POTENTIAL CHALLENGES AND SUPPORT MECHANISMS FOR STUDENTS TRANSITIONING TO UNIVERSITY LIFE

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ABSTRACT

Starting university studies, students must experience the transition from the familiar to the unfamiliar, encountering cognitive and social challenges. Universities need to be aware of this transition and provide an appropriate support mechanism that should be adapted to both first year students and senior year students. The aim of the study is: 1) the most important external changes and possible problems that students have to face when entering a university and continuing their studies; 2) identify the most important support mechanisms that students of the Latvia University of Life Sciences and Technologies (LBTU) would need before and during their studies. Based on Chen's proposed classification of external changes, students of LBTU Faculty of Information Technologies were surveyed. Respondents expressed their opinion about external changes during the transition to university studies. The research found that LBTU has support mechanisms for attracting students to the university, but there is a lack of effective support mechanisms for students in the study process.

1. INTRODUCTION

The attention of many researchers, pedagogues and also politicians both in the world, in Europe and in Latvia has been attracted by the high student dropout rate in universities. In OECD countries, about one third of students do not complete their university studies (OECD 2016, OECD 2018). Although graduation rates vary between European countries (from 10% to 60%), many common factors can be observed (European Commission/EACEA/Eurydice 2015). Research on the reasons for student dropout looks at both general dimensions and specific reasons. For example, as general dimensions are mentioned: academic and social integration at the university, study conditions at the university, information and admission requirements, previous academic achievements at school, personal efforts and motivation to study, the student's personal characteristics as well as the student's socio-demographic background and other external conditions (Barbara et al 2019). The most frequently cited reasons for dropping out of studies are: i) not knowing what one wants to study in general; ii) poor academic performance; iii) use of labor market opportunities; (iv) knowing that you have already learned enough to get a job; v) realization that higher education is not for me; vi) mental/physical health problems and vii) financial difficulties such as living expenses, tuition fees, having to support the family financially (Masterson 2022). It also mentions the fact that research has changed since the pandemic.

Different researchers have different views on the main factors and their hierarchy of influence that cause dropout, as for example Quinn (Quinn 2013) mentions six main factors - political, institutional, socio-cultural, structural, learning and personal factors. There are authors who emphasize only four factors based on adaptation to university studies – academic, social, personal-emotional and institutional adaptation (Sevinc, Gizir 2014, McCulloch 2014). No less important in the study process is overcoming cognitive stress (Romanenko, Nikitina 2016.). Studying the factors that influence the adaptation of first-year students to natural science studies in higher education, researchers from the University of Latvia emphasize three main factors that influence studies in universities (Birzina et al 2019): 1) Institutional factors (curriculum, necessary

resources, support staff, etc.); 2) Students' personal factors (attitude towards studies, previous experience, self-confidence, emotions, stress, illnesses, etc.); 3) Academic factors (prior knowledge, literacy, numeracy, computer-related skills, thinking skills, etc.).

Starting university studies, students must experience the transition from the familiar to the unfamiliar, encountering cognitive and social challenges. Universities need to be aware of this transition and provide an appropriate support mechanism that should be adapted to both first year students and senior year students (Perry, Allard 2003).

At the Latvian University of Life Sciences and Technologies, which is located approximately 45 km from Riga, students from various regions of Latvia and with various prior knowledge begin their studies. LBTU is not such a single campus. Some students live in dormitories; some rent living space in the city of Jelgava, some commute daily from Riga or nearby places. Although the highest student dropout is observed in the first years, there is also a significant dropout in the older years. The reasons are both common and different.

The aim of this study is: 1) to study the most important external changes and their possible challenges, which should be faced by students upon entering the university and continuing their studies; 2) identify the most important support mechanisms that students of the LBTU would need before and during their studies.

2. MATERIALS AND METHODS

The literature review was conducted to develop this research methodology. Based on the obtained results, a questionnaire was created, where students of different courses were asked to answer about the main changes, potential challenges and opportunities to overcome them when starting their studies at the university and in further studies.

2.1 Theoretical Background of the Study

2.1.1 External Changes and Possible Challenges in the Transition to University Studies

For first-year students, the period of transition from a familiar environment to an unfamiliar one is a period of disequilibrium (Jackson 2010). Many students are aware of this, but often cannot solve these problems themselves. However, there are students who are not ready to adapt to a new situation and try to act as before and when they fail, blaming the academic staff and the university administration, they try to prove their rightness. The result for such students is that time is missed, the study process is delayed and the student often becomes a dropout. Higher education institutions should be aware of key external changes and potential challenges as students' transition to university life. The main external changes are (Cheng 2023): 1) in the change of the physical environment; 2) in the change of the academic environment: 3) in the change of the social environment and 4) in financial changes (see Figure 1).

Starting to study at universities often involves a change of location, where you have to overcome possible challenges such as homesickness, often depression, isolation, as well as culture shock accompanied by the fear of being ignored. The change in the academic environment is related to changes in the learning environment, where cooperation with peers, student societies and club activities, self-management of expectations, because sometimes disappointments must also be experienced, changes in performance, where possible challenges are to develop study self-efficacy, information literacy and good time management are essential. Presentations and exams, which happen much more often than in secondary educational institutions, also require confidence, emotional skills management. Social changes are associated with making new friends, with academic staff being different from teachers in schools, getting new flatmates, where consideration, communication and compromise are possible challenges. Financial changes are no less important as loans are often taken out expenses have to be monitored, so studies are often combined with part-time or full-time work, which raises responsibility, priority management and time management as possible challenges.
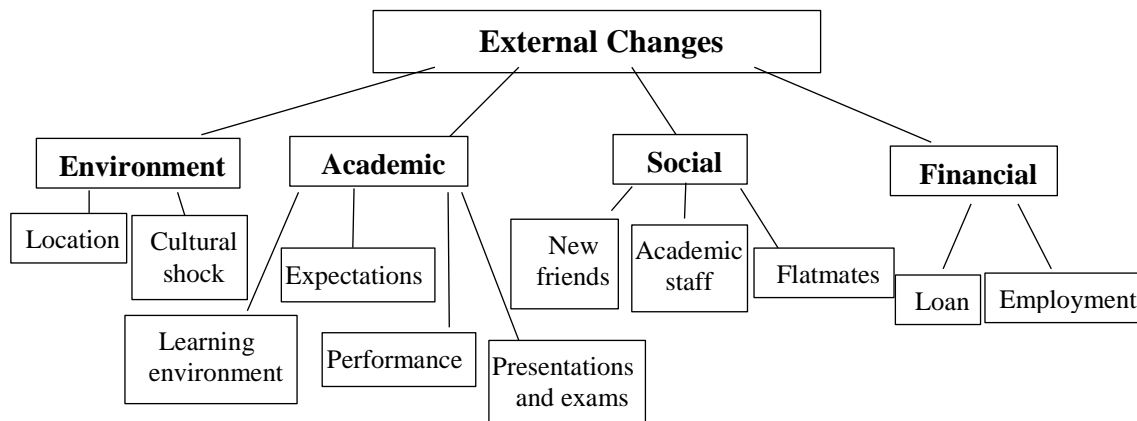
Figure 1. External changes for students starting to study at universities (adapted from Cheng 2023)

2.1.2 Possible Support Mechanisms in Formation the Student Experience in the University Studies

In order to create support mechanisms for students studying at universities throughout their study period, it is necessary to view the transition process as a continuity of a single experience. It is not enough to instruct students at the beginning of their studies about the requirements, regulations and possible assistance mechanisms during their studies at the university. First, students are often not ready for changes, sometimes their expectations are not fulfilled, which shows that the experience of studies should be formed many years before the start of studies. Students who have more precise expectations are better adapted to the transition (Denovan, Macaskill 2013). Secondly, many students face the problem throughout their studies, not only in the first year. In his research, Burnett (Burnett 2007) provides a holistic view, viewing the transition process as a continuum of cohesive experiences and distinguishes six phases in the student experience model (see Figure 2).
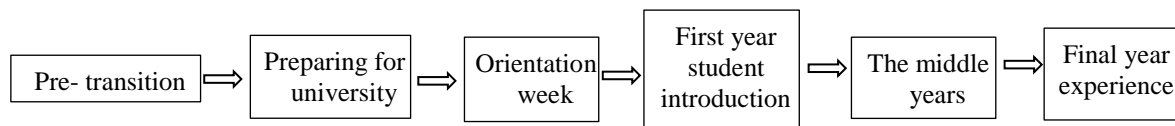

Figure 2. Phases of the Student Experience Model (adapted from Burnett 2007)

The pre-transition phase is more for elementary school students who are planning their careers. The choice of specialty at the university is based on knowledge and familiarity with the programs, attractiveness of the university's activities, financial factor, etc., where information cannot always be obtained from the university's website. Many choose to study at a particular university based on the recommendations of friends. The pre-transition stage could also be intended for workers who have planned a career change. Financial aspects and the possibility to combine studies with part-time work are also important here (Robotham, Julian 2006). In the Preparing for university phase, it is essential to strengthen the student's possible choice of program and university, increasing enthusiasm delight for the chosen program and the possibilities of the university and reducing fear of the unknown. In this phase, it is desirable to organize events where future students would have the opportunity to get to know the university in person. During the orientation week, which takes place on campus, various events are organized where students get more detailed information about the specific program, create social networks, develop academic skills, etc. The first-year students' instruction of can be both at the beginning of studies and throughout the first semester. Students experience changes in the academic environment compared to previous studies, learn to adapt to a learning environment that requires independence and an autonomous approach to learning (Frame et al 2006). The last two phases affecting middle year students and final year students are no less important. During these phases, students face problems, as the previous support is usually lost, new challenges appear, often including family relationships, full-time or part-time job offers, etc. Being aware of the peculiarities of each phase of the student experience formation model, university administrators should create appropriate support mechanisms.

2.2 Methodology of the Study

Based on Cheng's proposed classification of external changes for students starting to study at universities, a survey was created. The purpose of the survey is to identify the challenges faced by students of the Information Technologies Faculty of LBTU in the first year of study. The questionnaire included closed-ended and opened-ended questions and was conducted between April and May 2023, inviting students of the Information Technologies Faculty to fill out an electronic questionnaire. A Likert scale from 1 (strongly disagree) to 5 (strongly agree) is used in all the closed-ended questions of the questionnaire. The questionnaire is available here: https://ej.uz/ITFsurvey. Students of all four study years participated in the survey, 46% of them are 1st year students, 31% are 2nd year students, 13% and 10% are 3rd and 4th year students, respectively. Currently, a total of 295 students study at the bachelor's level in the faculty, 96 students participated in the survey, which is 32.5% of the total number of students.

3. FINDINGS

In order to clarify the impact of *environmental external changes* and potential challenges as students' transition to university life, students are asked to answer where they live (still with their parents, in a dormitory or rent). The obtained data show that 50% of surveyed students still live with their parents, 11.5% live alone in their own or rented apartment, 28.1% in a dormitory, while 10.4% rent an apartment with a friend or friends. Table 1 shows the distribution of students' living arrangements by year of study.

Table 1. Survey results on students' living arrangements

	live in dormitories	rent with friends	live with parents	live alone in their own or rented apartment
1st year students	43%	9%	39%	9%
2nd year students	17%	7%	63%	13%
3rd and 4th year students	14%	18%	55%	14%

Survey data show that almost half (43%) of 1st year students live in dormitories, but in the following years the proportion of those living in dormitories decreased rapidly to17% of 2nd year students and to 14% of 3rd year and 4th year students. At the same time, as the academic year increases, the proportion of students who live with their parents increases, which seems completely illogical. These data could indicate that it is students who live in dormitories who are potentially more likely to drop out than those who still live with their parents. On the other hand, those who live with their parents during the 1st year and have not changed their living arrangements, could be those who drop out less often. The results of the survey, which refer to students' challenges in the changes of the academic environment, are reflected in Table 2.

Only 19% of students agree (chose 4 or 5 on a Likert scale) that it was difficult to adapt to university studies. As comments to their answer, the students mention, for example, "there was a gap between graduating from a secondary school and entering a university", "It was difficult at first because I had to plan my own time", "I had a hard time understanding the structure of the university's electronic information system ", several students mention that "I didn't expect that it would be so difficult to combine work and studies at university". At the same time, 34% of students strongly disagree that adapting to university life was difficult. One of the reasons mentioned by one of the students is that in recent years the distance education training system has become more accessible in Latvia, and the graduates of distance education schools are already used to independent work.

Regarding the university's support mechanism 19% of students agree that a support mechanism would be needed to get used to the university environment, while 39% disagree. Students note that when they started their studies at the university, they missed the most information about the course of studies, changes in the list and the location of the necessary study space, as well as friends and family. Some students also mention that there was a lack of knowledge in the exact subjects.

Table 2. Survey results on students' challenges in changing academic environment

Statement	1	2	3	4	5	Mean
I had difficulty adapting to university studies	34%	29%	18%	14%	5%	2.27
Starting studies at university, I needed a support mechanism to get used to the university environment	39%	26%	16%	13%	6%	2.21
I am satisfied with the study environment at LBTU (lecture rooms, laboratory rooms, etc.)	0%	2%	18%	47%	33%	4.11
I am satisfied with the study environment outside the university (it is possible to study at home, in the library, etc.)	1%	1%	16%	45%	38%	4.17
Studying at a university is very different from studying at a secondary education institution	3%	14%	22%	31%	30%	3.72
Studies at a university require greater self-organization and self-discipline than studies in secondary education institutions	6%	3%	11%	22%	57%	4.21
I manage to plan my time in such a way that there is time for both study and relaxation	14%	27%	28%	17%	15%	2.92

It should be mentioned that the survey was conducted in the spring semester and it is very likely that those students who failed to adapt have already left their studies (this year, the number of 1st year students decreased from 167 to 130, or by 22%, comparing the number of students in the fall and spring semesters).

In order to find out the impact of external academic changes and possible challenges, the satisfaction of students with the study environment inside and outside the university was analysed. Approximately 80% of students note that they are satisfied with the study environment both at the university and outside it. 75% and 84% of the surveyed 1st year students respectively believe that they are satisfied with the study environment at LBTU and outside it. Several students note that there could be more modern physics laboratories, some rooms should have more modern equipment. However, there are also those who believe that the rooms are equipped in such a way that the study process is comfortable.

61% of students agree that the study process at a university is significantly different from the study process at a secondary school. As more significant differences, students mention greater independence, organization of time, often the opportunity to do practical tasks at home, a larger amount of learning material, as well as the fact that there is no class teacher to remind them of what has not been done on time. It should be noted that in our university there are appointed curators for each course of each specialty, to whom group leaders mostly turn for organizational issues. One could wish for more curatorial initiative in collaborating with subject teachers on student outcomes during the study process. Several students in their comments emphasize that the relationship between student and teacher at the university is collegial. Students emphasize that "the university does not have uniform criteria for obtaining a grade in each study course, the teacher declares his criteria for each course".

In order to find out the impact of external social changes and possible challenges, the survey included questions about belonging to a group, about the availability of information about extracurricular opportunities (see Table 3).

Table 3. Survey results relating to student challenges in social change

Statement	1	2	3	4	5	Mean
I feel like I belong to my group	3%	6%	22%	33%	36%	3.92
Group members are supportive	0%	4%	15%	38%	43%	4.20
Information about extracurricular opportunities at LBTU/ in the city is sufficient	3%	5%	23%	39%	30%	3.88

Students mostly agree that group members are supportive (81%) and that they feel a sense of belonging to the group (69%). But there are also those who do not feel belonging to the group, besides, they make up 9% of the 1st and 2nd year students. The survey data showed that such students are also in the 4th year, perhaps this is the result of remote studies during the Covid-19 pandemic, because these students have studied half of the 1st year and the entire 2nd year remotely. It should be noted that the authors' long-term work experience with students of the Faculty of Information Technologies shows that future IT specialists who do not fit into the group are not rare. This is also confirmed by the students themselves, stating in their comments that "I don't mind that I didn't feel like I belonged", "it's just my problem".

In order to find out the impact of external financial changes and possible challenges, the survey included the question whether students work alongside their studies. It turns out that 61% of the survey participants do not work, 21% work part-time, and 18% work full-time. In addition, the number of working students increases with each year of study (if 75% of students do not work in the 1st year, then only 30% of students in the 4th year). 60% of working students note that they work outside of study time, but 20% follow the schedule set by the employer, the rest manage to plan their work schedule according to their needs. Students have different opinions about their ability to plan time. There are those who believe that they manage to plan their time and find time and opportunity for studies, work and relaxation (32% of the surveyed students), but there are also those who do not succeed (41% of the surveyed students).

By conducting research on possible support mechanisms in shaping the student experience in LBTU studies and comparing them with the phases developed by Brunett (see Figure 2), it can be concluded that Phase 1 "Pre-Transition or Beginning to Think About University" is being implemented relatively successfully. Communication and Marketing Centre, which is one of the structural units of University, deals with student attraction, internal communication and study marketing. The Communication and Marketing Centre, in cooperation with the faculties, constantly provides excursions for high school students. During them, students are introduced to the history of Jelgava Palace (home of the LBTU), University and its activities, as well as to faculties and study programs. The Communication and Marketing Centre organizes career days, participates in exhibitions, holds open days, and coordinates advertising campaigns on TV, radio, digital channels and social networks. According to these activities, it "moves" students' brains in the direction of future professions.

The survey of first-year students (n=460) reflects that the determining factor why a young person submitted an application to LBTU is the availability of budget study places (rating 4.24 out of 5, see Figure 3). Only after that follows the fact that the specialists of the chosen study program are in demand on the labor market (rating 4.19 out of 5) (Janmere 2023).
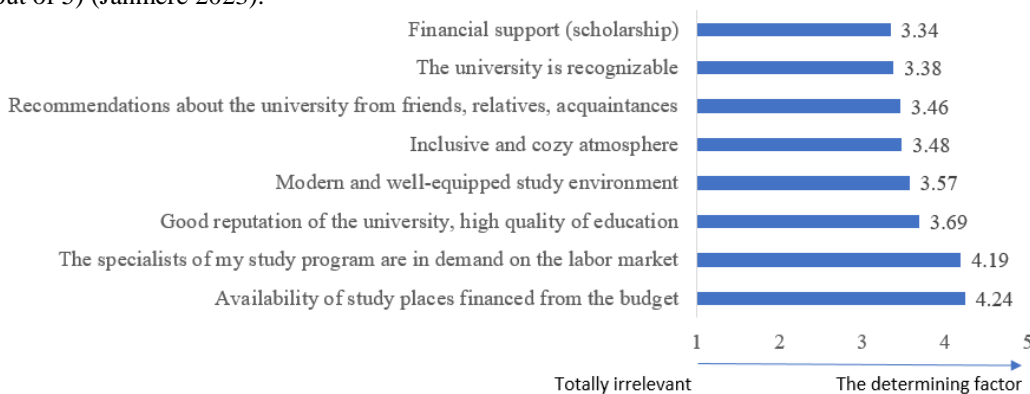

Figure 3. Factors importance when choosing studies at LBTU (Janmere 2023)

As mentioned in the Report, 32% of applicants had already made the decision to study at LBTU half a year before their studies. It must be admitted that quite a large proportion of young people make decisions about future studies at the last moment - as the survey proves, around 68%. It should be noted that Phase 2 "Preparing for university" is also being implemented relatively successfully at LBTU. University is actively involved in organizing various events with the aim of helping high school students prepare for university studies. LBTU, in cooperation with the State Educational Content Centre, organizes a scientific research competition for high school students from the Zemgale region - a conference. This event is very important for the students, because the best and most knowledgeable high school students of individual sections of the Zemgale region students' scientific research competition - conference have a unique opportunity to enter LBTU outside of the competition.

The Centre for Lifelong Education constantly provides preparatory courses, for example, in biology, chemistry, mathematics, physics, the target audience of which are students of high school graduation classes and those who have obtained secondary education, for repeating and supplementing knowledge in order to prepare for studies and exams. Over the past 5 years, the Lifelong Learning Centre has served approximately 1100 study course visitors.

The Faculty of Information Technologies offers courses in the Correspondence Programming School, which is intended for those who are interested in computer science and wish to learn programming skills

individually or continue their studies in fields related to computer science and programming. Successful course graduates are awarded additional points for the competition to enter the Faculty of Information Technologies.

The Students' Self-Government also actively participates in the Phase 3 and in the following stages. This is an organization representing university students, which solves important issues of academic, social, cultural and sports life, represents and defends the opinions and rights of students in LBTU, the Latvian Student Union, as well as in other institutions and organizations at the national and international level. Our university has a very old tradition of gathering first-year students - the Azemitologs' festival, which has been held since 1968. The student government helps first-year students come together in the first month of studies and to prepare a witty performance together. We could consider this as the time of orientation and settling into the university.

Continuing with the next, 4th phase - "Introduction of first-year students", it should be noted that study course "Introduction in the specialty" is included into our programs. Within the framework of that the organization of the university's activities is explained to newly enrolled first-year students and information about the chosen program is provided. The study course provides knowledge about the higher education system in Latvia, expanded knowledge about the specialty to be studied, about the organization of the study process and the regulatory basis of studies, knowledge about the university, the chosen faculty, its structure and administration.

For example, the Faculty of Information Technologies, a curator is appointed for each student course. The curator, knowing the work organization of the university, helps students navigate the work organization of the university.

Moving forward, the university offers students various extra-curricular activities, - participate in student representative organizations, participate in independent groups, dance groups, sing in a choir, participate in sports activities, etc., which in general involve students in a unified team and this forms the overall cultural environment of the university. This strengthens the sense of belonging to the university in students.

One of the biggest problems for Latvia is the lack of effective support mechanisms for students during the study process. Although, as a result of the competition, the student has obtained a state-financed budget place at the university, he must also solve the financing of his daily expenses.

In Latvia, only 5% of students in full-time studies in places paid for by the state budget receive a state budget scholarship, and its amount is only 140 EUR per month and it is paid only 10 months a year.

The Student Union of Latvia states that the support available in Latvia is not competitive according to academic criteria. This forces even the best students to look for work that is not always possible in their industry. According to the research of the Student Union, students in Latvia work an average of 31 hours/week, which is the highest rate in Europe, and moreover, this time is most often not spent working in the industry chosen during studies.

The experience of mid-level undergraduate students is worthy of further research. Research in this area could highlight the specific problems and needs of middle year's students, resulting in the development of a program that could support all students during their undergraduate studies.

4. CONCLUSION

Based on the results of the study, concluded that only 19% of LBTU students agree that it was difficult to adapt to university studies. At the same time, 34% of students strongly disagree that adapting to university life was difficult. In recent years the distance education training system has become more accessible in Latvia. 61% of students agree that the study process at a university is significantly different from the study process at a secondary school. As more significant differences, students mention greater independence, organization of time, often opportunity to do practical tasks at home, a larger amount of learning material.

As a possible support mechanism before student's transfer to the university, we can mention activities of the LBTU Communication and Marketing Centre and the Centre for Lifelong Education. In the initial stage of studies the study course "Introduction in the specialty" is a significant part of the support mechanism.

However, one of the biggest problems not only for LBTU, but also for other Latvia universities is the lack of effective support mechanisms for students in the study process including insufficient financial support.

This study is a case study and it only reflects the views of the respondents who participated in it. The results could be used to identify problems/ directions for in-depth research.

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