

# Stress and coping connected to higher education study structures: combined views from teachers and students

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## Abstract

Experienced stress by students and teachers in higher education has attracted increasing interest, but the two groups are rarely studied together. We combine their perspectives by considering the stress and coping among students and teachers concerning the development of study structures in a business school context. The findings indicate a strong connection between stress experienced by students and teachers, reflecting their interactive nature in this context. We categorize factors causing stress to those for which effective coping mechanisms exist, those causing tensions and requiring active management, and stressors that are difficult to remove because a coping mechanism for one group increases the stress of the other. Our findings add to existing knowledge on stress and coping mechanisms in higher education by combining the perspectives of students and teachers concerning study structures in business education.

**Keywords:** stress, coping, burnout, study structures, higher education

## Introduction

Well-being has been researched in many work environments [1], and recent studies have also addressed its importance in higher education [2-4]. As a part of this discussion, the multifaceted influences of stress in higher education have triggered increasing agreement that greater recognition of the stressful nature of higher education is needed [5]. COVID-19 has also brought increased attention to well-being in academia [4,6].

Stress refers to a relationship between an individual and the environment that the individual appraises relevant to their well-being and in which the individual's resources are taxed or exceeded [7]. Stress

includes causes of stress reactions, consequences of positive and negative stress, and their modifiers [8]. In evaluating a situational threat, individuals seek to assess whether they have enough resources to cope, influencing their perception of the stressor. This means that while a stressor is neutral, individuals' responses to it differ and can be positive and/or negative depending on the quality of an individual's relationship with it [9]. Personal experience becomes important.

Students in higher education experience stress balancing studies, work, family, and student life. Correspondingly, academics experience stress under pressure to provide high-quality teaching and manage student feedback, publish their research,

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acquire funding, and participate in administrative activities. [10] The competitive nature of business education can affect students and academics. In such a context, addressing harmful stress necessitates viewing stress more widely than simply as a normal part of higher education and recognizing the harmful impacts of stress [11]. Such psychological distress may severely affect individuals' mental and physical health [12], especially if it is continuous [13]. The increasing participation in higher education challenges the support structures to reach an equivalent development pace [14].

Existing literature focuses either on students or faculty [2], and relatively little attention has been paid to the perspectives of the two groups. Thus, we examine how experienced stress and coping mechanisms of students and teachers are connected to study structures in higher education. As students and faculty come most naturally in touch through the teaching function, in the search for the answers to this question, we focus on how stress and coping emerge concerning study-related structures (curriculum and program structures) as well as formal and informal support structures (tutor teacher activity and personal relationships).

We contribute to existing knowledge on stress and coping mechanisms in higher education by combining the perspectives of students and teachers. We add to research on stress and coping in a business education context concerning study structures. Both the simultaneous consideration of teachers' and students' viewpoints and the role of study structures, and the examination done in business school context extend earlier studies. As a specific contribution, we categorize easily applicable coping mechanisms, tensions that call for more active management, and inbuilt contradictions that come out as irreconcilable stress factors.

## Literature review

### *Stress factors in higher education*

Experiencing stressful academic life typically connects to different academic structures. Increasingly demanding study-related structures have been connected to student burnout [14]. These structures may also increase teachers' workload. While international accreditations are means to pursue legitimacy and global status, their influences generate stress [10]. Curricula are becoming more rigid, with less space for flexibility [14], which may also limit how teachers can organize their work to accommodate their various academic tasks, including teaching, research, and administrative duties. Such a lack of control over work causes harmful stress [10].

Different higher education groups may experience stress in different ways under the same structures. The determinants of stress for students in higher education relate to the demands of academic work, such as performing well in exams and workload. Stressors may also stem from social issues and financial uncertainty, with fears about being unable to finish the program and future job prospects [11]. Stressors may be intertwined with the pressures of meeting deadlines and time management problems [15], accentuating the need to take part-time jobs, for example [16]. Competitive study culture may result in spending more time with studies and feeling that tiredness cannot be shown to peers or families [8]. Relatedly, it has been found that interpersonal relationships may become a source of stress when an institution tries to socialize students through multiple social activities [17].

Stress felt by students resonates with teachers' stressors. It has been suggested that students' well-being has consequences for the well-being of teachers and the quality of teaching [18]. With

accreditation, higher education teachers are pushed to educate many enough graduates and provide high-quality education, and with other tasks, the work tends to occupy free time and holidays [19]. As a result, their recovery might be limited, and stress accumulates. Two-thirds of teachers perceived stress at work at least 50% of the time. In line with this, many preventive strategies for dealing with academic stress are needed. [20] The same stressor's meaning varies between individuals and situations.

### ***Coping mechanisms in higher education***

Coping mechanisms are an individual's cognitive and behavioural attempts to deal with internal and external demands and conflicts between them [21]. Generally, literature categorizes these into problem-focused (removing the stressor), emotion-focused (reducing, channelling, or eliminating the negative emotions), and avoidance-focused ones (avoiding the stressful situation) [21]. Positive affect and self-efficacy have also been found to mediate emotion regulation and self-leadership as critical coping mechanisms [12].

Structures matter for coping with stress. As study-related structures and curricula have developed, varying support functions have also been introduced and emerged that can facilitate coping; for example, various study support systems pay attention to student guidance and counselling, personal study plans, and study fluency [19]. Intervention and prevention programs can ease managing academic stressors more effectively; however, the challenge with these formal support systems might be that students are unaware of those systems [22] or may not always recognize if they are under stress [23,24]. Likewise, formal structures may be avoided due to experiences of shame for seeking support [25]. This applies to teachers using formal support too. Thus, it is necessary to pay attention to how

existing structures are communicated in order to support engagement with relevant services [26,27].

Formal support structures are accompanied by informal ones. Satisfaction with social support can act as a buffer against stress for students and teachers [28]. Such support is a resource in the social environment people turn to when they encounter stress. This coping strategy includes talking to family, friends, and peers [19]. However, individuals may deliberately hide their stress and mental health problems [23]. While there are many coping mechanisms, they may not be equally relied on by the actors in higher education, as the same stressor's meaning varies between individuals and situations [28]. In sum, it is still unclear which coping mechanisms work in academia [19].

## **Material and methods**

### ***The case***

A qualitative case study was used to investigate the stress and coping of students and faculty in a Nordic public university with about 1500 students and 100 faculty members. In the examined school, the study structures were changed in 2014 to meet the demands of business life and business school accreditation. After the structural changes, students first apply for a student place in a generalized bachelor program, and then, they need to apply for the master's degree programs at the last stages of the bachelor program, where students' average grades and choice of the desired major are decisive. Structural changes have been found to create competition among the students, resulting in an increased re-take of exams, which increases the workload of the teachers.

### Data collection

The data were collected through surveys and interviews. Surveys in 2019, 2020, and 2021 were used to collect data on the students' insights. The survey has about 60 quantitative and qualitative open-ended questions on study-life-work situations, the study structures, stress, well-being, and coping. This data comprises 232 responses in 2019, 267 responses in 2020, and 285 responses in 2021, representing 16-19 % response rates. Teachers' views were examined with an e-mail questionnaire in 2019 and 2020, including open questions regarding teachers' workload and perceptions of the study structures. The questionnaire reached 156 persons from the business school email list, to which 20 teachers responded each time. However, only some receiving the questionnaire were permanent faculty or a teacher, and to be able to respond, the teachers needed to have worked at the business school both before and after the change in study structures. Although acknowledging this brings the response rate to the same level as with students, to understand the teachers' insights more thoroughly, seven in-depth interviews were conducted in 2020 with teachers involved in executing the structural changes. To supplement the data, we used a summary report of a well-being survey of teachers, university webpages, annual reports of the business

school, and accreditation-related and tutor-teacher materials (Table 1).

### Analysis

The data were analyzed by applying thematic analysis. In the first phase of the analysis, each data set was separately analyzed by distinguishing the recurring patterns related to stress and coping with specific colour codes [29]. Thereafter, subcategories were created, which eventually allowed identifying the links between the categories [30]. This provided an understanding of whether the identified stress factors and coping mechanisms were related to study-related structures or formal and informal support systems. After this, the data sets were combined and categorized to identify the specific structures and support systems, and their elements, that induce or ease their stress. In the final phase of the data analysis, the viewpoints of students and teachers were combined through the identified elements of the structures. Two researchers developed categorizations of stress factors and coping mechanisms. A third researcher ran statistical tests on the quantitative student survey materials to check that the qualitative data aligned with the overall patterns. As very similar connections were detected, we proceeded with the qualitative materials.

**Table 1.** The interview data.

Informant	Time	Duration
Professor A	5 June 2020	45 min
Professor B	8 June 2020	1 h 20 min
Professor C	8 June 2020	52 min
Professor D	8 June 2020	20 min
University Lecturer	10 June 2020	31 min
University Lecturer	17 June 2020	30 min
Assistant Professor	23 June 2020	58 min

## Results

The data collected among the students showed that the most significant stressor was the uncertainty related to applying to the majors, which resulted in a competitive atmosphere. The number of retakes increases due to students comparing their grades with each other, intensifying workload issues and creating a vicious cycle of keeping up with the study schedules. The curriculum's general nature creates a lack of motivation for some. Stress emerges when

the students need to keep up with the expected schedule, but problems in passing mandatory courses might prevent them from proceeding with their studies, applying to a major, and graduating on time. The generality of the program prompted anxiety about the lack of qualifications after finishing the program and thus generated stress about competitiveness in job markets. Table 2 summarizes the findings related to the stressors of students.

**Table 2.** Structural factors and related stressors of students.

Structural factor	Stressor	Quotes
Major selection	Need to gain good grades	"The average of your grades that influence applying to majors has caused stress."
	Competition	"Competition related to getting into the major you want is burdening."
Time frame of studying	Time management	"Scheduling, and if there are too many exams and courses at the same time."
	Workload and keeping up with the timeframe	"Mainly the fact that if I do not have enough resources to perform some course, it is automatically postponed for the next year, which in turn will complicate the situation in the future."
	Expiring study right or student allowance months	"Graduating on time and that you have enough student allowance months." "Master's thesis and graduation and expiring study right."
Obligatory studies	Lack of motivation	"Stupid structure. You do not learn from anything properly, and there is a lack of motivation when you need to study things that you are not really interested in."
	Passing courses	"Graduating on time and passing certain courses."
		"The structure is really unfavourable for those who do not want to apply to "hard" majors. There are lots of "hard" subject courses that decrease the motivation to study remarkably because passing these courses is challenging!"
Generality of curriculum	Lack of proficiency	"Generalistic bachelor's programs do not provide qualification to any kind of work task."
	Future job prospects	"I wonder how the students graduating our business school will do in job hunting if compared to students graduating from other places that always have a deeper understanding of one major."

Among coping mechanisms for students, formal support structures emerged as relevant. For example, tutoring activities for first-year students were beneficial in forming social relationships, getting familiar with the study environment, and receiving important information. Electronic exams (e-exams) were found to ease the students' stress by increasing flexibility for taking exams. While for the majority of students, remote teaching and learning during COVID-19 caused stress, at the same time, there was an appreciation of new ways of learning and better time management possibilities, and some students acknowledged their stress levels were lower. Also, as uncertainty related to majors created stress, studying different subjects in the bachelor program allowed getting familiar with the majors, which increased certainty regarding the major selection for some students. Informal support structures were also found as a double-edged sword. While friends caused pressure to improve grades, having friends also increased the meaningfulness of studies and advanced the progress of

studies. Table 3 illustrates the findings related to the coping mechanisms of students.

Teachers similarly had mixed experiences regarding study structures. The increased student intake has increased the number of course participants, influencing the workload and the delivery and assessment methods. They also find the nature of the bachelor's degree program poses challenges regarding the students' knowledge levels. For example, a decline in the number of basic skills courses, such as mathematics and statistics generates challenges in transferring to master's studies and necessitates adjustment from teachers. According to the data, the most significant impacts felt by the teachers are linked to retakes and the students' attitudes towards the introductory courses, which may result in aggressive criticisms and looking for errors in a teacher's guidance to get better grades. This was found to be mentally challenging for teachers (see Table 4).

**Table 3.** Structural factors and related coping mechanisms of students.

Structural factor	Coping mechanism	Quotes
Remote learning /electronic exam	Flexibility to scheduling; for example, retakes	"Many retakes are at the same time, so the electronic exam would give you an opportunity to upgrade with time, and it would also help you in coordinating work and study lives."
	Control: time to prepare for exams and create better answers	"With a computer, you are able to write more thoughtful and decent answers. In addition, it increases the flexibility of studying."
Generality of curriculum	Knowledge and time enable better decisions	"First general knowledge from all majors, after which it is easier to make the decision about the major that is most natural to you."
Social support	Friends and meaningfulness of studies advance the progress of studies	"I have felt studying meaningful, and I have made wonderful new friends."
		"Discussion with fellow students that also write their master's thesis."

**Table 4.** Structural factors and related stressors of teachers.

Structural factor	Stressor	Quotes
Increased student intake	Teaching and evaluation methods	"Increasing student intake at both the bachelor's and master's levels poses challenges to teaching."
	Workload	"Teaching takes double work compared to time before changes in the study structures. There are two reasons for this: the number of students per course has increased and demands of diverse teaching add even more work."
Generality of curriculum	Course content	"In the past, students had broader (major-specific) knowledge, and as a result, the contents of their theses were deeper. In addition, when research methods were taught in the bachelor phase, bachelor's theses may already include small-scale empirical research, but today students have not yet tools to do so."
	Insecurity of own capabilities	"We need to supervise all kinds of topics, not only marketing topics, and sometimes feel not professional enough."
Major selection	Lack of motivation	"Because students have not applied, for example, to management discipline, some are not motivated or willing to think about things in a way that stems from the tradition of human science."
	Retakes	"It causes a lot of work, which means that for anyone who wants, we offer a discussion about why the grade was what it was."
	Aggressive attitudes	"The grade goals are high and -- grade 4 is a disaster for many. The result is aggressive complaints, looking for errors in the teacher's guidance, course structure, criteria -- and atmosphere may even be hostile among these students." "The work is mentally harder -- because of the attitude of seeking the highest grade with minimal work and tailor-made implementation."

The study structures also provide means for coping. As the program structure is more controlled, it is easier to know what the students have already studied. Teachers acknowledge this helps them better position teaching into the whole program and connect with other courses. The program-level coordination relies on collaboration and shared

practices among teachers in different courses. Finally, informal support structures in the form of support from superiors and peers remain essential in developing the work environment. Table 5 illustrates the findings related to the coping mechanisms of teachers.

**Table 5.** Structural factors and related coping mechanisms of teachers.

Structural factor	Coping mechanism	Quotes
Increased student intake and major selection	Pedagogical training:	"I think that my interaction with students has changed mostly because I have developed my teaching skills."
	interactivity and increasing work-life relevance	"More practical approach by involving numerous external guest lecturers from companies."
	Peer discussions	"Discussion with colleagues assists in developing pedagogical issues."
Program-level coordination	Systematic teaching planning and shared guidelines	"Perhaps a better understanding of the broader context can influence the content avoiding duplication of content with other courses."
	Sense of belonging	"We are really pleased with the common policy for not allowing a retake of the course assignments."  "Belonging to the (bigger) whole provides the appropriate "social pressure" to develop teaching."

## Discussion and concluding remarks

The same stressor's meaning varies between individuals and situations [28], and we can show this in the business education context. The first observation in our results is that while some stressors are discrete, many are multifaceted; the same factors can have different roles – and even turn into coping mechanisms. For example, students may feel frustration or benefit from having more time to decide which major to apply to. For teachers, structures can pose demands but also ease the workload. Teachers may feel stress due to the requirements for high-quality teaching [10], but simultaneously, the study structures may increase the clarity of expectations.

Similarly to study-related structures, formal and informal support structures can bear different meanings. In the studied business school, beneficial informal structures providing emotion-focused coping [21] are available for teachers. For business school students, the situation seems reversed. Formal support structures seem to mitigate students' stress by providing problem-focused or avoidance-

focused coping [21], whereas informal support structures are not as efficient. Social connections are multifaceted: while peer and family support might be needed, they may also give a start to increasing stress [10]. In the case school, social interaction with other students was connected to the number of retakes related to the competition about admission to the majors. The findings also reveal the power of situational appraisals. As 90% of students are accepted into their first choice major, the vicious cycle of stress is rooted in the individual students' appraisals of the situation [7].

The second observation from our case relates to the connections between stressors and coping mechanisms, starting different chain reactions and being accelerated or hindered depending on perceptions of the stressors and coping mechanisms and the conditions under which they emerge [8]. While the stressor is neutral, its response is labelled as positive and/or negative [9]. As the competitive culture lives strong among students, there is a risk that it will be embraced by the first-year students and continue influencing future students if not addressed. Therefore, attention should be paid to

how the structure is communicated to the students through the formal support structures.

We can identify three categories by looking at the stressors and coping mechanisms through the structures. The first category holds coping mechanisms benefitting both students and teachers. For example, peer support or e-exams may help both groups. The second category covers stressors and coping mechanisms involving tensions calling more active management. For example, the poor motivation of the students to study subjects outside their planned major may cause stress among teachers. Such stressors are addressable with appropriate measures, such as support for the planning of the course contents. However, some contradictions may emerge as irreconcilable; this third category captures coping mechanisms that lower stress for one party but become stressors for the other. For

example, students' stress would be eased by more versatile ways to complete the course, but this would increase teachers' workload. Such contradictory settings may be impossible to remove completely, but their occurrence can be limited through the coordination of study-related and informal and formal structures. University-, faculty-, and department-level actions are needed to solve problems and recognize potential problem areas proactively.

Due to its limitations, such as only observing students and teachers in one business school, and with its insights, we encourage examination of each coping mechanism's limits or technology's role in easing irreconcilable situations, for example.

#### Conflict of interest

The authors declare no conflict of interest.

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