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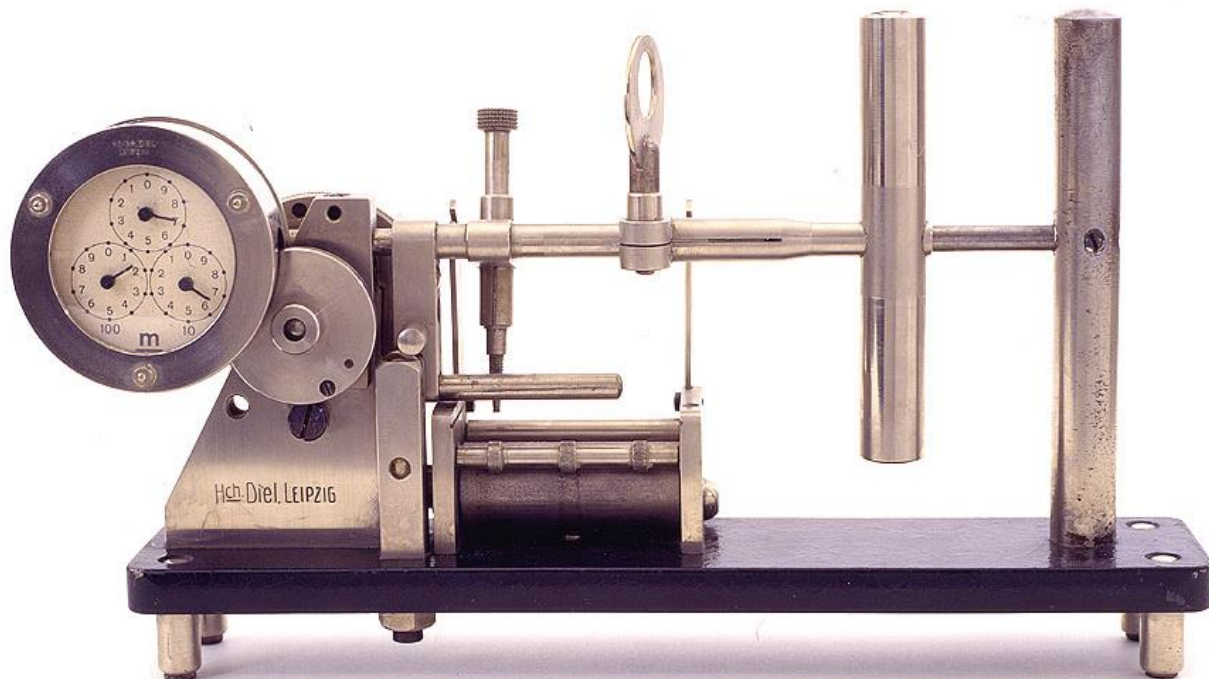


# EMPIRICAL STUDIES IN PSYCHOLOGY

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INSTITUTE OF PSYCHOLOGY  
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# Should they stay or should they go? Dropout in higher education

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## Abstract

Dropping out of higher education is a global phenomenon which affects virtually all universities. The main aim of this research is to determine the factors which have the most predictive value for students' satisfaction with their studies and dropout intentions. The research was conducted on the sample of 673 students who completed a self-description questionnaire which included 22 dimensions of students' perceptions of their studies. Based on a two-step cluster analysis, we have identified the group of students at risk of dropout. ANOVA has shown that the two groups differ on almost all investigated dimensions. Individual-related factors, developed in a specific context, are the main predictors of students' dropout from higher education. Understanding of these factors can improve the system of early detection of students at risk of dropping out.

**Keywords:** dropout; higher education; individual and institutional factors; prediction

## Introduction

In most of the countries worldwide, higher education is recognized as an important factor which supports social, cultural and economic development of both individuals and societies. According to data from the OECD (2010), around one-third of higher education students drop out before the completion of the first-degree studies. Lowering the dropout rate among HE students is one of the main goals of the EU strategy for jobs and growth (Europa 2020). Due to the significance of this issue, a number of studies have been focused on the factors leading to dropping out of the educational system.

Dropping out of HE is a major concern both for the educational system and policy-makers (Tinto, 2006). It is a universal problem which has significant economic and academic consequences at the individual, institutional, and societal levels (UNESCO, 2004). Available data suggest that workforce participation is the lowest for the youth who dropped out of high school and the highest for the youth who graduated with a four-year college degree (Sandoz, Kellum & Wilson, 2017).

A number of studies that researched dropout factors indicated that dropout was influenced not by a single factor, but rather by a combination of different factors (Bernardo, Esteban, Fernandez, Cervero, Tuero & Solano, 2016; Kim &

Kim, 2018). Based on rich empirical data, most researchers agree that the causes for dropout can be found in a specific combination of individual, familial, institutional, and societal factors (Bennett, 2003, Tinto, 1993). Still, there are no coherent data which define the combination of factors which leads to students' dropping out of higher education. Since dropout is a complex and multifactorial problem, there is no single solution that can be applied as a prevention measure in all situations and in all higher education institutions (Thomas & Hovdhaugen, 2014). Hence, there is a need for research into the factors which have a major effect on students' dropout in the specific cultural, societal and institutional contexts.

In the academic year 2017/2018, at the University of Belgrade, there were around 102,000 students enrolled in the previous year of studies. At the end of that academic year, around 12% of students graduated, a similar number of students repeated the year, and more than 3% dropped out. The current study focuses on the students at risk of dropping out of the University and the factors that increase that risk.

## Aim of the study

The research presented here is a part of a large international project SunStar, focused on the development of an online learning platform as a support for students at risk of dropping out. The aim of this study was to determine the factors which have the most predictive value for students' study satisfaction and dropout intentions in the Serbian context.

## Method

For the purposes of this study, a sample of 673 students (mean age 21.39, 79% females) participated in an online survey. Almost all participants were from the state university (96%), at four-year bachelor studies (95%), and most of them studied social sciences (70%). A self-description questionnaire comprised of 22 dimensions and 143 items (most of them on 6-point Likert scales, from 'strongly disagree' to 'strongly agree') was administered online. The dimensions included several aspects of students' perceptions and the evaluation of their university and their studies, referring to both individual and institutional factors: study organization, contacts with teachers, social atmosphere,

identification with the university, help-seeking behaviour, self-efficacy, self-evaluation certainty, attainment, emotional positivity, emotional support, emotional stability, worries, job perspective, relevance to practice, self-discipline, achievement, learning strategies, intrinsic and extrinsic motivation, concentration, cost-effectiveness, and intellectual development. The questionnaire also included the socio-demographic variables and questions about parental education, special educational needs, satisfaction with life conditions, and funding.

## Results

Various socio-demographic variables, parental education, special educational needs and the variables describing the type of studies (the state/private university, science/social studies, semester, previous studies) did not show significant prediction.

Study satisfaction among our participants was very high (mean 4.5) while their dropout intention was very low (mean 1.38). Science students and the students from private universities were more satisfied with their studies and university compared to social science students and those from the state university.

Based on a two-step cluster analysis, we could identify the group of students at risk of dropout ( $N = 206$ ). ANOVA has shown that two groups differ on almost all investigated dimensions, except funding and extrinsic motivation. The multiple regression model ( $F(28) = 16.564, p = .000$ ) has shown that 39% of dropout intentions can be explained by the following dimensions (Figure 1): help-seeking, self-efficacy, attainment, emotional positivity, emotional support, self-evaluation certainty, living conditions, grades and funding (active - e.g. paid work and passive - e.g. parental support). Various socio-demographic variables, such as parental education, special educational needs and the variables describing the type of studies, did not show significant prediction.

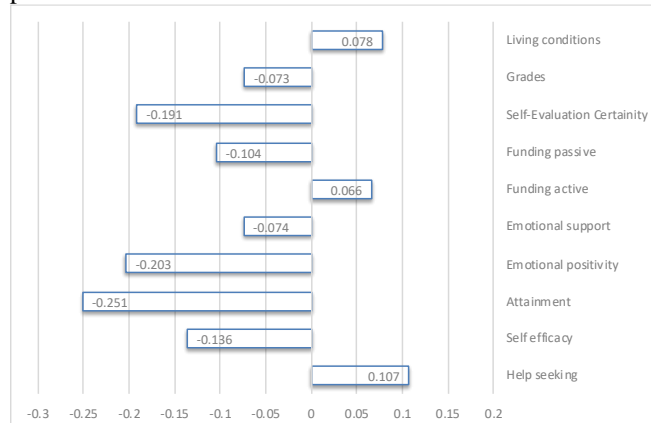


Figure 1: Dimensions predicting the dropout intention

Around 72% of students' study satisfaction ( $F(28) = 62.334, p = .000$ ) can be explained by the following dimensions (Figure 2): study organization, self-evaluation certainty, emotional positivity, intrinsic motivation,

intellectual development, relevance to practice and living conditions.

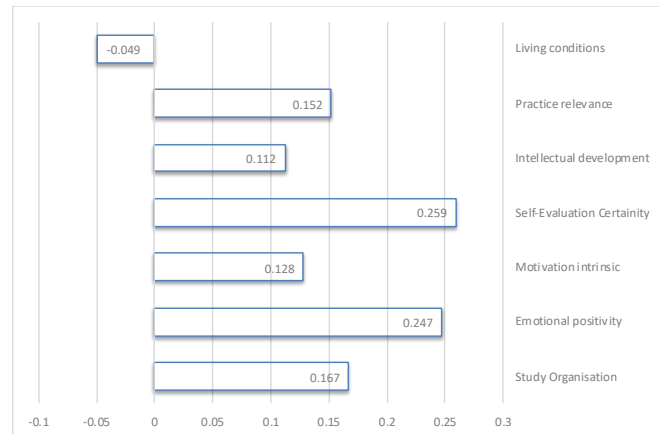


Figure 2: Dimensions predicting the study satisfaction

## Discussion and conclusion

The dimensions relevant for the prediction of students' study satisfaction and dropout intentions refer to several institutional factors (e.g. study organization, practical relevance), but mostly to individual factors (e.g. students' motivation, help seeking behaviour, self-efficacy, learning strategies, living conditions). Although previous studies have shown significant effects of SES, gender, and similar socio-demographic characteristics, in our research these factors showed no relevance for the prediction of students' study satisfaction or dropout intentions. Our results suggest that the individual-related factors are the main predictors of students' dropout from higher education. However, this finding also reflects a specific institutional setting that does not provide any support system for the students at risk of dropping out. Theoretically, these results are relevant for a better understanding of the factors that influence the likelihood of dropout. Understanding of these factors can improve the system of early detection of students at risk of dropping out. The results also imply that prevention and intervention measures should be focused primarily on students.

The current research justifies the development of tools for both detecting the students at risk and providing adequate support in accordance with their needs.

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