

Measuring School and Teacher Academic Optimism in Diverse School Contexts

The Validation of the adapted Survey for Academic Optimism

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Abstract

Academic optimism is the reflection of a triadic set of interactions between efficacy, trust, and academic emphasis, which positively correlates with students' performance, also after controlling for previous performance, SES and other demographic variables. This study focuses on refining and validating existing school and teacher academic optimism questionnaires. Cognitive interviews (n = 5), a pilot study (n = 106) and a large-scale study (n = 1061) were conducted with teachers from urban secondary schools in order to develop a new measurement instrument and test its content, cognitive and construct validity as well as the internal consistency of the individual scales. We provide an in-depth understanding of the underlying constructs and equip academics and practitioners with a valid aSAO-questionnaire to measure academic optimism, both at the collective school level and at the individual teacher level.

Key words: academic optimism, school effectiveness, educational inequality, validation, efficacy, trust, academic emphasis

1 Introduction

For several decades, educational scientists have been looking for school characteristics that positively influence students' learning outcomes after controlling for previous performance, socioeconomic status (SES) or other demographic variables (Reynolds et al., 2014). As student background characteristics tend to be stronger predictors of student achievement than most school-level variables, the question of how to improve performance and promote equal opportunities at the same

time, is prominent in school effectiveness research (Van den Branden, Van Avermaet, & Van Houtte, 2011). In an attempt to integrate previous research on school effectiveness, specifically with regard to children in disadvantaged positions, Hoy and colleagues introduced the concept of academic optimism (Hoy, Tarter, & Woolfolk Hoy, 2006a). The present study argues there are still measurement issues lingering in ongoing academic optimism research and to this end elaborates on the current literature to validate a teacher questionnaire that enables a more refined measurement of this broad concept in schools.

School academic optimism is a latent construct consisting of three interrelated subconcepts: (1) collective efficacy, (2) faculty trust in students and their parents and (3) collective academic emphasis (Hoy, Tarter, & Woolfolk Hoy, 2006b; McGuigan & Hoy, 2006). As empirical studies have repeatedly found a positive relation between school academic optimism and students' cognitive performance, even after controlling for previous performance, SES, migration background or other demographic variables (Boonen, Pinxten, Van Damme, & Onghena, 2014; Hoy et al., 2006b; Mitchell, Mendiola, Schumacker, & Lowery, 2016; Wu & Lin, 2018), school academic optimism and its subconcepts appear to be a powerful lever in promoting achievement for every student. Because of this proven impact, and in an attempt to further unpack the affordances of academic optimism, the framework has been extended with teacher academic optimism as an individual quality of educators (Woolfolk Hoy, Hoy, & Kurz, 2008). Whereas school academic optimism is defined as a collective property of the school (Hoy, 2012), teacher academic optimism can be described as an individual teacher's attitude about their ability to teach, to build trusting relationships

with students and their parents, and to promote academic emphasis (Beard, Hoy, & Woolfolk Hoy, 2010; Wu & Lin, 2018). This means that in the search for factors affecting student achievement that go beyond SES, two malleable characteristics have been identified: a collective one, characterized by a schools' culture, and an individual one, as a characteristic of the teachers themselves (Beard et al., 2010).

Although the impact of academic optimism has been established, both theoretically and empirically, questions on how the concept can be deepened and how schools can foster a culture of academic optimism largely remain unclarified (Hong, 2017; Mitchell et al., 2016). To properly address the academic call for more comprehensive research investigating academic optimism, valid measurement instruments of academic optimism, integrating the subconcepts, are needed, as well as cross-cultural validation of those comprehensive instruments. At the same time, such instruments will also be key for developing a practice-oriented policy on academic optimism in schools. These policies, and the projects and strategies implemented in the wake of them, will be more successful when they are evidence-based, relying on results obtained by valid measurement (Creemers & Kyriakides, 2015). Therefore, the present study focusses on revising and validating existing academic optimism questionnaires, as originally proposed by Hoy et al. (2006a) and Woolfolk Hoy et al. (2008). Moreover, as academic optimism has mainly been researched in North America and certain Asian regions, this study also looks into the possibilities of transferring the concept to Western Europe, and in particular to urban secondary schools in Flanders. The educational system in Flanders, the northern, Dutch-speaking region of Belgium, is characterized by an early tracking system and a constitutionally enshrined policy of free school choice, both leading to highly socioeconomically and/or ethnically segregated schools (Vantieghem & Van Avermaet, 2018). This results in a very diverse educational landscape, enabling researchers to study phenomena in different

types of school compositions. As academic optimism varies with the socioeconomic (Boonen et al., 2014) and ethnic (Wu & Lin, 2018) composition of the school, Flemish urban secondary schools form an interesting case for extending the knowledge base regarding academic optimism. At the same time, we respond to the need for a Dutch version of the academic optimism questionnaires, focusing on these secondary schools. Consequently, our primary aim is to ensure the content validity, cognitive validity and construct validity of a questionnaire that addresses both school academic optimism and teacher academic optimism in secondary schools. The study is guided by two overarching research questions: (1) (how) can existing questionnaires on academic optimism be improved by adopting a more refined yet holistic view? And (2) to what extent is this adapted survey for academic optimism (aSAO) valid for measuring academic optimism in secondary schools?

Before we discuss our three-phase process of revising, adapting, piloting, and validating the questionnaires in depth, we start by presenting the state of the art regarding the construct of academic optimism.

2 Conceptual framework

2.1 Academic optimism

School effectiveness research is strongly shaped by the search for school characteristics that make a difference to student achievement, regardless of student population. Building on this comprehensive body of research, Hoy et al. (2006a) identified a link between three critical school characteristics with a particularly positive effect on student outcome: collective efficacy, faculty trust in students and their parents, and collective academic emphasis. Theoretically, collective efficacy involves the shared perception of teachers that the team's efforts have a positive effect on their students (Goddard, Hoy, & Woolfolk Hoy, 2004). Faculty trust is the team's willingness to be vulnerable towards students and parents, based on the confidence that the latter will respond positively (Hoy &

Tschannen-Moran, 2003). Collective academic emphasis encompasses the school's focus on each student's academic success (Hoy, 2012). As these three variables appeared to be strongly correlated, the researchers also investigated their underlying properties (Hoy et al., 2006a). The optimistic nature of both efficacy (which is embedded in a positive perspective) and trust (which requires taking a leap of faith in others), combined with the focus that academic emphasis gives to this sense of optimism, led the researchers to identify a latent construct labelled *school academic optimism* (Hoy et al., 2006a).

Numerous empirical studies confirmed that school academic optimism is a second-order latent construct, composed of efficacy, trust and academic emphasis, and confirmed a strong positive correlation between academic optimism and student outcomes (Boonen et al., 2014; Hoy et al., 2006b; Mitchell et al., 2016; Wu & Lin, 2018). The significance of these findings is manifold. As the construct has a positive impact on all students, it enables educational practitioners to develop a policy that benefits everyone – and what is more, a culture of academic optimism can be learned as it is inherently malleable, meaning that a pessimistic school can become optimistic (Hoy et al., 2006b). Moreover, the three subconcepts are comprehensive as they represent a cognitive, affective, and behavioural dimension (McGuigan & Hoy, 2006). Collective efficacy, or the school team's conviction of being successful in the teaching task, represents the cognitive dimension. Trust among teachers, students and parents, as an emotional response, is the affective dimension of the construct. Academic emphasis, manifesting as a school wide focus on academic success, constitutes the behavioural dimension (Wu, Hoy, & Tarter, 2013).

Whereas school academic optimism is a characteristic of a collectively shared school culture and reflects a normative pattern, teacher academic optimism pertains to the individual dimension of academic optimism. The subconcepts underlying school academic optimism and teacher academic optimism are inherently the same, but they differ in

perspective: teacher academic optimism is a latent construct that consists of the individual teacher's sense of efficacy, their trust in students and parents, and their focus on promoting academic emphasis (Beard et al., 2010; Woolfolk Hoy et al., 2008). Earlier research suggests that between-school variance in teacher academic optimism is predicted by school academic optimism (Hong, 2017; Wu & Lin, 2018).

In the interest of conceptual clarity, we will elaborate on the three subconcepts (efficacy, trust and academic emphasis) one by one, including a discussion of the difference between the two levels (school and teacher level).

2.2 Efficacy

Efficacy is the cognitive dimension of academic optimism (Beard et al., 2010). It builds on the notion of self-efficacy as originally formulated by Bandura (1994, p.72): a person's beliefs "about his or her capabilities to produce designated levels of performance that exercise influence over events that affect their lives".

Collective efficacy entails the shared perception of teachers that the team's efforts have a positive effect on their students' learning (Goddard et al., 2004). It concerns the faculty's beliefs and expectations about their ability to be successful in teaching all children, also those who are less motivated or face more difficulties that may hinder learning (Wu, 2013). Schools with a high level of collective efficacy will act upon challenging goals with strong organizational effort and determination towards successful student achievement (Goddard, 2002). Collective beliefs about the team's teaching abilities are powerful, as they influence the choices that are made, the standards the team maintains, the confidence they possess, and their persistence to work towards students' success (Kirby & DiPaola, 2011; McGuigan & Hoy, 2006). *Teacher efficacy* is the extent to which individual teachers believe in their personal ability to influence the performance of their students, even those who are less motivated or learning-oriented (Woolfolk Hoy et al., 2008) and those who face obstacles related to a low

SES or migration background (Forsyth, Adams, & Hoy, 2011). Efficacious teachers are resilient, persistent and take responsibility for student performance (Forsyth et al., 2011).

Both collective (school) efficacy and individual (teacher) efficacy play a powerful role in schooling, not only in terms of teachers' motivation to educate, but also in terms of student engagement (Bakhshae & Hejazi, 2017) and student achievement (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). Nevertheless, research has shown that teachers in socioeconomically disadvantaged schools report lower feelings of collective and teacher efficacy compared to teachers in more socioeconomically privileged schools (Goddard et al., 2004; Woolfolk Hoy et al., 2008), even though both forms of efficacy appear to predict performance better than SES or migration background (Carroll et al., 2009; Hoy et al., 2006a). As schools with a strong sense of collective efficacy have powerful normative and behavioural influences on the school's culture that reinforce teachers' beliefs of self-efficacy (Goddard et al., 2004), it is undeniably important to have robust and comprehensive measurements to grasp both efficacy dimensions.

2.3 Trust in students and parents

Trust in students and parents is about schools' and teachers' readiness to form trusting relationships with students and their parents (Beard et al., 2010) by creating an environment in which teachers, students and parents can interact and cooperate in a safe and mutually supportive way (Hong, 2017). It is symbolized by a positive emotional response towards students and parents (Wu & Sheu, 2015). As human interdependence is identified as an essential condition within these trusting relationships, the willingness to be vulnerable is assumed to be a pivotal facet of trust (Van Maele & Van Houtte, 2009). It allows students to feel comfortable to make mistakes and learn from them, and stimulates parents to believe that teachers will have their children's best interest in mind (Beard et al., 2010).

Consequently, *faculty trust in students and parents* addresses the willingness of the

team to be vulnerable towards students and parents, based on the confidence that the latter will respond positively (Hoy & Tschannen-Moran, 2003). It is grounded in a shared sense of the other party's trustworthiness (Forsyth et al., 2011) and is a stable, socially constructed normative condition that is part of the school culture (Adams & Forsyth, 2013). *Teacher trust in students and parents* is the level of trust that an individual teacher has in their students and the parents of those students (Van Maele & Van Houtte, 2012). Even though faculty trust and teacher trust are both products of actions and interactions of school members, they are distinct constructs: teacher trust is an individual emotional state that may or may not be shared by others, while faculty trust is a norm that is formed within the culture of a school (Adams & Forsyth, 2013).

The reciprocal character of trust entails that higher student achievement produces even greater levels of trust, while low student achievement will lead to a vicious circle of decreasing trust (Tschannen-Moran & Hoy, 2000). Trust in students and parents correlates positively with learning growth (Dewulf, van Braak, & Van Houtte, 2017), and has a decisive impact on the extent to which the interactions between teachers, students and parents are productive (Goddard et al., 2001). Research shows a negative correlation between trust and the share of lower SES or minority students in schools: the larger the ratio of these student groups, the lower the levels of trust among teachers towards students and parents (Dewulf et al., 2017; Van Maele, Forsyth, & Van Houtte, 2014). As trust is an important predictor of student achievement, these hampered trust relationships are not without consequence (Belfi, Gielen, De Fraine, Verschueren, & Meredith, 2015), particularly because the amount of trust teachers have in students and parents can outweigh the effects of school composition in terms of poverty and migration background (Goddard et al., 2001) and can thus reduce educational inequality.

Although previous factor analyses claimed trust in students and trust in parents together constitute one referent (Goddard et al., 2001;

Hoy et al., 2006a), we question the generalizability of these findings, especially in diverse urban secondary schools. Teacher-parent contact correlates negatively with the age of children (Scott, 2016), while regular contact between parents and schools is fundamental for building trust relationships (Hoy & Tschannen-Moran, 1999). In addition, teachers expect less involvement of parents with a low SES or migration background (Clycq, Nouwen, & Vandenbroucke, 2014), which can put extra pressure on these trusting relationships. Furthermore, as teachers must deal with conflicting demands from students and parents, it seems more likely that trust in students and trust in parents are conceptually separate but empirically related concepts (Van Maele & Van Houtte, 2009).

2.4 Academic emphasis

Academic emphasis pertains to the focus on each student's academic success (Hoy, 2012). High yet achievable goals are set, rooted in the belief that all students are able to reach these objectives (Hoy et al., 2006a). The school environment is learning-oriented, students and teachers strive for and respect academic success (Goddard, Sweetland, & Hoy, 2000). Academic emphasis is the behavioural dimension of academic optimism and expresses how serious schools and teachers are about their goal of educating all students (Allen, 2011).

Collective academic emphasis refers to the school members' shared perspective on valuing education (Goddard et al., 2000). The underlying question is whether the culture of the normative reference group (i.e., students and teachers in one's own school) is more or less academically oriented (Van Houtte, 2002). Schools with a primary focus on learning, hard work and achievement will have students who are motivated to meet those high expectations (Hoy et al., 2006b). *Teachers' sense of academic emphasis* is the degree to which teachers set high academic standards in their classroom (Wu & Lin, 2018) and find ways to engage students to aspire to those standards (Beard et al., 2010). It is about emphasizing academic behaviour within the classroom walls (Wu & Lin, 2018)

and extending the time students successfully and actively spend on school-related tasks (Woolfolk Hoy et al., 2008). For teachers' sense of academic emphasis to be high, teachers must believe in the potential of all students, as this leads to managerial and instructional decisions in line with these expectations (Rubie-Davies, Peterson, Sibley, & Rosenthal, 2015; Woolfolk Hoy et al., 2008). However, research indicates that teachers in schools with higher percentages of lower SES and minority students, perceive their students to be less teachable and less able to meet those academic expectations (Van Maele & Van Houtte, 2011; Vervaeke, D'hondt, Van Houtte, & Stevens, 2016). On the other hand, schools with high proportions of advantaged students have a more pronounced normative, academic climate (OECD, 2010; Thys & Van Houtte, 2016).

2.5 A triadic reciprocal interaction

The subconcepts of academic optimism interact and reinforce each other in a triadic reciprocal way, in order to produce an optimistic school culture and optimistic teachers who foster student learning (Hoy, 2012; Wu & Lin, 2018). Teachers who trust their students set higher expectations (Woolfolk Hoy et al., 2008) and are more likely to establish a learning climate that focuses on academic success (Van Maele et al., 2014). In schools where faculty trust is high, a positive performance culture is expected (Adams & Forsyth, 2013). Simultaneously, trust promotes efficacy, because teachers believe that their efforts to improve student achievement are not hindered by students and parents (Wu & Lin, 2018). And likewise, trust is encouraged by efficacy (Hoy et al., 2006b). When teachers perceive themselves as capable of teaching, they are more inclined to be vulnerable and to trust parents and students (Wu & Lin, 2018). Finally, when efficacy beliefs are high and teachers are convinced they can make a difference in student learning, they will raise the bar and strive for academic success (Kirby & DiPaola, 2011). And as academic emphasis improves student learning, this will in turn strengthen efficacy beliefs (Boonen et al., 2014). In summary, all the

elements discussed are in a transactional relationship with each other. Together, they create a school culture of academic optimism (Hoy et al., 2006b), that enables and shapes schools' endeavours to promote excellence and equity (Hoy, 2012). However, although prior research indeed agrees that there is a positive relationship between academic optimism and students' academic outcomes, the literature also shows that efficacy, trust and academic emphasis are less pronounced in lower SES and ethnically diverse schools. In order to address and investigate this issue, and with our now deepened understanding of how the different dimensions of academic optimism are interrelated, it is clear that more detailed yet comprehensive measurement instruments are urgently needed.

3 Methodology – data analyses - results

As the current study is a validation study aimed at developing and testing a more comprehensive academic optimism questionnaire, we describe the validation path in detail. Different steps were taken to ensure the validity of the aSAO-questionnaire. Validity is defined as the extent to which the collected evidence and theory supports the intended interpretation of the measurement instruments for the proposed use (AERA, APA, & NCME, 2014). The approach to provide in this kind of evidence will be explained chronologically, by consecutively reporting on methodological arguments, data analysis and results, as this is the most transparent structure for reporting on the methodological process and findings.

3.1 Phase 1 – Conceptual underpinnings and cognitive validity

To obtain evidence for the content validity of the school and teacher academic optimism questionnaires in measuring the intended constructs, a literature review was performed to allow for an in-depth conceptualization of both constructs (as presented in the conceptual framework). Acknowledging the existence of other questionnaires measuring subconcepts,

the starting point for operationalizing school academic optimism was the questionnaire used by Hoy et al. (2006a) and the Dutch adaptation for primary schools by Boonen et al. (2014). For teacher academic optimism we started from the questionnaire originally developed by Woolfolk Hoy et al. (2008). Despite valuable research that suggests measuring the collective level through aggregation of the individual level (e.g., Van Houtte & Van Maele, 2011), the distinction between the two levels is maintained. The school academic optimism variables are group-level characteristics that outline the normative nature of the school culture which is different from the sum of teachers' personal beliefs, it includes the reciprocal, coordinative and collegial dynamics of their interactions (Bandura, 2006). A referent-shift design is used to map out respondents' perceptions about their team's actions, beliefs and attitudes (Chan, 1998).

In this first, conceptual phase of the validation process, a comparison of the aforementioned existing questionnaires with the conceptual framework and the analysis of the relationship between the content of the questionnaires and the construct they are supposed to measure (AERA et al., 2014), led to three adaptations.

First, as argued previously, while reviewing the literature, we theorized that trust in students and trust in parents are two empirically related though conceptually distinguishable phenomena. Based on conceptual considerations made prior to the empirical phases of our validation process, both faculty trust and teacher trust were divided into two concepts: faculty trust in students and faculty trust in parents for the collective measurement of academic optimism, teacher trust in students and teacher trust in parents for the individual measurement of academic optimism. Second, as the original scales in the teacher academic optimism questionnaire consisted of only three items each, we expanded these scales in an attempt to enhance internal consistency. To generate possibilities for future comparison between the collective and the individual level of the construct, we brought

the items in the teacher academic optimism scales in line with the more elaborate scales for measuring school academic optimism. To illustrate, we added “I believe in the potential of every student in this class” to the teacher academic emphasis scale in accordance with the item “Teachers at this school believe in the potential of every student” from the collective academic emphasis scale. Third, we decided to ask teachers to answer the items for measuring teacher academic optimism with one specific class in mind. Knowing that school academic optimism is dependent on the school composition, this adjustment to the original scale opens avenues for future investigation of whether the level of teacher academic optimism is variable and dependent on the composition of the class for which the questionnaire is filled in.

The above operationalization decisions resulted in a questionnaire consisting of 53 items, of which 28 were intended to grasp teacher academic optimism (four scales) and 25 to measure school academic optimism (four scales). All items are scored on a 7-point Likert scale, ranging from “strongly disagree” (1) to “strongly agree” (7), with a ‘do not know/not applicable’ answering option.

In the next step in our validation study, and to capture whether respondents cognitively process the items as intended, a think aloud procedure was conducted with five teachers from urban secondary schools. Respondents were asked to fill in the questionnaire while expressing their thoughts, interpretations, and judgements. This way, difficulties and/or ambiguities in respondents’ cognitive answering process could be identified in order to make improvements to increase cognitive validity (Faddar, Vanhoof, & De Maeyer, 2017; Koskey, Karabenick, Woolley, Bonney, & Dever, 2010) and provide the necessary evidence of the correspondence between the construct and the detailed nature of the answers actually given by the respondents (AERA et al., 2014). This think aloud exercise indeed pointed to potential improvements to both the questionnaire in general and to a number of specific items in particular. To illustrate the latter, respondents tended to misunderstand

the item “I am vulnerable towards the students in this class”. After adjusting the wording to “I dare to be vulnerable towards these students”, respondents’ interpretations were in line with the intended theoretical meaning. In addition, the sequence of the items was modified. Teacher academic optimism is now addressed first, as respondents experienced answering the questions on the individual level to be less cognitively challenging and regarded these as a better preparation for questions about the collective aspect than vice versa. After the revisions, the content and cognitive validity of the aSAO-questionnaire was sufficiently guaranteed.

3.2 Phase 2 – Pilot study for exploratory analyses

To inform the next phase of the validation study, we collected data in a sizable and typical convenience sample of secondary school teachers ($n = 106$) who were sent a link to an online version of the aSAO-questionnaire. This approach did not aim for representativeness, but the sample did provide the necessary pilot data to perform initial exploratory analyses to substantiate further adjustments to the questionnaire.

As an initial empirical step, we performed an exploratory factor analysis (EFA), using the psych package (version 2.0.12) in R, in order to test the scales and reduce or reorganize items. An oblique rotation was used because theoretical factors were expected to correlate (Osborne, Costello, & Kellow, 2011). Cronbach’s alpha was calculated to test the internal consistency of the scales. Consequently, decisions about keeping, removing, or changing any of the items were based on both theoretical (conceptual fit) and empirical (factor loadings and internal consistency) grounds. All Cronbach’s alphas values at this stage of the validation process were provisional as new items could still be added, which explains the differences with the Cronbach’s alphas values in the main run (see Phase 3).

The EFA led to the creation of two new scales for teacher academic optimism, as there were found to be two dimensions to trust in students and parents: general trust in students or parents as such, a representation

of the affective bond between both parties; but also trust in the learning orientation of students and parents. The construction of these new scales led to the addition of extra items to capture these (sub)concepts comprehensively. For example, “These students want to achieve good results” was added to teacher trust in students’ learning orientation, and “The parents of these students encourage their children to achieve good results” to teacher trust in parents’ learning orientation. In other scales, some items were deleted. The item “When I’m teaching this class there is often noise and chaos”, for example, was removed from the teacher efficacy scale, as this significantly improved this scale’s internal consistency. Consequently, after piloting, the new version of the aSAO-questionnaire consisted of 30 items measuring teacher academic optimism, subdivided into six scales: teacher efficacy (seven items, $\alpha = .67$), teacher trust in students (four items, $\alpha = .85$), teacher trust in students’ learning orientation (four items, $\alpha = .80$), teacher trust in parents (five items, $\alpha = .83$), teacher trust in parents’ learning orientation (five items, $\alpha = .90$) and teacher academic emphasis (five items, $\alpha = .73$).

EFA confirmed the four-factor structure of school academic optimism. The questionnaire was reduced by six items (from 25 to 19 items), subdivided into the four predetermined scales: collective efficacy (six items, $\alpha = .85$), faculty trust in students (four items, $\alpha = .89$), faculty trust in parents (four items, $\alpha = .87$) and academic emphasis (five items, $\alpha = .79$). The adjustments made in this phase pertained to items that empirically proved not to be fully in line with the corresponding construct on a conceptual level.

3.3 Phase 3 – Main run for descriptive and confirmatory analyses

While EFA is a useful technique for piloting and optimizing questionnaires at item and scale level, it does not allow to determine the construct validity of hypothesized models (Osborne et al., 2011). Therefore, a large-scale study was conducted to analyse the internal structure of the aSAO-questionnaire to find out whether the interrelationships

between the test items are consistent with the measured construct (AERA et al., 2014).

Sampling and data collection

Several steps were taken to obtain a solid sample that represents the reality of (Flemish) urban secondary schools. We decided to focus on schools in the city of Antwerp, the largest city in Flanders and exemplary for the highly socioeconomically and ethnically segregated educational landscape (530.104 inhabitants, 51,1% with a migration background and 31,4% of children born in poverty (“Stad in Cijfers - Antwerpen,” 2016)). The sampling frame was firstly stratified into state and private schools. It is important to know that all schools in Flanders are subsidized by the state, and free education is enshrined in the constitution, but the majority of Flemish schools are (publicly funded) private Catholic schools. Within these two groups of schools in the sampling frame, we ranked schools from highest to lowest according to the number of disadvantaged students, based on two student level indicators the Flemish government uses to determine which schools need extra funding to increase equal educational opportunities: ‘language spoken at home’ and ‘the mother’s highest level of completed education’. The resulting list was divided into five equal groups and a proportional number of schools was systematically sampled per group.

The principals of the sampled schools were e-mailed with information about the purpose and the design of the study and then consulted by telephone to confirm their participation afterwards. They were asked to distribute the online survey link to their teachers and were informed that a minimum of 20 participating teachers per school (15 in schools with less than 30 teachers) was needed to allow for further clustered analyses. Such stratified clustered systematic sampling based on voluntary response has the disadvantage that biases can occur in the respondent group, as the willingness to participate can influence the group composition. Still, this sampling method was deemed the most suitable in our case. We

aimed to reach a minimum of 40 secondary schools (out of a total of 90 Antwerp secondary schools). Finally, 41 sampled schools participated in the survey between November 2020 and January 2021, of which 37 passed the school internal response rate threshold. A total of 1061 secondary school teachers participated, which is approximately 18% of all secondary school teachers in Antwerp (total: 6026) (Stad Antwerpen, AgODi, & VDAB, 2011). This is a high response rate, even more so when considering data collection took place in the heart of the COVID-19 pandemic.

Descriptive findings

In order to check the scales for floor and ceiling effects and to investigate variation within and between scales, descriptive statistics were calculated. As shown in Table 1, all variables have reasonable ranges, but the high mean ($M = 5.91$) and low standard deviation ($SD = 0.66$) for teacher academic emphasis stand out. Further analyses demonstrated a restricted between-item variance for this scale. Furthermore, the

descriptives suggest a tentative confirmation for differences between trust in students and trust in parents, both at the school and the teacher level. In line with our expectations, trust in students is scored noticeably higher than trust in parents ($M = 5.17$ for faculty trust in students and $M = 4.52$ for faculty trust in parents; $M = 5.64$ for teacher trust in students and $M = 4.81$ for teacher trust in parents). However, whether this supports our proposition that trust can indeed be divided into two separate constructs, could not be confirmed at this point as this requires more sophisticated analysis. Finally, Cronbach's alpha values were recalculated to test the internal consistency of the scales. These analyses confirm the reliability of all the scales, with values ranging from .74 to .89. The final aSAO-questionnaire, both in Dutch and English, is included in the Appendix.

Confirmatory factor analysis

Confirmatory factor analysis (CFA) makes it possible to test whether the theorized model is in line with the empirical findings (Lance, Butts, & Michels, 2006). Our models were

Table 1
Descriptives and Cronbach's alpha

School academic optimism (SAO) - subconcepts	item example	items	min	max	M	SD	α
Collective efficacy (CE)	Teachers in this school believe that every student can learn.	6	2	7	5.49	0.86	.88
Faculty trust in students (FTS)	Teachers in this school trust their students.	4	2	7	5.17	0.89	.85
Faculty trust in parents (FTP)	Teachers in this school trust the parents of their students.	4	1	7	4.52	0.95	.86
Collective academic emphasis (CAE)	This school sets high standards for student achievement.	5	1	7	4.96	0.88	.77
Teacher academic optimism (TAO) - subconcepts	item example	items	min	max	M	SD	α
Teacher efficacy (TE)	I can motivate those students who show low interest in school-work to do their best.	6	1	7	5.39	0.73	.80
Teacher trust in students (TTS)	I trust these students.	4	2	7	5.64	0.91	.83
Teacher trust in students' learning orientation (TSLO)	These students are interested in learning.	4	1	7	5.05	1.11	.89
Teacher trust in parents (TTP)	These students' parents are trustworthy.	5	1	7	4.81	0.97	.86
Teacher trust in parents' learning orientation (TPLO)	The parents of these students encourage their children to achieve good results.	5	1	7	4.53	1.06	.87
Teacher academic emphasis (TAE)	I set high, but attainable goals for all students in this class.	5	3	7	5.91	0.66	.74

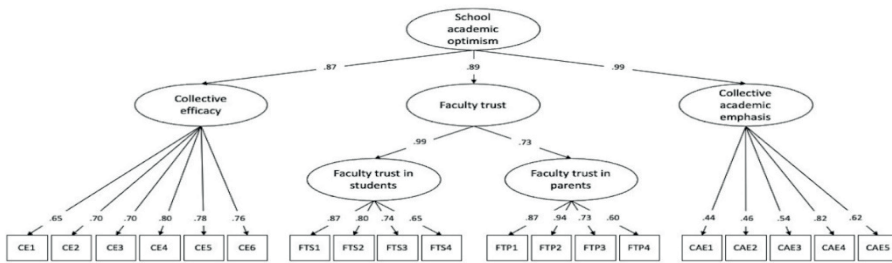


Figure 1
Confirmatory factor analysis for school academic optimism

estimated using robust maximum likelihood estimation (MLR) to take the nested structure of the data set into account (Stapleton, McNeish, & Yang, 2016) and full information maximum likelihood (FIML) to handle missing data (Schlomer, Bauman, & Card, 2010). In order to obtain model fit indices, we used the lavaan package (version 0.6-7) in R (Rosseel, 2012). The following fit indices were considered: the comparative fit index (CFI, cut-off: .90), the root mean square error of approximation (RMSEA, cut-off: .08) and the standardized root mean square residual (SRMR, cut-off: .08) (Hooper, Coughlan, & Mullen, 2008). The starting point of our analyses were the conceptual models as presented in the conceptual framework. Given the complexity of the factor structure within both school academic optimism and teacher academic optimism, the number of respondents was too limited to model both concepts simultaneously. As a consequence of this statistical power limitation, we conducted CFA for both aspects of academic optimism separately.

For school academic optimism we conceptualized faculty trust to be a higher order latent construct formed by two variables: faculty trust in students and faculty trust in parents. We compared this model (see Figure 1) with the original school academic optimism model, which considers trust in students and in parents to be one combined variable. Fit indices and the comparative chi-square test were clear: the model which integrated all trust-items into one variable (as suggested in previous research) had an unacceptable fit (CFI=.86, RMSEA=.10 and SRMR=.06), while the model which assumed

faculty trust to be a latent construct for faculty trust in students and faculty trust in parents combined, was found to have a good fit. Therefore, we proceeded with the latter. To improve model fit, modification indices were checked and followed up on when conceptually defensible. For example, an error covariance was added between items CE2 and CE3 for collective efficacy. Such error covariances were very limited in number and were only added if they were justifiable conceptually. In order to arrive at a sparse and clear visualization, these covariances are not included in the figure. The model fit indices of this final model are the following: CFI=.94, RMSEA=.07 and SRMR=.05. All item factor loadings are of acceptable to meaningful strength: 11 items are above .70, six items between .50 and .70, and two items slightly missed the proposed .50 cut-off value with factor loadings of .46 and .44, which is still acceptable. This all solidly confirms the validity and reliability of our hypothesized model, in which school academic optimism is a higher order latent construct consisting of the three proposed subconcepts, with trust being split into trust in students and trust in parents.

Originally, and in line with school academic optimism, we theorized teacher academic optimism to be composed of teacher efficacy, teacher academic emphasis and teacher trust, with the latter being a higher order latent construct formed by teacher trust in students and teacher trust in parents. This is the first model we tested. As EFA in the pilot study suggested a six-factor model, in which trust in students and parents consisted not of two, but of four different

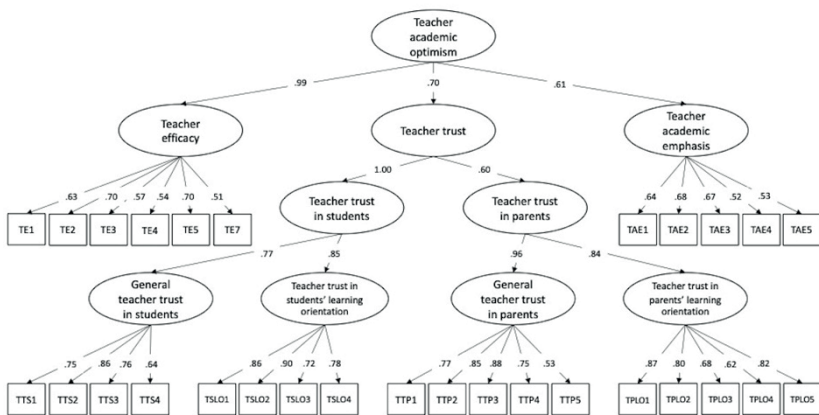


Figure 2
 Confirmatory factor analysis for teacher academic optimism

variables – general teacher trust in students, teacher trust in students’ learning orientation, general teacher trust in parents and teacher trust in parents’ learning orientation – we also tested a second model taking this structure into account. Finally, we compared both to the original model proposed by Woolfolk Hoy et al. (2008), in which teacher trust in students and parents is considered as one combined variable. Fit indices and the comparative chi-square test were convincing: the first model (CFI=.84, RMSEA=.08, SRMR=.07) and the third model (CFI=.71, RMSEA=.11, SRMR=.09) did not fit the data well, while the second model was promising. Modification indices suggested the addition of a minor number of justifiable error covariances. For example, we added covariance in the teacher efficacy scale between items TE1 and TE2. Our final model, as shown in Figure 2, presented good fit indices (CFI=.93, RMSEA=.05 and SRMR=.05). Factor loadings support the model as well: 16 items are above .70, 12 items are between .50 and .70, and only one item has a factor loading of .45. Consequently, we do not only have items validly measuring the different scales, but we also have a robust confirmation that these scales constitute the latent construct of teacher academic optimism.

In summary, construct validity for both teacher and school academic optimism has been established through CFA. However,

notwithstanding that we had a sizeable sample, the data set was not sufficiently large to also allow us to jointly model school and teacher academic optimism as part of an overarching academic optimism construct, nor to include the hypothesized relation between both measures of academic optimism, or relationships between teacher level subconcepts and their collective counterparts (e.g., collective efficacy and teacher efficacy). By way of an exploratory and statistically feasible alternative, we calculated the correlations between all scale scores, i.e. the averages over all item scores per scale. The higher order latent variables of school and teacher academic optimism hereby represent the mean of the scale scores of the underlying subconcepts. This correlation matrix, displayed in Table 2, shows that the higher order latent variables school academic optimism and teacher academic optimism have a correlation of 0.47. As expected, schools with higher levels of school academic optimism will have teachers with higher levels of teacher academic optimism, and vice versa. The underlined numbers highlight the correlations between the subconcepts of academic optimism and their corresponding equivalent at the teacher level. While the correlation between faculty trust in parents and teacher trust in parents is notable at .56, all others are rather low. These results indicate that school and teacher academic optimism,

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. CE	1.00											
2. FTS	.65	1.00										
3. FTP	.47	.68	1.00									
4. CAE	.59	.65	.58	1.00								
5. SAO	.80	.89	.82	.84	1.00							
6. TE	.23	.21	.17	.30	.25	1.00						
7. TTS	.11	.33	.25	.29	.29	.47	1.00					
8. TSLO	.17	.36	.34	.47	.42	.52	.57	1.00				
9. TTP	.13	.26	.56	.32	.39	.30	.42	.47	1.00			
10. TPLO	.17	.28	.47	.46	.41	.29	.28	.59	.68	1.00		
11. TAE	.25	.18	.16	.26	.25	.48	.32	.32	.28	.20	1.00	
12. TAO	.24	.37	.47	.48	.47	.67	.71	.83	.76	.75	.55	1.00

Table 2

Bivariate correlation analysis of (the subconcepts of) school and teacher academic optimism

and its subconcepts, are related though clearly measure different things, which accentuates the need for separate constructs. In addition, the matrix shows high correlations between the different subconcepts of school academic optimism and teacher academic optimism as the higher order latent construct (numbers in bold, upper triangle), attesting again to the presence of that underlying construct. Correlations between the subconcepts of teacher academic optimism and their latent construct (numbers in bold, lower triangle) are not as high, but clearly present, nevertheless.

4 Discussion and conclusion

This study set out to address specific gaps in the current state of the art of the quantitative measurement of the concept of academic optimism. More specifically, in answering the first research question, which was concerned with critically assessing the concept of academic optimism, we built on existing research on this topic and aimed to incorporate various theoretical and empirical insights to broaden the scope of existing academic optimism questionnaires. In answering the second research question, aimed at ensuring the validity of our adapted questionnaire on academic optimism in highly diverse urban schools, we designed and employed a set of data driven testing procedures in order to investigate the functionality and applicability of the aSAO-

questionnaire. We elaborated on our multi-phased validation process in depth. CFA supported our elaborated theoretical model and confirmed that the aSAO-questionnaire we developed is suitable to measure the proposed subconcepts of academic optimism. As content validity, cognitive validity and construct validity were sufficiently scrutinized, we propose that our study is a valuable contribution to the knowledge base on academic optimism.

With respect to the topics included in the questionnaire, our two chief adaptations concerning the conceptualization of academic optimism are: (1) separating trust in students from trust in parents, and (2) the further disentanglement of teachers' perceptions of academic optimism at the classroom level on the one hand and at the school level on the other. Applying these adaptations to existing academic optimism questionnaires produced several new and important insights. For school academic optimism, disconnecting faculty trust in students from faculty trust in parents adds a crucial nuance. As teacher-parent contact decreases when children grow older, splitting up the trust subconcept is pivotal as it creates profound insights into the affective dimension of the relationship between teachers, students and parents in secondary schools. Moreover, for teacher academic optimism, this revision gave rise to further and more pronounced extensions, indicating an important lacuna in the original questionnaires. Unravelling the different kinds of teacher trust in students and parents

enables us to delve deeper into this relevant affective state. In addition, this study demonstrates the need for both constructs. A thorough examination of the same (sub) concepts on both an individual and a collective level, has highlighted the differences and distinctions between the constructs. The aSAO-questionnaire presented in this study, answers the academic call for more comprehensive research regarding the potential of academic optimism as a construct, ultimately with the aim to provide more insight into the broader context in which learning takes place. Our study represents a crucial step in this endeavour by offering an extensive and validated measurement instrument.

While our work has produced new and interesting findings, we were confronted with methodological and data related limitations that could be taken up in future research. For instance, in our theoretical framework we conceptualized school academic optimism and teacher academic optimism as two distinct though related concepts. Yet, due to our sample size, we were not able to test the possibility of an overarching construct, including both school and teacher academic optimism. Nor could we perform a multilevel analysis considering between-school and within-school sources of variance. To deepen our understanding of academic optimism, future research could investigate the relationship between (the measurement of) school and teacher academic optimism in more detail. This also includes for instance the question of the conceptual and empirical relationship between school academic optimism measured through a referent shift approach on the one hand (our current approach) and academic optimism measured as the school-level aggregate of I-questions on teacher academic optimism. In addition, analyses of the relationship of academic optimism and variables external to the test, such as student outcome, could provide another source of validity evidence (AERA et al., 2014). Based on previous research, we assumed this positive correlation, but further research is needed to strengthen the validity of the aSAO-instrument as it is by empirically

linking findings of this questionnaire to student performance. Another limitation is the possible common method variance as a result of investigating the two levels of academic optimism together and using the same methodological approach, which could lead to inflated correlations (Richardson, Simmering, & Sturman, 2009). This is something to consider in future use of the instrument, especially if the relationships between school and teacher academic optimism are the focus of research. And finally, we see a limitation that concerns the broader context in which our study took place. The schools participating in this research were limited to the city of Antwerp (Flanders, Belgium) and assuming validity in different geographical contexts cannot be taken lightly. However, although the schools involved are very diverse in terms of school size, school and student SES, amount of ethnic minority students and available educational programmes, we cannot be confident that the presented aSAO-questionnaire will also be functional when transferred to secondary schools in other countries. Follow-up research in other contexts is needed to make further claims about the generalizability of this questionnaire.

As academic optimism is a triadic combination of subconstructs that interact and mutually reinforce each other and given the impact of academic optimism on student performance, knowledge on how to increase levels of efficacy, trust and academic emphasis is pivotal in contemporary school policy. However, research on how schools can foster a culture of academic optimism is scarce (Hong, 2017; Mitchell et al., 2016). Our adapted and validated academic optimism questionnaire, of which the final version is included in the Appendix, is a starting point for further investigation into antecedents for (the subconcepts of) school and teacher academic optimism once combined with other contextual and process variables. Little is known, for example, about the influence of leadership styles, teachers' agency towards lower SES and minority students, diversity policy of the school, schools' organizational cultures, and interaction between parents,

students and teachers, to name a few. In addition, the aSAO-questionnaire makes it possible to investigate variance in teacher academic optimism in relation to class composition. Prior research has found that school academic optimism is dependent on the socioeconomic (Boonen et al., 2014) and ethnic (Wu & Lin, 2018) composition of the school, but whether this also applies to teacher academic optimism is currently unknown. Unravelling academic optimism and its subconcepts to the core will help schools in their strive for excellence and equity, and the present study provides the first fundamental step: a comprehensive and valid measurement instrument. In addition, the instrument holds added value for more practical purposes as well. For the first time, the Dutch language area disposes of a validated and comprehensive questionnaire to jointly measure all aspects of academic optimism in secondary education. The aSAO-questionnaire can be of use to those in need of a more profound insight into the level of (teacher) academic optimism in schools and/or into the cognitive, affective and behavioural dimensions underlying this academic optimism. It may serve for self-evaluation purposes, as well as administrative authorities and inspectorates for monitoring purposes. The person using the questionnaire can decide what is interesting to measure. The availability of both overarching constructs and subconcepts in our instrument does not imply that future users need to use the aSAO-instrument in its full form.

Together, these theoretical and practical implications and affordances underline the potential of academic optimism as a malleable and meaningful school and teacher attribute.

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Samenvatting

Academisch Optimisme van de School en van de Leraar Meten in Diverse Schoolcontexten De Validering van de aangepaste Survey voor Academisch Optimisme

Academisch optimisme (AO) is ontstaan uit de zoektocht naar schoolvariabelen die een invloed hebben op prestaties, ook na controle op eerdere prestaties, SES en andere demografische variabelen. AO is een latent construct dat het geloof van de leraar en het team in de eigen sterktes en mogelijkheden omvat en wordt gevormd door drie onderliggende concepten: overtuigingen van doelmatigheid, vertrouwen in leerlingen en ouders, en academische gerichtheid. Hoewel AO veel potentieel bevat in het streven naar scholen met meer kwaliteit en onderwijsgelijkheid, zijn er nog enkele belangrijke conceptuele- en meetvragen. Daarom richt deze studie zich op het verfijnen van de bestaande vragenlijsten die percepties van leraren over AO in hun school en in hun eigen klaspraktijk in kaart brengen. Een literatuurstudie, cognitieve interviews (n = 5), een pilotstudie (n = 106) en een survey (n = 1061) leidden tot de ontwikkeling en validering van een meetinstrument. Zo bieden we een diepgaand begrip van de onderliggende concepten en voorzien we academici en praktijkmensen van een valide en betrouwbare survey voor academisch optimisme, zowel voor het collectieve niveau als voor het individuele niveau. Op die manier vormt dit onderzoek een eerste stap in de creatie van concrete paden naar scholen met meer AO.

Kernwoorden: Academisch optimisme, schooleffectiviteit, onderwijsongelijkheid, validering, doelmatigheid, vertrouwen, academische gerichtheid

APPENDIX

Nederlandstalige versie van de vragenlijst

Alle stelling worden beantwoord via een 7-punt Likert schaal: Sterk oneens (1) – Oneens (2) – Eerder oneens (3) – Neutraal (4) – Eerder eens (5) – Eens (6) – Sterk eens (7). Ook wordt er nog een 'weet niet / n.v.t.'-optie toegevoegd.

English version of the questionnaire

All statements are answered on a 7-point Likert scale: Strongly disagree (1) – Disagree (2) – Rather disagree (3) – Neutral (4) – Rather agree (5) – Agree (6) – Strongly agree (7). A 'don't know / N/A' option is also added.

ACADEMISCH OPTIMISME VAN DE LERAAR

TEACHER ACADEMIC OPTIMISM

Bij deze reeks vragen willen we te weten komen hoe u zichzelf ziet als leerkracht in relatie tot uw leerlingen. Het is van belang dat u één specifieke klas voor ogen houdt bij het beantwoorden van de vragen. In dit geval de eerste klas waar u bij het begin van een typische lesweek les aan geeft. Veelal is dit de eerste klas die u op maandagochtend heeft, tenzij uw werkweek later start. De vragen richten zich op uw globale beeld bij deze ene specifieke klasgroep. Gelieve het antwoord aan te duiden dat volgens u het dichtst aansluit bij uw algemene beeld van deze klas.

With this series of questions, we want to find out how you see yourself as a teacher in relation to your students. It is important that you keep one specific class group in mind when answering the questions. In this case, the group that attends the first class you teach at the start of a typical week. This is usually the first class you have on Monday morning, unless your working week starts later. The questions focus on your overall picture of this one specific class group. Please indicate the answer that you think corresponds best to your overall opinion of this group.

In welke mate bent u het eens met de volgende stellingen over de leerlingen in **deze klas**?

To what extent do you agree with the following statements about the students in **this class**?

INDIVIDUELE DOELMATIGHEID

TE

TEACHER EFFICACY

Ik kan de leerlingen die weinig interesse tonen in hun schoolwerk toch motiveren om hun best te doen.

TE1

I can motivate those students who show low interest in schoolwork to do their best.

Ik kan deze leerlingen ervan overtuigen dat zij goede resultaten kunnen behalen.

TE2

I can convince these students that they will do well in school.

Ik kan ook goede resultaten bereiken bij leerlingen met individuele leernoden.

TE3

I can also achieve good results with students with individual learning needs.

Ik kan ook goede resultaten bereiken bij leerlingen met een moeilijke thuissituatie.

TE4

I can also achieve good results with students with a difficult home situation.

Mede dankzij mij waarderen deze leerlingen leren.

TE5

Partly thanks to me, these students appreciate learning.

Ik voel me bekwaam om les te geven aan deze leerlingen.

TE6

I feel competent to teach these students.

In welke mate bent u het eens met de volgende stellingen over de leerlingen in **deze klas**?

To what extent do you agree with the following statements about the students in **this class**?

VERTROUWEN VAN DE LERAAR IN LEERLINGEN

TTS

TEACHER TRUST IN STUDENTS

Deze leerlingen zijn oprecht in de omgang met leerkrachten.

TTS1

These students are sincere in their relationship with teachers.

Ik vertrouw deze leerlingen.

TTS2

I trust these students.

Ik heb een goede band met deze leerlingen.

TTS3

I have a good relationship with these students.

Ik durf me naar deze leerlingen kwetsbaar op te stellen.

TTS4

I dare to be vulnerable towards these students.

In welke mate bent u het eens met de volgende stellingen over de leerlingen in **deze klas**?

To what extent do you agree with the following statements about the students in **this class**?

VERTROUWEN VAN DE LERAAR IN DE LEERGERICHTHEID VAN LEERLINGEN	TSLO	TEACHER TRUST IN STUDENTS' LEARNING ORIENTATION
Deze leerlingen doen echt hun best voor school.	TSLO1	These students really do their best for school.
Deze leerlingen zijn geïnteresseerd in leren.	TSLO2	These students are interested in learning.
Deze leerlingen zien het nut van een diploma in.	TSLO3	These students see the utility of a diploma.
Deze leerlingen willen graag goede resultaten halen.	TSLO4	These students want to achieve good results.

In welke mate bent u het eens met de volgende stellingen over de ouders van de leerlingen in **deze klas**?

To what extent do you agree with the following statements about the parents of the students in **this class**?

VERTROUWEN VAN DE LERAAR IN OUDERS	TTP	TEACHER TRUST IN PARENTS
Ik geloof wat de ouders van deze leerlingen mij vertellen.	TTP1	I believe what these students' parents tell me.
Ik kan rekenen op de steun van de ouders van deze leerlingen.	TTP2	I can count on the support of these students' parents.
De ouders van deze leerlingen zijn te vertrouwen.	TTP3	These students' parents are trustworthy.
Ik heb aangename contacten met de ouders van deze leerlingen.	TTP4	I have a good rapport with these students' parents.
Ik durf me naar de ouders van deze leerlingen kwetsbaar op te stellen.	TTP5	I dare to be vulnerable towards these students' parents.

In welke mate bent u het eens met de volgende stellingen over de ouders van de leerlingen in **deze klas**?

To what extent do you agree with the following statements about the parents of the students in **this class**?

VERTROUWEN VAN DE LERAAR IN DE LEERGERICHTHEID VAN OUDERS	TPLO	TEACHER TRUST IN PARENTS' LEARNING ORIENTATION
De ouders van deze leerlingen doen wat nodig is voor de toekomst van hun kinderen.	TPLO1	These students' parents do what is necessary for their children's future.
Deze leerlingen krijgen voldoende steun van hun ouders bij hun schoolwerk.	TPLO2	These students are well supported by their parents in their schoolwork.
De ouders van deze leerlingen tonen weinig interesse voor onze school. (R)	TPLO3	These students' parents show little interest in our school. (R)
De ouders van deze leerlingen zien het nut van een diploma in.	TPLO4	These students' parents see the utility of a diploma.
De ouders van deze leerlingen moedigen hun kinderen aan om goede resultaten te behalen.	TPLO5	The parents of these students encourage their children to achieve good results.

In welke mate bent u het eens met de volgende stellingen?

To what extent do you agree with the following statements?

ACADEMISCHE GERICHTHEID VAN DE LERAAR	TAE	TEACHER ACADEMIC EMPHASIS
Ik moedig alle leerlingen in deze klas aan om goed te presteren.	TAE1	I encourage all students in this class to perform well.
Ik geef alle leerlingen in deze klas uitdagende oefeningen.	TAE2	I give all students in this class challenging exercises.
Ik stel hoge maar bereikbare doelen voor alle leerlingen in deze klas.	TAE3	I set high, but attainable goals for all students in this class.
Ik geloof in de mogelijkheden van alle leerlingen in deze klas.	TAE4	I believe in the potential of every student in this class.
Ik benadruk bij alle leerlingen in deze klas het belang van goede schoolprestaties.	TAE5	I emphasize the importance of academic achievement to all students in this class.

ACADEMISCH OPTIMISME VAN DE SCHOOL | SCHOOL ACADEMIC OPTIMISM

De volgende reeks vragen richt zich op de cultuur in het lerarenteam. Uiteraard zijn er verschillen tussen leraren onderling. We proberen echter een beeld te krijgen van uw algemeen idee over het lerarenteam op deze school. Het is dus belangrijk om het voltallige lerarenteam voor ogen te houden en aan te geven in welke mate u denkt dat onderstaande stellingen opgaan voor dit lerarenteam.

The next set of questions focuses on the culture in the teaching team. There are, of course, differences between teachers. However, we are trying to get a sense of your general idea about the teaching team at this school. It is therefore important to keep the entire team of teachers in mind and to indicate to what extent you think that the statements below apply to this team of teachers.

In welke mate bent u het eens met de volgende stellingen over het lerarenteam in deze school?

To what extent do you agree with the following statements about the teaching team in this school?

COLLECTIEVE DOELMATIGHEID	CE	COLLECTIVE EFFICACY
De leerkrachten in deze school geven het snel op als een leerling niet wil leren. (R)	CE1	Teachers in this school give up easily if a student does not want to learn. (R)
De leerkrachten in deze school kunnen ook goede resultaten bereiken bij leerlingen met individuele leernoden.	CE2	Teachers in this school can also achieve good results with students with individual learning needs.
De leerkrachten in deze school kunnen ook goede resultaten bereiken bij leerlingen met een moeilijke thuissituatie.	CE3	Teachers in this school can also achieve good results with students with a difficult home situation.
De leerkrachten in deze school hebben er vertrouwen in dat ze hun leerlingen kunnen motiveren.	CE4	Teachers in this school are confident they are able to motivate their students.
De leerkrachten in deze school geloven dat elke leerling kan leren.	CE5	Teachers in this school believe that every student can learn.
De leerkrachten in deze school beschikken over de nodige vaardigheden om leerlingen tot goede prestaties te leiden.	CE6	Teachers in this school have the necessary skills to lead students to good performance.

In welke mate bent u het eens met de volgende stellingen over het lerarenteam in deze school?

To what extent do you agree with the following statements about the teaching team in this school?

VERTROUWEN VAN HET LERARENTEAM IN LEERLINGEN	FTS	FACULTY TRUST IN STUDENTS
De leerkrachten in deze school hebben vertrouwen in hun leerlingen.	FTS1	Teachers in this school trust their students.
De leerkrachten in deze school geloven dat hun leerlingen oprecht zijn in de omgang met anderen.	FTS2	Teachers in this school believe that their students are sincere in their relationship with others.
In deze school hebben leerkrachten en leerlingen een goede band met elkaar.	FTS3	In this school, teachers and students have a good rapport with each other.
De leerkrachten in deze school durven zich naar leerlingen toe kwetsbaar op te stellen.	FTS4	Teachers in this school dare to be vulnerable towards students.

In welke mate bent u het eens met de volgende stellingen over het lerarenteam in deze school?

To what extent do you agree with the following statements about the teaching team in this school?

VERTROUWEN VAN HET LERARENTEAM IN OUDERS	FTP	FACULTY TRUST IN PARENTS
De leerkrachten in deze school kunnen geloven wat ouders hen vertellen.	FTP1	Teachers in this school can believe what parents tell them.
De leerkrachten in deze school hebben vertrouwen in de ouders van hun leerlingen.	FTP2	Teachers in this school trust the parents of their students.
De leerkrachten in deze school kunnen rekenen op de steun van de ouders.	FTP3	Teachers in this school can count on parental support.
De leerkrachten in deze school durven zich naar ouders toe kwetsbaar op te stellen.	FTP4	Teachers in this school dare to be vulnerable towards parents.

In welke mate bent u het eens met de volgende stellingen?

To what extent do you agree with the following statements?

ACADEMISCHE GERICHTHEID VAN HET LERARENTEAM	CAE	COLLECTIVE ACADEMIC EMPHASIS
Op deze school stelt men op vlak van leren hoge eisen aan de leerlingen.	CAE1	This school sets high standards for student achievement.
Leerlingen in deze school respecteren medeleerlingen die goede punten halen.	CAE2	Students in this school respect others who get good grades.
De leerlingen in deze school doen hard hun best om hun oefeningen zo goed mogelijk uit te voeren.	CAE3	The students in this school try hard to complete their exercises as well as possible.
Leerkrachten op deze school geloven in de mogelijkheden van elke leerling.	CAE4	Teachers at this school believe in the potential of every student.
Leerkrachten op deze school vinden dat het voor veel leerlingen weinig uitmaakt wat we als school doen, omdat die leerlingen toch geen goede resultaten zullen behalen. (R)	CAE5	Teachers at this school believe that for many students it makes little difference what we do as a school, because those students will not achieve good results anyway. (R)