## Do You Trust Me? A Systematic Literature Review on Student-teacher Trust and School Identification

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#### Abstract

Trust between a student and a teacher and school identification are described in scientific research as focal points of learning, personal development and satisfaction, and a basis for a positive school culture that can impact the whole community. Yet, both constructs are still challenging scientists as to their components, incidence and links. Additionally, empirical studies have mainly explored the relationships between either student-teacher trust or school identification with proximal constructs, and their impact in other aspects of school life, and few address the two constructs simultaneously. The accuracy of their definition and the grasping of their mutual connections seems an important step to take, to further research and enhance school environments. This study consists of a systematic literature review, which seeks to contribute for the understanding of the latest findings about trust between students and their teachers, and about school identification, in basic education, attempting to clarify their definitions and relations, distinguishing them from other proximal constructs, namely school belonging. The PRISMA Statement (Moher et al., 2009; Page et al., 2018) is adopted as methodological procedure for data collection and analysis. The research protocol includes articles presenting empirical studies, published in peer-reviewed academic journals, between January 2000 and March 2021, accessed in Web of Science and B-On. Results will be presented according to the PICOS approach. Key variables and findings related to both constructs will be discussed. Finally, strengths, limitations, important implications and suggestions for future research on the subject will be briefly addressed.

Keywords: Student-teacher Trust, School Identification, Students' Belongingness to School



#### Introduction

In this study we try to retrieve what recent scientific research has identified as the relevancy and the elements of trust between students and their teachers, in basic schools, and the correlations between those and the relevancy and elements of school identification.

Trust is a latent construct with multi-level significance both in a general social view, as within an educational perspective (Niedlich et al., 2020). Defined in the context of student-teacher relationships as student-teacher trust, it comprises vulnerability, benevolence, honesty, openness, reliability and competence (Bankole, Mitchell, & Tschannen-Moran, 2013).

School identification is an affective construct considered correlated to personal development, academic performance, school improvement and trust among stakeholders, including sense of belonging and valuing (Mitchell, Kensler, & Tschannen-Moran, 2016; Voelkl, 2012).

Trust between a student and a teacher has been identified in scientific literature as a crucial factor of personal development and of the quality of schools as learning communities, enhancing the general social environment, both while the person is growing and when the student has become an adult. Research underlines that trust involves a risk, more acute in contexts of crisis.

Students' trust in their teachers is a specification of the multiple and complex trust relationships that occur in a healthy school community. We adopt the definition by Bankole, Mitchell and Tschannen-Moran (2013), already the result of a research depuration and based on the fivefacet model proposed by Hoy and Tschannen-Moran (1999): the student's trust in his/her teacher implies a "willingness to be vulnerable" based on confidence that the teacher will relate and act with benevolence, honesty, openness, reliability, and competency. The "positive" elements of trust (e.g., benevolence) seem well established in scientific literature. On the contrary, the fact that students and teachers are willing to assume and expose vulnerability seems to us one of the most important points to investigate: that a student is objectively vulnerable to the teacher seems obvious (Bankole, Mitchell, & Tschannen-Moran, 2013); that the teacher is also objectively vulnerable to the students, even if because of different factors, mainly affective, but also professional and institutional, may also be evident (research on teachers' burnout is clear confirming this; on the other hand, teaching and learning are mutually linked). But the willingness to recognize and act positively upon this vulnerability, and upon its reciprocal aspect, seems a point lacking investigation. May it be that this accepted vulnerability constitutes the point of intersection of the two constructs of student-teacher trust and school identification?

School identification springs from two essential human needs, belonging and valuing, possibly thus including a positive expression of personal vulnerability that becomes fulfilled in a communal and institutional reality as a school.

The construct of school identification is most thoroughly considered in recent research by Kristin Voelkl, namely in her chapter in the Handbook of Student Engagement (Voelkl, 2012), in which she reviews the most relevant research on the matter and proposes the following definition: school identification is "an intrinsic form of achievement motivation that encourages students to engage in appropriate learning behaviors (...), that is, an internal desire to achieve, develop competencies, and take pleasure in academic success" (p.194). Its components are identified by Finn (1989) as *belonging* and *valuing*: both rooted in the

psychological theories of human needs (Maslow, 1968), the first comprehends the need to experience a sense of community — "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (Chavis & McMillan, 1986, p.9); the second expresses the individuals' "need to feel their actions are worthwhile and to have a sense of competence and positive self-regard" (Voelkl, 2012, p. 195). The "arena" where the person experiments this competency is valued, either as causing itself a sense of fulfillment or as a factor of another goal attainment. Voelkl does not establish an explicit relation between school identification and student-teacher trust, but the author's section on teachers' relationships with students identifies *teachers' encouragement* as clearly impacting school identification. The elements of teachers of trust), providing clear norms and expectations (which may be included in honesty and openness) and encouraging students' autonomy (which may connect with competence). Cooperative learning — which largely depends on the student-teacher interaction — is presented as an important means to foster identification.

A correspondence between the elements of trust and the elements of school identification may show a useful correlation to foster both dynamics, enhancing the quality of the relations between individuals, and clarifying the characteristics of a positive school environment. The two constructs together may be vital to a healthy school environment.

These conclusions taken from both paths of research — on student-teacher trust and on school identification — make us attempt a future research question: is the fact of experiencing vulnerability both by the student and by the teacher a positive trigger to risking a relationship of reciprocal student-teacher trust which, in turn, finds its institutional dimension in school identification? Experiencing vulnerability corresponds to a relational need of objective attitudes and behaviours (reciprocal benevolence, honesty, openness, reliability, and competency) enacted by individuals — the student and the teacher — but also by a community, the school, to which both individuals feel they belong and which they value as a place where they are accepted and are helped to develop, and where their vulnerabilities are welcome and worked upon.

Scientific research is attempting to keep pace with changes, so as to further reflection and decision making through an adequate analysis of data. It is not an easy task. Systematic reviews of literature contribute to having a broader look over facts and theory and to enhancing the dialogue among the scientific community and between scientists and educators and educational decision makers. The present study aims at being a contribute to this collection of knowledge of facts and theories, and to the dialogue between scientists, thinkers and school stakeholders. There appears to be no recent literature review associating studies on student-teacher trust and studies on school identification. This study intents to fulfil that gap.

#### Method: Systematic Literature Review

We analyzed empirical papers published between January 2000 and March 2021. This time span shows the data and conclusions of the scientific community affected by recent trends and circumstances and allows a manageable number of materials to work with. All of these papers build on previous studies; therefore, the time limit does not necessarily signify a knowledge reduction, for references to previous works assure the continuity of the scientific approach.

We had in consideration peer reviewed articles written in English, Portuguese and Spanish, in an effort to cover the majority of the published material on this subject. Even so, there is the danger of not considering relevant data and reflection, due to time and language limitations.

The search was conducted following the PRISMA statement (Moher et al., 2009). The selection of articles for analysis was made from the Web of Science and B-On data-bases.

The search criteria used the following cues: student\*-teacher\* trust, school identification, student\* belong\* to school\*, combined to allow a thorough coverage of the multiple possible links between the constructs of student-teacher trust and school identification and its proximal area of students' sense of belongingness to school.

As criteria for inclusion in the present study we considered:

a) Peer reviewed articles;

b) Published in English, Portuguese or Spanish, from January 2000 to April 2021;

c) Addressing the trust relationship between students and their teachers, in basic schools, AND/OR the students' identification with school, even if theorized recurring to the proximal construct of "students' sense of belongingness to school", considering positive psychology issues that involve the students' relationship with their teachers.

d) Works using quantitative or mixed approaches, with the exception of one theoretical article (Voelkl, 2012), included because of its importance for the establishing of the construct of school identification.

As criteria of exclusion, we considered:

a) Literature reviews, with the mentioned exception;

b) Non-scientific articles, even if on the subject of study;

c) Scientific articles that address trust or school identification of other school stakeholders, not the students;

d) Scientific articles that address under-graduate or graduate students trust in teachers or school identification;

e) Scientific articles about the relationships between student-teacher trust or school identification and other school issues such as racism, violence, educational policies, multiculturalism, leadership, organizational structure;

f) Scientific articles that address, as principal object, psychological issues of children and adolescents related to mental health risks, gender questions, inclusion, minorities, peer-relationships;

g) Scientific articles that address trust or school identification but aiming mainly at studying academic performance and impact of social-economic status.

A total of 279 papers were found, using web of science and b-on data-bases. After the screening of the respective abstracts, 50 were selected as relevant to answer our question and the other excluded. Within these 50 articles, 23 were selected according to the previous criteria, after examining the abstracts and conclusions looking for quantitative or mixed scientific articles that address teacher-student trust, school identification and aspects of school belongingness which relate to one or to both constructs. From these, after extensive reading, 17 were considered included in our research criteria.

# Findings

### a) Studies that measure and relate student-teacher-trust and school identification

1. Bankole, Mitchell and Tschannen-Moran (2012) applied a single survey form based on the Student Trust in Teachers Scale (Adams & Forsyth, 2009), and on an adaptation of the original Identification with School Questionnaire (ISQ) developed by Voelkl (1996), measuring student achievement with data from the Virginia Standards of Learning (SOL) assessments in English and Mathematics. Paper versions of the survey were administered by teachers to students of third to 12<sup>th</sup> grade classrooms, randomly chosen in the 49 schools of a mid-Atlantic district in the United States and a confirmatory factor analysis was used as measurement model. They confirmed the three hypothesis they had started with: a. that student trust in teachers, student academic press and student identification with school are positively correlated with each other; b. that the three variables would come together to form a latent variable the authors call student academic optimism; c. that all three variables are also strongly correlated with student demographic characteristics. Based on these results, the authors encourage educators to cultivate student-teacher trust, celebrate academics and enhance student identification with school.

2. Mitchell, Kensler and Tschannen-Moran (2016) investigated the effects of students' trust in teachers and of students' perception of safety on school identification. The authors confirmed the two hypotheses of departure, namely that student trust, safety and identification with school covary positively; and that the levels of student trust in teachers and students' perception of safety are school properties that explain different levels of students' identification among different schools. The authors applied a student climate survey composed of three scales — Student Identification with School, Student Trust in Teacher and Student Perception of Safety in an east coast district in the U.S.A. 5441 surveys were analysed, 59.8% of elementary students, 22.6% of middle school students and 17.6% of high school students. School level, minority status and percent free and reduced lunch (as a proxy to SES) were included as covariates. The authors emphasize the importance of including the students' voice in further studies and conclude that student-teacher relationships are the essential factor of cognitive and affective identification of students with school, confirming earlier findings about the link between student-teacher trust and school identification (Adams, 2014; Mitchell et al., 2008).

### b) Studies that measure student-teacher trust and its impact

These studies differ as to the orientation of trust, either students' trust in their teachers or teachers' trust in their students or trust considered as a social dimension, namely collective trust.

3. Lee (2007) investigated the effects of students' trust in teachers on school adjustment, academic motivation and academic performance. The study was applied to 318 7<sup>th</sup> graders in Seoul Middle Schools. The author used the short version of the Students' Trust in Teachers Scale (Lee & Han, 2004) that includes two subscales: cognitive trust and affective trust, combined to reach a total trust relationship score; the School Adjustment Scale (Yoo, 1982), to assess students' perception of school climate and personal adjustment; the Academic Motivation Scale (Yoon, 2003), to verify students' perceived academic motivation; and the end-of-year cumulative grade point average, in Korean, English and mathematics, as the index

of academic performance. The author concluded that students' sense of trust positively influences their school adjustment, academic motivation and, thus, performance.

4. Van Houtte and Van Maele (2012) explored the impact of teachers' trust in students both in academic and vocational tracks. They used data of the Flemish Educational Assessment, ending up with a sample of 3,376 students attending 9<sup>th</sup> and 11<sup>th</sup> grades (U.S.A. equivalence), and 461 teachers in 22 academic secondary schools in Flanders, and 3,475 students and 754 teachers of 28 vocational schools, during the school year of 2004-2005. Belonging at school was assessed using a translation of the Psychological Sense of School Membership scale (Goodenow, 1993). With an exploratory factor analysis, the authors identified perceived teacher support as a factor within sense of belonging and decided to treat the other factors as one scale including peer acceptance, rejection items, and general belonging items. School type was the main independent variable, distinguishing academic from technical-vocational schools. The results indicated that while in general, school belonging was lower in vocational schools, when the variable faculty trust was introduced the difference between school types ceased to be relevant as to school belonging. Teachers trust in students at school level and parental support at student level were the main determinants of students' sense of belonging. The researchers underline a new result: that faculty's trust in students assessed by the teachers themselves and students' perception of teachers' support are different concepts, related but not interchangeable.

5. Adams (2014) conducted a study to verify if collective student trust is a positive factor for urban elementary students and confirmed that a culture of collective student trust enhanced identification with school, internal control over learning tasks, and math and reading achievement. The author traced the empirical and conceptual frame of the construct of collective trust embedded in the individual psychologic needs that emerge as a social factor, which constitutes not the sum of the individual beliefs, but an intangible common resource that is offered to newcomers as a group norm and common asset. The study was conducted in an urban school district in a southwestern state of U.S.A. 1.646 surveys were analysed. Surveys included an adaptation of Voelkl's (1997) Identification with School Ouestionnaire; the Self-Efficacy for Self-Regulated Learning Scale (Bandura, 2006; Zimmerman & Schunk, 2008); the Student Trust in Teachers Scale (Adams & Forsyth, 2009); and scale scores from the statemandated math and reading achievement tests. The first stage of the study was to verify if student trust in teachers, school identification and self-regulated learning qualified as collective properties, using Intraclass Correlation Coefficients, ICC-1 and 2 (Van Houtte & Van Maele, 2011). Then a model-building process in HLM 6.08 tested the links between collective student trust and school identification, self-regulated learning and math and reading achievements. The author concludes that the relational environment built by collective student trust enhances students' academic excellence.

6. Ahmadi, Hassani and Ahmadi (2020) explored student-level and school-level variables linked to sense of belonging to school. Emphasising the importance of belonging to school during the risky years of adolescence, the authors verified the factors that increase that essential link to school which enhances personal and academic development. The target population was all high school students in the West Azarbaijan province of Urmia, in 2018/19; 11<sup>th</sup> graders were chosen as a cluster and a total of 1200 students were chosen randomly, resulting in 1003 usable student questionnaires. The study used the Student Sense of Belonging Scale, present in the PISA (2000) student survey. Among other factors such as socio-economic status, parental involvement, sense of fairness, academic self-efficacy and peer support, a trust relationship between the students and their teachers was verified as positively relevant for the students' sense of school belonging.

#### c) Studies that address school identification

7. Antonio, Carvalho, Martins and Santos (2020) studied the relation between teachers' feedback and school identification; and the role of school identification as mediator between teachers' feedback and students' behavioral engagement. The authors also aimed at verifying the changes in these constructs as students become older and progress at school; and between academic courses and professional ones. 2,534 students of public and private Portuguese schools, in 6<sup>th</sup>, 7<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> grades, participated in the study, 69.3% attending academic courses and 30.7%, professional courses. The Questionnaire Feedback, Identification and School Trajectories (Carvalho et al., 2005) was used, combined with the Teachers Feedback Scale (Carvalho, 2014); the School Identification Scale (Conboy et al., 2015) and a nine-item scale (Carvalho et al., 2016) to assess students' behavioral engagement. The authors conclude that there was a significant positive relation between students' perception of effective teachers' feedback and school identification; that school identification mediated students' engagement with school activities, enhanced by effective teachers' feedback; that there was not less dependence of older students on teachers' feedback; though students in 6<sup>th</sup> and 7<sup>th</sup> grades reported more effective teachers' feedback than in the 9<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> years. School identification was found to be less in the highest years. Students in the professional track show higher levels of identification with school.

8. Simonsen and Rundmo (2020) developed a study that tried to compare the impacts of school identification and self-efficacy on school satisfaction of Norwegian high-school students. Framing their study on the importance of social identification as a response to the fundamental need of belonging, they point at social identity leadership (Haslam et al., 2011) as an essential feature of teachers' mission. The authors applied a survey to 794 first year high-school students, from both general studies and vocational education, two months after the beginning of the school year. Questionnaires were used including items to account for School Satisfaction, Cognitive and Affective Identification, Social Identification, Social Identification with the Teachers and with the Classmates – Group Identification Questionnaire, the Identity Leadership Inventory Survey, Multiple Group Membership, General Self-Efficacy and Academic Self-efficacy Scale. The authors found that students' affective identification with school was the most relevant factor of school satisfaction and showed a strong association with self-efficacy, indicating the social feature of self-efficacy. The study also pointed at a relevant link between teachers' social identity and students' identification with the teachers. Finally, the authors account for a strong relation between identification with classmates and school identification, stressing the importance of educators' management of the students' identification process, to avoid alienation dynamics. In conclusion, the authors point out that the role of self-efficacy in enhancing school satisfaction seems minor to that of school identification, and that self-efficacy itself beneficiates from school identification. The authors proposed to contribute to a "new psychology of classroom management", as a social identity leadership process, uniting teachers and students in a common quest.

9. Bromhead, Lee, Reynolds, Subasic and Turner (2017) conducted a study with 340 grade 7th and 9th Australian students, in which a) school climate and school identification were identified as positively correlated with numeracy and writing and b) school identification was revealed as mediator between school climate and achievement. The authors recommended attention to the importance of the group and of social identification for learning.

### d) Studies that identify school belonging

Along our research, we found several studies that refer to school belonging. This construct is one of the elements of school identification, according to Voelkl (2012) and tends to absorb also the other element of school identification, valuing, for these constructs are both latent in scientific literature and tend to be proximal. We bring here the studies where "school belonging" or "sense of school belonging" seem to mean the same as "school identification".

10. Hogberg, Johansson, Peterson and Strandh (2021) accounted for a declining of school belonging over the last two decades and try to understand its causes. The authors focus on 15-16 years old students and use individual-level survey data from the Swedish version of the Programme for International Student Assessment (PISA), in which Swedish students reported the highest scores of School Belonging in the years between 2000 and 2003, declining after that, being thus exemplificative of a general trend observed in the other countries participating in the programme. The first objective of the study was to research the characteristics of the Swedish trend: the authors found a polarized tendency, where there is a general decline, but accentuated in students from low-income and migration backgrounds; there is also a declining trend of school belonging for students with low-achievement, especially after 2012, which seems disproportionate with the average. The second objective of the study was to find the causes of this declining. But, with the exception of mathematics anxiety between 2003 and 2012, the other variables, namely, school disciplinary climate and student-teacher relationships did not explain it. Although only as a theoretical hypothesis, the authors suggest that, since the declining in Sweden coincided with a performance-oriented shift in educational policies, that shift can explain the data, alienating from school the most fragile students. The authors appeal to the necessity of more research on the field.

11. Konishi, Parent and Wong (2019) explored the relevance of Student-Teacher Relationships (STRs) and Sense of School Belonging (SSB) for future orientation of adolescents, which includes expectation, aspirations, planning, anticipation of future consequences and time perspective (Lindstrom-Johnson et al., 2014). Underlining the social variables of future orientation, the authors proposed to answer two questions: do STRs and SSB predict educational and career expectations? And do SSB and educational expectations interfere in the impact that school climate variables have on career expectations? The study included 3,238 students aged 15 years, who participated in the Hong-Kong 2003 Program for International Student Assessment (PISA) and answered the optional questionnaire Educational Career and Information Communication Technology. Results seemed to point at students having higher expectations when they experience positive relationships with their teachers and sense that they belong to school. Interestingly, while STRs seem to influence mostly the individual sense of school belonging and educational expectations, it is school belonging that in turn seems to impact directly on career expectations.

12. Allen, Kern, Hattie, Vella-Brodick and Waters (2018) presented a meta-analysis of results found in 51 quantitative studies, published between 1993 and 2013 involving 67.378 students aged 12 to 18, in schools in Australia, New Zealand and the U.S.A. The authors tried to identify which of the ten themes linked to school belonging are actually significant as causal or associated with school belonging. Individual and meso level factors were analyzed as relevant; to our present review, the most significant results were the ones obtained looking at the micro-level factors, specially at student-teacher relationships. At this level teacher support was found as the most relevant to school belonging, to the point of permitting correction of negative

family and peer interactions. Teachers support, combined with the help of parents in a wholeschool approach to students was found as the most relevant factor.

13. Gizir and Uslu (2017) studied the role of student-teacher relationships, peer relationships and family involvement in adolescent school belonging. They applied a survey to 815 seventh and eighth grade students of state schools in four central districts of the Mersin province in Turkey. The authors used the Sense of Belonging sub-scale of the Perceived Cohesion Scale (Bollen & Hoyle, 1990); the Student-Teacher Relationships and Student Interpersonal Relationships, sub-scales of The School Climate Survey (Haynes, Emmons, & Comer, 1993); and the Parent Involvement, sub-scale of the Show Me Character Student Survey (Marshall & Caldwell, 2006), divided into Parent Involvement at Home and Parent Involvement at School. All the variables were shown to impact positively on school belonging, and teacher-student relationship was by far the most significant and associated with the other personal, peer and parent related factors.

14. Chhuon and Wallace (2012) proposed an interesting construct, namely, "being known", as describing the adolescents' perceptions of development tasks, psychological perceptions and effective teaching through which teachers influence students school belonging. The researchers used a sample of 77 high school students, in Los Angeles (California), Pittsburgh (Pennsylvania) and Saint Paul (Minnesota) aged14 to 20, recruited in development programs and different schools, and conducted focus groups with an average of 5, 6 participants, and a subsequent analysis of the raw data through a conceptualization process. Findings underlined the accuracy of students perceptions and the importance that students give to three items: teachers' devotion to teaching and their competence and effectiveness in doing so, meeting the real student and adapting methods and developing a caring relationship with each; the instrumental support that teachers are capable of mobilizing to actually facilitate and foster students' academic goals, viewed as a professional responsibility that should always be present; the "benefit of the doubt" attitude, that allows for respect, tolerance and acceptance of the turmoil naturally present in a process of gradual independent decision making on part of the students, essential to their growth, opposite to negative prejudices and generalizations about students. The authors conclude that the student-teacher relationship is the most relevant relationship for students, for it is within this relationship that the essential questions of adolescence — who am I? who can I be? — are looked at and cared for.

15. Johnson (2009) verified, through a mixed methods study, several factors that foster student belonging to school and enhance learning and personal development. The author compared students' perceptions in two north-western High Schools in U.S.A., one that presents a traditional structure and one that is described as non-traditional. Belongingness is measured both through a Psychological Sense of School Membership Scale (PSSM) and through a one-time questionnaire about teacher support perception during a week of Experience Sampling Method (ESM; Csikzsentmihalyi, 1994), to a self-selected group of students in both schools. In conclusion, the author points at teacher support and adolescents' sense of school membership as important factors of learning and motivation.

### e) Studies that address student-teacher relationships that seem to correspond to trust

16. Hughes (2011) conducted the first longitudinal study about elementary students' perceptions of teachers' support, and their effect on academically outcomes. The author distinguished students' perceptions from teachers' perceptions and used a sample of 784 academically at-risk third graders, that she tested with a Teacher-Student Relationships

Questionnaire, looking at school outcomes in the following year. The study suggested that research should take into account both the child's and the teacher's perspectives and that a positive and warm relationship on part of the adult is capable of mitigating conflict and significantly influence the child's sense of belonging and academic engagement, fostering outcomes.

17. Vaz et al. (2015) studied the personal and contextual contributors to school belongingness among primary school students in Australia, through survey questionnaires applied to 395 6<sup>th</sup> and 7<sup>th</sup> grades students, and data treated by linear regression models. Demographic variables account for 2.5% of SB; student personal factors account for 49.5%; school factors, among which, teacher-student relationships, account for 13.9%; family factors for 3%. Authors propose that a democratic school environment will influence higher levels of school belongingness through enhancing the personal and school relevant variables.

#### **Discussion and Conclusion**

This systematic literature review may infirm of methodological limitations, for it may ignore important contributions that do not fulfill the formal criteria of inclusion. Further research on the subject, both empirical and theoretical, will be useful. Even so, this seems enough material to show that research about student-teacher trust and school identification are still scarce, taken into account the importance of both constructs for students, teachers and schools all over the world.

The elements of both constructs seem clearly identified in some research, but not yet generally acknowledged as a common theoretical body, that could help understand reality and enhance positive school communities. School identification seems a "stronger" construct than mere "school belonging" or "school sense of belonging", for its dual components of belonging and valuing demand a critical approach on top of an affective one. On the other hand, the construct of "belonging", in the studies above, seems to comprehend "valuing" on part of the student, even if not so explicitly assumed.

The risk of vulnerability, explicitly taken when it comes to trust, and the conscience of a need, present within "belonging" and "valuing", both seem fragilities which may turn into possibilities and advantages, because they can cause positive reciprocal dynamics and interactions, that, if composed and experienced together, may avoid abuse and enhance opportunities for protagonists, both individuals and communities. Advantages and positive impacts of both constructs in students' development and school environments seem well established and verified by empirical research.

#### References

- Adams, C. M. (2014). Collective student trust: A social resource for urban elementary students. *Educational Administration Quarterly*, *50*(1), 135-159.
- Adams, C. M., Forsyth, P. B., & Mitchell, R. M. (2009). The formation of parent-school trust: A multilevel analysis. *Educational Administration Quarterly*, 45(1), 4-33.
- Ahmadi, S., Hassani, M., & Ahmadi, F. (2020). Student-and school-level factors related to school belongingness among high school students. *International Journal of Adolescence and Youth*, 25(1), 741-752.
- Allen, K., Kern, M. L., Vella-Brodrick, D., Hattie, J., & Waters, L. (2018). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review*, 30(1), 1-34.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds.), Self-efficacy beliefs of adolescents (Vol. 5, pp. 307-337). Information Age Publishing.
- Bollen, K. A., & Hoyle, R. H. (1990). Perceived cohesion: A conceptual and empirical examination. *Social Forces*, *69*(2), 479-504.
- Carvalho, C., Conboy, J., Santos, J., Fonseca, J., Tavares, D., Martins, D., & Gama, A. P. (2015). An integrated measure of student perceptions of feedback, engagement and school identification. *Procedia-Social and Behavioral Sciences*, 174, 2335-2342.
- Carvalho, C., Santos, N. N., António, R., & Martins, D. S. M. (2020). Supporting students' engagement with teachers' feedback: The role of students' school identification. *Educational Psychology*, 1-20.
- Debnam, K. J., Johnson, S. L., Waasdorp, T. E., & Bradshaw, C. P. (2014). Equity, connection, and engagement in the school context to promote positive youth development. *Journal of Research on Adolescence*, *24*(3), 447-459.
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59(2), 117-142.
- Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *The Journal of Early Adolescence*, *13*(1), 21-43.
- Haynes, N. M., Emmons, C., & Comer, J. P. (1993). *Elementary and middle school climate survey*. Yale University Child Study Center.
- Högberg, B., Lindgren, J., Johansson, K., Strandh, M., & Petersen, S. (2021). Consequences of school grading systems on adolescent health: Evidence from a Swedish school reform. *Journal of Education Policy*, 36(1), 84-106.
- Hoy, W. K., & Tschannen-Moran, M. (1999). Five faces of trust: An empirical confirmation in urban elementary schools. *Journal of School Leadership*, 9(3), 184-208.

- Hughes, J. N. (2011). Longitudinal effects of teacher and student perceptions of teacherstudent relationship qualities on academic adjustment. *The Elementary School Journal*, 112(1), 38-60.
- Johnson, L. S. (2009). School contexts and student belonging: A mixed methods study of an innovative high school. *School Community Journal*, *19*(1), 99-118.
- Lee, S. J., & Han, J. S. (2004). The development and validation of the Teacher Trust Scale. *The Journal of Psychology*, *18*(3), 23-29.
- Lim, S. K., & Lee, H. S. (2007). The effects of self-esteem, relationships with parents and peer relationships on adolescents' school adjustment. *Journal of Korean Home Economics Education Association*, 19(3), 169-183.
- Marshall, J. C., & Caldwell, S. D. (2006). *Core measures ShowMe character*. RetrievedAugust, 19, 2009, from http://www.showmecharacter.com/Core Measures.pdf.
- Martins, D., & Carvalho, C. (2014). Students' perceptions about teachers' feedback in a career construction: A study in vocational education. *Electronic Journal of Research in Educational Psychology*, *12*(2), 303-324.
- Maslow, A. (1968). Some educational implications of the humanistic psychologies. *Harvard Educational Review*, 38(4), 685-696.
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14(1), 6-23.
- Mitchell, R. M., Forsyth, P. B., & Robinson, U. (2008). Parent trust, student trust and identification with school. *Journal of Research in Education*, 18(1), 116-124.
- Mitchell, R. M., Kensler, L., & Tschannen-Moran, M. (2018). Student trust in teachers and student perceptions of safety: Positive predictors of student identification with school. *International Journal of Leadership in Education*, 21(2), 135-154.
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Group preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Med*, *6*(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097.
- OECD. (2003). Student Engagement at School, a Sense of Belonging and Participation Results from PISA 2000. OECD Publishing, Paris.
- OECD. (2014). PISA 2012 Technical Report. OECD Publishing, Paris.
- OECD. (2017a). PISA 2015 Technical Report. OECD Publishing, Paris.
- OECD. (2017b). PISA 2015 Results (Volume III): Students' Well-Being. OECD Publishing, Paris.

- OECD. (2019b). *PISA 2018 Results (Volume I)*: What *Students Know and Can Do*. OECD Publishing, Paris.
- OECD. (2020). PISA 2018 Technical Report. OECD Publishing, Paris.
- Reynolds, K. J., Lee, E., Turner, I., Bromhead, D., & Subasic, E. (2017). How does school climate impact academic achievement? An examination of social identity processes. *School Psychology International*, 38(1), 78-97.
- Schiefele, U., & Csikszentmihalyi, M. (1994). Interest and the quality of experience in classrooms. *European Journal of Psychology of Education*, 9(3), 251-269.
- Simonsen, I. E., & Rundmo, T. (2020). The role of school identification and self-efficacy in school satisfaction among Norwegian high-school students. *Social Psychology of Education*, 23(6), 1565-1586.
- Subašić, E., Reynolds, K. J., Turner, J. C., Veenstra, K. E., & Haslam, S. A. (2011). Leadership, power and the use of surveillance: Implications of shared social identity for leaders' capacity to influence. *The Leadership Quarterly*, 22(1), 170-181.
- Tschannen-Moran, M., Bankole, R. A., Mitchell, R. M., & Moore, D. M. (2013). Student academic optimism: A confirmatory factor analysis. *Journal of Educational Administration*, *51*(2), 150-175.
- Uslu, F., & Gizir, S. (2017). School belonging of adolescents: The role of teacher–student relationships, peer relationships and family involvement. *Educational Sciences: Theory & Practice*, *17*(1), 63-82.
- Van Maele, D., & Van Houtte, M. (2012). The role of teacher and faculty trust in forming teachers' job satisfaction: Do years of experience make a difference?. *Teaching and Teacher Education*, 28(6), 879-889.
- Vaz, S., Falkmer, M., Ciccarelli, M., Passmore, A., Parsons, R., Tan, T., & Falkmer, T. (2015). The personal and contextual contributors to school belongingness among primary school students. *PLoS One*, 10(4), e0123353.
- Veiga, F. H., Robu, V., Conboy, J., Ortiz, A., Carvalho, C., & Galvão, D. (2016). Students' engagement in school and family variables: A literature review. *Estudos de Psicologia (Campinas)*, 33(2), 187-197.
- Voelkl, K. E. (1996). Measuring students' identification with school. *Educational and Psychological Measurement*, *56*(5), 760-770.
- Voelkl, K. E. (1997). Identification with school. *American Journal of Education*, 105(3), 294-318.
- Voelkl, K. E. (2012). School identification. In S.L. Christenson et al. (Eds.), Handbook of Research on Student Engagement, 193 DOI 10.1007/978-1-4614-2018-7\_9, Springer Science+Business Media, LLC 2012 (pp. 193-218).

- Wallace, T. L., Ye, F., McHugh, R., & Chhuon, V. (2012). The development of an adolescent perception of being known measure. *The High School Journal*, *95*(4), 19-36.
- Wong, T. K., Parent, A. M., & Konishi, C. (2019). Feeling connected: the roles of studentteacher relationships and sense of school belonging on future orientation. *International Journal of Educational Research*, 94, 150-157.
- Yoon, M. (2003). *Effects of thinking styles on academic achievement with the mediators of academic motivation and subject-specific interests*. [Unpublished doctoral dissertation]. Korea University.