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Research Article

Student conceptions of motivation to study in upper secondary school in Sweden revealed through phenomenography

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The motivation to study may affect students' successes and setbacks in their studies. Research has shown that multiple factors affect students' motivation to study. The purpose of this article is to describe how students conceptualize the motivation to study. We gathered empirical data through group interviews with 32 Swedish students in six study programs. Through phenomenographical analyses, we identified six categories of how students experience the motivation to study: the importance of teachers, the subject, student characteristics and attitude, study results, and support from friends and family and the environment. Within each category, we distinguished various aspects. Differences in conceptions between students and programs or types of programs exist, but they are small. Only students from study preparation programs emphasized the importance of student characteristics and attitude for increasing study motivation and getting good jobs. The study's results show both general and distinctive content in the meaning of study motivation. We make recommendations to develop incentives for all students, not just those who have favourable socio-economic study conditions, to develop motivational strategies to study.

Keywords: Phenomenographic analyses; Study motivation; Study strategies; Sweden; Upper secondary school

1. Introduction

When children start school, they encounter various challenges and demands in social, cognitive, and academic tasks. Most children seem to be curious and driven by a need to explore, interact with, and discover their environments (Koca, 2016). However, student motivation to learn seems to diminish as students get older. This is especially obvious in high school and upper secondary school (Martin, 2009). Gnambs and Hanfstingl (2016) provided a hypothesis regarding adolescents' reduced study motivation, claiming that traditional school environments insufficiently satisfy three basic psychological needs of youths during maturation (i.e., the need for autonomy, competence, and relatedness).

In Sweden, this decrease in motivation is both evident and discordant. In recent years, the upper secondary school in Sweden has reported low throughput, a high proportion of students with incomplete grades, and a lack of motivation. A total of 53% of upper secondary school students state that they feel little motivation to study (Sveriges Elevkårer & Lärarnas Riksförbund, 2015). Many actors (parents, student organizations, teachers' unions, the National Agency for Education, businesses, and politicians) are demanding measures to reverse this negative trend. In interviews, teachers in upper secondary school often claim this low motivation to study is established in compulsory school, before students begin their studies in high school. Compulsory-school teachers report that by the intermediate stage, attention is drawn to the problem of a lack of study motivation among some students, mostly boys (Boström & Bostedt, 2021). The question of study motivation is therefore relevant in most of the students' year groups.

Study motivation is an important issue in both compulsory school and upper secondary school. Statistics from the Organisation for Economic Co-operation and Development (OECD) and the Swedish National Agency for Education confirm this fact. The Swedish graduation rate is significantly lower than those of OECD countries in general and of the OECD countries that are members of the European Union (OECD, 2022). The graduation rates in Sweden in 2017 (69%) and 2019 (70%) are approximately 10% percent lower than in the other OECD countries for the same years (78% and 80%, respectively) and in OECD countries in the European Union (78% and 81%, respectively). The number of students in theoretical programs in upper secondary school in Sweden who graduated within three years after starting the program only increased slightly from 2017 (76.8%) to 2019 (78.7%). The comparable numbers for vocational programs are 70.8% and 71.6%, respectively (Skolverket, 2020). The comparable figure for the Individual Program (IP) for 2018 is 7.6% (Skolverket, 2021). In other words, it is vital to examine students' study motivation in compulsory school and upper secondary school in Sweden. Besides various age groups, it is also important to analyse variations in the student groups dependent on important background variables, such as gender, country of birth, parents' level of education, and socio-economic status.

Students need the motivation to study to advance in their educations, and this need is dynamic, changing based on the needs and interests of students in various situations. Study motivation is a driving force behind student behaviour (Perry et al., 2006). In Swedish upper secondary school, teachers try to help students study effectively and increase their motivation by introducing study techniques. Lessons on study techniques are usually included in the Swedish subject, and these skills are often described in textbooks. Study techniques are often described as strategies for taking notes, reading, processing texts, and retention (Skoglund & Waje, 2000). The assumption that the study techniques presented are suitable for all individuals is implicit. However, this assumption does not take into account students' individual characteristics and study preferences. We believe that individual variations in motivation to study are important and that they should not be considered on the basis of surface learning or as instrumental competencies. Our experience after many years as teachers in upper secondary school is that study techniques are often treated as a collective competence and that teaching is based on simple study strategies that students can use, such as memorization or simple structuring. A broader analysis of and insight into study motivation is required within school and subject contexts. In analysing the motivation to study in upper secondary school, it is important to have a perspective that not only focuses on the individual student but also takes into account the entire school and classroom situation (see Imsen, 2006).

The aim of this study is to describe and analyse how students in three types of study programmes (a total of six programmes) conceptualize the motivation to study. The research questions are as follows:

1) What conceptions do upper-secondary students in six programs in Sweden (the Social Sciences Program [SSP], the Technology Program [TP], the Health and Social Care Program [HSCP], the Building and Construction Program [BCP], the Children and Leisure Program [CLP], and the Individual Program [IP] have of study motivation?

2) What are the similarities and differences among these groups of students?

The following presentation of previous research and our theoretical standpoint are followed by a description of the procedures for data collection and data analysis. Then we present our empirical findings and finish the article by analysing and discussing those findings.

2. Previous Research

Much of the international research on motivation in school focuses on various topics (i.e., music, math and science (Gilbert et al., 2014), and literacy) or digital devices (e.g., Berg et al., 2019; Hofvenberg, 2020). In a comprehensive Australian survey, Martin (2009) compared three age groups: students in elementary school, high school, and university. The conclusion was that the youngest age groups were most motivated to study, followed by university students. Students in upper secondary schools had the least motivation. Martin (2009) argued for the importance of a more thorough understanding of why students in their early teens experience the least motivation and how motivation develops during a lifetime. Szklarskis (2011) provided one answer, describing students who were 15–16 years old and their perceptions of motivation both from self-reports and focus group interviews. Szklarskis (2011) reported two essential factors, namely students' interests and progress.

Research on various individual characteristics and personal preferences that affect study motivation is quite plentiful. Below are some research findings that we find relevant. Students' self-perception regarding self-esteem, competence, experience, and individual goals (Hugo, 2011; Wery & Thomson, 2013) are crucial for study motivation. Relevant in this context are also the feelings that are aroused in success and failure as well as teachers' didactic competence to handle these feeling at both the group and individual levels (Giota, 2013; Imsen, 2006; Lundahl et al., 2015). Important for study motivation is also how students perceive given tasks (whether they are relevant, how much use they see in them, perceived degree of difficulty, working methods [Granström, 2012], feedback, group division, group dynamics, and many other factors that have to do with classroom work itself; Carlgren, 2015; Håkansson & Sundberg, 2012; Woolfolk & Karlberg, 2015). Gender also affects study motivation (Berg et al., 2019; Dunn & Griggs, 2006; Zimmerman, 2018). Most important for students' study motivation, however, is teacher–student interaction and the teacher's overall didactic competence (Gilbert et al., 2014; Hattie, 2009; Kiefer et al., 2014). This finding indicates the importance of relationships for students' study motivation and results. This special research area is called relational pedagogy (Aspelin, 2018), which emphasizes that successful learning takes place in pedagogical meetings that are characterized by trust, care, and respect. Study motivation is also greatly influenced by the learning environment for students (Wery & Thomson, 2013). A crucial prerequisite for those students who have not succeeded earlier in school is an adapted learning environment in which teachers employ an inclusive approach (Gidlund & Boström, 2017).

As previous studies (Giota, 2013; Hofvenberg, 2020; Marton 2009; Szklarskis, 2011) have shown, the result is sprinkled with various puzzle pieces regarding what affects students' study motivation. We can also conclude that the research in this area is dominated by educational psychology. Didactic research occurs only to a small degree.

National studies in Sweden about the motivation to study are few (Lundahl et al., 2015). Research on the interaction between the individual and the learning environment in Swedish schools is also limited (Blomgren, 2016), and researchers have conducted few contemporary studies based on students as informants about their study motivation (Giota, 2017). The two most important factors for students' study motivation are reported to be contact between student and teacher and access to student health care (Sveriges Elevkårer & Lärarnas Riksförbund, 2015). The interaction between teacher and student, above all the individual teacher's knowledge and commitment, with the student receiving sufficient pedagogical support for their studies, are of utmost importance for motivation to study. Likewise, access to student health is a crucial factor for students to increase their study motivation. Results of current Swedish research projects (Boström

& Bostedt, 2020a, 2020b) show that students believe that their learning strategies are crucial but also that teaching strategies, the learning environment, and other factors in their immediate environments are important. We found some similarities between the four upper secondary programs that we included, such as a preference for more practically oriented pedagogy, short-term goals and quick feedback, varied teaching methods, and good textbooks. However, we also found statistically significant differences between the programs regarding the need for structure, learning methods, and preferred perceptual preferences (Boström, 2011, 2013). These studies have shown that vocational classes need more structure and more varied teaching that includes various multimodal offerings, compared to theoretical classes, for students to learn theoretically difficult and new content. Vocational students seem to prefer other learning methods (kinaesthetic and tactile) more than their peers in the theoretical classes, who to a greater extent prefer visual and auditory methods. Blomgren (2016) also concluded that students' perspectives on schoolwork are important for motivation. An important finding from this study is that students emphasize the importance of variation in schoolwork.

> It is clear that motivation in school work in the students' descriptions is shaped by feelings, perceptions of success and failure, and the capacity they feel they have. These results align with research on students' capacity to experience and the assumptions included in the attribution theory. (Blomgren, p. 241)

In summary, the research in the field in Sweden is small and has focused on students' and teachers' descriptions of what study motivation seems to be. No study has focused on the variation in students' perceptions of study motivation.

3. Our Theoretical Understanding of Study Motivation

Our theoretical standpoint corresponds with relational pedagogy (Aspelin, 2018) and the belief that students' study motivation is influenced by the learning environment (Wery & Thomson, 2013). We believe that both internal and external factors are important for understanding and explaining motivation. With "internal factors", we refer to the students' driving forces, and with "external factors", we refer to the influence of social and material environments as well as teachers' approaches and students' home situations. A teacher's approach, choice of didactic working methods, and leadership are, among other factors, important interactive and motivating factors. To analyse possible variations in students' conceptions of study motivation, perspectives are therefore required that not only focus on the individual student but take into account the entire school and classroom situation.

In accordance with Perry et al. (2006), we also argue that the motivation to study is about transaction and interaction—that is, motivation is about negotiations of meaning in the social interaction. Motivation is then seen as a process integrated into a larger whole, impossible to separate from learning, individual differences, the nature of tasks, or societal context. For this reason, field studies are important. There are strong links between motivation and (a) communicated expectations, (b) clear feedback on results, (c) interaction between teacher and student and between students, (d) positive climate, and (e) teacher leadership (Perry et al., 2006). This finding implies that the teacher's choice of didactic approach is of great importance in boosting study motivation.

We view motivation as something more than just an individual trait; rather, it is a matter of negotiation of meaning in social interaction. Other researchers in this field also take this perspective. Wery and Tomson (2013) argued, for example, that a synthesis of various psychological theories is needed to understand motivation as a phenomenon. They use achievement theory and expectancy-value theory as their theoretical positions, where the first theory addresses motivation as the feelings about and perceptions of opportunities for individual success and perceived challenges that arise in the current situation in the classroom. According to Wery and Tomson (2013), expectancy-value theory explains motivation as something that depends on how students perceive the meaning of tasks. Motivation then becomes the sum of self-

knowledge and the student's perceived ability to complete the various tasks the schoolwork entails. With low confidence in one's own ability in general or in relation to certain topics or tasks, motivation decreases. Wery and Tomson (2013) therefore chose to focus on the individual characteristics in a classroom situation.

Our choice of perspective is linked to Blomgren's (2016) conclusions. Several factors promoting students' motivation can be summed up as the social climate. Blomgren (2016) also linked motivation to pedagogical approaches, learning environments, didactic issues, and the importance of teachers — that is, issues linked to learning. He concluded,

> Students have high demands on their teachers' skills and the relationship they want to have with them, which is in line with research in the field. International research on motivation shows that teachers' skills and ways of implementing teaching are of the utmost importance for successful school operation. Included in this is that the teacher should be subject competent, interested in his subject, and enjoy teaching. (p. 242)

This is in line with research suggesting that the dichotomy of internal and external must be problematized and used with some caution. For instance, Vaanstenkiste et al. (2006) argued that the internal and external factors might be interdependent — that is, students internalize external causes. On the other hand, Covington and Muller (2001) argued that the dichotomy might only constitute endpoints on a continuum. We argue that internal and external motivational factors have to be supplemented with the perspectives of relational pedagogy (i.e., that motivation to study is also about relationships [student–student and teacher–student interaction]), the teacher's overall didactic competence, and the learning environment for students. Our definition of motivation to study is thus the following; *internal and external factors, which interact relationally and didactically in students' learning environment.* With this definition, we can capture crucial theoretical perspectives that can illuminate and analyze students' study motivation in a practice-oriented school context in Sweden.

4. Methodology

4.1. Phenomenography Approach

In this study, we use a phenomenographical approach to explore students' experiences of study motivation. From the phenomenographical perspective, each individual experiences the world differently due to their different degrees of awareness of things, feelings, and meanings that are embedded in a phenomenon (Akerlind, 2008; Marton & Booth, 1997). Phenomenography defines aspects that are critically different within a group involved in the same situation. These differences make one way of seeing the situation qualitatively different from another.

According to Stamouli and Huggard (2007, p.1), "Phenomenography is a tool for understanding our students", and it looks at how people experience, understand, and ascribe meaning to a specific situation or phenomenon. When research is conducted with a phenomenographical approach, the world can be seen from two perspectives, first- and second-order (Kroksmark, 2007; Uljens, 1989). From a first-order perspective, the researcher looks at reality objectively and describes how things are in the world. The purpose of this study is to examine how students perceive the motivation to study in upper secondary school; therefore, the study will instead be based on second-order perspectives, in which the starting point is to describe how people experience their surroundings, that is, the subjective perception of things in the world (Kroksmark, 2007; Uljens, 1989). The most central concept in phenomenography is therefore the concept of perception. However, it is not the individual perception itself that is interesting; it is the possible variation in people's perceptions of a phenomenon within the group of interest (Marton & Booth, 2000). "Students exhibit qualitatively different approaches to studying that depend upon their perceptions of the learning task and their conceptions of themselves as learners" (Richardsson, 1999, p. 57). Ultimately, the goal of phenomenography is not only to identify people's conceptions about or "ways of experiencing" a given phenomenon but to organize those ways of experiencing into conceptual categories. In this study, we use the term "conception" in our analyses of empirical

data because it best encompasses the phenomenon we want to study, namely how students learned to study and then internalized the concept in their mind as learners.

In addition, the research is connected with the variation theory of phenomenography because one of the purposes of the study was to analyse the dimension of variation within the phenomenon under investigation and to compare various viewpoints about it (Dahlin, 2007). A dimension of variation is a set of categories somehow related with a smaller number of categories (Marton, 2015).

4.2. Participants

This study involved 32 students in upper secondary school in Sweden with variations in their backgrounds in terms of gender, study experiences, academic qualifications, and types of programme (see Table 1). Strategic sampling was used to select the participating classes and the students who were interviewed. It was based on the group of students, including boys and girls with varying degrees of success in their studies i.e. students with high, medium or low grades. The teachers in each class selected students for interviews according to this principle. The variation allows for a more comprehensive depiction of the studied phenomena. The study included students from six upper secondary school programmes: the SSP, the TP, the HSCP, the BCP, the CLP, and the IP. The selection principles included students from theoretical (SSP, TP) and vocational programmes (HSCP, BCP, CLP) as well as students who have only limited or restricted access to upper secondary education (IP). The programmes represent students with various past successes or challenges in their learning processes, from high-performing (SSP, TP) to low-performing (IP) students. In the 2019–2020 academic year, there were 355 000 students in upper secondary school programmes in Sweden. Of those students, 52% studied in theoretical programmes, 26% in a vocational programme, and 13% in an introductory programme. SSP and TP are two of the four largest theoretical programmes in student population, and BCP is one of the three biggest vocational programmes in student population. Vocational programmes have a majority of male students, and theoretical programmes have a majority of female students (Skolverket, 2020). The programmes we chose represent an equal representation of boys and girls totally and within the groups of theoretical and vocational programmes.

The study included 32 students in total (14 girls and 18 boys), age 17–18. In a research context, a distinction is made between the concepts of informant and respondent. An informant is viewed as conveying facts or information, and a respondent is seen as providing answers based on their feelings and thoughts (Esaiasson et al., 2017). In our study, we therefore use the term "respondent". In the quotes below, we encoded all respondents in accordance with the abbreviations of their programmes, SSP1, SSP2, and so on.

4.3. Limitations

Our study is based on empirical data from one of Sweden's 20 largest municipalities. We only studied six out of a total of 18 national programmes (six theoretical, 12 vocational) and four introductory programmes in upper secondary school. We primarily focused on student conceptions related to school that influence study motivation even though we realize that their life situations outside school, such as their socio-economic situations, also impact study motivation.

4.4. Data Collection

We collected data in the fall of 2017 and in autumn of 2019. One of the project's researchers or research assistant conducted each interview. We conducted two interview sessions with various IP classes because we wanted to examine the content of the responses more fully. The students in the IP classes are those who have the lowest grades and cannot express themselves verbally as effectively as the other students. Therefore, we needed two groups to get full answers in the interviews. The extended data collection time frame (over a period of two years) gave us researchers time for deeper reflections and discussions that gave us an even clearer focus for the interviews in the second round.

Table 1

Information on participating students regarding the programmes

Student categories / programme	Abbreviations for respondents	Focus on the programme
5 students in the SSP	SSP1–SSP5	SSP is a university preparatory programme and a theoretical programme. After graduating from the programme, students have knowledge for university studies in a broad social-science area.
4 students in the TP	TP 1–TP4	TP is a university preparatory programme and a theoretical programme. After graduating from the programme, students have knowledge for university studies, primarily in technology and science but also in other areas.
5 students in the HSCP	HSCP1–HSCP5	HSCP is a vocational programme. After graduating from the programme, students have the knowledge they need to work in health care and social services.
4 students in BCP	BCP1–BCP4	BCP is a vocational programme. After graduating from the programme, students have the knowledge they need to work in one of the construction industry's professions, for example as a construction worker, construction machine operator, construction painter, or sheet metal worker.
5 students in CLP	CLP1–CLP5	CLP is a vocational programme. After graduating from the programme, students have the knowledge they need to work with children, young people, or adults in educational and social professions or in the leisure and wellness sector.
9 students in IP	IP1–IP9	IP programmes give unauthorized students the opportunity to enter an upper secondary national school programme or help them get a job. These students do not have full grades from primary school and cannot gain access to upper secondary school until they have received full grades. All students follow an individual study plan. In the introductory programmes, the individual study plan is very important because there is no degree goal or programme structure, but the study plan shows what the curriculum should contain.
Total	32 students	Six programmes (three types of study programmes)

We informed all participants of the project's aims, and we followed current Swedish ethical principles of research (Vetenskapsrådet, 2017). The Act on Ethical Review (SFS 2003) states that research that falls under the act concerning children who have reached the age of 15 and realize what the study entails for them must be informed and consent to the research. In this study, students received information in writing and orally both from us researchers and from the teachers. Because the focus of the study was the students' perceptions of study motivation, mainly linked to the school context, no personally sensitive aspects emerged. However, we were aware the students may describe sensitive personal information, and we as researchers had a conscious strategy to deal with it.

We conducted and recorded the interviews on site at the school and then transcribed them. The interviews lasted between 40 min and 1.5 hr. Then we converted the interviews into Word files. The transcribed interviews consisted of about 106 A4 pages of text.

To answer the research question, we chose the focus group interview method as our data collection method. The design of questions for the focus group interviews was influenced by a study Blomgren (2016) conducted because he contextualized the students' school situations and we wanted to follow up and extend his study and results. The methodological approach was phenomenography, as our interest was in the ways that humans experience, conceptualize, and understand their surrounding world and the chosen phenomena (Marton, 1988). In addition, the research is connected with the variation theory of phenomenography because one of the purposes of the study was to analyse the dimension of variation within the phenomenon under investigation

and to compare various viewpoints about it (Dahlin, 2007). Focus group interviews are a way to discuss a topic in a group, and the interviewer leads the discussion (Morgan, 2008). The use of focus group interviews has increased in many research fields, as they provide a functional way to share understandings of themes that have been infrequently studied (Hesse-Biber & Leavy, 2011). In a phenomenographic study, the questions posed are designed to encourage the participants to think about why they experience a phenomenon in certain ways and how they constitute the phenomenon's meaning. Because the intention of phenomenographic research is to report on the variation that emerges in the experience of the phenomenon at the collective level—in this case, the notion of study motivation— we designed the questions to focus on students' awareness of aspects related to their experience of motivation. Because we focused on understanding at the collective level, our choice of focus groups as an interview method was obvious. We also chose to conduct focus group interviews because we could replicate and extend them as Blomgren (2016) study showed. Our strategy in conducting group interviews was to address and encourage all students to describe their perceptions as concretely as possible. The phenomenographic interview is characterized by an open-ended question method and deep interest. We asked a number of follow-up questions to get the students to clarify and go in depth with their comments. The focus group received nine questions (semi-structured) to discuss and analyse the phenomenon of study motivation (e.g., How do they understand the term "study motivation"? What do they understand study motivation to be about? What is the motivation to study? What increases or decreases their study motivation? What motivational strategies help them in their schoolwork?).

4.5. Data Analysis

We used Dahlgren and Johansson's (2009) seven-step phenomenographic analysis model. Step 1 is to become well acquainted with the empirical material, which we did by listening to and transcribing the interviews individually. In Step 2, condensation, statements that can be seen as important for the study are identified and distinguished. We distinguished five themes in the respondents' statements. Step 2 was performed jointly so that any doubts about statements' interpretation could be discussed directly. In the comparative and grouping phases, Steps 3 and 4, we sought variations and similarities in the respondents' conceptions, then grouped and related them to each other according to common features. In Step 5, we grouped similarities between statements into categories. Step 6 involved naming the categories. The statements were collected and sorted into descriptive categories, which were named according to the conceptions they represented. Our final main categories were teachers, subject, personalities and characteristics, study results, friends and family, and environment. Step 7, the contrastive phase, consisted of reviewing all identified main categories to ensure that the different conceptions were exclusive to their categories. During our analysis, several doubts and discussions arose about the category of affiliation of conceptions. Demarcations needed to be made in some cases—for example, our distinction between the two categories of friends and family and environment. Through this analysis process, both research questions could be processed in parallel, i.e. we found both main categories (RQ1) and differences / similarities between study programs (RQ2) during the work with the empirical data.

We formed our categories based on the transcribed material (descriptive categories; Kroksmark, 2007). Together, the descriptive categories created an outcome space where the connection between the categories was made visible. These categories described the totality of the result (Marton & Booth, 2000). To avoid drawing our own conclusions or misinterpreting the students' conceptions of the phenomena, we describe their conceptions as closely to their answers as possible, and clarify with excerpts from the study's empirical material. Our results cannot be generalized and should only be seen as a statement about what the students in this study perceived.

5. Findings

Phenomenological analysis of our interviews with 32 students in six different study programmes (with three different specializations: theoretical, vocational, and individual programmes) revealed six different ways of understanding their conceptualizations of study motivation. Five of the main categories were the same for the different study programs. One of the main categories and one subcategory were distinctively different between the three study programmes (see blue boxes in Figure 1).

5.1. The Importance of Teachers

The most prominent source of study motivation for all study groups appeared to be the importance of teachers. The participants' statements suggested that teachers' importance for their study motivation stemmed from their relationship with the teachers, teachers' behaviour, and teachers' competencies.

5.1.1. Relationship with teachers

Participants stated that good relations with their teachers increased their study motivation. The students believed that it is important that they agree with each other. The relationships are based on the teacher being the one who can understand the students' situation and care for their progress. The excerpt below illustrates this:

> Someone who tries to understand students and does not stress. . . takes one student at a time and asks what they need, a teacher who knows how it can feel. . . it helps much better with teachers who understand students' situation. . . then you will be motivated to study. (IP2)

5.1.2. Teachers' personality and behaviours

Important for teachers who motivate students are their behaviours and their personalities. Desirable personalities were described with the following phrases: *nice, kind, has reasonably high expectations, understandable, positive, amusing, fair,* and *committed.* This was emphasized especially in the IP and vocational classes. One student put it this way: "If you do not like the teacher, it is the biggest obstacle to being motivated" (HSCP1). Students also expressed the understanding that the teachers one fits in with depends on personal chemistry. A teacher's behaviours affect students' motivation—for example, whether they are positive and engaged in teaching. This is illustrated in the two following excerpts:

> The teacher should understand and be nice. If they do not want to listen or believe in me, then it does not work. When the teachers understand me, it gives me a lot of motivation. (IP5)

> It is important to deliver the message in a positive way, not with the same tone all the time; as such, it does not make it interesting or fun to listen to. (BCP3)

One student expressed the importance of that the teacher understands that students need time to catch up on the lessons:

> She speaks quickly, and then she usually uses the whole lesson to have reviews. And then you can hardly do any tasks. (CLP2)

5.1.3. Teachers' didactical competencies

The students emphasized how lessons' structure and the teacher's teaching affected their study motivation. Teachers' didactic competence also describes the importance of realistic planning. Pedagogical variation from the teachers was emphasized. Several students stressed that when teachers set up the teaching in a fun way (e.g., through games and quizzes), they were more motivated:

> If it is only tests and assignments, it will be boring. It's good if teachers understand a little bit how we work and how we learn. It is easier to plan the teaching. . . and if the teacher plans the teaching based on how I learn, I get more motivated to study. (CLP 4)

The didactical skill among teachers that motivates students is also about the teacher giving clear descriptions, and preferably giving students opportunities to choose working methods. One participant clearly articulated this thought:

> If you understand why you do the task, what you get out of a task, and what it contributes to in the course, it will be easier to be motivated. (TP2)

5.2. The Importance of the Subject

The participants also touched upon the importance of academic subjects—that is, some motivated them more than others. It seems obvious to the students that the motivation to study is related to their interest in subject areas:

> For the topics I like, it is much easier to find motivation; motivation is related to interest in the subject area. I really like the socially oriented topics, especially history, and that's why I chose this programme. (SSP2)

Because the six programmes had various study specializations, clear student descriptions emerged that the content of the chosen specialization motivated more than the general subject. For example, students in the BCP stated that when they had a practical subject and were allowed to be out on different construction sites, it motivated them more than sitting in the school desks. On the other hand, a student from the SSP said she was motivated "when studying and reading things that make me a good citizen" and that she had "a great interest in such subjects (SSP 5)."

If students are allowed to choose more freely within a subject area, it is also more motivating:

> If you as a student get to be involved in selecting the content of a course and then get to learn things you want, you become more motivated. (BCP1)

5.3. The Importance of the Environment

The environment seemed to affect study motivation to varying degrees. This included social and physical environments.

5.3.1. Physical environment

Conceptions of whether one's physical environment (i.e., the school building and its premises) influenced study motivation varied from not at all to very decisively. This is exemplified through the following quote:

> Yes, the school environment plays a big role in my motivation. Uncomfortable chairs, bad air, and too-cold classrooms decrease my motivation. (CLP3)

5.3.2. Social environment

In all study programmes, conceptions emerged of the importance of the atmosphere within the class. Participants emphasized the importance of feeling safe and comfortable in school, which facilitated and also increased study motivation and made it easier to work with tasks.

> If you do not thrive where you are and do not feel safe, then you do not want to be there. And then you think, "I just want to go home." (IP9)

5.4. The Importance of Students' Study Results

Students' study results seem to impact study motivation, mainly due to two aspects: grades and the future. The future, an interesting job, and good finances motivate students to study. Students expressed that it is important to get good grades to get a good education and that it is difficult to "get somewhere in life" without a good education. Students' responses demonstrated qualitative differences regarding getting jobs in the future; students in theoretical classes emphasized *good jobs*, but students in IP and in vocational classes expressed only the importance of *getting a job* in the future. Here, one distinctive difference in perception between the study programs is clarified.

Grades are unequivocally important for students' motivation to study, both in a positive and negative sense. High grades can foster motivation, but constantly fighting for high grades can also reduce motivation. This claim can be seen in the following statement:

> No, it may not be worth feeling as mentally ill as I do to get these As; so, it is better to feel better than it is to get high grades. (SSP2)

Grades can be experienced as both "whip" and "carrot," as clarified in the following excerpt:

> The whip is used to reach good grades, then, because you should be able to apply to university or whatever; and the carrot is used so that you have some inherent power, so to speak — some inherent interest and thirst for knowledge — or that you think it's fun in different ways. (SSP5)

5.5. The Importance of Support from Friends and Family

Although our interviews' focus was to study motivation in school and the classroom, all interviews also contained factors such as relations to peers and family.

5.5.1. Classmates

Students described how they sought support from each other to gain study motivation. However, this can be double-edged; group pressure can both reduce and increase motivation. Socializing with friends who have the same goal is viewed as reassuring.

> If I hang out with some friends and they do not even want to work, I lose motivation. It is difficult to change friends. It's up to me if I should follow them. So they sit in negativity and just say, "no, I cannot stand this" and "this feels boring." But, it's still up to me to decide that, okay, I can go sit somewhere else and do this, or I'll have to hook up with a group if I feel like it. (HSCP4)

5.5.2. Family

Our interview results showed that not all parents help their children with their schoolwork. Some parents push their children for good grades; others do not. One student expressed this clearly:

> I think a lot depends on the type of family you have also — relationships in the family. You need parents who know the subject. Then it depends on whether the parent wants to help and if the student wants to receive help from that parent. (CLP3)

5.6. The Importance of Students' Characteristics and Attitude

Only participants from the theoretical classes suggested that study motivation stemmed from their characteristics and positive attitudes. This is thus a distinctive difference main category between the study programs.

5.6.1. Attitudes

According to students in the theoretical classes, motivation to study is most about attitudes towards learning. One student warned against the attitude of thinking every task is boring because it can become a self-fulfilling prophecy, clarifying,

> Most of it is actually about your attitude of what you do. If you tell yourself that it is difficult, then it will be difficult. It's about a kind of mindset. (TP1)

5.6.2. Personal responsibility

The participants expressed their role in influencing study motivation, pointing out that it was more an individual trait than a group behaviour. They evoked study motivation by emphasizing the importance of taking personal responsibility to complete tasks.

> Focus on schoolwork means that I place higher demands on myself and to plan my life so that I create time for my studies. This in itself makes me find a certain motivation. (SSP1)

5.6.3. Setting goals

Participants also mentioned the importance of setting goals to motivate their studies.

> Yes, I have a goal. I always see a goal with everything I do; otherwise, I have no motivation to do it. (SSP2)

These six categories represent six conceptions of how study motivation increases or decreases in the minds of 32 students. Figure 1 summarizes the conceptions and aspects of the categories. The

blue boxes represent the differences among the three different types of study programmes. Differences in conceptions between students, programmes, or types of programmes are small, but exist (see Category 6 [the importance of students' characteristics and attitude] and aspects of the subcategory *job*).

Figure 1

Summary of conceptions about study motivation and differences among study programmes (blue boxes)
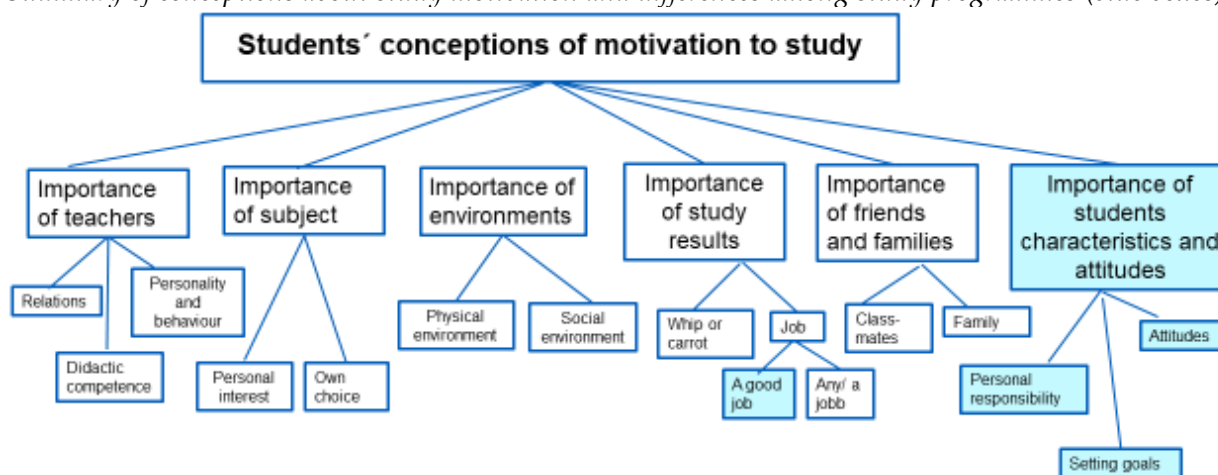
The following section analyses our findings in light of the relevant literature.

6. Discussion

This study has contributed to understanding more of what motivates adolescents to study, which are in demand by e.g. Martin (2009). We have also pointed out that young people's declining study motivation is not only a problem in Sweden but in a number of OECD countries (OECD, 2022). In earlier sections of this article, we presented our theoretical understanding that study motivation must incorporate both internal and external factors to adequately comprehend and explain motivation. By internal factors, we refer to the students' driving forces; by external factors, we refer to the influence of the social and material environments, as well as teachers' approach and students' home situations. We also argue that an interactive motivating approach (e.g., teachers' approach, choice of didactic working methods, leadership) as well as a transactive approach (i.e., that motivation is about negotiations of meaning in the social interaction; Perry et al., 2006) is important for understanding study motivation. Thus, to analyse the varied conceptions of study motivation, we argue that perspectives that not only focus on the individual student, but also the entire school and classroom situation, are required (see Blomgren, 2016).

As stated earlier in this article, the aim of our phenomenographic study was to analyse the varied methods through which students in three types of study programmes (six programmes total) conceptualized study motivation. We presented the following research questions: (a) What kinds of conceptions do students in six different programmes in an upper secondary school in Sweden have about study motivation; and (b) what are the similarities and differences between these groups of students?

The answer to our first research question is that this we identified six experienced categories of study motivation:
- The importance of teachers,
- The importance of the subject,
- The importance of the environment
- The importance of students' study results,
- The importance of support from friends and family, and
- The importance of the student's characteristics and attitude.

These six descriptive categories of the students' conceptions of study motivation validate that there are many explanations for students' motivation to study or lack thereof. Motivation can therefore be seen as a process integrated into a larger whole that is impossible to separate from learning, individual differences, the nature of tasks, or societal context. As Perry et al. (2006) argued, strong links exist between motivation and (a) communicated expectations, (b) clear feedback on results, (c) interaction between the teacher and student and between students, (d) positive climate, and (e) teacher leadership. Our descriptive categories thereby validate that both internal and external motivational factors should be considered when analysing study motivation. The internal factors exist in what we have labelled the importance of the students' characteristics and attitude (i.e., questions about individual attitudes towards learning, taking personal responsibility, setting goals for their studies, and the importance of students' study results). External motivational factors exist in what we have labelled the importance of teachers and the environment (i.e., the importance of the physical and social environments). A student's environmental motivation also includes the importance of support from friends and family. Furthermore, our results imply that an interactive approach (e.g., the relationship to the teachers, teachers' personality and behaviour, and teachers' didactical competencies) and a transactive approach (e.g., attitudes, classmates, family, and physical and social environments) are both necessary when analysing the results. The category dealing with the importance of the subject stands out as having components from both internal and external motivational factors. Notably, a few of our other categories also included internal and external motivational components to some extent, but not as clearly as this category. This is in line with research suggesting that the internal–external dichotomy must sometimes be used with caution (Covington & Muller, 2001; Vaanstenkiste et al., 2006).

Our second research question was about the similarities and differences between the groups of students. The six categories represent six conceptions of increasing or decreasing study motivation in the minds of 32 students. These conceptions have noticeable similarities with the conceptions in Szklarski's (2011) results. Differences in conceptions among the student groups were small. Close scrutiny revealed that the conceptions were common to all participants, whereas the differences between the three types of study programmes (i.e., theoretical programmes, vocational programmes, and IPs) only exist in how some of the conceptions are viewed by the students (see Figure 1). One category derived from the students' provided responses was *the importance of the student's characteristics and attitude.* In one of the subcategories, *job*, participants from theoretical programmes differed from the other two types of study programmes in terms of their perspective. Students in theoretical classes emphasized *good jobs.* Students in the other types of programmes (for instance, IP) only expressed the importance of *getting a job* in the future. Students from theoretical programmes usually acquire a higher degree of personal responsibility and setting goals than the students from other types of programmes. Students from theoretical programmes more often come from families with higher socioeconomic status and with parents who possess an academic background. Socioeconomic background factors can therefore possibly explain the differences among the students regarding their levels of expectation, together with closely related issues such as social capital. This is supported by research that has found some correlation between students' motivation and socioeconomic status (e.g., Wiederkehr et al., 2015). By *social capital*, we mean the sum of the current and potential resources available to an individual (see Bourdieu, 2021). The students from theoretical programmes reflected to a greater degree on their own responsibilities and their mental attitudes toward studying and goalsetting, which are also beneficial competencies to the other groups of students in their studies. In other words, these students seem to have more awareness of internal factors influencing their motivation to study than the other student groups.

Our aim was to describe and analyse variations in the ways the students in three types of study programmes (a total of six programmes) conceptualized study motivation. Our results validated our previous findings (Boström & Bostedt, 2020a, 2020b) that students believe that their learning

strategies, teachers' teaching strategies, learning environment, and other factors in their immediate surroundings are important for their motivation to study. This is in accordance with Hatties's (2009) findings that teacher–student interaction and the teachers' overall didactic competence are crucial, as well as Blomgren's (2016) findings that students' perspectives on schoolwork are important for motivation and Szklarskis's (2011) argument that students' interest in and progress in their studies are important. It is also in accordance with Wery and Thomson's (2013) finding that students' study motivation is greatly influenced by their learning environment.

The contribution of this study is a delimitation of students' core experience of being motivated in school. Many previous studies have focused on various aspects of students' motivation to study, but few of them have explored students' varied experiences of study motivation. Thus, to the best of our knowledge, ours is one of only a few studies that have investigated these experiences from a phenomenographical perspective.

7. Implications

The reasons underlying students' motivation to study are often complex and encompass as well as hide different needs. To understand the phenomenon of motivation, a synthesis of theories is needed (see Wery & Tomson, 2013). We have primarily placed motivation in a social and didactic context. In research, there are different explanations that partly overlap each other. We have described and analysed possible causes for success and failure in the area of study motivation. We emphasize the importance of understanding and studying study motivation in a broader perspective in which internal and external motivational factors interact. It is especially important that teachers inspire students to develop internal motivation and ensure that external motivation is promoted at the same time (i.e., interactive motivation).

The Swedish school law (SFS 2010:800) stipulates that education within the school system in Sweden aims for students to acquire and develop knowledge and values. It should promote a lifelong desire to learn. Education must also take students' various needs into account. Students are to be given support and stimulation to compensate for differences in their ability to assimilate their education. In collaboration with the home, the Swedish education system also aims to promote children's and students' personal development into competent and responsible individuals and citizens. We argue that understanding students' conception of study motivation, as well as analysing possible differences in programmes or types of programmes, is important to fulfil the ambitions stated in the law. To do so, knowledge of the internal and external factors that affect students' motivation to study is an important aspect in achieving a lifelong desire to learn. If these adolescents were to experience that their basic needs during maturation were supported, such as the need for autonomy, competence, and relatedness (Gnambs & Hanfsting, 2016), their study motivation might increase. Namely, we can see in the students' descriptions that these keywords are also found in their descriptions of study motivation.

We also believe that concrete ideas regarding working with study motivation issues can help actors in Swedish schools address the compensatory assignment given them by law, as well as the students' possibilities for successful school performance. Students with conscious strategies can deepen their learning and successfully complete their schooling—a win-win situation for both the students and Swedish society. We also believe that the results of this study can be transferred to countries with similar educational structures, because motivation to study is a universal phenomenon.

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