Students' chauvinistic track attitudes: the role of public track regard and teachers' chauvinistic communication in Belgian secondary schools.

Abstract

Although there is a wealth of research on educational tracking, little research investigates students' own track perception. Based on theoretical insights from ethnic and identity studies, we study how public regard and teachers' track communication affect students' chauvinistic track attitudes. Chauvinism is a less desirable way of identification, causing between-group prejudice and hostility. The [Anonymized] survey, involving 4500 adolescents from 64 Belgian schools is analyzed, using multilevel modelling. The findings show that chauvinism breaks down into two concepts, cognitive and social track chauvinism. These are mostly employed by students who feel low public regard, as protection against their public status. Teachers' track communication correlates with students' track chauvinism, both through students' individual perception of teachers' communication and through schoolwide cultures of chauvinistic teacher communication.

Keywords: Educational Tracking; Secondary Education; Teacher communication; Chauvinism; Public regard

1. Introduction

The educational system in Belgium, like in many other countries, employs tracking in secondary education to provide more specific education to its students. Tracking is based on the idea that separating students in homogeneous ability groups leads to better academic results, since it allows curricula and teaching methods to be adapted better to students' ability level (Hallinan et al., 2003). Through tracking, students are prepared for disparate futures (Gamoran, 1992). In Belgium, this system is rigid and explicit, meaning that the general public knows the

boundaries between the tracks. In a society focused on white collar jobs and with less favorable labor market opportunities for blue collar jobs, vocational, and to a lesser extent technical tracks are attributed lower public status (Andersen & Van de Werfhorst, 2010).

Tracking affects students in many different ways. Firstly, tracking steers students' labor market opportunities, since academic tracks prepare students for higher education, whereas vocational education has a focus on the labor market. Secondly, tracking also affects a range of educational outcomes, as students enrolled in lower status-tracks show less motivation (Saleh et al., 2005), more deviant behavior (Van Houtte & Stevens, 2008) and lower educational effort (Carbonaro, 2005). Lastly, the public character of tracking causes students in these tracks to be attributed different status by society (Andersen & Van de Werfhorst, 2010). Track status affects students since they tend to identify with their track (Yonezawa et al., 2002). These status differences can lead to lower self-esteem (e.g., Van Houtte, 2005; Ecclestone, 2004), when students in more vocationally oriented tracks feel looked down upon by society (Spruyt et al., 2015). Certain (vocational) tracks and courses are even labelled as 'dustbins' by teachers, parents and students themselves (Stevens & Vermeersch, 2010). These track labels also cause stereotype threat, with students opting for coping strategies like dropping out to counteract the negative stereotypes attached to vocational education (Nouwen & Clycq, 2019; Steele & Aronson, 1995). Students in the positively viewed academic track on the other hand have a higher self-esteem, even more so in multilateral schools where they can compare themselves more directly to the educationally more 'deprived' tracks (Van Houtte, Demanet & Stevens, 2012).

Despite the wealth of research on the educational and broader outcomes of tracking for students and the finding that tracks are attributed different social status, there is very little research that investigates how students develop their perception of their own track. Although little is known about the underlying processes that explain students' development of track

identities, small scale, qualitative case studies show that vocational students cope with their lower track status by either rejecting core educational values, like working hard for school (Högberg, 2011) or by setting themselves apart from fellow track members and embracing these educational values (Van Praag et al., 2017). These findings build on a rich tradition of sociological research that shows how working class (Willis, 1977), and racial/ethnic minority students (Mac an Ghaill, 1988) 'resist' a school system that treats them less favorably and instead search for positive identities elsewhere, by working, being cool and successful in dating (Van Houtte & Stevens, 2016; Willis, 1977).

However, very little research investigates if lower status track students can identify in a positive way with their track, even when their track receives differing societal praise. A possible way for students to achieve this can be through chauvinistic identification. Chauvinism[1] is a sense of ingroup superiority which devalues, discriminates, and derogates outgroups, and values what makes the ingroup unique (Raijman et al., 2008). Chauvinistic identification can be used as a strategy to counteract outsider judgement, so it might be a useful identification for vocational track students (Huddy & Del Ponte, 2019), especially if this could help students at risk of dropping out to remain in education by feeling connected with their track, despite a negative societal judgement of them and their track. Chauvinistic attitudes might at the same time also be held by academic students, as a reflection of societal praise.

Prior research has established that teachers are an influential voice in students' educational and non-educational attitudes (e.g., Ardies et al., 2015; Boone, Seghers & Van Houtte, 2018; Goodenow, 1993). Additionally, teachers are, to a certain extent, tracked

[1] Throughout this paper we will discuss the concept of chauvinism based on its academic definition and mainly focus on the factors that influence the existence and composition of chauvinism in the context of educational tracking. While we are aware that the public discourse on chauvinism as a concept is generally negative and chauvinism is often used in a pejorative way, we do not see it within the scope of this paper to discuss the merit of chauvinism as a concept or to present our opinion on how chauvinism should be used within the academic or public discourse.

themselves (e.g., Achinstein et al., 2004; Boldrini et al., 2019; Gore & Morrison 2001). So, based on their own experiences of being tracked and observing how students are influenced by the public perception on tracks, teachers can, for instance, stimulate chauvinistic track opinions in students, in an effort to counteract (negative) societal judgement.

This paper builds on a rich body of research on tracking, by investigating which factors relate to chauvinistic track attitudes in Belgian secondary school children. More specifically, this study looks at how students' track chauvinism is informed by the public perception of tracks and teachers' communication to their students on their own track.

2. Theoretical framework

2.1 Chauvinism and tracking

Chauvinism is an attitude that stimulates positive ingroup feelings by distinguishing the ingroup from meaningful outgroups through feelings of ingroup homogeneousness and superiority, leading to exclusionary and hostile attitudes towards outgroups (Raijman et al., 2008). Chauvinism is different from other, positive forms of ingroup identification like ingroup favoritism or bias, since it is a more conflict-oriented identification, rooted in the idea that the ingroup is superior on certain characteristics. Ingroup bias refers to making choices that benefit the ingroup more than outgroups, based on a more positive sentiment towards the ingroup. This can be both through favoring the ingroup or derogating the outgroup (Brewer, 1979; Hewstone et al., 2002; Tajfel et al., 1971). The chauvinism measure does not look at favoring behavior, but is purely about attitudes of supremacy based on the idea that if more people were like the ingroup, the world would be a better place. Chauvinistic feelings can be caused by the societal status ladder, as the highest status group might allow their self-perception to mirror the higher status society attributes to them, increasing their feelings of superiority (Stryker & Serpe, 1982).

Reflected appraisal, the process through which people come to see themselves as how they perceive significant others to see them, effectively acting as a looking glass for the self, might likewise lead to a more negative self-perception in lower status tracked students through internalizing their lower public status (Cooley, 1902; Mead, 1934; Wallace & Tice, 2012). At the same time, chauvinism has also been observed in lower status groups, as chauvinism can be a mechanism to resist a lower place on a status ladder (Huddy & Del Ponte, 2019), by dismissing the elements on which they are esteemed lower and highlighting ingroup superiority and homogeneity. Mizrachi and colleagues (2009), while not explicitly calling it chauvinism, observe a sense of superiority in the 'lower tracks' compared to the more academic tracks in Israel. 'Lower track students' claim superiority based on undesirable personality traits in the other tracks, not based on academic performance/attitudes. These traits include the way students from different tracks dress, 'the higher tracks' ' perceived lack of social solidarity, and that high track students study so hard it makes them 'freaks' according to 'low track' students, rather than having fun like the 'lower track' students. The suggestion that chauvinism might be observed in both groups that are societally praised and lowly esteemed, raises the question whether the concept of chauvinism might be given a different meaning depending on which group holds these chauvinistic attitudes. The different sources of these tracks' chauvinistic attitudes might also be caused by what track characteristics students attach importance to.

Public perception is relevant to study in all grouping systems where the groups are explicit and publicly known. Public regard is the extent to which individuals feel that others view their group positively or negatively (Sellers et al., 1998). Public track regard is known to affect students on educational outcomes, it can alter educational motivation from a more individual to a more group-oriented feeling of accomplishment (Chavous et al., 2003) and public group regard can even affect personal self-esteem (e.g., Thomas et al., 2012). Additionally, according to the Rejection-Identification model, increased identification can be used to counteract low

public regard (Branscombe et al., 1999). Chauvinism is expected to be higher for academic track students with high public regard, as their feelings of superiority are more confirmed by society, whereas for lower status technical and vocational tracks, a lower public regard could also increase chauvinism, invoking more protective feelings against judgement by others.

2.2 Chauvinism and tracking: the role of the teacher

Teachers can be influential in how students perceive themselves. Teachers shape students' views on a wide range of subjects, for example interest in educational subject matters (e.g., Ardies et al., 2015), students' sense of belonging (Goodenow, 1993), school engagement (Quin, 2017) and even non-educational attitudes like ethnic prejudice (Vervaet, Van Houtte & Stevens, 2018). Teachers are also shown to be role models for students. Feelings of sharing a certain trait with the teacher, being gender, ethnicity, religion, or caste, all positively affect students' performance and educational attitudes (e.g., Paredes, 2014; Rawal & Kingdon, 2010; Zirkel, 2002). Since teachers are seen as role models by students through a wide variety of traits they share with their students, it can be assumed they are also role models for their students based on their shared track membership. It is quite likely for teachers to communicate about tracks since they also experience the benefits and burdens of being tracked, in a similar way to their students and become 'tracked' themselves to a certain extent (Achinstein et al., 2004). Especially in educational systems such as those in the USA, where the assignment of classes to teachers is based on a competitive (performance) model between teachers, teachers' personal status attainment will be closely tied to tracking (Finley, 1984; Kelly, 2004; Talbert & Ennis, 1990).

Teachers experience the public regard of the tracks they teach. The societal focus on higher education makes teachers in vocational education courses feel that their subject does not matter and their job is considered less valuable than that of their academically oriented

colleagues (Achinstein et al., 2004; Boldrini et al., 2019; Gore & Morrison, 2001). In the United States, teachers are shown to look down on their colleagues who teach in lower status tracks (Finley, 1984). Additionally, vocational education teachers feel that the challenges associated with the diverse educational and personal backgrounds of their students, motivating their students, and trying to bridge the gap between curriculum and future workplace does not receive the social recognition it deserves, causing increased job frustration (Amitai, 2021; Boldrini et al., 2019).

Teachers hold a position of authority, so their expressed track opinion could be interpreted as very commanding. Students tend to accept teachers as authority figures in their school, out of respect, to show their appreciation towards teachers as guardians or to avoid punishment (Yariv, 2009). Teachers' authority is limited however. Issues that overstep teachers' authority include violating civil rights, intervening in personal matters and causing moral dilemmas (Yariv, 2009). It could be argued that the teachers' personal opinion on tracks, and how students should view their own and other tracks is a strictly personal matter and falls outside the authority of the teacher. Expressed chauvinistic track attitudes by teachers might affect students' track chauvinism, though, as students can consider their teachers as both a role model and a voice of authority.

The higher status attributed to academic tracks, combined with their students' more pro-school attitudes could lead us to assume that the academic schools are the most desired by teachers. This is not necessarily the case. Less study-oriented attitudes do impact teachers' job satisfaction to a certain extent (Van Houtte, 2006), but it does not mean that teachers view their bond with these students less positively (Spilt & Koomen, 2009). An important driver of teachers' track preference concerns their preferences in student-attributes. Vocational and technical track schools experience the highest teacher mobility to other tracks, based on their students exhibiting a higher sense of futility and these students being perceived as less teachable

(Amitai, 2021). On the other hand, the personal-social behavior of technical and vocational track students is rated more positively (Stevens & Vermeersch, 2010; Amitai, 2021). Students' sense of futility and teachability are more impactful on teacher mobility than students' performance (Boyd et al., 2005). So, generally speaking, academic education is more attractive to teachers, yet teachers who put an emphasis on student-teacher communication may prefer teaching in vocational education.

The influential voice teachers have towards their students, combined with teachers' own experiences with the effect of track status, and the possible benefits of chauvinism for students' self-image, leads us to hypothesize that teachers will employ track chauvinistic communication to improve students' self-image. The extent to which teachers communicate about tracks might depend on the extent they feel students' self-image is threatened by track status. As the vocational track students are the most status disadvantaged, teachers might communicate more chauvinistically about their track to counteract its lower status. Educational grouping systems in which the academic track is considered the most desirable might cause academic education members to consider their track as 'the norm' or even as 'the regular trajectory,' and due to this feeling of 'normality' academic track students might not even be aware of their tracked identity. This would cause the track to remain a hidden, dominant identity, as has been shown in ethnic identity research with dominant groups (Doane, 1997). Hidden identity means that for members of the dominant group, their identity is less salient and they do not identify with it as consciously and explicitly since it is less visible. Academic teachers for whom track is a hidden identity are expected to communicate less about tracks. Yet, following social dominance theory, high track status students and teachers might put more emphasis on their track identity, as a source of status gains (e.g., Sidanius et al., 1997). Vocational, and to a lesser extent technical track teachers, are expected to show track chauvinistic communication as a defensive response to lower public regard.

2.3 Current study

In this study, we examine how students' track chauvinism is constructed, influenced by their perception of external opinions, being the public opinion on their track and their teachers' chauvinistic track communication. In doing so, we test the applicability of concepts and theories originated in ethnic studies and social psychology, such as chauvinism, public regard, social dominance theory, reflected appraisal, and theories studied previously in education, related to teachers as role models. As these concepts and theories have not been applied widely to educational tracking before, the expected directions of effects for the following hypotheses will be adopted from their original fields.

The theoretical framework leads to four hypotheses. Firstly, the chauvinism composition hypothesis assumes that track chauvinism can be broken down into two concepts. Chauvinism might tap into its cognitive component (Stryker & Serpe, 1982; Wallace & Tice, 2012), and into its social component (Willis, 1977; Mizrachi et al., 2009). Secondly, if chauvinism is one unified concept, the track chauvinism hypothesis assumes that the academic track students will have the highest chauvinism, since the studied educational tracking system is characterized by rigid boundaries, limited upward mobility raising the status of students who stay in the 'highest track', and a focus on academic achievement. Students who 'succeed' in this system could feel cognitively superior to students from the technical and vocational track who are considered 'less successful'. Yet if track chauvinism is hypothesized to occur in different status groups based on different sources, not solely based on educational prowess, all tracks might have fairly equal chauvinism. Thirdly, the direction of the effect of public regard on track chauvinism is track dependent. The public regard hypothesis assumes that, in the academic track, a high public regard will allow students to gain status from their track position which might lead to higher chauvinism through reflected appraisal (Sidanius et al., 1997; Stryker & Serpe, 1982). In contrast, in the vocational track, and to a lesser extent the technical track, a lower public regard

will lead to more stereotype threat and might result in higher chauvinism, as chauvinism can be used to resist the threats of their lower status position (Huddy & Del Ponte 2019; Steele & Aronson, 1995). This hypothesis might change if chauvinism breaks down into multiple concepts, as high public regard is assumed to be positively related to more cognitively inspired chauvinism, whereas low public regard might cause students to put more emphasis on personality based chauvinism. Fourthly, the teacher communication hypothesis assumes that in schools with track chauvinistic teacher cultures, expressed through teachers' chauvinistic track communication, students will develop more chauvinistic track attitudes. This is assumed regardless of whether there is one or multiple types of track chauvinism. Students can be assumed to take the opinion of their teachers into consideration, since their teachers can be seen as role models who also have the experience of being tracked.

2.4 Belgian context

There are five particularities of the Belgian educational context that must be taken into consideration for this study. Firstly, the Belgian tracking system can be typified as a 'cascade', secondly the tracks are explicitly connected to schools, thirdly teachers' track membership does not depend on their accreditation, fourthly Belgian secondary education has regional differences, and lastly tracking can be done either within or between schools. The dominant position of the academic track students is unquestioned in Belgium. This is established in the organization of tracking. Students have the choice to start in either a general A-stream or remedial B-stream, reserved for those who did not obtain a primary education degree. Within this general A-stream students must choose elective courses already in the first year – such as Latin or technology, which serve as a preparation for the official track choice they will make after the second year (Van Praag et al., 2015). When students choose their track officially in year three, they have the choice between the academic, technical, vocational and arts track. The academic track prepares students for higher education, the technical track consists of both

general and technical-theoretical courses, and the vocational track focuses on training students for a craft (Vlaams Ministerie van Onderwijs en Vorming, 2019). The arts track offers art courses and a general education, but due to the low number of students enrolled in this track, 2.2 percent of the student population in 2019 (Vlaamse Overheid, 2019), the arts track will not be considered in this study. The most important aspect of this system for the current study is that once students are part of a track, moving 'down' to a more practical track can be done easily and is common, but 'upward' mobility towards more academic education is barely possible in practice. This causes a 'cascade', whereby students in secondary education 'aim high' by trying out the more academic track first, and eventually 'go down' to 'lower', more technical tracks (Boone, Seghers & Van Houtte, 2018). This urge to 'aim high' at the start exemplifies that the academic track is valued the most. Track movement advise is based on students' performance. Student performance is assessed through the schools' own examination, which is based on governmental educational standards and teachers' estimation of students' skill, as there was no central examination in Belgian secondary education at the time of this study.

Secondly, tracks are explicit and publicly known in Belgian education. Schools can offer either one track or multiple tracks in the same school. There are countries characterized by within school ability grouping (for example the United States, United Kingdom and Australia) and countries which only organize between-school tracking, in which each school provides one track (e.g., Japan) (Chmielewski, 2014; Ono, 2001). In countries like Belgium and Germany tracks are organized both between schools and within schools. So-called 'categorical schools' provide one track per school (commonly academic or technical/vocational) and multilateral schools (or 'Gesamtschule' in German) provide more than one track in the same school. Yet the distinction between tracks persists and there is no education in heterogeneous or mixed-ability groups (Chmielewski, 2014; Van Houtte, Demanet & Stevens, 2012). Since the tracks

provided by each school are publicly known, teachers can make a conscious choice to teach a certain track. This allows teachers to take the status of a track and the student characteristics they prefer into consideration when choosing their workplace, which should lead to a better fit between teacher and track. Public tracking results in more teachers who value the track they teach in for its unique characteristics and are invested in the track they teach, rather than looking for opportunities to teach in higher status tracks. The difference between one track and multiple track schools does not seem to affect students' evaluation of their own track (Dekeyser et al., 2022), even though this does affect students in terms of study involvement, sense of futility and self-esteem (Van Houtte & Stevens, 2009; Van Houtte, Demanet & Stevens, 2012; Van Praag et al., 2015). These differences are caused by the difference in interacting, with students in multilateral school being confronted with other tracks on a daily basis, causing track membership to become more salient.

Thirdly, teachers' accreditation in Belgium has no influence on track membership. Belgian higher education is open to all students who successfully graduated and all courses can be chosen freely. When studying a general course (e.g., mathematics, French), students are trained and licensed to teach this in all tracks. The only exceptions are track specific courses, (e.g., Latin for academic track and hairdressing for vocational education). So, teachers can develop their track preference throughout their career, rather than it being solely based on course choice or personal educational history.

Fourthly, Belgian education is divided in a Flemish-region governed and Walloon-region governed education. These systems are similar but show some differences: in the Walloon system, when students do not succeed in their first two years, they are rerouted to a program which aims to tackle their individual issues and reinstate students in the communal program afterwards. The Flemish system is more willing to let students 'move down' to vocational tracks or make students re-do a year instead of applying remedial programs (Onderwijskiezer, 2021).

Lastly, Flemish research on within and between school tracking generally differentiates between categorical schools and multilateral schools, the former providing either academic or technical and/or vocational education and the latter providing a combination of academic with either technical, vocational or both types of education (e.g., Van Houtte, Demanet & Stevens, 2012).

3. Methods

3.1 Sample

The data for this study are drawn from the School, Identity & Society survey. The dataset relies on a mixed-method research design (QUAL > QUAN). The measurement instruments vis-à-vis students' track identification are based on qualitative interviews with adolescents (N = 32) enrolled in their third year of secondary education. These qualitative interviews were conducted as a preparatory phase for the School, Identity & Society-survey. The goal of the interviews was to unravel which social identities were important for these adolescents and how these identities were embedded in their overall school context (Maene, Thijs & Stevens, 2021). Special attention went to the discourse/language the students used to talk about the identities and their social interactions with peers and teachers. The findings of these interviews were used to develop measurement instruments to investigate more in-depth the role of tracking as a social identity with multiple dimensions (Ashmore et al., 2004) and its embeddedness in the school context.

The quantitative dataset contains information on 4540 third year high school students: 64 schools took part, 7 schools in Wallonia (French speaking part of Belgium), 29 in Flanders (Dutch speaking part of Belgium) and 28 in the Brussel Capital Region (21 French speaking and 7 Dutch speaking). The schools were selected through multistage sampling: first cities with a history of migration were randomly selected and secondly the secondary schools were divided

in strata based on their track variety. This led to a distinction between purely academic schools, technical-vocational and multilateral schools. Schools were randomly invited from each stratum to participate with this study. The focus on cities with a history of migration was a choice based on the more overarching topic of the dataset, but is not informed by tracking research. In total, 360 schools were contacted, from which 64 schools agreed to participate. Belgian educational research has a history of rather low school response rates, as many schools feel they are asked too often to participate in scientific research (e.g., Vervaet, Van Houtte & Stevens, 2018). Yet even considering this over demand, the School, Identity & Society survey has lower response rates than other educational research in Belgium, possibly due to its focus on ethnic and national identities, which schools might consider as sensitive topics to survey. The response rate was lower in Brussels and Wallonia (18.3% and 11.3% respectively) compared to Flanders (23%), possibly due to the lack of familiarity these regions have with Flemish research institutions.

The School, Identity & Society dataset is stratified. The objective for the School, Identity & Society survey was to generate a dataset that would allow to study adolescents' ethnic and track identities on a wide range of outcomes such as their intercultural, psychological and educational functioning. The dataset therefore had to include sufficient numbers of students from each educational track and a sufficient number of students with a migration background. In addition, to allow a sociological perspective on the data, structural and cultural contextual features had to be incorporated in the design of the dataset. This implied that schools had to be diversified on three axes: educational system (i.e. Dutch-speaking or French-speaking), diversity of the student population (ranging from monocultural to multicultural schools) and range of tracks offered (i.e. categorical or multilateral schools). In terms of ethnicity, there was an underrepresentation of Belgians without foreign roots (56% population, 36.7% sample), a considerable oversampling of Belgians with a foreign background, based on the birthplace of the grandparents or parents (33% population, 44.2% sample), and an of non-Belgians (11%

population, 19.1% sample) (Statbel, 2018; Maene, Thijs & Stevens, 2021). It was a conscious decision to oversample students with a migration background to enable studying the main objectives of the School, Identity & Society survey. For tracking, there was an overrepresentation of academic track students (41% population, 59.9 % sample) and an underrepresentation of both technical (31% population, 22.8% sample) and vocational students (25% population, 17.3 % sample). The arts track was not included in the survey as they represent only 2.2 percent of the secondary school population (Vlaamse Overheid, 2019). For sex there was a slight underrepresentation of boys (52% population, 49.1% sample).

The data collection took place from September 2017 to December 2017. The school principals distributed an information letter to all students and their parents, informing them on the research theme, timing and the anonymous and voluntary nature of the study. This letter gave parents the option to opt their child out of participating in the survey. Depending on region, 6 to 8% of parents did not give their consent. During the data-collection at school, students were asked to participate voluntarily, which yielded an 80% response-rate. The questionnaire was distributed and filled out in the classroom. There was no clear pattern in the non-consent and non-response. This survey moment was monitored by a researcher who answered students' questions, and teachers who supervised students while respecting their privacy.

3.2 Variable description

3.2.1 Dependent variable

Students' track chauvinism. Students were presented 5 statements on how they view their track compared to other tracks. These statements were formulated based on the explorative qualitative interviews of the School, Identity & Society survey and inspired by research on national/ethnic chauvinism. Items previously used in national/ethnic chauvinism research, like 'the world would be a better place if people were more like the X-group' and 'Generally,

[country] is a better country than most other countries' (e.g., Raijman et al., 2008) were not included as these can seem rather broad, whereas the explorative qualitative interviews gave the basis to break down sense of superiority into more detailed characteristics, more explicitly linked to education but inspired by the same underlying sentiment as previously used items. Items commonly used in welfare chauvinism research did not translate very well to the educational context. Van der Waal and colleagues (2010) operationalized welfare chauvinism as: 'Thinking of people coming to live in [country] from other countries, when do you think they should obtain the same rights to social benefits and services as citizens already living here?'. The studied items were therefore more inspired by national/ethnic chauvinism research, rather than welfare chauvinism. The statements had 5 answering categories ranging from 'absolutely disagree' (1) to 'totally agree' (5): (1) 'students in my track are smarter than those in other tracks', (2) 'have more capabilities than those in other tracks', (3) 'are cooler than those in other tracks', (4) 'my track is harder' and (5) 'more creative'. The goal of these items was to measure students' sense of track superiority (i.e., track chauvinism). To validate its conceptual difference with students' public track regard (see further), we included the items of these two measures in an exploratory factor analysis. The factor analysis included a total of 8 items for which two factors explained 51% of the variance (KMO = 0.859). The factor analysis showed that students' track chauvinism and students' track public regard are conceptually distinct. The factor loadings for track chauvinism ranged from 0.623 to 0.861, except for the item 'my track is harder' which had a factor loading of 0.450.

3.2.2 Main determinants

Student level; Track membership. Students are part of only one track. There were 2723 surveyed academic track students, 1034 technical and 783 vocational track students.

Students' public track regard. A self-developed three item scale, based on Sellers and colleagues' (1998) definition of public regard as the extent to which individuals feel that others view their group positively or negatively, were included in the survey. The items were: 'students from other tracks look down on my track', 'students from other tracks are respected more than my track' and 'students from other tracks see students from my track as social outcasts'. The items had 5 answering categories ranging from 'absolutely disagree' (1) to 'totally agree' (5). To establish these items as conceptually different from students' track chauvinism, they were included together in one factor analysis (cf. supra). The EFA showed a two-factor structure with the three items of students' public track regard loading on a separate factor with loadings ranging from 0.639 to 0.677. This was consistent for all three tracks and the three items have a good Cronbach's alpha of 0.738. These items were brought together in a scale by calculating their overall mean (Table 1, $M = 2.258$, $SD = 0.825$). All items were recoded, so a high score represents a high public regard. The three tracks differed significantly from each other ($p < .05$) (see Table 1).

Perceived chauvinistic teacher communication: Students were asked to indicate for 20 items how they perceived the teachers from track specific courses were talking about tracking during lessons. These items were developed to represent different aspects of teachers' discourse. Three items related to teachers' speech highlighting differences among tracks from a superiority point of view: (1) 'my teacher makes jokes about other tracks' (2) 'my teacher says my track is better than other tracks' (3) 'my teacher says we have more capabilities than students in other tracks. The response scale ranged from 1 (totally disagree) to 5 (totally agree). These items were referred to as teacher chauvinism. Exploratory factor analysis on the 20 item-battery in which these items were included showed that the three items of teacher chauvinism exclusively loaded on the same factor. The factor loadings ranged from 0.518 to 0.730. The Cronbach's alpha for the three items was 0.648. A scale was created taking the mean score of

those three items (M = 2.436, SD = 0.873): the higher a student's score, the more the student perceives the teachers from track specific courses as using chauvinistic track speech. These items were brought together in a scale by calculating their overall mean (Table 1, M = 2.44; SD = 0.87). The three tracks differed significantly from each other ($p < .05$) (see Table 1).

School level; Teachers' chauvinistic culture.

To create a measure for chauvinistic track culture in schools, the individual students' perceived chauvinistic teacher communication items were aggregated to the school level by calculating the average for each school. To validate whether those perceptions are (partly) shared by the students within each school, the 'mean rater reliability' (Glick, 1985; Shrout & Fleiss, 1979) was calculated. This is done by calculating the intra-class correlation (ICC) of an ANOVA (BMS-WMS/BMS), which allows us to measure the similarity between micro-units belonging to the same macro-unit and has to be higher than the threshold of 0.60 (Glick, 1985). The ICC for teacher chauvinism is 0.86 (F = 7.159, $p < .001$), which implies that the perceptions are shared by the students of the same school and that the aggregate can be considered as a school characteristic.

3.2.3 Control variables

Student level; Sex was almost equally distributed in our sample: 48.8 percent of the sample was male. The academic track had mostly female students (55.5 percent), in the technical and vocational track the majority was male (56.3 and 54.8 percent respectively).

Prior Grade Point Average (GPA) was measured by asking students to self-report which average grade they obtained in the previous school year. As there is no guarantee students are still part of the same track as the one in which they achieved the reported GPA, prior GPA is used as a general indicator of educational success. This was scored as a percentage (N = 3705; M = 67.57; SD = 12.67). Students in the academic track had the highest average GPA (69.98),

technical track students the lowest (62.28) and the vocational track students scored in between (65.10), students in the three tracks differed significantly from each other ($p < .05$) (see Table 1). As there are no standardized tests in Belgian education we have to rely on self-reported GPA, which does raise questions of validity due to possible cover-up and memory issues in students (Van Praag et al., 2015). Yet it is the best measure we currently have.

Students' socioeconomic status. SES is based on students' reports of the occupation of their parents, which were matched to the International Socio-Economic Index of Occupational Status (ISEI) (Ganzeboom et al., 1992). Ideally, the SES measure would be based on parents' own reporting, but due to the limitations of SIS-dataset we use student reported parental occupation. Student reports do generally seem a good indicator of parental SES (e.g., Ensminger et al., 2000; Lien et al., 2001).Students were also allowed to give a brief description of parental occupation so the researchers had more information to determine parents' jobs.

The highest occupational score of both parents was retained as the students' SES indicator. The higher the score on the ISEI, the higher the SES. The scale theoretically ranges from 10 to 90. For our sample the minimum score was 15, the maximum 90, with an average of 50.16 ($N = 4584$, $SD = 16.72$). Students in the academic track have the highest SES (50.16) on average, which is considerably higher than the average SES of the technical (45.72) and vocational track (44.57) students. The three tracks differed significantly from each other ($p < .05$) (see Table 1).

Ethnic background: we chose a simplified solution with only two groups. The reference category are Belgian natives and Western Europeans. All other national backgrounds are grouped in the dummy category. The ethnic background of the students was determined in the first place by the birthplace of the student's maternal grandmother. This is common practice in Belgium, as most students of immigrant descent are second or third generation and have the

Belgian nationality (OECD, 2008). If this data was not available, we used the mother's place of birth. If even this data was missing, we used the students' birth country (Maene, Thijs & Stevens, 2021). There were 1891 students of the reference category (1608 Belgian descent and 283 Western European) and 2412 minority students.

School level; Educational system. To control for possible region/policy differences on track chauvinism we include a control dummy variable with the Flemish education, which included 36 surveyed schools (counting 2659 students) as the reference category. The Walloon education has 28 included schools counting 1925 students. Schools in the Brussels Capital Region fall under one of these systems depending on the principal language of education.

School structure. Categorical schools were 63.5 percent of all surveyed schools (N = 40). Of all surveyed schools, 24 provided only the academic track, 16 schools provided technical education either alone or combined with vocational education. There were 24 multilateral schools. Ten schools offered academic, technical and vocational, 13 schools offered academic and technical, and 1 school academic and vocational education.

3.3 Design

Track differences were examined for each variable by means of an F-test or Cramer's' V (Table 1). To study the chauvinism composition hypothesis, since it is the first time, to our knowledge, that track chauvinism is employed as a statistical construct, we have to test what track chauvinism consists of before using it as a dependent variable for analysis. Whether the 5 chauvinism items are one scale that is consistent in meaning across all three tracks, if some items have to be omitted or if this breaks down into different constructs of chauvinism per track, was studied through measurement invariance (MI) testing. If our construct(s) achieve MI across tracks, it would give more credibility to track chauvinism meaning the same to all students, regardless of track, and it would allow between track comparisons. We test MI through MPlus (Geiser, 2013).

Following the guidelines on reporting MI-testing by van de Schoot and colleagues (2012) and Putnick and Bornstein (2016), we will start from the full 5 item model and test for configural, metric and scalar invariance across the tracks (Table 2). For all models the model fit will be tested through the CFI, RMSEA and SRMR indices. CFI should achieve values larger than 0.90 and preferably larger than 0.95 (van de Steen et al., 2012). RMSEA should be smaller than 0.08 and preferably smaller than 0.05 (van de Steen et al., 2012). Lastly, SRMR should be smaller than 0.030 for the metric model and smaller than 0.015 for the scalar model (Chen, 2007). The chi-squared tests indicate whether there are significant differences between the models. When scalar invariance is achieved, the MI analysis is complete. If no invariance across the tracks is achieved, possibly problematic variables will be eliminated one by one based on modification indices (Putnick & Bornstein, 2016). When interpreting modification indices, the higher the number, the bigger the improvement of model fit would be by modifying the model based on this variable. If there are several options that provide similar results in terms of modification indices, a theoretical motivation will be used to delete an item.

After the deletion of an item from the scale, the same measurement invariance tests will be rerun with the reduced scale. If this again does not provide any type of invariance, another item will be deleted. If no scalar invariance is achieved after eliminating two items, but at least metric invariance is achieved, partial scalar invariance testing will be performed (van de Schoot et al., 2012). This is done by unconstraining the intercept of one item and retesting for scalar invariance afterwards. This partial scalar invariance testing would be done for all items separately, meaning we only unconstrain one intercept per tested model, as ideally more than half of all intercepts should be invariant (Steenkamp & Baumgartner, 1998). Partial scalar invariance can be considered sufficient to compare the means of the different tracks in subsequent analysis. If no partial scalar invariance is achieved, it is not advised to compare means. The rest of the design section depends on the outcome of the chauvinism composition hypothesis.

If it would be allowed to test the chauvinism hypothesis, based on the results of the measurement invariance test, an ANOVA with students' track chauvinism as the outcome and a post-hoc Bonferroni test to check if student chauvinism differs between the tracks will be run. If MI testing leads to multiple outcome variables, all outcome measures will be tested for track differences with a post-hoc Bonferroni test. If no (partial) scalar invariance is achieved the results of these Bonferroni tests should be considered as indicative of possible differences that future research should look deeper into.

To test the public regard and teacher communication hypotheses, we will run multilevel regression models with students' chauvinism as the dependent variable, using HLM6 (Raudenbush et al., 2013). Multilevel models most accurately analyze the data, since the surveyed students (level 1) are clustered in schools (level 2). The regression analysis starts with an unconditional model (model 0) to indicate whether there are significant school differences

in the dependent variable. The addition of students' track as dummies, with the academic track as reference category, can only be done if the outcome measure achieves MI. If not, all three tracks will be analyzed separately.

The subsequent model (Table 5) will include SES, sex, prior GPA and ethnic background as control variables at the student level, and educational system and school structure as control variables at the school level. Previous research showed sex differences in terms of chauvinism in general but no consensus on which sex is more chauvinistic (e.g., Hjorth, 2016; Huddy & Del Ponte, 2019; Van der Waal et al., 2013). Research on tracking in Flanders (Dutch speaking part of Belgium) has repeatedly shown that tracking and SES are closely related to each other, with tracking causing an underrepresentation of lower SES-students in the academic track and an overrepresentation in the technical and vocational tracks (e.g., Boone & Van Houtte, 2013; Tan, 1998).

Chauvinism and public regard are generally studied from the viewpoint of the dominant social group (Douglass & Umaña-Taylor, 2017; Spencer et al., 1997), however, studying it in all groups can provide more insight into how chauvinism works. Prior GPA was included as a control variable since it can be considered a general indicator of educational success. Ethnic background was added since nationalism research has shown chauvinism can be based on national/ethnic background, both as minority and majority group members, adding ethnic background allows us to account for possible strengthening or weakening effects of ethnic identity on educational chauvinism. The educational system is added to control whether the differences in the first two years of secondary education affect students' track attitude. School structure, being in either a categorical or multilateral school, is added since this has been shown to affect students' study involvement, sense of futility and self-esteem (Van Houtte, Demanet & Stevens, 2012; Van Houtte & Stevens, 2009; Van Praag et al., 2015). Additionally, the track's

public regard will be added to test the public regard hypothesis; perceived chauvinistic teacher communication and teachers' chauvinistic culture were added to test the teacher communication hypothesis. Adding this teacher communication at both level 1 and 2 allows to discern between the effects of perceived chauvinistic teacher communication by a singular student and the separate effect of a schools' chauvinistic teacher culture. The metric variables, chauvinism, public regard and perceived chauvinistic teacher communication, were grand mean centered.

If MI is achieved, in order to determine the specific direction and significance of the effect of public regard per track, interactions would be run between public track regard and students' track. To do this, we would perform a simple slope analysis (Aiken & West, 1991).

4. Results

When testing the chauvinism composition hypothesis, initial analysis showed no MI when all 5 chauvinism items were included (Table 2). When comparing between the different invariance models, they all differ significantly in terms of their chi-square ($p \leq 0.001$) (available on request). Therefore, based on the modification indices (available on request), the 'students in my track are more creative' item was deleted, as its correlation modification indices (40.9 and 27.6) were considerably higher than those of the other variables, with values ranging between 20 and 14. The new scale with 4 items does not achieve MI yet (Table 2), but it does already show a non-significant chi-square difference between the configural and metric model ($p = 0.142$) (available on request), which is an improvement over the 5-item model. For the modification indices there were no clear values that stood out, the correlation of the 'smarter' and 'more capable' items (27.710) and 'my track is harder' with 'cooler' (27.714) gave the highest values, but were too close to base a decision on. As the first deleted item was 'students are more creative', it seemed theoretically more coherent to try and eliminate 'student in my

track are cooler' next, as these two could be considered non-cognitive, whereas my track is 'harder', students have 'more capabilities' and are 'smarter' all pertain to cognitive skills.

The new three item scale did achieve metric MI which is already stronger than configural invariance (Table 2). In terms of model fit, the CFI (1.000), RMSEA (0.017) and SRMR (0.018) are all within the desired threshold values (Chen, 2007; van de Steen et al., 2012). As the three item model did not achieve scalar invariance, partial scalar invariance was tested. Table 3 shows that all partially unconstrained models achieve a desirable CFI, the models that unconstrain 'my track is smarter' and 'more capable' achieve a good RMSEA, but none of the models achieve a good SRMR. So the model fit of these unconstrained models is not unequivocally good. Table 4 compared the partially unconstrained models with the 3 item model that achieved metric invariance. The p-values of Table 4 indicate that none of the partially unconstrained models are invariant compared to the metric model ($p > 0.05$), therefore there is no partial scalar invariance achieved.

[Insert Tables 2 – 4 here]

Achieving metric invariance with this three item factor means that both the factor structure and the factor loadings are invariant across the tracks. These items also seem theoretically aligned, with the common theme being that the three items are cognitively oriented. Additionally, they have a good Cronbach's alpha (0.765). We therefore elect to continue analysis with this three item solution, which we will label cognitive track chauvinism (from now on called cognitive chauvinism), rather than opting for a four or five item construct which achieved no level of MI. Yet metric MI is insufficient to allow for any meaningful comparisons between the mean scores of the tracks, as this requires (partial) scalar invariance.

The two excluded items ('students from my track are cooler' and 'more creative') will be retained and turned into a separate scale, as these seem theoretically aligned and have a good

Cronbach's alpha (0.734). This item will be labeled social track chauvinism (from now on called social chauvinism). As neither scale achieved MI, we cannot compare results between groups and opt instead to study each track in a separate analysis.

Cognitive chauvinism (M = 2.60, SD = 0.91), the scale which achieved metric M.I., scored highest with academic track students (M = 2.62, SD = 0.92), followed by the technical (M = 2.57, SD = 0.87), and vocational track (M = 2.57, SD = 0.90). The chauvinism scales are rescored to a mean rather than a sum scale for further analysis. For social chauvinism (M = 2.37, SD = 0.91), based on the two remaining items, the vocational track has the highest score (M = 2.86, SD = 0.97), followed by the technical (M = 2.66, SD = 0.98) and lastly the academic track (M = 2.12, SD = 0.91).

[Insert Table 1 here]

The null-model for cognitive chauvinism showed that for the academic track 10 percent of the total variance (p < .001) can be situated at the school-level. For the technical and vocational track this is 10.7 and 4.1 percent respectively. For social chauvinism, in the academic track 13.4 percent of the total variance can be situated at the school level, in the technical track 6.2 percent and in the vocational track 2.0 percent. This variance at the school level is relatively low throughout the vocational track and for social chauvinism in the technical track.

For the control variables at the school level (Table 5), academic track students in Dutch-speaking schools are more cognitively chauvinistic than their counterparts in French-speaking schools. Additionally, academic students in multilateral schools are also more cognitively chauvinistic than academic students in categorical schools. The educational system and school structure show no significant relationship with cognitive chauvinism for the technical and vocational students. Teacher communication culture on the other hand is only significant with technical students, showing that the more chauvinistic communication is shared among

teachers, the higher students' cognitive chauvinism. At the student level however, perceived chauvinistic teacher communication is positively significant across all three tracks.

Public regard is negatively related to cognitive chauvinism in a significant manner in all three tracks. For the control variables at the individual level, boys are generally more cognitively chauvinistic than girls across all tracks. SES shows no significant effect on cognitive chauvinism in any track. Prior GPA is only in the academic track significantly correlated with the outcome. Being part of the ethnic minority is significantly positively related to cognitive chauvinism for the academic and vocational track students, but not in the technical track.

In order to obtain more insight into the public regard measure and to inform the discussion on the public regard hypothesis, we ran additional F-tests with Levene's homogeneity of variance tests to see if the variance in experienced public regard was the same for all tracks. Pairwise homogeneity of variance tests showed that the variances differ significantly between the academic track and both the technical ($F(1,3601) = 99.085$, $p < .001$) and the vocational track ($F(1,3350) = 283.840$, $p < .001$) as well as between the technical and vocational track ($F(1,1705) = 37.863$, $p < .001$).

[Insert Table 5 here]

Students in Dutch-speaking schools are significantly less socially chauvinistic compared to those in French-speaking schools in the academic and technical track. For the vocational track, the opposite is the case. The technical track is the only one that differs in social chauvinism based on school structure, with multilateral school students being significantly more socially chauvinistic than their counterparts in categorical schools. For chauvinistic teacher communication culture, all three tracks show differing impact on social chauvinism. Academic students' chauvinism benefits from a more chauvinistic communication culture, whereas vocational students' chauvinism lowers in these more chauvinistic cultures. Technical

students experience no significant impact at the school level of chauvinistic teacher communication. At the individual level however, all three tracks show a significantly positive relationship between perceived chauvinistic teacher communication and social chauvinism.

Public regard is significantly negatively related to social chauvinism in all three tracks. For the control variables at the individual level, SES shows no significant effect on the outcome in any track. For prior GPA, only the technical track shows a significantly negative relation to social chauvinism. In the academic and vocational, but not in the technical track, boys are more socially chauvinistic than girls. Lastly, ethnic background is only significant in the academic track, with ethnic minority students being more socially chauvinistic.

[Insert Table 6 here]

5. Discussion

This study examined how students' track chauvinism is constructed and how it is related to the perceived opinions of society and teachers on students' tracks. Firstly, track chauvinism was investigated more in-depth through factor analysis and measurement invariance testing, leading to the construction of two separate types of chauvinism. Cognitive chauvinism, which achieved metric measurement invariance across the three tracks, and social chauvinism, which is an explorative construct as it did not achieve any type of measurement invariance and is only based on two items. In order to study the relationship of cognitive and social chauvinism with the public opinion, we tested three hypotheses.

Firstly, the track chauvinism hypothesis assumed that students in the academic track would be most cognitively chauvinistic, followed by students in the technical and lastly in the vocational track, based on a sense of success within an educational system that is characterized by a focus on academic achievement. The students in the vocational track were hypothesized to be most socially chauvinistic, as they might search for alternative characteristics to feel

superior, rather than academic success. Any results based on descriptive statistics should be considered purely as a possible indication of between group differences that future research, which explores these constructs more in depth, should look into, as the lack of (partial) scalar invariance for these two constructs does not allow for conclusive statements on between group mean comparisons. Therefore we cannot discuss the track chauvinism hypothesis.

Secondly, the public regard hypothesis expected academic track students' chauvinism to benefit from a high public regard, as it would provide opportunities for status gains through reflected appraisal (Sidanius et al., 1997; Stryker & Serpe, 1982). For the vocational, and to a lesser extent technical track, a lower public regard would lead to higher chauvinism as a protective strategy by these students to cope with their lower public perception (Huddy & Del Ponte, 2019). The public regard hypothesis was partly confirmed for both types of chauvinism. Lower public regard is linked to higher track chauvinism, but rather than this just being the case for vocational and technical track students, this is the case across all tracks. The academic track has a higher average public regard with significantly less variance than the other two tracks. It therefore seems that there are fewer academic track students who experience low public regard. As public regard is negatively related to track chauvinism across all three tracks and there are students who experience low public regard in all tracks, it seems that track chauvinism is generally used as a defensive response to perceived negative public judgement (Huddy & Del Ponte, 2019). High public status does not necessarily lead to feelings of chauvinism, therefore chauvinism does not seem to be an expression of reflected appraisal. So, organizing secondary education in a system with explicitly public tracking and differential track status might come at the cost of some students feeling looked down upon, becoming more chauvinistic and as such developing more antagonistic feelings towards other tracks (Dekeyser et al., 2022).

The results for public regard for all groups are in line with ethnic identity research, even for the high status academic track. Ethnic identity research only rarely studies public regard

with the dominant, high status White category (Douglass & Umaña-Taylor, 2017), as public regard and experiences of discrimination are not as salient in dominant groups as in minority groups (Spencer et al., 1997). Academic track students seemingly experience less instances of low public regard since their track can be considered the 'norm' and their track can therefore be a hidden identity, an identity which is not salient or conscious since it is unchallenged (Doane, 1997). But when they do experience low public regard, it would unexpectedly challenge this hidden identity, a very jarring experience which could cause track membership to become more salient (Douglass & Umaña-Taylor, 2017). Low public regard would then invoke the same chauvinistic defensive reaction as it does in the other tracks (Huddy & Del Ponte, 2019). This seems to be happening for both cognitive and social chauvinism. An additional explanation might be that lower status academic track students, students in the Humanities compared to Science education, shift reference groups. Rather than comparing themselves favorably to the technical and vocational track, they would compare themselves in a more negative light with their higher status academic track counterparts. Future (qualitative) research could provide more insights from the students' perspective into the more ambiguous status position of lower status academic track students, as members of the highest status track who have comparatively low status within this track. Stevens & Vermeersch (2010) already looked at how teachers perceive and adapt to this stratification within the academic track.

Thirdly, the teacher communication hypothesis assumed that, regardless of track, there would be a positive association between more chauvinistic teacher communication (cultures) and more chauvinistic attitudes in students. Students are hypothesized to consider the opinion of their teachers, who can be seen as role models and authority figures who also experience being tracked (Achinstein et al., 2004, Yariv, 2009). The teacher communication hypothesis was partly confirmed by our analyses. For both types of chauvinism, all three tracks show a significantly positive association between perceived chauvinistic teacher communication and

their own social chauvinism at the individual level. At the school level however, the three tracks show different outcomes. For cognitive chauvinism, only technical students experience a significantly positive impact, the other tracks show no significant association between cultures of chauvinistic teacher communication and the outcome. The academic track students have a positive association between school wide chauvinistic teacher communication and their social chauvinism, in the technical track this association is not significant and in the vocational track there is even a significantly negative association between school wide chauvinistic teacher communication and social chauvinism.

Interpreting these results for the academic track, the lack of an association between chauvinistic teacher communication cultures and cognitive chauvinism might be because, despite this communication being shared at the school level, this school culture possibly does not have an equal impact on all students within the same school. For academic students, this might be due to different status groups existing within the academic track, with for instance Science Education being attributed more cognitive status than the Humanities. For social chauvinism, the school level chauvinistic communication is significant. This is in line with the association with perceived teacher communication at the student level and seems plausible as there are, to our knowledge, no clear social status differences in academic tracks. Therefore, a chauvinistic school culture could more easily benefit all students' social chauvinism.

The technical track is the only track to experience a significant, positive, association between schoolwide teacher chauvinistic communication and students' cognitive chauvinism. This is in line with the associations with perceived chauvinistic teacher communication at the student level. For social chauvinism, the technical track is the only track to seemingly experience no impact of school-level teacher communication. The difference between the association with the individual experience of chauvinistic teacher communication and the lack of association at the school level with social chauvinism might be partially attributed to how

the chauvinistic communication variable is constructed. In Belgian education, schools are generally considered categorical if they provide either academic or a combination of technical and vocational education. Therefore, by aggregating the results from a technical-vocational school, both the communication of technical and vocational track teachers are included. Yet this does not provide an explanation for the diverging results for social and cognitive chauvinism.

The negative relation between vocational students' social chauvinism and schoolwide communication culture might also be due to how the chauvinistic communication culture variable is constructed. It might be that the chauvinistic communication by technical track teachers cause vocational students to feel less socially chauvinistic, partially representing the school-level variable, whereas their own vocational teachers' communication could lead to higher feelings of both types of chauvinism, reflected in the student level variable. Since the track opinions teachers voice associate with students' views on tracks, teachers might be considered as role models or authority figures when it comes to tracking. This is however not the case for vocational students' cognitive chauvinism, where there is no significant association. Future research should investigate these diverging results.

There are significant results of teacher communication at both the individual and the school level on students' track attitudes. Stimulating awareness in teachers and schools about their own track prejudices and the effects voicing these prejudices can have on their students could be an effective policy choice to reduce antagonistic feelings in educational tracks. School wide communication of track chauvinism can be significantly related to students' track views beyond individual student experiences with teacher communication, showing that track chauvinism cannot be reduced to an individual's response to lower status, but rather that track chauvinism is developed in interaction with others (i.e., teachers) and the broader school context.

Concerning the control variables, a few notable results might be used as inspiration for future research. Firstly, Prior GPA was positively significantly related to cognitive chauvinism in the academic track, indicating that the cognitive focus of this track seemingly affects the importance of prior GPA on students' attitudes. Secondly, academic track students' cognitive chauvinism was higher in multilateral schools, whereas technical students' social chauvinism was higher in multilateral schools. These results imply that students who are confronted with students from other tracks tend to look at their track through a more superior lens. The academic track is more cognitively oriented and coming into contact with non-academic students seemingly strengthens cognitive superiority attitudes. For the technical track, based on the way multilateral schools are operationalized, coming into contact with academic track students leads to more social superiority, compared to coming into contact with either no other tracks or vocational track students. So, being confronted with an unfavorable status comparison stimulates technical students to protect their self-image through feelings of social ingroup superiority. The vocational track students' chauvinism showed no significant correlations with school structure. It is currently unclear, due to the operationalization of school structure, whether this is because their sense of chauvinism is not changed by coming into contact with other students or whether they do not make a distinction between technical and academic track students for this contact.

While a sense of superiority might be seen as a rather hostile attitude, as it is based on comparing the ingroup to others, this paper has shown that it might also serve a good purpose, as it might allow students to defend themselves against negative outside voices. It might even be the case that feeling connected to an ingroup could counteract the desire to drop out of education. Additionally, chauvinism can be broken down into several aspects, so schools and policy makers could look into which aspects of track identity they can stimulate to maintain the benefits of track chauvinism, while having minimal negative consequences in students'

opinions towards other tracks. Dekeyser and colleagues (2022) have already given an indication that, in technical and vocational tracks, a sense of superiority does not necessarily lead to significantly more negative attitudes towards the other tracks. The teacher communication hypothesis was made regardless of track.

Limitations and future research suggestions

The first limitation of this paper lies in the fact that no (partial) scalar measurement invariance was achieved for either type of chauvinism. So there cannot be made any statements with certainty when comparing the group means for chauvinism between the tracks. We therefore cannot discuss the track chauvinism hypothesis. There is metric invariance for cognitive chauvinism, showing internal consistency in the factor structure and factor loadings. Additionally, both scales give a good Cronbach's alpha, 0.765 and 0.734 for cognitive and social chauvinism respectively. As there seems a statistical basis to consider these scales as usable constructs and chauvinism is commonly used as a concept in ethnic and national identity research, we encourage future researchers to survey a wider range of chauvinistically inspired track attitude items, to deepen the understanding of this concept in the context of educational tracking and allow for between track comparisons when achieving scalar invariance.

The second limitation of this paper pertains to the teacher communication measure. Superiority is operationalized in the broad sense, through "my track is superior to other tracks", but a more detailed investigation could test whether chauvinistic teacher communication is limited to comparisons between the ingroup and tracks lower on the status ladder or compared to all tracks. It is adequate for the research questions posed in this paper, but there is more that could be explored in depth on this subject in future research. Additionally, comparing students' perceived teacher communication with the actual communication by teachers would provide more insight in the effectiveness of teachers' track communication. Lastly, the Belgian context

makes it hard to study school wide chauvinistic communication for each track separately, as a lot of Belgian schools provide a combination of technical and vocational education.

Thirdly, the studied data are cross-sectional. So even though there are theoretical reasons to assume that chauvinism is a defensive response to a low public regard (Huddy & Del Ponte, 2019), we cannot with certainty disprove that this relationship might be the other way around. In that case, students who are more chauvinistic would be more sensitive to or aware of negative messages towards their ingroup, causing them to believe that the public perception towards their track is more negative, compared to students in the same track who are less chauvinistic.

Future research might be able to include track mobility, as students' track opinion might differ depending on their previous educational experiences and how long they are in their current track. This paper did include ethnic background as a control variable since the chauvinism concept originates from the field of ethnic/nationalism studies. But future research should look deeper into the relationships between ethnic background, coping with minority status and sense of (educational) superiority. Lastly, we believe that both types of track chauvinism might be interesting to study as an influencing factor in relation to classic educational concepts such as students' academic performance and their (academic) self-esteem.

5.3 Conclusions and implications

Explicit public tracking is an educational grouping system that aims to provide the best learning environment for all students, but it also (unintentionally) leads to social divisions and hierarchical group thinking between the tracks (Dekeyser et al., 2022). Lower public regard leads to higher feelings of both cognitive and social chauvinism across all three tracks. Students invoke a sense of superiority and harbor antagonistic outgroup attitudes when facing negative public opinion as a way to protect themselves. As students 'lower' on the educational status

ladder experience a generally more negative public opinion, they resort to these negative feelings to a larger extent. Policy makers should be aware of the unwanted consequences of tracking, especially for technical and vocational students, and look for either less damaging alternatives to explicitly public tracking or at ways to compensate for the negative effects this system can cause.

Consequently, how tracks are portrayed societally should be rethought in ways that diminish experiencing negative public opinion. Additionally, it could be interesting to see if track membership relates to public regard and chauvinism in similar ways in educational systems where tracking is not so rigid. At the same time, this article shows that teachers' communication regarding tracks does matter in how students see their own and other tracks. Stimulating awareness in teachers about their own track prejudices and the effects voicing these prejudices can have on their students could be an effective way to reduce antagonistic feelings and social division between educational groups. Policy makers should stimulate alternative narratives which provide the same protective benefits as social chauvinism, without its possible negative consequences. This is all the more relevant as tracking might be considered a precursor of future social divisions between 'higher' and 'lower' educated groups and their attitudes towards each other.

6. References

Achinstein, B., Ogawa, R.T., & Speiglman, A. (2004). Are we creating separate and unequal tracks of teachers? The effects of state policy, local conditions, and teacher characteristics on new teacher socialization. *American educational research journal*, 41(3), 557-603. https://doi.org/10.3102/00028312041003557

Aiken, L. S., & West, S.G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage. https://doi.org/10.1177/109821409301400208.

Amitai, A. (2021). *Teachers throwing in the towel: the role of the school in teacher wellbeing and turnover* [Doctoral dissertation, Ghent University].

Andersen, R., & Van de Werfhorst, H.G. (2010). Education and occupational status in 14 countries: the role of educational institutions and labour market coordination. *The British journal of sociology*, *61*(2), 336-355. https://doi.org/10.1111/j.1468-4446.2010.01315.x

Ardies, J., De Maeyer, S., Gijbels, D., & van Keulen, H. (2015). Students' attitudes towards technology. *International Journal of Technology and Design Education*, *25*(1), 43-65. https://doi.org/10.1007/s10798-014-9268-x

Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T. (2004). An organizing framework for collective identity: articulation and significance of multidimensionality. *Psychological bulletin*, *130*(1), 80. https://doi.org/10.1037/0033-2909.130.1.80

Boldrini, E., Sappa, V., & Aprea, C. (2019). Which difficulties and resources do vocational teachers perceive? An exploratory study setting the stage for investigating teachers' resilience in Switzerland. *Teachers and Teaching*, *25*(1), 125-141. https://doi.org/10.1080/13540602.2018.1520086

Boone, S., & Van Houtte, M. (2013). In search of the mechanisms conducive to class differentials in educational choice: A mixed method research. *The Sociological Review*, *61*(3), 549–572.

Boone, S., Seghers, M., & Van Houtte, M. (2018). Transition from primary to secondary education in a rigidly tracked system: The case of Flanders. In *Educational choices, transitions and aspirations in Europe: systemic, institutional and subjective challenges* (pp. 53–70). Routledge.

Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005). Explaining the short careers of high-achieving teachers in schools with low-performing students. *American economic review*, *95*(2), 166-171. https://doi.org/10.1257/000282805774669628

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of personality and social psychology*, *77*(1), 135. https://doi.org/10.1037/0022-3514.77.1.135

Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological bulletin*, *86*(2), 307. https://doi.org/10.1037/0033-2909.86.2.307

Carbonaro, W. (2005). Tracking, students' effort, and academic achievement. *Sociology of Education*, *78*(1), 27-49. https://doi.org/10.1177/003804070507800102

Chavous, T. M., Bernat, D. H., Schmeelk-Cone, K., Caldwell, C. H., Kohn-Wood, L., & Zimmerman, M. A. (2003). Racial identity and academic attainment among African American adolescents. *Child development*, *74*(4), 1076-1090. https://doi.org/10.1111/1467-8624.00593

Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural equation modeling: a multidisciplinary journal*, *14*(3), 464-504.

Chmielewski, A. K. (2014). An international comparison of achievement inequality in within-and between-school tracking systems. *American Journal of Education*, *120*(3), 293-324. https://doi.org/10.1086/675529

Cooley, C. H. (1902). Looking-glass self. *The production of reality: Essays and readings on social interaction*, *6*, 126-128. https://doi.org/10.32376/3f8575cb.73d69f51

Dekeyser, L., Van Houtte, M., Maene, C., & Stevens, P. (2022). Track prejudice in Belgian secondary schools: examining the influence of social-psychological and structural school features. *Oxford Review of Education*, 1–18.

Doane, A. W. (1997). Dominant group ethnic identity in the United States: The role of "hidden" ethnicity in intergroup relations. *The Sociological Quarterly*, *38*(3), 375-397. https://doi.org/10.1111/j.1533-8525.1997.tb00483.x

Douglass, S., & Umaña-Taylor, A. J. (2017). Examining discrimination, ethnic-racial identity status, and youth public regard among Black, Latino, and White adolescents. *Journal of Research on Adolescence*, *27*(1), 155-172. https://doi.org/10.1111/jora.12262

Ecclestone, K. (2004). Learning or therapy? The demoralisation of education. *British Journal of Educational Studies*, *52*(2), 112-137. https://doi.org/10.1111/j.1467-8527.2004.00258.x

Ensminger, M. E., Forrest, C. B., Riley, A. W., Kang, M., Green, B. F., Starfield, B., & Ryan, S. A. (2000). The validity of measures of socioeconomic status of adolescents. *Journal of Adolescent Research*, *15*(3), 392-419.

Finley, M. K. (1984). Teachers and tracking in a comprehensive high school. *Sociology of education*, 233-243. https://doi.org/10.2307/2112427

Gamoran, A. (1992). Synthesis of research: Is ability grouping equitable? *Educational Leadership*, 50, 11-17.

Ganzeboom, H. B., De Graaf, P. M., & Treiman, D. J. (1992). A standard international socio-economic index of occupational status. *Social science research*, *21*(1), 1-56. https://doi.org/10.1016/0049-089x(92)90017-b

Geiser, C. (2013). *Data analysis with Mplus*. New York, NY: The Guilford Press.

Glick, W. H. (1985). Conceptualizing and measuring organizational and psychological climate: Pitfalls in multilevel research. *Academy of management review*, *10*(3), 601-616. https://doi.org/10.5465/amr.1985.4279045

Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *The Journal of early adolescence*, *13*(1), 21-43. https://doi.org/10.1177/0272431693013001002

Gore, J. M., & Morrison, K. (2001). The perpetuation of a (semi-) profession: Challenges in the governance of teacher education. *Teaching and Teacher Education*, *17*(5), 567-582. https://doi.org/10.1016/s0742-051x(01)00014-2

Hallinan, M. T., Bottoms, E., Pallas, A. M., & Palla, A. M. (2003). Ability grouping and student learning. *Brookings papers on education policy*, (6), 95-140. https://doi.org/10.1353/pep.2003.0005

Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual review of psychology*, *53*(1), 575-604. https://doi.org/10.1146/annurev.psych.53.100901.135109

Hjorth, F. (2016). Who benefits? Welfare chauvinism and national stereotypes. *European Union Politics*, *17*(1), 3-24. https://doi.org/10.1177/1465116515607371

Högberg, R. (2011). Cheating as subversive and strategic resistance: Vocational students' resistance and conformity towards academic subjects in a Swedish upper secondary school. *Ethnography and Education*, *6*(3), 341-355. https://doi.org/10.1080/17457823.2011.610584

Huddy, L., & Del Ponte, A. (2019). National identity, pride, and chauvinism–their origins and consequences for globalization attitudes. *Liberal Nationalism and Its Critics. Normative and empirical questions, 38-58*. https://doi.org/10.1093/oso/9780198842545.003.0003

Kelly, S. (2004). An event history analysis of teacher attrition: Salary, teacher tracking, and socially disadvantaged schools. *The Journal of Experimental Education*, *72*(3), 195-220. https://doi.org/10.3200/jexe.72.3.195-220

Lien, N., Friestad, C., & Klepp, K. I. (2001). Adolescents' proxy reports of parents' socioeconomic status: How valid are they?. *Journal of Epidemiology & Community Health*, *55*(10), 731-737.

Mac An Ghaill, M. (1988). *Young, Gifted and Black. Student-Teacher Relations in the Schooling of Black Youth*. Buckingham and Philadelphia, Open University Press.

Maene, C., Thijs, J., Stevens, P.A., (2021). "School, Identity and Society Survey", https://doi.org/10.34934/DVN/ZRXUWM, Social Sciences and Digital Humanities Archive – SODHA, V2, UNF:6:6VzBbrZqvWS/vV5uMTrFqQ== [fileUNF].

Mead, G. H.. 1934. *Mind, self and society* (Vol. 111). University of Chicago Press.: Chicago.

Mizrachi, N., Goodman, Y. C., & Feniger, Y. (2009). 'I don't want to see it': decoupling ethnicity and class from social structure in Jewish Israeli high schools. *Ethnic and Racial Studies*, 32(7), 1203-1225.

Nouwen, W., & Clycq, N. (2019). The role of teacher–pupil relations in stereotype threat effects in Flemish secondary education. *Urban education*, *54*(10), 1551-1580. https://doi.org/10.1177/0042085916646627

OECD. (2008). *Jobs for immigrants: Labour market integration in Belgium, France, the Netherlands and Portugal* (Vol. 2). Paris: OECD Publishing.

Onderwijskiezer. (2021). *Secundair Onderwijs" [Secondary Education]*. Retrieved from https://www.onderwijskiezer.be/v2/secundair/index.php.

Ono, H. (2001). Who goes to college? Features of institutional tracking in Japanese higher education. *American Journal of Education, 109(2),* 161-195. https://doi.org/10.1086/444265

Paredes, V. (2014). A teacher like me or a student like me? Role model versus teacher bias effect. *Economics of Education Review, 39*, 38-49. https://doi.org/10.1016/j.econedurev.2013.12.001

Putnick, D. L., & Bornstein, M. H. (2016). Measurement invariance conventions and reporting: The state of the art and future directions for psychological research. *Developmental review, 41*, 71-90.

Quin, D. (2017). Longitudinal and contextual associations between teacher–student relationships and student engagement: A systematic review. *Review of Educational Research*, *87*(2), 345-387. https://doi.org/10.3102/0034654316669434

Raijman, R., Davidov, E., Schmidt, P., & Hochman, O. (2008). What does a nation owe non-citizens? National attachments, perception of threat and attitudes towards granting citizenship rights in a comparative perspective. *International Journal of Comparative Sociology*, *49*(2-3), 195-220. https://doi.org/10.1177/0020715208088912

Raudenbush, S. W., Bryk, A., Cheong, Y. F., Congdon Jr, R.T., & du Toit, M. (2013). HLM 7.01 for Windows [Hierarchical linear and nonlinear modeling software]. *Los Angeles: Multivariate Software*.

Rawal, S., & Kingdon, G. (2010). *Akin to my teacher: Does caste, religious or gender distance between student and teacher matter? Some evidence from India*. Department of Quantitative Social Science-UCL Institute of Education, University College London, 10-18.

Saleh, M., Lazonder, A.W., & De Jong, T. (2005). Effects of within-class ability grouping on social interaction, achievement, and motivation. *Instructional Science*, *33*(2), 105-119. https://doi.org/10.1007/s11251-004-6405-z

Sellers, R. M., Smith, M. A., Shelton, J. N., Rowley, S. A., & Chavous, T. M. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality and social psychology review*, *2*(1), 18-39. https://doi.org/10.1207/s15327957pspr0201_2

Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: uses in assessing rater reliability. *Psychological bulletin*, *86*(2), 420. https://doi.org/10.1037/0033-2909.86.2.420

Sidanius, J., Feshbach, S., Levin, S., & Pratto, F. (1997). The interface between ethnic and national attachment: Ethnic pluralism or ethnic dominance?. *The Public Opinion Quarterly*, *61*(1), 102-133. https://doi.org/10.1086/297789

Spencer, M. B., Dupree, D., & Hartmann, T. (1997). A phenomenological variant of ecological systems theory (PVEST): A self-organization perspective in context. *Development and psychopathology*, *9*(4), 817-833. https://doi.org/10.1017/s0954579497001454

Spilt, J. L., & Koomen, H. M. (2009). Widening the view on teacher–child relationships: Teachers' narratives concerning disruptive versus nondisruptive children. *School Psychology Review*, *38*(1), 86-101. https://doi.org/10.1080/02796015.2009.12087851

Spruyt, B., Van Droogenbroeck, F., & Kavadias, D. (2015). Educational tracking and sense of futility: a matter of stigma consciousness?. *Oxford Review of Education*, *41*(6), 747-765. https://doi.org/10.1080/03054985.2015.1117971

Statbel. (2018). *Diversiteit naar herkomst in België [Diversity of origins in Belgium]*. Retrieved from https://statbel.fgov.be/nl/themas/bevolking/structuur-van-de-bevolking/herkomst.

Steele, C.M. & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69, 797–811. https://doi.org/10.1037/0022-3514.69.5.797

Steenkamp, J. B. E., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of consumer research*, *25*(1), 78-90.

Stevens, P. A., & Vermeersch, H. (2010). Streaming in Flemish secondary schools: Exploring teachers' perceptions of and adaptations to students in different streams. *Oxford Review of Education*, *36*(3), 267–284.

Stryker, S., & Serpe, R.T. (1982). Commitment, identity salience, and role behavior: Theory and research example. In *Personality, roles, and social behavior*, 199-218. https://doi.org/10.1007/978-1-4613-9469-3_7

Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European journal of social psychology*, *1*(2), 149-178. https://doi.org/10.1002/ejsp.2420010202

Talbert, J. E., & Ennis, M. (1990, April). Teacher tracking: Exacerbating inequalities in the high school. In *annual meeting of the American Educational Research Association, Boston*.

Tan, B. (1998). Blijvende sociale ongelijkheden in het Vlaamse onderwijs [Persistent social inequalities in Flemish Education]. *Tijdschrift voor Sociologie,* 19, 2, 169-197.

Thomas, D. L., Smith, C.D., Marks, B.T., & Crosby, B. (2012). Institutional Identity and Self-Esteem among African American Males in College. *Journal of African American Males in Education*, *3*(1), 1-11.

Van der Waal, J., Achterberg, P., Houtman, D., De Koster, W., & Manevska, K. (2010). 'Some are more equal than others': Economic egalitarianism and welfare chauvinism in the Netherlands. *Journal of European Social Policy*, *20*(4), 350-363.

Van Der Waal, J., De Koster, W., & Van Oorschot, W. (2013). Three worlds of welfare chauvinism? How welfare regimes affect support for distributing welfare to immigrants in Europe. *Journal of Comparative Policy Analysis: Research and Practice*, *15*(2), 164-181. https://doi.org/10.1080/13876988.2013.785147

Van de Schoot, R., Lugtig, P., & Hox, J. (2012). A checklist for testing measurement invariance. *European journal of developmental psychology*, *9*(4), 486-492. DOI: 10.1080/17405629.2012.686740

Van Houtte, M. (2005). Global self-esteem in technical/vocational versus general secondary school tracks: A matter of gender? *Sex Roles, 53*(9–10), 753–761.

Van Houtte, M. (2006). Tracking and teacher satisfaction: Role of study culture and trust. *The Journal of Educational Research, 99*(4), 247–256.

Van Houtte, M., & Stevens, P. A. (2008). Sense of futility: The missing link between track position and self-reported school misconduct. *Youth & Society, 40*(2), 245–264.

Van Houtte, M., & Stevens, P. A. (2009). Study involvement of academic and vocational students: Does between-school tracking sharpen the difference? *American Educational Research Journal, 46*(4), 943–973.

Van Houtte, M., & Stevens, P. A. (2016). Track position, futility culture, and involvement with paid work: Investigating the correlates of lower-track students' involvement with part-time employment in flanders. *Sociological Inquiry, 86*(3), 372–399.

Van Houtte, M., Demanet, J., & Stevens, P. A. (2012). Self-esteem of academic and vocational students: Does within-school tracking sharpen the difference? *Acta Sociologica, 55*(1), 73–89.

Van Praag, L., Boone, S., Stevens, P. A., & Van Houtte, M. (2015a). De paradox van het watervalsysteem: Wanneer het groeperen van studenten in homogene groepen tot meer heterogeniteit leidt in het beroepsonderwijs [The paradox of the cascade system: When group students in homogeneous groups leads to more heterogeneity in vocational education]. *Sociologos, 36*(2), 82–101.

Van Praag, L., Boone, S., Stevens, P. A., & Van Houtte, M. (2015b). How tracking structures attitudes towards ethnic out-groups and interethnic interactions in the classroom: An ethnographic study in Belgium. *Social Psychology of Education, 18*(1), 165–184.

Van Praag, L., Demanet, J., Stevens, P. A., & Van Houtte, M. (2017). Everyone has their own qualities': tracking and academic self-appraisal in Flemish secondary education. *Social Psychology of Education, 20*, 601–618.

Vervaet, R., Van Houtte, M., & Stevens, P. A. (2018). Multicultural school leadership, multicultural teacher culture and the ethnic prejudice of Flemish pupils. *Teaching and Teacher Education, 76*, 68–77.

Vlaams Ministerie van Onderwijs en Vorming. (2019). Het voltijds gewoon secundair onderwijs [The full time regular secundary education]. Retrieved from https://onderwijs.vlaanderen.be/het-voltijds-gewoon-secundair-onderwijs.

Vlaamse Overheid (2019). *Vlaams onderwijs in cijfers 2017-2018 [Flemish Education in numbers 2017-2018]*. Retrieved from https://www.vlaanderen.be/publicaties/vlaams-onderwijs-in-cijfers.

Wallace, H. M., & Tice, D. M. (2012). Reflected Appraisal through a 21st-Century Looking Glass. in *Handbook of Self and Identity*, ed. Mark R. Leary and June P. Tangney, New York: Guilford, 124–140.

Willis, P. (1977). *Learning to labour: How working-class kids get working-class jobs*. New York: Columbia University Press (Morningside Edition 1981). https://doi.org/10.2307/2067890

Yariv, E. (2009). Students' attitudes on the boundaries of teachers' authority. *School Psychology International*, *30*(1), 92-111. https://doi.org/10.1177/0143034308101852

Yonezawa, S., Wells, A. S., & Serna, I. (2002). Choosing tracks: "Freedom of choice" in detracking schools. *American Educational Research Journal*, *39*(1), 37-67. https://doi.org/10.3102/00028312039001037

Zirkel, S. (2002). Is there a place for me? Role models and academic identity among white students and students of color. *Teachers College Record*, *104*(2), 357-376. https://doi.org/10.1111/1467-9620.00166

7. Tables

Table 1: Descriptive statistics for dependent and independent variables–comparing the academic, technical, and vocational track

Variable	Total		Academic (N= 44)		Technical (N= 37)		Vocational (N= 28)		Difference
	Mean or %	SD	Mean or %	SD	Mean or %	SD	Mean or %	SD	F-test or Cramer's V
School Level									
Teachers Chauvinistic Culture (N= 64)	2.44	0.26	2.32	0.20	2.56	0.25	2.67	0.24	
Educational System (ref. = Dutch-Speaking) (N= 64)	56.25		51.11		53.85		51.61		
School Structure (ref. = categorical) (N= 64)	62.5		51.11		42.03		60.17		
	Total		Academic (N= 2725)		Technical (N= 1037)		Vocational (N= 786)		Difference
Individual Level									
Cognitive Chauvinism (N= 4426)	2.60	0.91	2.62	0.93	2.57	0.87	2.57	0.90	1.701

Social Chauvinism (N=4448)	2.37	0.99	2.12 ^{T,V}	0.91	2.66 ^{A,V}	0.98	2.86 ^{A,T}	0.97	244.19***
Public Track Regard (N = 4365)	11.22	2.47	11.69 ^{T,V}	2.26	10.82 ^{A,V}	2.56	10.05 ^{A,T}	2.57	153.54***
Perceived Chauvinistic Teacher Communication (N= 4377)	2.44	0.87	2.30 ^{T,V}	0.84	2.56 ^{A,V}	0.87	2.76 ^{A,T}	0.87	100.60***
Sex (ref. = male) (N= 4553)	49.1		44.55		56.8		54.7		0.112***
SES (N= 4584)	48.18	16.71	50.16 $^{T, V}$	17.31	44.43 ^{A}	19.44	44.57 ^{A}	14.62	49.69***
Prior GPA (N= 3705)	67.57	12.67	69.98 $^{T, V}$	10.89	62.28 ^{A,V}	12.19	65.10 ^{A,T}	16.71	130.19***
Ethnic background (N= 4275)	43.4		47.5		39.6		37.3		0.088***

X^A :differ from the academic track at $p < 0.05$; X^T differ from the technical track at $p < 0.05$; X^V differ from the vocational track at $p < 0.05$

Table 2: Measurement Invariance Testing of Track Chauvinism

	χ^2	df	p	CFI	RMSEA	SRMR
5 item model						
Configural	376.139	15	0.000	0.960	0.127	0.034
Metric	401.687	23	0.000	0.958	0.105	0.041
Scalar	1533.132	31	0.000	0.832	0.180	0.099
4 item model						
Configural	27.964	6	0.000	0.996	0.049	0.013
Metric	37.585	12	0.000	0.995	0.038	0.023
Scalar	738.331	18	0.000	0.872	0.163	0.087
3 item model						
Configural	0.000	0	0.000	1.000	0.000	0.000
Metric	5.651	4	0.227	1.000	0.017	0.018
Scalar	422.126	8	0.000	0.902	0.186	0.070

Table 3: Partial Scalar Invariance of Cognitive Chauvinism: 3 Item Model, Unconstrained Item Intercept

	χ^2	df	p	CFI	RMSEA	SRMR
'Smarter'	16.834	6	0.010	0.997	0.035	0.029
'more capable'	59.234	6	0.000	0.987	0.077	0.056
'Track is harder'	208.899	6	0.000	0.952	0.150	0.077

Table 4: Comparison of Unconstrained Cognitive Chauvinism 3 Item Models to Metric Invariance Model

	χ^2-Diff	Df-diff	p
'Smarter'	11.183	2	0.004
'more capable'	53.583	2	0.000
'Track is harder'	203.248	2	0.000

Table 5: Separate Multilevel Regression for Academic, Technical and Vocational Track (HLM 6) with Cognitive Chauvinism as Outcome

Variables	Academic	Technical	Vocational
Intercept	2.333***	1.648***	2.996***
School Level			
Educational System (ref. = Dutch-	-0.150**	-0.015	0.155
Speaking)	(0.047)	(0.088)	(0.089)
School structure (ref. = categorical)	0.138*	0.102	-0.037
	(0.054)	(0.088)	(0.098)
Teacher communication culture	0.148	0.362*	-0.153
	(0.141)	(0.150)	(0.175)
Individual Level			
Public Regard	-0.140***	-0.118***	-0.135***
	(0.014)	(0.015)	(0.017)
Perceived Chauvinistic Teacher	0.205***	0.217***	0.254***
Communication	(0.022)	(0.035)	(0.044)
Sex (ref. = male)	-0.192***	-0.151*	-0.366***
	(0.041)	(0.063)	(0.066)
SES	-0.001	0.001	-0.001
	(0.001)	(0.001)	(0.002)
Prior GPA	0.006**	0.004	<-0.001
	(0.002)	(0.002)	(0.002)

Ethnic background (ref. =	0.128**	0.089	0.168**
Belgian/Western European)	(0.046)	(0.072)	(0.050)
Variance components			
Intercept	0.075***	0.081**	0.001*
Public Regard	0.005***	0.003	0.002
Perceived teacher communication	0.005	0.008	0.015*
Sex	0.018*	0.013	0.006
SES	<0.001	<0.001	<0.001
Prior GPA	<0.000	<0.001	<0.001
Ethnic Background	0.019	0.053	0.004

Note: All presented coefficients are unstandardized. *$p < 0.05$.; **$p < 0.01$; ***$p < 0.001$.

Table 6: Separate Multilevel Regression for Academic, Technical and Vocational Track (HLM 6) with Social Chauvinism as Outcome

Variables	Academic	Technical	Vocational
Intercept	0.736	1.844***	4.110***
School Level			
Educational System (ref. = Dutch-	0.224***	0.181*	-0.210*
Speaking)	(0.051)	(0.068)	(0.098)
School structure (ref. = categorical)	0.081	0.163*	-0.125
	(0.052)	(0.060)	(0.106)
Teacher communication culture	0.560**	0.266	-0.378*
	(0.175)	(0.147)	(0.177)
Individual Level			
Public Regard	-0.518***	-0.451***	-0.426***
	(0.030)	(0.051)	(0.079)
Perceived Chauvinistic Teacher	0.162***	0.199***	0.206***
Communication	(0.023)	(0.043)	(0.041)
Sex (ref. = male)	-0.143***	-0.159	-0.414***
	(0.032)	(0.089)	(0.068)
SES	-0.002	<0.001	0.003
	(0.001)	(0.002)	(0.003)
Prior GPA	0.001	-0.006*	-0.002
	(0.002)	(0.003)	(0.002)

Ethnic background (ref. =	0.103**	0.118	0.076
Belgian/Western European)	(0.037)	(0.075)	(0.077)
Variance components			
Intercept	0.014	0.064*	0.026
Public Regard	0.014*	0.034	0.097**
Perceived teacher communication	0.004	0.011	0.013
Sex	0.011	0.106*	0.009
SES	<0.001	<0.001	<0.001
Prior GPA	<0.001*	<0.001	<0.001
Ethnic Background	0.009	0.052	0.037

Note: All presented coefficients are unstandardized. *$p < 0.05$.; **$p < 0.01$; ***$p < 0.001$.