school. *British Journal of Educational Psychology, 60*(2), 207-211. https://doi.org/10.1111/j.2044-8279.1990.tb00937.x

Coffman, D. L., & MacCallum, R. C. (2005). Using parcels to convert path analysis models into latent variable models. *Multivariate behavioral research, 40*(2), 235-259. https://doi.org/10.1207/s15327906mbr4002_4

Daily, S. M., Smith, M. L., Lilly, C. L., Davidov, D. M., Mann, M. J., & Kristjansson, A. L. (2020). Using school climate to improve attendance and grades: Understanding the importance of school satisfaction among middle and high school students. *Journal of School Health, 90*(9), 683-693. https://doi.org/10.1111/josh.12929

Donat, M., Gallschütz, C., & Dalbert, C. (2018). The relation between students' justice experiences and their school refusal behavior. *Social psychology of education, 21,* 447-475. https://doi.org/10.1007/s11218-017-9423-9

Durham, R. E., & Connolly, F. (2017). Strategies for Student Attendance and School Climate in Baltimore's Community Schools. Baltimore Education Research Consortium.

Durham, R. E., & Connolly, F. (2017). Strategies for Student Attendance and School Climate in Baltimore's Community Schools. Baltimore Education Research Consortium.

Freeman, J., Wilkinson, S., Kowitt, J., Kittelman, A., & Brigid Flannery, K. (2018). supported practices for improving attendance in high schools: A review of the literature. *Educational Research and Evaluation, 24*(8), 481-503. https://doi.org/10.1080/13803611.2019.1602546

Fryer, L. K., Ginns, P., Howarth, M., Anderson, C., & Ozono, S. (2018). Individual differences and course attendance: why do students skip class?. *Educational Psychology, 38*(4), 470-486. https://doi.org/10.1080/01443410.2017.1403567

Glaesser, D., Holl, C., Malinka, J. et al. Examining the association between social context and disengagement: Individual and classroom factors in two samples of at-risk students. *Soc Psychol Educ 27*, 115–150 (2024). https://doi.org/10.1007/s11218-023-09829-4

Hamlin, D. (2021). Can a positive school climate promote student attendance? Evidence from New York City. *American Educational Research Journal, 58*(2), 315-342. https://doi.org/10.3102/0002831220924037

Havik, T., Bru, E., & Ertesvåg, S. K. (2015). School factors associated with school refusal-and-truancy-related reasons for school non-attendance. *Social psychology of education, 18,* 221-240. https://doi.org/10.1007/s11218-015-9293-y

Hendron, M. C. (2014). School climate, absenteeism, and psychopathology among truant youth.

Henry, K. L., & Huizinga, D. H. (2007). School-related risk and protective factors associated with truancy among urban youth placed at risk. *The journal of primary prevention, 28*, 505-519. https://doi.org/10.1007/s10935-007-0115-7

Heyne, D., Gren-Landell, M., Melvin, G., & Gentle-Genitty, C. (2019). Differentiation between school attendance problems: Why and how?. *Cognitive and behavioral practice, 26*(1), 8-34. https://doi.org/10.1016/j.cbpra.2018.03.006

Hinojo-Lucena, F. J., Aznar-Díaz, I., Cáceres-Reche, M. P., Trujillo-Torres, J. M., & Romero-Rodríguez, J. M. (2020). Sharenting: Adicción a Internet, autocontrol y fotografías online de menores. *Comunicar, 28*(64), 97-108. https://doi.org/10.3916/C64-2020-09

Iacobucci, D., Saldanha, N., & Deng, X. (2007). A meditation on mediation: Evidence that structural equations models perform better than regressions. *Journal of Consumer Psychology,17*, 139-153.

Juvonen, J., Espinoza, G., Knifsend, C. (2012). The Role of Peer Relationships in Student Academic and Extracurricular Engagement. In: Christenson, S., Reschly, A., Wylie, C. (eds)

Kline, R.B. (2015). *Principles and practice of structural equation modeling*. Guilford publications

Kutsyuruba, B., Klinger, D. A., & Hussain, A. (2015). Relationships among school climate, school safety, and student achievement and well being: a review of the literature. *Review of Education, 3*(2), 103-135. https://doi.org/10.1002/rev3.3043

Liang, C. T., Rocchino, G. H., Gutekunst, M. H., Paulvin, C., Melo Li, K., & Elam-Snowden, T. (2020). Perspectives of respect, teacher–student relationships, and school climate among boys of color: A multifocus group study. *Psychology of Men & Masculinities, 21*(3), 345. https://doi.org/10.1037/men0000239

Losier, G. F., Vallerand, R. J., & Blais, M. R. (1993). Construction et validation de l'Échelle des Perceptions de Compétence dans les Domaines de Vie (EPCDV). Science et comportement.

Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of statistical software, 48,* 1-36. https://doi.org/10.18637/jss.v048.i02

Smink, J., & Reimer, M. S. (2005). Fifteen Effective Strategies for Improving Student Attendance and Truancy Prevention. National Dropout Prevention Center Network.

Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of educational research, 83*(3), 357-385. https://doi.org/10.3102/0034654313483907

Wang, M. T., & Holcombe, R. (2010). Adolescents' perceptions of school environment, engagement, and academic achievement in middle school. *American educational research journal, 47*(3), 633-662. https://doi.org/10.3102/0002831209361209

Waters, S. K., Cross, D., & Shaw, T. (2010). How important are school and interpersonal student characteristics in determining later adolescent school connectedness, by school sector?. *Australian Journal of Education, 54*(2), 223-243. https://doi.org/10.1177/000494411005400207

Waters, S., Cross, D., & Shaw, T. (2010). Does the nature of schools matter? An exploration of selected school ecology factors on adolescent perceptions of school connectedness. *British Journal of Educational Psychology, 80*(3), 381-402. https://doi.org/10.1348/000709909X484479

Rizzotto, J. S., & França, M. T. A. (2022). Indiscipline: The school climate of Brazilian schools and the impact on student performance. International *Journal of Educational Development, 94*, 102657. https://doi.org/10.1016/j.ijedudev.2022.102657

Handbook of Research on Student Engagement. Springer, Boston, MA. https://doi.org/10.1007/978-1-4614-2018-7_18

Kearney, C. A. (2008). School absenteeism and school refusal behavior in youth: A contemporary review. *Clinical psychology review, 28*(3), 451-471.

Kutsyuruba, B., Klinger, D. A., & Hussain, A. (2015). Relationships among school climate, school safety, and student achievement and well being: a review of the literature. *Review of Education, 3*(2), 103-135.

Liang, C. T. H., Rocchino, G. H., Gutekunst, M. H. C., Paulvin, C., Melo Li, K., & Elam-Snowden, T. (2020). Perspectives of respect, teacher–student relationships, and school climate among boys of color: A multifocus group study. *Psychology of Men & Masculinities, 21*(3), 345–356. https://doi.org/10.1037/men0000239

Smink, J., & Reimer, M. S. (2005). Fifteen Effective Strategies for Improving Student Attendance and Truancy Prevention. National Dropout Prevention Center Network.

Hamlin, D. (2021). Can a positive school climate promote student attendance? Evidence from New York City. *American Educational Research Journal, 58*(2), 315-342. https://doi.org/10.3102/0002831220924037

Kearney, C. A. (2008). School absenteeism and school refusal behavior in youth: A contemporary review. *Clinical psychology review, 28*(3), 451-471. https://doi.org/10.1016/j.cpr.2007.07.012