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Student Employees' Dropout Intentions: Work Excuse and University Social Capital as Source and Solution

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Abstract: This study seeks to investigate the relationship between dropout intent, the weekly work duration of student employees, and university social capital by analysing empirical evidence from three European countries, including Estonia, Lithuania, and Poland. This exploratory study utilised Eurostudent-VII survey data and employed cross-tabulation and exhaustive Chi-square Automatic Interaction Detection (CHAID) to achieve its objectives. Findings indicate that student employees who believe they get along well with their teachers and have more connections with fellow students to discuss subject-related issues are less likely to intend to drop out of university. In addition, the results show that students' likelihood of abandoning their higher education increases in the presence of difficulties caused by an inapt academic programme. Regarding employment duration, for the Estonian and Lithuanian markets, there is no difference between working more than 20 hours per week or less than that with the intention of dropping out of university. In Poland, however, the disparity in working hours interacts with other factors related to social capital to explain dropout intent. These findings provide novel insights into the dropout literature by refreshing thoughts on the role of teacher-student and peer relations in the dropout intentions of student employees. In addition to reviving the relevance of university social capital, which has received too little attention lately, they have also sparked a recent debate on whether or not combining work and university actually affects the intention to drop out.

Keywords: *Dropout, social capital, working student, work duration.*

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Introduction

In today's capitalist-obsessed society, where profitable progress is widely tied to the presence of competent personnel, higher education is typically seen as one of the primary paths through which individuals could acquire the necessary skillsets. Although university enrolment has increased in many industrialised nations (Roser & Ortiz-Ospina, 2013), a considerable proportion of students who integrate study and work do not complete their degrees, making dropout a major concern in both the education and human resource management fields. Students that are able to juggle work and education are a unique segment of the labour and student populations. Since they fulfil their professional obligations in two ways, as employees and students, they are able to study and work simultaneously. However, the integration process often reaches a crossroads where competing professional commitments must be reconciled, possibly at the cost of opting out of one commitment or another. Therefore, the problem of student attrition from higher education has long piqued the interest of scientists, and research focusing on the factors such as work commitment and university social capital that contribute to this phenomenon among working students have carved out a special niche (Pusztai et al., 2022).

Higher education abandonment has numerous detrimental repercussions. On the one hand, it robs a person of the opportunity to succeed and grow in their personal and social life, while on the other, it leads to wasteful expenditures and social failure on the part of the student (Catterall, 2011). The unique significance of the issue of dropout intent among working students stems from the fact that this widespread problem affects not only the students themselves but also the schools where they enrol and the others who financially and emotionally support them (their families and employers) (i.e., those who pay for it) (Ampaw & Jaeger, 2012; John et al., 2018). There is a loss for everyone concerned if these students do not finish their degrees, as the time, effort, and resources spent on them may not have resulted in a competent professional.

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Despite the evident negative consequences, students remain engaged in the practice of abandoning their higher education, and the issue has emerged as a twisted rationale, especially for student workers. Several studies (Casanova et al., 2018; Kehm et al., 2019; Kocsis & Pusztai, 2020; Pusztai et al., 2022) have highlighted the fact that there is no single cause for students to drop out of school. Instead, numerous factors—family troubles, academic challenges, health issues, inefficient specialisation selection, weak academic integration, and inadequate student support—play a part, but student employment gets specific blame. When drawing a clear boundary between employment and school, there are varying opinions on whether or not mixing the two boosts the likelihood of dropping out of university. While some evidence (Body et al., 2014; Kocsis & Pusztai, 2020; Triventi, 2014; Tumin et al., 2020) implies that working students with more difficult academic experiences are more likely to drop out of school, others (Body et al., 2014; Wang et al., 2010) indicate that this is not necessarily the case. Graduation is regarded as a success if it leads to employment, while failing to graduate or dropping out is seen as a consequence of juggling school and job (Bair & Haworth, 2004). For student employees, employment takes on an extremely nuanced meaning in this context. The investigation of this conundrum within the context of various education markets would yield additional insights that are not well understood (Kehm et al., 2019; Tumin et al., 2020). This study intends to address this deficiency by investigating the relationship between employment and the abandonment of higher education among working students, as well as the institutional aspects associated with this phenomenon. In fact, this study seeks to address the question: Can work be responsible for student employees' intention to drop out of university, or are other factors more likely to be to blame? By looking at it through the lens of social capital, this study will attempt to uncover the answer.

The notion of social capital as a means of investigating the issue of dropout has gained traction in recent years. For instance, researchers (Bernardo et al., 2016; Pusztai, 2014, 2015; Pusztai et al., 2022) have underscored that students' success in commitment depends on their ability to fully actualize their academic and work obligations, which necessitates allocating all of their resources, including their social relationships. In fact, students who form strong ties with their instructors and classmates are better equipped to integrate into the academic programme and succeed academically (Bernstein-Yamashiro & Noam, 2013; Quin, 2017). While this renewed emphasis on the intersection of social capital and the academic experience is promising, it fails to adequately account for the numerous ways in which university social capital interacts with work duration and manifests in the intention to drop out of working students. Therefore, the aim of this study is to investigate if factors such as work duration, teacher-student relationships, peer relationships, and inapt academic programme all influence working students' intention to abandon higher education. The study is exploratory (e.g., Stebbins, 2001) in character, and it made use of the data from the Eurostudent-VII survey. The remainder of the paper consists of four major sections: the literature review and conceptual clarification, the research method, the results and analysis, and finally the discussion and conclusion.

Literature Review

Conceptual Understanding

University Dropout

Researchers have pointed out that the concept of dropout is murky in part because the meaning of dropping out is not always obvious (Astin, 1975; Kehm et al., 2019). The seminal literature (Bean & Metzner, 1985; Terenzini & Pascarella, 1980; Tinto, 1987) relevant to the issues at hand defines dropout as an action to leave their study, withdraw from learning activity, refuse a promise or annul a commitment to continue the study they started, and so on. There are parallels between dropout (individual perspective) and attrition (organisational perspective), as well as, in some situations, the intention to cease all educational pursuits (Delen, 2011; Pusztai et al., 2022). An easy definition of a dropout is a student who has decided to abandon their current course of study. To frame dropout as a simple occurrence is difficult because some students who appear to have dropped out may have intended to enrol in a lower or higher level academic programme, or may have returned to their former programme after a brief hiatus (Aljohani, 2016; Casanova et al., 2018). Students who are struggling academically may consider dropping out as a solution, but this is different from actually withdrawing from the course or being expelled (Gutiérrez-de-Rozas et al., 2022).

While there are several ways to define dropout, the aforementioned perspective offers a more objective view of the issue. However, instead of analysing actual dropout definitions and rates, this research looks at students' intentions to leave higher education. This evaluation is based on the individual's own subjective feelings (Bean, 1982; Respondek et al., 2017; Trautwein et al., 2007) regarding whether or not they want to abandon their pursuit of higher education entirely, which is essential for mapping the risk of dropping out (Srairi, 2022).

University Social Capital

Studying the issues of social capital and dropping out of education can be grounded in theory of money (Simmel, 2004), human capital theory (Becker, 1993), symbolic capital theory (Bourdieu, 1989), and theory of capital (Coleman, 1988). Relationships among students, faculty, and parents/guardians, as well as other relevant stakeholders, are one measure of the social capital of a university (Bye et al., 2020). Social capital is a broad notion that reflects the interactions of

agents such as individuals and organisations, and is one of the causes of institutional growth (Bourdieu, 1986; Pusztai, 2014, 2015).

At the centre of university social capital is the individual's interaction with the institutional schooling and socialisation framework (e.g., Pusztai, 2014). As a result of this engagement, the students' motivations and responsibilities toward the school may change, hence altering the likelihood of dropout. Additionally to the student's goals and associated background brought to the university, the student's experiences while enrolled at the university are crucial in determining whether the student will graduate successfully or drop out of university. In this way, the students' perceptions and evaluations of their daily interactions with professors, administrators, and other university employees, as well as with fellow students in formal and informal academic and social contexts, determine whether or not they might withdraw from the university or continue their studies.

A key part in the formation and expansion of a university's stock of social capital is played by the institutional qualities that students find valuable and from which they benefit. The postmodern university's search for new and original ideas for its own development in a knowledge-based economy is aided by traditional forms and types of educational activities that take into account the requirements of students and the dynamic social milieu. The ongoing reinforcement of the university's involvement in the organisation of educational activities strengthens the institution's overall social capital, which in turn improves the quality of education, student cooperation, the competitiveness of the labour market, and the output of society (Pusztai, 2015; Tierney & Lanford, 2016).

Inapt Higher Education

Education ideals have changed over time, from those held by the elite to those held by the masses, from religious preaching to a decolonial outlook. However, due to a lack of innovation, the system remains mired in inefficient practises, rendering it poorly suited to compete with more dynamic alternatives (Tierney & Lanford, 2016). It was common practise for colonial authorities to incorporate elements of capitalism into the educational system in order to train a more capable local workforce and so generate taxes for the local economy (Bhamani & Mehar, 2014). The practises of the pre-modern education system, such as mandatory attendance, the threat of punishment, and training as many disciples as possible despite limited resources and facilities, are still evident in today's education system, with the risk of an undesirable outcome serving as an excuse (Clair, 1999; Kapoor et al., 2020; Whitley & Saggers, 2022).

The educational system has gone global, with the help of creative capitalist ideas leading to the creation of a variety of educational programmes (such as regular, executive, day, evening, weekend, regular, open, and distance programmes). Oftentimes, the needs of pupils are not taken into account when designing such variations (Yılmaz & Karataş, 2022). The demands of students might vary greatly from one academic field to another, which results in a wide range of student expectations and outcomes from higher education programmes. This is one reason why using graduation rate as a performance metric in business studies at publicly funded schools is problematic (Lember et al., 2022). Although both regular students and working students have full-time jobs, they are treated very differently (Tumin et al., 2020). In reality, however, both types of students face difficulties due to institutional factors such as required attendance mechanisms in the curriculum and minimum academic result requirements (Clair, 1999). Arguments made by academics (Yılmaz & Karataş, 2022) concerning the issue of open university education and distant education are also relevant to this discussion in a similar manner.

The problem of dropout is a global trap that cannot be resolved unless systemic conflict within education programmes is minimised (Kehm et al., 2019). Modernising the structures that regulate the sector, the educators who work within it, and the teaching and learning that occurs could be one of the many practical approaches to addressing these difficulties (Kehm et al., 2019; Srairi, 2022). However, it is challenging to be adaptable to the unique requirements of each student when there is so much disagreement and complexity among the many different educational programmes and their laws; therefore, it is not surprising to anticipate that such complexity may have some form of barriers in the way of obtaining education at will or for working students who wish to tailor it according to their own requirements.

Student Employee

The universal veneration of capitalism has legitimised student work as a response to economic pressures in an unequal, globalising world. In comparison to the linear emphasis of higher education, the present trend of student employment as a parallel process of learning market competencies highlights the current propensity toward short-term gain and individual learning orientations (Beerkens et al., 2011; Sanchez-Gelabert et al., 2017). The modern student worker, who is affected by global issues but acts at the local level, exemplifies the dichotomy of the modern education and labour market. Work has numerous virtues and useful effects, such as creating wealth and eradicating poverty (Cheng & Alcántara, 2007), but these benefits all stem from its alleged contribution to the ordering of existence, to the historical act of granting humanity control over its own destiny, in which education plays a fundamental role.

Researchers (Beerkens et al., 2011) view working students as a part of a larger socio-demographic population that shares traits with both students and workers. It is challenging to generalise about this subset of students because the laws of various countries use different terminology to describe them. The specifics of their social situation affect the

conditions under which these working students can develop academically and professionally. This study's focus on this distinct demographic has resulted in the labelling of these individuals as 'student employees' or individuals who 'perform double commitment' by combining higher education and job. In this study, the terms 'student employee', 'working student', and 'student worker', which are frequently used interchangeably, have the same connotations.

Previous Studies and Hypotheses

Different Factor-Models

In the literature (Bean, 1982; Casanova et al., 2018; Lombardi et al., 2019; Spady, 1970; Tinto, 1987), models highlighting the various reasons that can lead to a student leaving an educational institution are available. Many factors, including classroom management and teacher-student relationships, missed deadlines, tough instructors, overly complex assignments, and a lack of understanding of the course material, have been investigated in an effort to better understand why some students struggle with and eventually abandon their education (Kuh et al., 2006; Longden, 2004; Obispo et al., 2021; Sherimon et al., 2021). The literature reviewed here examined the issue of student attrition from the perspective of social structures and forces, including the student's university environment, family background, early socialisation mechanisms, and the encouragement and backing they receive from friends, family, and institutions. Tinto's (1975) theory, which he later improved (Tinto, 1987), has received a lot of attention (Chrysikos et al., 2017). Having a careful understanding of the aforementioned models, the focus of this study has been narrowed to factors such as teacher-student relations, peer relations, the level of work commitment, and barriers encountered by student employees.

Teacher-Student Relationship

University is a system unto itself, and as such it has its own norms and ideals. Social concerns, such as a lack of involvement with other individuals at the university and a misalignment between the student's ideals and those of the university community, are reflected in the aforementioned models as potential causes of student dropout. Tinto (1987) draws parallels between the processes of integration and dropout, the latter of which occurs when an individual does not fully share the norms and values of his or her social group and does not have enough contact with other instructors at the university.

The aforementioned realisation is supported by the fact that the social elements identified as contributors to school abandonment are consistent with those identified by other researchers (Dwyer, 2017; John et al., 2018; Simic & Krstic, 2017; Webb & Cotton, 2018). In fact, such findings are highly relevant to the plight of working students in a sense, as a lack of participation in the university's social system leads to a lack of commitment to this system, which in turn raises the chance that the student may choose to withdraw from the institution. Integration into the academic environment is just as important as social integration if students are going to live up to the expectations set forth by the institution in terms of what they should know (Tinto, 1987). This suggests that a lack of integration in the social areas where teacher-student relations are weak may be at the root of the discordant intention to leave higher education. The following hypothesis, which is being provided, has the potential to either expose at least the relations or further trigger the discussion over this issue.

Hypothesis 1: Working students are more likely to reflect a decreased intention to drop out of school if they perceive strong relationships with their teachers.

Peer Relations

Students' participation in interactions with teachers and fellow students enhances their overall university experience (Fernandes, 2018; Pusztai et al., 2019; Tinto, 1987). It is just as important for students to develop meaningful relationships with one another as it is for them to get involved in school activities. Strong relationships with classmates significantly promote social integration and reduce the risk of expulsion, even among students who do not actively participate in campus life (DeLay et al., 2016; Spady, 1971). For this reason, a student's social isolation from his or her former peers often worsens when the student drops out of school.

Students who have jobs have the ability to create connections that will favourably benefit their academic achievement based on their homework, tests, and examinations, and it is only natural for them to gravitate toward making connections with peers who can assist them in achieving their goals (Zhang et al., 2019). These peers might have better study habits, more access to relevant resources, or might be ready to help them out in some way. Students, over the course of their education, tend to develop a preference for either emulating the academic performance of their contemporaries or studying in the same manner as those who are immediately surrounding them (Lomi et al., 2011; Webb & Cotton, 2018). By taking into account students' relationships with their peers, the following hypothesis can shed light on whether or not these relationships actually have a part in students' decision to leave school altogether.

Hypothesis 2: If working students have a strong network of fellow students with whom they can discuss the issues they have in their studies, they are less likely to intend to drop out.

Barriers due to Inapt Academic Programme

Students' success in higher education is highly dependent on their ability to adjust to the distinctive social and institutional norms of their chosen institution (Aljohani, 2016; Magen-Nagar & Shachar, 2017). Similarly, the likelihood that a student will drop out of university is influenced by the degree to which the university fulfils its commitment to meet the students' needs (Munro, 1981). Tinto (1987) places a strong emphasis on the significance of students exchanging the values and norms of the institution as a means of lowering the chance of student attrition and raising the possibility that students would be satisfied with their academic experience.

Students' behaviours and outcomes are influenced not just by individual characteristics such as intelligence, household composition, and cultural background, but also by the institutional culture of the university and the surrounding society (Coleman et al., 1966; Konstantopoulos & Borman, 2011). Similar to how forced attendance, scarce resources, and a lack of student voice in the classroom have been linked to student dropout, resource factors at universities have been found to be linked with student attrition (Bernardo et al., 2016; Bridges et al., 2008; Mayhew et al., 2016). If a university's ability to retain students and the quality of its education are indicators of its attractiveness and competitiveness, then a low dropout rate is indicative of the university's attention to its students' individual circumstances (Bernardo et al., 2016; Mayhew et al., 2016). Given the expectations of students and the available resources of institutions, it is possible that if students are battling between the two, their desire to drop out would be affected. The following hypothesis could contribute to this argument.

Hypothesis 3: If working students encounter problems owing to an inapt academic programme, they would be less inclined to reject the decision to abandon their studies.

Work Commitment

Recent literature abounds on the theoretical complexities of understanding students' work commitment and the specifics of working students' social behaviour (Darolia, 2014; Pusztai et al., 2022; Zhang et al., 2019). Several scholarly works (Bills et al., 1995; Warren, 2002) provide essential frameworks for investigating the social behaviours of working students and the ways in which their occupational and educational lives intersect.

Combining school and work has been shown to have a negative effect on students' academic performance, leading researchers (Bartolj & Polanec, 2021; Body et al., 2014; Triventi, 2014) to call for a method of estimating student labour in terms of fixed hours that accounts for factors such as the prestige of the student's educational institution, the likelihood of academic success, and the potential income. The central argument was that there is some degree of tolerance for students who work while also attending school, but that after a certain number of hours per week, the two activities begin to conflict with one another. Combining work and school has a negative impact not only on class participation but also on a student's ability to maintain academic progress; additionally, work hours have a negative impact on the student's ability to keep enrolment (Pusztai et al., 2022; Zhang et al., 2019). When it comes to the issue of student employees, there is a fine line between combining job and school, the schedule of the work, and the intention to drop out. Many students who work while they study have already decided to do so because they can complement work and school and have a good idea of what their future work schedules will look like. Therefore, they shall not let the length of their employment affect their decision to leave. However, at least the following hypothesis could tell more about the relationship between weekly fixed work and intention to drop out:

Hypothesis 4: There is a difference between working fewer than 20 hours per week and working more than 20 hours per week with the intention of dropping out of university.

Methodology

This study seeks to investigate the relationship between dropout intent, the weekly work duration of student employees, and university social capital by analysing empirical evidence from three European countries (Estonia, Lithuania, and Poland). To accomplish the aim of this research, the following tasks are scheduled:

1. To determine if there is a significant association between dropout intent, teacher-student relationships, student-to-student relationships, inapt academic programme and the work commitment of working students.

2. To determine the interaction between the factors stated in goal one and to demonstrate their importance for each of the three markets.

Data and Operationalization

Data for the study were acquired from the Eurostudent-VII survey directed by the Eurostudent research group (Cuppen et al., 2021). The survey received a total of 13616 responses from university students in Poland, 3358 responses from students in Lithuania, and 2760 responses from students in Estonia (Cuppen et al., 2021). Eurostudent resources (e.g., Cuppen et al., 2021) allow access to more information on the survey and data, such as validity and response rate, among others. In order to accomplish its goals, this study focused on the working student population (n = 10911),

which included 7302 students from Poland, 1707 students from Lithuania, and 1902 students from Estonia. Several items from the survey questionnaire were utilised to operationalize the concepts, and they are listed in Table 1. Control variables (denoted as C1=Age, C2=Sex, C3= Education level) have been incorporated into market-specific models (see appendix Table 4) together with risk-related measures.

Table 1. Relevant Items Utilized in Operationalization

Item code	Variable name	Relevant items utilized in operationalization	Source
Y	Intention to abandon higher education	I am seriously thinking of completely abandoning my higher education studies.	Eurostudent-VII survey adopted from another source (e.g., Trautwein et al., 2007).
X1	Teacher student relation	I get along well with the lecturers in my current (main) study programme.	Adopted in the Eurostudent-VII survey from the National Education Panel Study of Germany (Dahm & Lauterbach, 2016).
X2	Peer relations	Knows a lot of fellow students to discuss subject-related questions.	Eurostudent-VII (Cuppen et al., 2021).
X3	Inapt university programme	Difficulties due to organisational issues at HEI (e.g., organisation of schedule, space restrictions in classes, mandatory attendance, etc.).	Eurostudent-VII (Cuppen et al., 2021).
X4	Work duration per week	Number of hours students working.	Eurostudent-VII (Cuppen et al., 2021).

Demographic Characteristics of Working Students

In terms of gender, 69.9% of the total working student responses are female, while the remaining 30.1% are male; this reflects the student demographics of these three nations, where female enrolment in higher education is higher than male (Hankewitz, 2022; Limanauskiene et al., 2017; Popiński, 2019). The age of working students in these three countries has been classified into four categories. 29.8% of the total number of working students in these three nations are between the ages of 18 and 21; 36.5% are between the ages of 22 and 25; 14.9% are between the ages of 25 and 30; and the rest are between 30 and older. In terms of educational level, 64.6% of respondents are bachelor students, 38.2 percent are master students, and the rest belong to long national degree.

Table 2. Sample Information about Working Students

Demographic factors		Country of survey			
		Estonia	Lithuania	Poland	Total
Age (C1)	up to 21 years	351	589	2309	3249
		3.2%	5.4%	21.2%	29.8%
	22 to <25 years	463	588	2935	3986
		4.2%	5.4%	26.9%	36.5%
	25 to <30 years	405	251	970	1626
		3.7%	2.3%	8.9%	14.9%
	30 years or over	683	279	1088	2050
		6.3%	2.6%	10.0%	18.8%
	Total	1902	1707	7302	10911
Sex (C2)	Female	1463	1180	4982	7625
		13.4%	10.8%	45.7%	69.9%
	Male	439	527	2320	3286
		4.0%	4.8%	21.3%	30.1%
	Total	1902	1707	7302	10911
Qualification studied for (C3)	Bachelor	1098	1237	4717	7052
		10.1%	11.3%	43.2%	64.6%
	Master	697	417	1959	3073
		6.4%	3.8%	18.0%	28.2%
	Long national degree	107	53	626	786
		1.0%	.5%	5.7%	7.2%
	Total	1902	1707	7302	10911

Source: Calculated by author based on empirical data

Analytical Technique

Despite the availability of other prediction techniques such as logistic regression and artificial neural networks, decision tree techniques have found widespread application due to their better advantages. CHAID, later improved as exhaustive CHAID, has various advantages over other classification methods due to its ability to recognise patterns in enormous volumes of data, display probability distribution, and build predictive model that is easy to read and less affected by extreme values (Milanović & Stamenković, 2016; Ritschard, 2013). Predictors are sorted into categories according to the degree of variation in the target variable's values, and the algorithm selects the predictor that has the strongest interactions with the target variable during the tree-building process. Exhaustive CHAID takes into account the ideal *n*-ary splits that each candidate predictor would generate at each node and selects the predictor based on the splits by employing p-values with a Bonferroni correction as splitting criterion (Ritschard, 2013). In addition to the use of exhaustive CHAID, the cross-tabulation technique (Stockemer, 2019) has also been implemented in this study. In order to perform the calculations, the Statistical Package for the Social Sciences (SPSS) version 23, has been utilised.

Results

Dropout Intention by Relevant Factors

Table 3 presents the findings of crosstab analysis (performed on aggregated data) that examined the association between the degree of agreement or disagreement with the intention to drop out of higher education and factors such as X1, X2, X3, and X4. Chi-square statistics were utilised in order to investigate the association between intention to drop out of university and the quality of the interaction between teachers and students.

It is possible to observe, based on the findings presented in Table 3, that there is a significant association, at a significance level of 5%, between dropout intention and the teacher-student relationship of respondents (Chi-square = 759.733, df = 16, p < .001). Because of the significant association between the teacher-student interaction and the intention to drop out of school, it can be deduced that student employees who have a high sense of getting along well with their teachers are more likely to have less intention to abandon their education. This outcome can be supported by the fact that there is a directional association (Somers'd = -.176, p < .001; Kendall's tau-b = -.205, p < .001) between dropout intention and teacher-student relationship. Working students who feel they have a good rapport with their instructors are less likely to want to give up on their higher education (79.5%).

Table 3. Measure of Association

		Y					Total	Measures
		Strongly agree	**-**	**-**	**-**	**Don't agree at all**		**Measures relevant for hypothesis**
X1	Strongly agree	104	107	285	343	3254	4093	χ^2 = 759.733, df = 16, p < .001 Somers' d = -.176, p < .001; Kendall's tau-b = -.205, p < .001
		2.5%	2.6%	7.0%	8.4%	79.5%	100.0%	
	-	128	172	377	610	2696	3983	
		3.2%	4.3%	9.5%	15.3%	67.7%	100.0%	
	-	142	153	251	381	1088	2015	
		7.0%	7.6%	12.5%	18.9%	54.0%	100.0%	
	-	58	49	63	74	242	486	
		11.9%	10.1%	13.0%	15.2%	49.8%	100.0%	
	Do not agree at all	43	13	30	20	88	194	
		22.2%	6.7%	15.5%	10.3%	45.4%	100.0%	
	Total	475	494	1006	1428	7368	10771	
		4.4%	4.6%	9.3%	13.3%	68.4%	100.0%	
X2	Strongly agree	108	103	279	332	2706	3528	χ^2 = 368.475, df = 16, p < .001; Somers' d = -.109, p < .001; Kendall's tau-b = -.133, p < .001
		3.1%	2.9%	7.9%	9.4%	76.7%	100.0%	
	-	116	148	297	488	2274	3323	
		3.5%	4.5%	8.9%	14.7%	68.4%	100.0%	
	-	91	115	245	330	1364	2145	
		4.2%	5.4%	11.4%	15.4%	63.6%	100.0%	
	-	85	87	108	196	746	1222	
		7.0%	7.1%	8.8%	16.0%	61.0%	100.0%	
	Do not agree at all	75	40	75	84	271	545	
		13.8%	7.3%	13.8%	15.4%	49.7%	100.0%	
	Total	475	493	1004	1430	7361	10763	
		4.4%	4.6%	9.3%	13.3%	68.4%	100.0%	

Table 4. Continued

		Y					Total	Measures
		Strongly agree	**-**	**-**	**-**	**Don't agree at all**		**Measures relevant for hypothesis**
X3	No	230	251	551	814	4887	6733	χ^2 = 154.757, *df* = 4, *p* < .001; Somers' *d* = -.116, *p* < .001
		3.4%	3.7%	8.2%	12.1%	72.6%	100.0%	
	Yes	244	244	455	620	2508	4071	
		6.0%	6.0%	11.2%	15.2%	61.6%	100.0%	
	Total	474	495	1006	1434	7395	10804	
		4.4%	4.6%	9.3%	13.3%	68.4%	100.0%	
X4	1-20 hours	146	158	331	493	2599	3727	χ^2 = 7.405, *df* = 4, *p* = .116
		3.9%	4.2%	8.9%	13.2%	69.7%	100.0%	
	>20 hours	320	331	662	922	4667	6902	
		4.6%	4.8%	9.6%	13.4%	67.6%	100.0%	
	Total	466	489	993	1415	7266	10629	
		4.4%	4.6%	9.3%	13.3%	68.4%	100.0%	

Note: % within X
Source: Calculated by author based on empirical data

The similar link has been found in case of association of dropout intention with the peer relation of working students. The analyses (Chi-square = 368.475, *df* = 16, *p* < .001) indicate that there is a significant relationship between the extent of peer relations and the level of agreement and disagreement regarding the intention to abandon higher education. In Table 3, the directional measures (Somers'*d* = -.109, *p* < .001; Kendall's tau-*b* = -.133, *p* < .001) indicate that an enhanced network of students with whom students have the opportunity to discuss subject-related issues is associated with a decreased intention to leave higher education.

In addition, the findings (which can also be found in Table 3) pertain to the hypothesis that there is an association between an inapt academic programme and the decision to abandon higher education. According to the statistics (Chi-square = 154.757, *df* = 4, *p* < .001) presented, the possibility of rejecting the decision to abandon higher education is higher for working students if no difficulties are faced owing to organisation of schedule, space constraints in classes, mandatory attendance, etc.

The final hypothesis centres on the work hour duration per week and perceptions towards dropping out of university. The analyses (Chi-square = 7.405, *df* = 4, *p* = .116) imply that there is no difference between working less than 20 hours per week and more than 20 hours per week with the intention to drop out of university. Working hours may not be an acceptable reason because possibly working students may be aware of how they would work and have the option to combine employment and study; working students who were aware of this option would have chosen to mix work and study. Therefore, it makes sense that for working students, there is no difference between working fewer than 20 hours per week and more than 20 hours per week in terms of abandoning higher education.

Market-specific attributes

Estonia

The CHAID analysis has been utilised so that the ways in which the aforementioned factors interact in individual markets can be identified. Six models have been developed for each of the three markets, with and without controlling factors. As Figure 1 depicts the first model designed for the Estonian market, it demonstrates that the X1 is the most significant factor (Chi-square = 45.568, *df* = 1, *p* < .001) among those listed to explain the level of agreement and disagreement with the intention to abandon higher education. X3 is the subsequent significant factor (Chi-square = 4.331, *df* = 1, *p* < .001) that interacts with it. The interaction can be read as working students having the perception of getting along well with the teacher, and in the absence of any scheduling challenges, space limits, mandatory attendance requirements, etc., the likelihood of rejecting the decision to abandon higher education is 86.5% (see Node 4 in Figure 1). The risk that comes with Model 1 is 21%, resulting in an overall accuracy (see appendix, Table 4) of 79%.

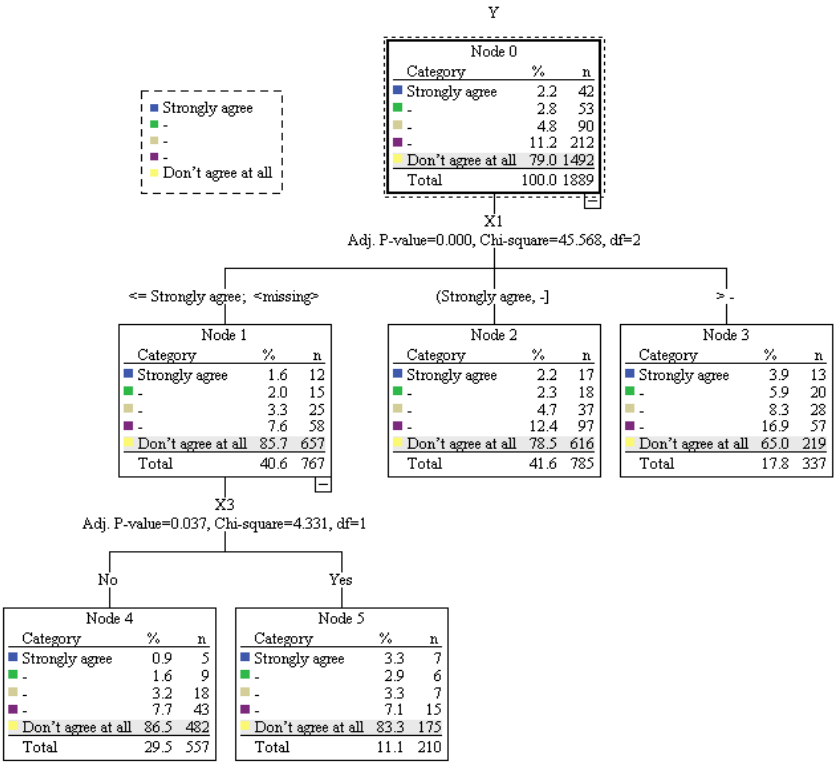

Figure 1. Attributes Specific to Estonian Market (Model 1)

Lithuania

Figure 2 illustrates the third model created for the Lithuanian market. Likewise to the Estonian market, the first significant factor for the Lithuanian market (Chi-square = 170.712, $df = 1$, $p < .001$) is X1. However, the second significant factor interacting with it (Chi-square = 17.815, $df = 1$, $p < .001$) is X2, while the third significant factor (Chi-square = 17.815, $df = 1$, $p < .001$) is X3. The interaction reveals that the likelihood of rejecting the decision to abandon higher education is 63.2% among Lithuanian working students who have a moderate relationship with their teachers and peers and who do not face any scheduling challenges, space limitations, or mandatory attendance requirements, among other factors (see Node 6 in Figure 2). The overall accuracy of Model 3 is 69.5% (see appendix, Table 4).

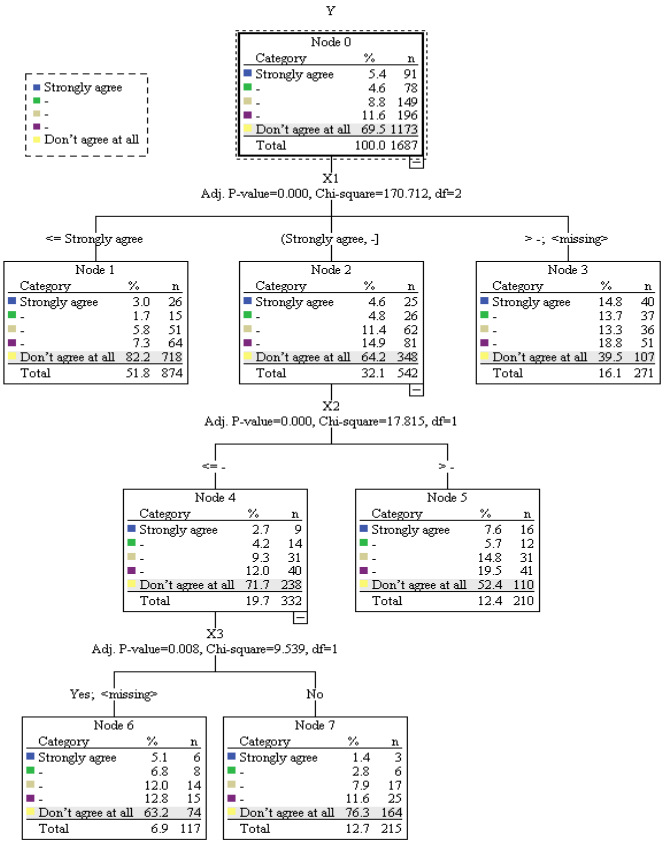

Figure 2. Attributes Specific to Lithuanian Market (Model 3)

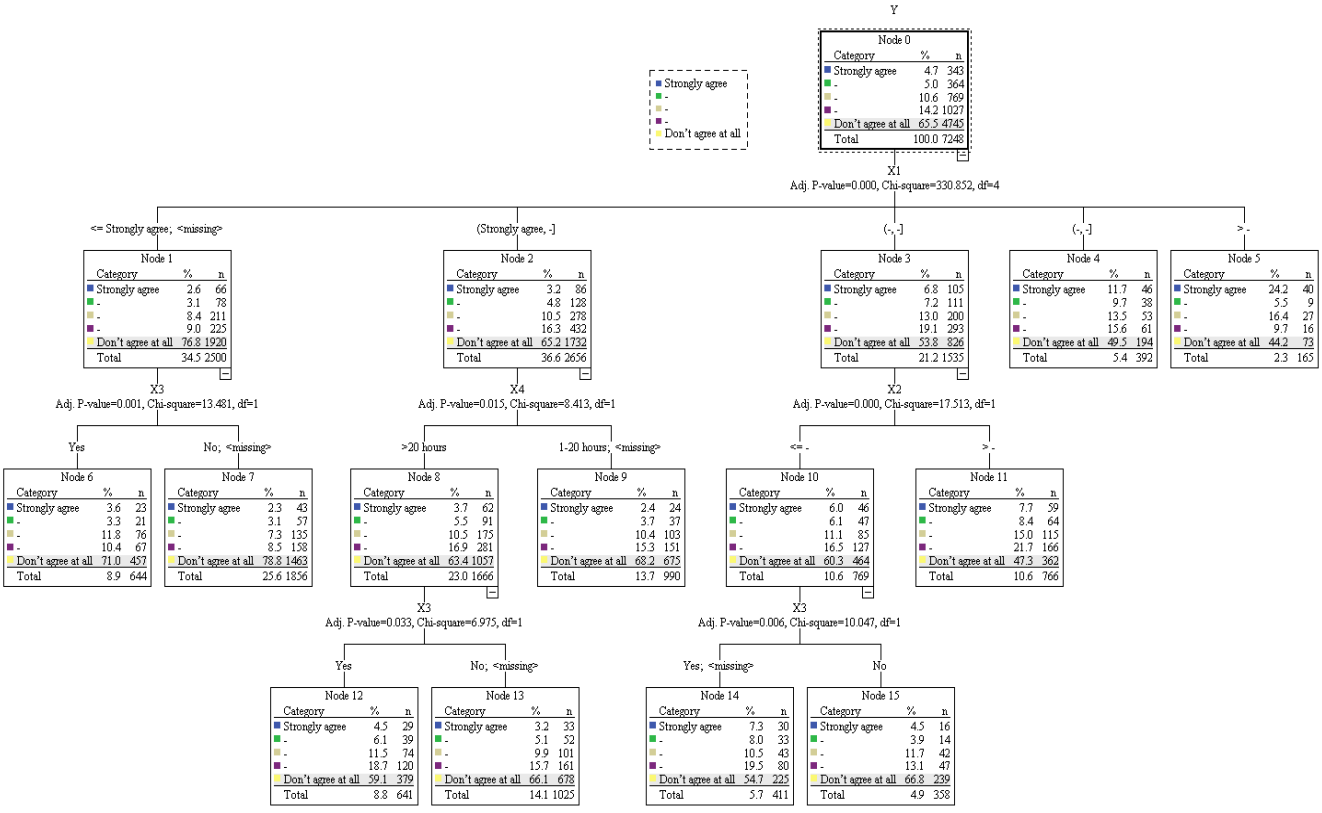

Figure 3. Attributes Specific to Polish Market (Model 5)

Poland

Figure 3 depicts the fifth model designed specifically for the Polish market. X1 is the first significant factor for the Polish market, as it is for the other two markets (Chi-square = 330.852, *df* = 4, *p* < .001; Chi-square = 330.852, *df* = 4, *p* < .001). However, X3 is the second significant factor interacting with it (Chi-square = 13.048, *df* = 1, *p* < .001), and X4 is the third (Chi-square = 8.413, *df* = 1, *p* = 0.015). The fourth significant factor (Chi-square = 17.513, *df* = 1, *p* < .001) is X2 (Chi-square = 17.513, *df* = 1, *p* < .001). The interaction reveals that the likelihood of rejecting the intention to abandon higher education is 78.8% among Polish working students who have perceived a well relationship with their teachers and who, among other factors, do not face any scheduling difficulties, space limitations, or mandatory attendance requirements (see Node 7 in Figure 3). The interaction also reveals that if Polish working students get along relatively well with the teacher, work more than 20 hours per week, and have no scheduling difficulties, space limitations, or mandatory attendance requirements, among other factors, then their likelihood of rejecting the intention to abandon higher education is 66.1% (see Node 13 in Figure 3). The prediction carries a 30% risk; hence, Model 5 has an overall accuracy of 65.5% (see appendix, Table 4).

Discussion

This study aimed to evaluate the relationship between working students' intention to drop out of university and teacher-student relationships, peer relationships, and barriers due to inapt academic programme. In order to accomplish what it set out to do, the study came up with a few different hypotheses.

The first hypothesis considers the relationship between students' intention to drop out of higher education and the teacher-student interactions. The findings suggest that there is a statistically significant association between the teacher-student interaction and the desire to drop out of university, such that student employees who have a high perception of getting along well with their teachers are more likely to have less intention to drop out. The same can be said for the second hypothesis, which examines the relationship between dropout intent and peer relationships. The third hypothesis evaluates whether an inapt academic programme has a significant relationship with the intention of working students to drop out of university. Significant results suggest that in the presence of mandatory attendance, university schedule organisation, and space limitations, the likelihood of abandoning higher education is negatively impacted. The fourth hypothesis examines the association between work duration and intention to drop out. Regarding work duration, however, the results indicate that with the intent to abandon higher education, there is no difference between working more than 20 hours per week and less than 20 hours per week.

This study also sought to determine how these relationships manifested in three distinct markets. For Poland, the most important factor is the relationship between teachers and students, followed by an inapt academic curriculum, work time, and peer relations. Their interaction suggests that if a student perceives a close relationship with teachers and there are no impediments to an inappropriate academic programme, the likelihood of disagreeing with the intention to drop out of university increases. If students have only a moderate relationship with their lecturers, the interaction manifests itself differently. For this group of students, the next most significant variable is not an inappropriate academic programme but rather working hours. For instance, if they work more than 20 hours per week, they are less likely to disagree with the decision to quit higher education.

The interaction took on a slightly different form in Lithuania than it did in Poland. Teacher-student relationships, like in the Polish market, rank first among critical factors; peer relationships, second; and an inapt academic programme, third. There is no statistically significant interaction between weekly work length and abandon intention. Students who perceive having good relationships with their teachers are more likely to disagree with the abandonment decision. For working students in Lithuania who believe they have a moderate relationship with their lecturers, but not a strong relationship, the second most important factor is their relationship with their peers and the inadequacy of their academic programme. In the presence of peer relations and the exclusion of barriers from mandatory attendance, university schedule organisation, and space limits, the probability of these students disagreeing with the decision to drop out is higher than their presence.

In Estonia, interaction appears somewhat differently than in Poland and Lithuania. The most significant variables are teacher-student relations and an inapt academic programme. The likelihood of working Estonian students disagreeing with the decision to abandon higher education falls when they have a strong relationship with their teacher but suffer difficulties from mandatory attendance, university schedule organisation, and space restrictions. Similar to Lithuania, the difference in weekly employment time of Estonian working students has no statistically significant effect on their decision to abandon higher education.

These results provide some relevant context in relation to the decision to forego higher education due to work-related reasons and the lack of university social capital.

Despite claims to the contrary in the literature (Kocsis & Pusztai, 2020), this study indicated that having a job was not a major factor in a student's intention to abandon higher education. Instead, it is important to comprehend the significance of securing a job as part of the educational process, so that the value of education can take on the flavour of

capitalist incentive that it aims to achieve in the modern world. Moreover, for working students, having a job might be a means to an end—a means by which they can save money for university and improve their own human capital— rather than a source of their intention to drop out. Admittedly, the extent to which universities realise this reality is an open question (Hall, 2010). It is critical to recognise institution-related difficulties in order to design policies that enable students to continue their education without limiting their employment opportunities. If a student drops out of university to pursue a dream job, are institutions willing to support the student's request and encourage them to drop out of the programme and seek employment? This can be attributed to the varied regulatory treatments for working students and the types of institutional support provided to these student employees (Hall, 2010). Several universities offer executive programmes in addition to their standard curriculum, including evening and weekend programmes; nevertheless, it is unclear how these programmes treat working students or how easily they can transition between regular and executive programmes. Permitting such readmissions is a potential answer; however, this type of adaptability may not be readily accessible to students who simultaneously work and study, or universities with inapt academic programme may be unwilling to sanction such a radical change. Facing these kinds of challenges in an inapt academic programme is not unprecedented may result in the choice of dropping out of university; at least, this research has confirmed a connection between the two.

In addition, the significance of the availability of social capital both within the institution and among its agents, such as instructors and students, is not something that can be overlooked. To elaborate, it can be argued that a lack of social capital has contributed to the widespread acceptance of practises and customs that have nothing to do with innate abilities, but have yet grown pervasive in contemporary society (Bourdieu, 1989). In higher education, for instance, it is routine practice for academics and administration to presume that students should be promoted to individualism (Humphrey & Bliuc, 2022). Student employees, on the other hand, are characterised by their commitment to their work, their responsiveness to others, and their membership in a social subculture that places a premium on reliance. The social restriction that generates such reliance, which may be attributable to a lack of means, inadequate support, or a combination of the two, is itself a form of dependence. Ignoring such dependence under the guise of individualism does nothing but harm the students (Baik et al., 2019; Humphrey & Bliuc, 2022); in this way, working students may be more prone to social isolation as a result of being exposed to the norms of independence typical at universities, as seen by a lack of relationships with teachers and peers, a diminished sense of belonging, and a diminished focus on individual academic responsibility. In a broader sense, the symbolic emphasis on autonomy may contribute to and even stimulate the development of the social capital deficits that are generally associated with working students. While this deficiency may not be as devastating as it initially seems, it does play a role in whether or not a student decides to continue their relationship with their university or gives up on higher education altogether. The existence of such a connection has been recognised by this research.

Conclusion

This research endeavoured to make a contribution by illuminating the relation between students' commitment to their work and their intention to abandon higher education. This was accomplished by considering the points of view of student workers hailing from three different countries in Europe. The research also made an effort to shed light on the part played by the relationships between students and teachers as well as between students and their peers in the intention to forego higher education. In fact, findings indicate that student employees who believe they get along well with their teachers and have more connections with fellow students to discuss subject-related issues are less likely to intend to drop out of university. In addition, the results show that students' likelihood of abandoning their higher education increases in the presence of difficulties caused by an inapt academic programme. Regarding work duration, it varies by market; for the Estonian and Lithuanian markets, for instance, there is no difference between working more than 20 hours per week or less than that with the purpose of dropping out of university. In Poland, however, the disparity in working hours interacts with other factors related to social capital to explain dropout intent. These results not only resurrect the importance of university social capital, which has been overlooked recently, but they have also ignited a new discussion about whether or not combining work and education influences students' decision to drop out.

Recommendations

With the findings and discussion elaborated in the preceding sections, this research informed those who are interested in looking at the social capital of university, in particular to rethink the quality of teachers who can make bonding with students, to reassess the facilities that boosts interaction among working students, and to reevaluate the opportunities whether students wising to combine study and work really have chance to do so without trouble from inapt academic programmes. Other factors, such as financial backing, work-life balance, and personal drive, may be more crucial, however, and can be accounted for in future studies.

Limitations

Although this study provides empirical insights into the dropout literature, it does have a few flaws, such as the fact that the study could have taken into account a wider variety of factors, such as the type of work that the student employee did, their level of wealth, and the support they received from their employers, all of which could have an

impact on the student's decision to discontinue pursuing higher education. The results of further research might provide light on the significance of such issues.

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Conflict of Interest

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Appendix

Table 5. Model Summary of CHAID Analysis

	Estonia		**Lithuania**		**Poland**	
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Dependent Variable	Intention to abandon higher education (Y)					
Independent Variables	X1, X2, X3, X4	X1, X2, X3, X4, C1, C2, C3	X1, X2, X3, X4	X1, X2, X3, X4, C1, C2, C3	X1, X2, X3, X4	X1, X2, X3, X4, C1, C2, C3
Validation	Cross Validation					
Maximum Tree Depth	3	3	3	3	3	3
Minimum Cases in Parent Node	100	100	100	100	100	100
Minimum Cases in Child Node	50	50	50	50	50	50
Independent Variables Included	X1, X3	X1, X3, C2, C1	X1, X2, X3	X1, C2, X2, X3	X1, X3, X4, X2	X1, C3, C1, X3, C2, X2
Number of Nodes	6	16	8	12	16	27
Number of Terminal Nodes	4	9	5	7	10	16
Depth	2	3	3	3	3	3
Risk	Re-substitution: Estimate = 0.210, Std. Error = 0.009 Cross-Validation: Estimate = 0.210, Std. Error = 0.009	Re-substitution: Estimate = 0.210, Std. Error = .009 Cross-Validation: Estimate = 0.210, Std. Error = 0.009	Re-substitution: Estimate =0.305, Std. Error =0.011 Cross-Validation: Estimate =0.305, Std. Error =0.011	Re-substitution: Estimate =0.305, Std. Error =0.011 Cross-Validation: Estimate =0.305, Std. Error =0.011	Re-substitution: Estimate =0.345, Std. Error =0.006 Cross-Validation: Estimate =0.345, Std. Error =0.006	Re-substitution: Estimate =0.345, Std. Error =0.006 Cross-Validation: Estimate =0.345, Std. Error =0.006

Source: Calculated by author based on empirical data

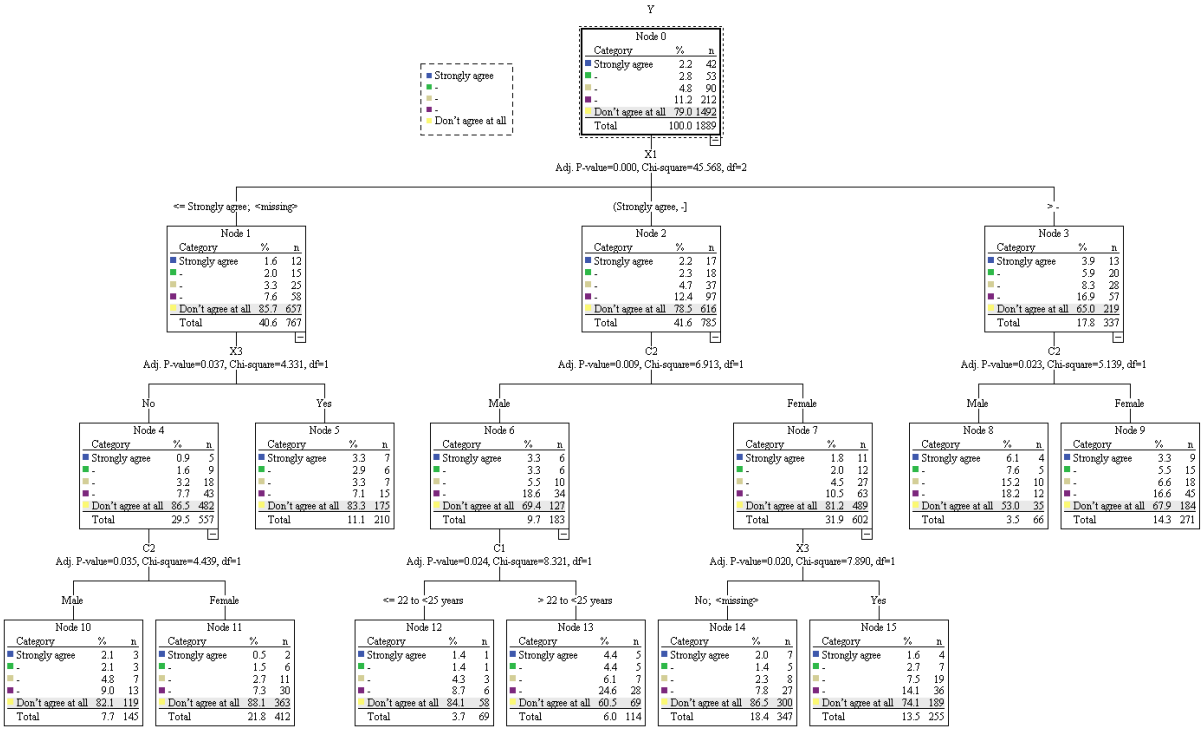

Figure 4. Attributes Specific to Estonian Market (Model 2)

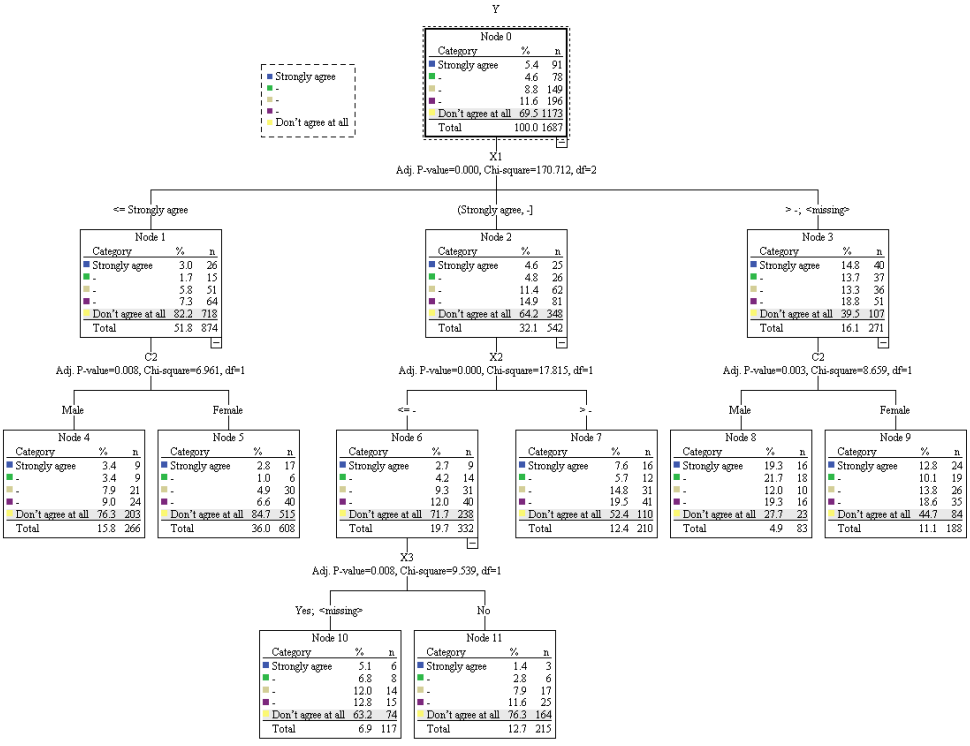

Figure 5. Attributes Specific to Lithuanian Market (Model 4)

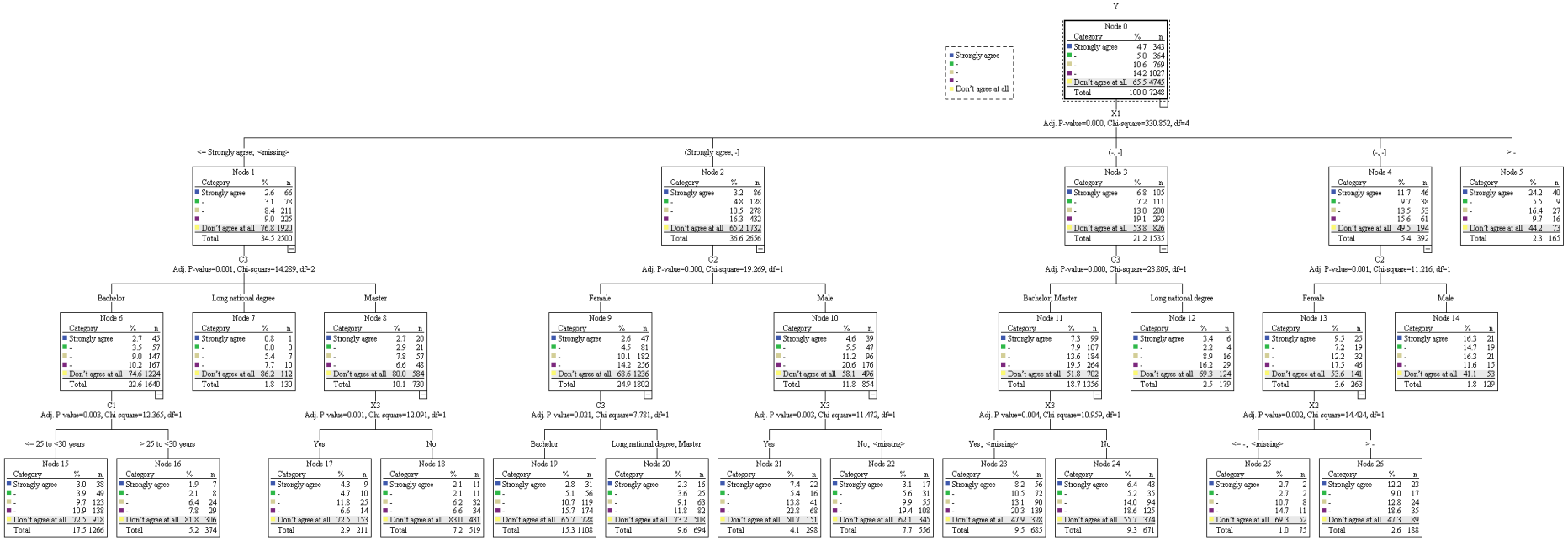

Figure 6. Attributes Specific to Polish Market (Model 6)