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What about Study Motivation? Students´ and Teachers' Perspectives on What Affects Study Motivation

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Abstract. One out of every four upper secondary school students in Sweden interrupts their education, although the intention behind the new Curriculum for Upper Secondary School (GY 11) was to increase throughput of students with complete grades. Lack of study motivation is the most important explanation for students dropping out. This article analyzes study motivation from students and teachers' perspectives. It is based on interviews in three upper secondary school programs that were analyzed with a qualitative approach and hybrid content analysis. Study motivation is set in relation to motivational strategies, achievement, and learning environment. The result showed similarities and differences in perceptions. Both teachers and students pointed to the importance of teachers, practical pedagogy, social relations, and the significance of grades for study motivation. An important difference between informants was that teachers put more emphasis on life skills and adapted study groups, whereas students pointed to the physical learning environment and teachers' personalities as important. Conclusions in the study point to complex interplay between internal and external motivational factors and between situation, person, and learning processes. This leads to validity of interactive and transactional motivational perspectives. A broader and more in-depth study is needed primarily to understand students' perspectives.

Keywords: increasing motivation; decreasing motivation; students´ and teachers' perspectives; study motivation; upper secondary school

1. Introduction

One in every four students in Sweden drops out of upper secondary education. However, the intention of the new upper secondary school reform, Curriculum for Upper Secondary School (GY11), among other things, was to increase the

throughput of students with complete grades. Possible reasons for this trend are that the new system imposes higher requirements for admission to the upper secondary school's national program, Swedish primary school students have declining knowledge results, and primary school students are less prepared for the increasing demands in secondary school (Skolverket, 2016). Lack of student motivation is the most crucial explanation for the drop-out rate. More than half of the upper secondary school students indicated in a national study (Sveriges Elevkårer & Lärarnas Riksförbund, 2015) that they experienced low or non-existent study motivation. The most important factors for increasing student motivation are stated to be teachers' subject competence, teacher–student relationships, educational support, and access to student health. In the study, teachers also pointed to students' lack of prior knowledge from elementary school and the need to learn better study techniques to pass upper secondary school.

Dropping out of upper secondary education has individual and national consequences. The National Agency for Education has therefore implemented activities that are close to business (Skolverket, 2016) to prevent drop-outs. The National Agency for Education (Skolverket, 2019) has described the measures, which include conferences for principals and process support for schools. Several initiatives and key areas have been identified as necessary, such as early efforts to develop a systemic approach and to maximize the local scope for action. Motivation is a prerequisite for learning in school. However, scholars lack the main actors' perspectives on these efforts, namely the students and the teachers. When students have low or non-existent study motivation or if students lack the necessary prerequisites, schools must find ways to help them achieve the knowledge goals. This study examines how students and teachers think about students´ study motivation and how a school can match the students. According to Skolverket (2019):

> "*Lack of motivation makes it difficult to take advantage of school education. Conversely, those who do not qualify for teaching can suffer a lack of motivation. Assuming a lack of motivation – and thus corresponding compensation needs – motivation becomes something that needs to be added to the learning processes. " (p. 154).*

Because the new upper secondary school we studied has not yet achieved the ambitions that existed with upper secondary school reform regarding increased throughput, and because causal analysis points to student motivation as an important explanation, we studied upper secondary school students´ and teachers' ideas about student motivation. We gained in-depth knowledge of students' thinking about the issue of study motivation and compared their views with the teachers, who are the other important group of actors in classrooms. Another important reason for the interest in study motivation is that few national studies in the field exist (Lundahl et al., 2015) and research on the interaction between individual and learning environments in Swedish schools is limited (Blomgren, 2016). Analytical models of learning (in this case, study motivation) require an understanding of the interplay between individuals, educational material, and the social context (Imsen, 2006). Another important incentive for the research area is that there are few contemporary studies based on students as informants about their study motivation (Giota, 2013, 2017). A recent study

(Hofverberg, 2020) points to several different perspectives on motivation that need to be integrated in order to capture the complexity that students' driving forces constitute and that research should be conducted close to practice in collaboration with teachers.

The internal factors regarding study motivation are often highlighted in research, but Håkansson and Sundberg (2012) warned seeing the issue of motivation as a purely individual trait. They pointed out that motivation is contextual, changeable, and arises in dynamic relationships between people. Furthermore, factors such as family background class affiliation and grades (Skolverket, 2019), socio-economic belonging, gender, and ethnic origin (Skolverket, 2018) are cited as important for students' study motivation. Several influencing factors can be assumed to both support and cause study motivation deficiencies. However, the responsibility for lack of motivation is often placed on the young people themselves, especially from many municipal representatives (Lundahl et al., 2015). Like Håkansson and Sundberg (2012), we believe that internal and external factors need to be considered in a discussion about study motivation. Thus, to analyze a lack of study motivation as a cause of low throughput in upper secondary school, a perspective is required that not only focuses on individual students but takes into account the entire school and classroom context (Imsen, 2006). This study contributes to the field by applying theories of educational psychology in practice-related activities in school. This is justified based on various research results (Giota, 2013, 2017; Hattie, 2009) that show motivational factors influence students' study results.

In this article, we analyze study motivation based on didactic aspects and learning environments. Our interest in the issue of study motivation can be expressed as an interest in analyzing both internal and external motivational factors. Responses from students and their teachers from three academic programs in a municipal upper secondary school constitute the empirical material. The school was located in the central part of a large city. For 2015, the municipality reported it was eight percentage points below the value for all municipalities in Sweden.

In view of the above problem, the purpose is to describe and analyze the upper secondary school students' study motivation or lack of motivation from the students´ and teachers' perspectives. The selected issues are as follows:

- What experiences do teachers and students have about what increases students' study motivation, and what is the cause of and explanation for possible low study motivation?
- What differences and similarities exist in teachers and students' perceptions?
- How is study motivation linked to various aspects of education according to teachers and students?

The article initially describes the theoretical framework we used, namely motivation theory, motivation strategies, and learning environment. Thereafter, methodological approaches and the results are described. Finally, conclusions and educational implications are presented in a discussion that returns the result to the theoretical frameworks. The definitions that have been made are that the article focuses on students´ and teachers' perceptions of factors that are directly linked to the school. Thus, how time outside the school affects students' study motivation is not addressed.

2. Theoretical Overview

Study motivation is a multifaceted concept. Therefore, we begin with a general overview of motivation theory in the school context and then discuss motivation in relation to three theoretical starting points: achievement, motivational strategies, and learning environment. These assumptions are not mutually exclusive but overlap in different respects.

2.1 Motivation Theory

Motivation is a research area found in various disciplines (Woolfolk & Karlberg, 2015). There are different perceptions of what influences student motivation. One is that the interaction between teacher and student and access to student health are the most important factors in raising student motivation (Sveriges Elevkårer & Lärarnas Riksförbund, 2015). There are also different definitions and understandings of the concept of study motivation. It is often described with the dichotomous inner and outer motivation (Ryan & Deci, 2002). From within, controlled motivation arises when an activity feels engaging and rewarding. Internal motivation factors are about seeking and managing challenges based on an endeavor to satisfy personal interests and use one's abilities (Woolfolk & Karlberg, 2015). In school, students with strong internal motivation show greater endurance with the tasks, seek more understanding in terms of knowledge, and try different strategies to achieve their goals (Giota, 2017).

Motivation is more often based on control when the result determines how motivated the student is, or if there is a reward that attracts (e.g., credits, praise, or useful skills in working life) or a "punishment" (e.g., missing student support, delayed studies) that threatens them. External motivational factors imply an endeavor to meet expectations or demands that come from or are perceived to come from, outside the individual (Giota, 2017; Woolfolk & Karlberg, 2015). Externally motivated students adopt more surface learning strategies, often giving up when rewards and benefits are removed etc. (Giota, 2017). External motivation can be divided into two subcategories of controlled or autonomous motivation. Controlled external motivation is about being controlled by someone else through reward, penalties, or fear of failure. Autonomous external motivation implies in the context of a school that a student has taken on the values of the school and makes an effort even if the activity does not give pleasure. Non-existent motivation is the third aspect of motivation; that is, study motivation is entirely lacking. Students give up, blame other factors than themselves, and do not see the relationship between performance and results (Woolfolk & Karlberg, 2015).

Researchers have described the dichotomy of inner and outer motivation as clear cut, whereas others believe that internal and external factors are interdependent; that is, students internalize external causes (Vaanstenkiste et al., 2006) or internal and external factors constitute endpoints on a continuum (Covington & Mueller, 2001). Therefore, because there is an interaction between internal and external motivation, one can talk about motivation systems (Anderman & Anderman, 2009). The factors interact and, in many cases, depend on each other (Jerkeby, 2019). External motivation can be changed to the internal; they can exist simultaneously and vary between different times and tasks. Determining when students are driven by internal or external motivational factors is therefore tricky. The most important difference is the student's motives for their actions (i.e., whether it is internally or externally motivated; Jerkeby, 2019). For students who find it challenging to find motivation in school, external motivation is a tool to get started with the studies. Furthermore, motivation is not a fixed trait that one either has or does not have. It changes, develops, and varies during the studies, and there are many factors, both internal and external, that affect it. The interactive theory of motivation makes it possible to capture and focus on the interaction between a person and a situation (Stensmo, 2005).

2.2 Achievement and Motivation

The interactive motivation theory focuses on achievements and expectations (Stensmo, 2005). It is about the desire of individuals to deal with a question and their fear of failure and how this is affected by the expectations that exist in the individual. This means that the interaction between the expectations of teachers, parents, and others, as well as their ambitions, shape students and their performance goals. Teachers' significance for study motivation is well documented in research; that is, how they convey expectations of students (Giota, 2013), organize classroom activities (Hattie, 2009), stimulate engagement and effort, support individuals and groups, shape classroom climate (Hugo, 2011), choose didactic work methods (Boström, 2013), teachers´ subject-specific enthusiasm (Mahler, Großschedl & Harms, 2018) and lead learning (Stensmo, 2005). These are crucial interactive motivational factors along with the inner and outer motivational factors. To analyze lack of study motivation as a cause of low throughput in upper secondary school, a perspective is therefore required that not only focuses the individual student but takes into account the entire school and classroom situation (e.g., the relationship between student, teacher, and educational materials (Imsen, 2006).

Another, but partly overlapping, theoretical point of departure is that motivation is more about transaction than interaction (Perry et al., 2006). Motivation is then understood not only as an individual trait but is about negotiation of meaning in social interaction. Thus, motivation becomes an integrated process in a larger whole, impossible to separate from learning, individual differences, and the nature of tasks or social context. According to Perry et al. (2006), strong relationships exist between motivation and (a) communicated expectations, (b) clear feedback on results, (c) interactions between teachers and students and among students and their peers, (d) positive climate, and (e) teachers´ leadership. Blomgren's (2016) summary regarding students' perspectives on schoolwork, and the importance it has for study motivation, is that study motivation is primarily

shaped by perceptions of success and failure, as well as perceived self-capacity. This conclusion are similar to Perry et al. (2006).

2.3 Motivational Strategies

Strategies to increase student motivation can be understood and analyzed from various perspectives (Jerkeby (2019). Motivation strategies interact with each other in many different ways. If teachers are to contribute to students' study motivation, a "toolbox" of different motivational strategies is required (Augustsson & Boström, 2016).

The following strategies are mentioned by various researchers in the field: understanding and taking into account the complexity of events, students and groups in the setting of teaching (Giota, 2013), the design of the tasks to enable adaptation to individuals and groups (Boström, 2013), constructive evaluations, taking into account time aspects and didactic diversity (Woolfolk & Karlberg, 2015), various teaching strategies and active work with metacognitive strategies (Boström, 2013), differences in students' perceived best learning and teaching strategies (Boström & Bostedt, 2020) and conscious leadership in the classroom (Augustsson & Boström, 2016; Hattie, 2009). Paying attention to the emotions that are brought about by success and failure and the teachers' competence to handle them at both group and individual level is also relevant in this context (Giota, 2013; Imsen, 2006). Teaching strategies that impair student motivation include ineffective or no feedback (Giota, 2013), lack of connection, overly complicated tasks (Hugo, 2011), slow pace, focus on being transparent and not learning, poor planning, and punitive leadership. Other demotivating factors are unattractive classrooms and negative mood in the class (Woolfolk & Karlberg, 2015).

Factors that motivate students are also complex. According to Farrington et al. (2012), decisive factors that influence student learning outcomes are study-oriented behavior, endurance in studies, academic mindset, constructive learning strategies, and social ability. One's self-esteem, experience ways of experience events, and individual goals (Hugo, 2011; Wery & Thomson, 2013) are crucial to study motivation, because allowing students to learn in their best individual way is of decisive importance for the results. Furthermore, previous research points to the importance of students' perceptions of work tasks; that is, relevance, utility, level of difficulty, working methods (Granström, 2012), feedback, and grouping and group dynamics (Håkansson & Sundberg, 2012; Woolfolk & Karlberg, 2015; Zimmerman, 2018). Also, students overall "experiences" of teachers' didactic competence (Hattie, 2009) and the importance of relationships (Aspelin, 2018) are also considered to have a positive effect on study motivation.

Positive, neutral, or negative teaching strategies affect student motivation accordingly. If teachers can match teaching strategies with students' learning strategies, then good conditions are created for student motivation and study results. A concrete example is a student's need for a clear teaching structure, which is not always in line with teachers' perceptions (Boström, 2013). Both upper secondary school students and university students show a clear need for external structure to perform better (Boström & Gidlund, 2016). Students are motivated if they receive clear frameworks, instructions, deadlines, schedules, exemplary

examples and concretions, and regular feedback (Boström, 2013). This matching pedagogy seems particularly essential for students in need of support or in a classroom situation where behavioral problems occur (Gidlund & Boström, 2017). Grönqvist and Vlachos (2008) found that different types of students are affected in different ways, but that the match between student and teacher is crucial to students' study motivation. However, they emphasized, "*Figuring out which teachers are best suited in different situations is an open question"* (p. 15).

2.4 Motivation and Learning Environments

The surrounding physical and social environment also affects students to varying degrees (Ahlberg, 2001; Valsö & Malmgren, 2019). For many students, study motivation is formed in the learning environment. According to Blomgren (2016), this is evident in students' descriptions of feelings and perceptions of success and failure. Adapted learning environments with inclusive approaches are especially crucial for students who have not previously succeeded in school (Gidlund & Boström, 2017). Definitions of learning environment vary depending on scientific starting points and disciplines and include different perspectives on learning. Learning environments are described based on mental, social, and psychosocial dimensions (Sveriges Kommuner och Landsting, 2017). Another definition of the concept which goes further is including psychological, educational, cognitive, socio-economic, physical, communicative, social, and organizational aspects (Ahlberg, 2001).

If environments are to motivate students, then they should in some sense be good, which in research has been described as working methods, attitudes, and the physical layout of the classroom (Ahlberg, 2001). These factors can help create good conditions for all students' sense of participation in activities (Antonovsky, 2005). Insights into and knowledge of how good learning environments are established are needed to understand student learning processes (Ahlberg, 2001). The same goes for students, namely that they understand what constructive learning environments are for them so that they can take responsibility for learning (Boström, 2013; Jerkeby, 2019). Opportunities to meet students on their own terms are about the knowledge and understanding of individual differences and similarities regarding student learning. In a learning environment, mutual interaction takes place where people affect and are influenced by the social and physical environment (Björklid & Fischbein, 2011). Learning takes place between people in a physical context and in a social context. An indispensable ingredient in the learning process is the tools that teachers use, which can be either physical or intellectual (Säljö, 2014). A good learning environment must therefore be initiated, created, developed, and evaluated to best support a student's study motivation.

3. Empirical Starting Points

3.1. Upper Secondary School Programs

Three upper secondary school programs selected for empirical material collection were the Social Sciences Program (SSP), the Health and Social care Program (HSP), and the Individual Program (IP). The selection principles thus include both academic and practical programs, as well as a representation of student groups

with various past successes or challenges in their learning processes. To address our research questions, in spring 2017, we conducted six group interviews with 12 students, as well as three group interviews with 20 teachers from the three programs. The study is limited to factors that are directly linked to the school. How time outside of school affects students' study motivation is not a primary part of the study's interest. Furthermore, the study is limited to the four participating upper secondary school programs and group interviews with teachers and students.

The throughput figures for students at the upper secondary school in 2016 were about 8% below the national average, whereas the municipality's Child and Education Board's goals and resources plan (X Municipality, 2016) set high targets in terms of increasing the proportion of students completing their upper secondary studies in the course in 3 or 4 years. Thus, there was a clear political orientation that affects the children and education administration and the work of the municipal upper secondary school. In the local business plans for 2015–2016, a crucial area of development was found to increase student motivation. Such work was perceived by those responsible for the programs as helping to raise the results in the upper secondary school. The political ambitions of the upper secondary school are also reflected in an operational priority from the administration.

3.2 Data Collection and Data Processing

The design of questions for the group interviews was adapted from Blomgren (2016). The teachers interviewed consisted of those gathered at a work-place meeting for the teachers' college for the intended program or those who volunteered to participate. The students were selected by teachers based on the criteria that the group of students would include both boys and girls and students with varying academic success. The interviews were conducted on-site at the school and were recorded and transcribed. The interviews lasted between 40 min and 1.5 hr. The transcribed interviews comprised approximately 250 A4 pages of text.

3.3 Method

We used a hybrid content analysis method (Fereday & Muir-Cochrane, 2006; Rising Holmström et al., 2015). We conducted group interviews as a data collection method. All contributors were informed about the project's aims and current ethical research principles (Vetenskapsrådet, 2017). At the start of the interviews, all informants were informed that participation was voluntary and that they could cancel the interview at any time.

The interviews focused on organizational conditions, perceptions of interpersonal processes, and individual characteristics. To achieve the purpose, we used a hybrid content analysis that began with deductive analysis based on selected theories and perspectives, and then moved on to an inductive analysis and finally connected the theoretical starting points with the empirical material in the result.

A deductive (targeted) content analysis (Hsieh & Shannon, 2005) was initially used to answer the research questions. The analysis was based on predetermined themes when the interview material was analyzed (Mayring, 2000) and was characterized by a more structured process compared with unconditional coding. The deductive content analysis enables comparisons with results from previous

research and the results of discussions based on different selected theoretical perspectives (Elo & Kyngäs, 2008). This article tests theories in the field of study motivation that see motivation as a social and contextual interplay (Hugo, 2011; Perry et al., 2006). The analysis of the interviews was based on four themes: motivation, motivational strategies, learning environments, and more. Based on the four themes, a categorization matrix was developed that was then systematically used in the analysis of the interviews.

After an initial deductive analysis phase of the interview responses, the analysis turned into an inductive approach (see Figure 1). With selected themes as breaks, the categorization matrix was developed. Data were sorted via an inductive process (i.e., the text "spoke freely" within each theme and generated categories). After a close reading, the parts of the text that expressed identifiable ideas or positions (units of meaning) were condensed by coding within each theme. The empirical content was examined methodically, the texts were interpreted step-by-step, and data were classified to distinguish patterns. The empirical material was broken down into meaning-bearing units, which were condensed into shorter sentences and then abstracted into codes, describing the content of the meaning-units. Codes with similar content were combined into themes and organized into categories. To make the analysis transparent, codes and categories were combined in an analysis scheme. These categories were interpreted and presented in their respective themes with some telling quotes, and finally, the two informant groups were compared. The two researchers discussed the results of analysis thoroughly until we reached consensus, a process that resulted in the further refinement of categories and a final thematisation. To offer credible, generalisable results, we have reported our methodological approach, means of categorisation and analytical method herein.

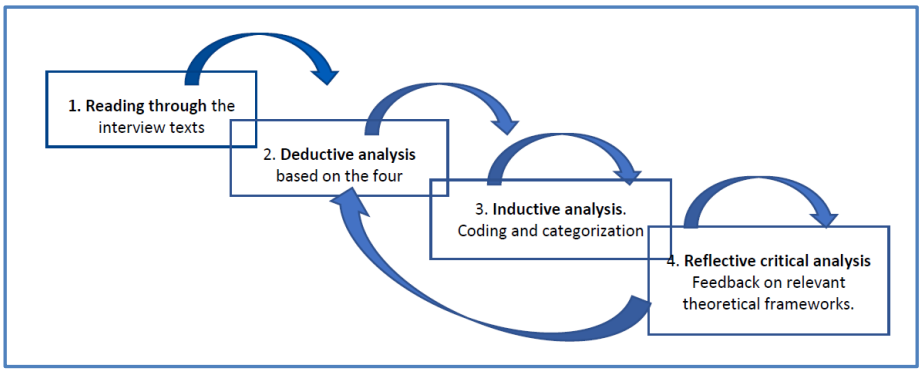

Figure 1: The analysis process

The analysis process was not linear but had more of an iterative character, where the process moved back and forth between the different phases. Through reflective dialogues between the researchers, the data processing was carried out. The participants were coded in the transcribed material with the numbers T1–T20 for teachers and S1–S12 for students to distinguish them more efficiently during the processing of the data set.

4. Results and Analysis

The results are presented and analyzed based on the study's purpose and its three research questions. The presentation of the result is based on the developed theme and categorization matrix. In the four themes (i.e., motivation, motivational strategies, learning environments, and more), there are common and distinctive categories within both the teacher and student groups, but also between them. The categories that were condensed were teachers, students, structure, social relations, and results.

4.1 Motivation

Regarding the upper secondary school students' study motivation, several influence categories were found. Teachers were the most important motivator, according to the informants:

> *"I would say that perhaps the teacher's most important task is to work with and improve and develop students' motivation. But I would also like to say that it is the students' most important task to become aware that their own motivation is so incredibly crucial, and that motivation is something that can change." (T8).*

Teachers are perceived as the single most important factor that affects students' study motivation and through their leadership they can influence students' inner motivation is confirmed by other research (Hattie, 2009; Hugo, 2011; Håkansson & Sundberg, 2012). The approaches that describe constructive teachers are clarity and the ability to give constructive feedback and push students and to be "interesting".

Students' responsibility for study motivation was a prominent theme in the empirical material. However, students and teachers' images differed from each other. The teachers placed more emphasis on the students' inner motivation, with descriptions that study motivation can be controlled from within and the importance of students being responsible, wanting to learn, and seeing the benefits of going to school. In the teachers' answers, there was also a strong belief that students work towards goals and sub-goals and know the purpose of their studies.

The students, on the other hand, did not discuss to any great extent their inner motivation. Two study-motivating aspects for them were to experience the benefits of learning and participation in the planning of teaching. The interviews did not provide unambiguous or comprehensive answers regarding the students´ strategies for building their inner motivation. However, the empirical material showed that the teachers "*views on how students should muster study motivation differed from the students*" (T9). Important questions include whether students learned or understood the importance of mental strategies or whether teachers understand students' cognitive strategy.

Regarding the category of arrangements, students and teachers consistently showed that a more practical and laboratory arrangement of lessons has a positive effect on study motivation. This is in line with the results Boström and Bostedt (2020) present in a new study on vocational classes´ study motivation.

Motivational teaching planning was described as "*learning for working life*" (T4). The results are not entirely in line with international and national research on learning strategies (Boström, 2013; Niemivirta, 2004). This research indicates that at group level, there are differences in what are called perceptual preferences; that is, learning-by-doing (Dewey, 1897) is an approach that may suit some students well, others not. Boström (2013) showed, for example, that students in an upper secondary school's vocational program preferred teaching that is based on learning-by-doing to a greater degree than students in academic programs.

Work-place learning was an example of how teaching methods in or about real - life generate higher study motivation and higher student attendance compared with regular school lessons. According to T2, having "*courses that you can do close to reality, it often becomes . . . easier for the students to become study-motivated."* If the approach was not sufficiently well-planned or too monotonous, students' study motivation decreased. The design of assignments was also crucial for students' study motivation (cf. Hugo, 2011; Håkansson & Sundberg, 2012). Another aspect of the teaching structure concerned the upper secondary school common subjects, which were not as popular with the students in the vocational programs as they were in the academic programs. These subjects lowered the study motivation. The time aspect was also emphasized by the students as an essential factor in increasing or decreasing motivation: "*Time is more important than methods . . . but this is where you get a little time for certain things" (S5).*

Teachers and students agreed on the importance of grades for study motivation, namely that the presence of grades can both increase and decrease motivation*: "If I get a high grade on one task, I will be motivated for the other. Grades give motivation" (S2); "If I get bad grades/. . ./ or if I am behind, then I cannot work at all. It will be a vicious circle" (S4).*

In summary, the results showed that study motivation could be seen as both a controlled and autonomous external motivation-driven phenomenon (cf. Imsen, 2006; Woolfolk & Karlberg, 2015). In the teacher interviews, the perception emerged that the students did not reflect sufficiently on what they had learned, even though information was submitted so they would not fail. This is a strategy that demonstrates control via external autonomous motivation (Wery & Thomson, 2013). If students do not reflect on what they have learned, then it can be seen as a rejection of the school's mission to stimulate students' metacognitive competence.

4.2 Motivational Strategies

Motivational strategies were perceived as active behaviors or actions to create motivation in the students, which can include students' thoughts, feelings, and actions, but also teachers' actions or surrounding structures or cultures (Jerkeby, 2019). Similar themes that emerged about motivation can also be discerned within this theme (i.e., teachers, students, structure, and results). Here, however, social relations are also added as a category.

Teachers' behaviors were of strategic importance, according to both teachers and students, which is in line with current research (Håkansson & Sundberg, 2012;

Hattie, 2009; Hofvenberg, 2020; Jerkeby, 2019). One difference between teachers and students was that they emphasized different teaching behaviors as important. The teachers pointed to their knowledge competence, the importance of being up to date on the subject, and the ability to enthuse the students and to see and build on students' strengths (cf. Mahler et al. 2018). The students emphasized teachers' personal qualities in the treatment as important for study motivation (e.g., teachers should be happy, understanding, and have the competence to provide support, but should not stress the students). According to the teachers, students' motivational behaviors were that they are responsible and curious. Behaviors that reduce or remove motivation are, according to some of the teachers, different types of defense mechanisms or "*repressed dissatisfaction" (T12).*

Students consistently mentioned that finding enjoyment in school work was a motivational strategy: According to S8, "*Study motivation means to do what is fun. So it's fun if you want to do it. If it's boring, it's not fun".* This was also commented on by teachers: "*Everything should be pleasurable. In general, I think students today are pleasure-driven young people"* (T20). Here we can discern generational differences between teachers who prefer learning to be serious and young people who are motivated by the teaching being pleasure-filled. This is a challenge to deal with in everyday pedagogical practice.

According to the teachers and students, the motivation to study decreased or increased depending on the structure of the courses (e.g., through good planning and participation). Planning includes teachers' lesson and course planning, joint planning, and the students' planning. The students emphasized the importance of being able to choose a variety of working methods: "*When I am motivated, there is a variation in the teaching, with varying tasks and subject areas*" (S6). Another motivational strategy was "*to get rid of the stamp of boredom"* (T3).

Social relationships as motivational strategies recurred in the student and teacher interviews. If teachers and students can build good relationships, then the study motivation is affected in a positive sense. The pedagogical task is facilitated with good relationships, for example, by giving feedback and making the right demands. Similar to Hattie's (2009) results, the interviews showed that relationships between teacher and student were the most important study motivating factor. According to T1, "*One must build relationships, and the biggest obstacle to reaching students who do not have motivation, it is the absence. Because if they are not in place, then it is very tough to motivate them*." Results in the form of grades as a motivation strategy were problematized by both teachers and students. The overall picture was that grades could create study motivation, but that they could further inhibit motivation if they were low. "*The whip, it is to reach the good grades then, because you should be able to apply to university or what-ever*" (S10). The grades as a structurally inhibiting and stress-related factor were also problematized by the informants. The new grading system created excitement and stress for the students, and the demands are very high. In this study, grades can be seen as an area where motivation can arise as controlled external or autonomous external motivation (Imsen, 2006; Woolfolk & Karlberg, 2015) and its effect on study motivation can be both promoting or inhibiting.

4.3 Learning Environments

Descriptions of the learning environment within the teacher group focused on the importance of adaptations for different groups of students at the individual level and from the perspective of disabilities, in other words, a special educational perspective (e.g. Ahlberg, 2001). This did not appear at all in the student group. Some teachers emphasized that smaller groups of students were a motivating factor. However, this view did not emerge in the interviews with the students. On the other hand, well-being, security, and the class were described as essential aspects in the learning environment by both informant groups. Well-being was both about being comfortable with the teacher and the class, but also in the physical sense, namely being comfortable on the premises. The effect of the external environment on students' study motivation was even described as underestimated. Security was also emphasized in the interviews with the two groups: *"If you feel safe and comfortable and you enjoy being here, then homework and assignments are easier"* (S1). Both teachers and students emphasized the importance of the class or group in the learning environment as an influencing factor for students' study motivation. The results above confirm previous research on good learning environments (i.e., that social inclusion is important as a basis for safe learning; Ahlberg, 2001).

4.4 Other

Within the theme, there were several distinctive perceptions between teachers and students. The teachers emphasized that a consensus between school and parents is crucial to creating a good basis for students' study motivation. It was seen as important that the teachers take the initiative for cooperation: *"We have a reasonable consensus with the parents. That we call home and tell now is going well. Trying to push together. That it is not just that we have a discussion together, but we invite them"* (T11). From a student perspective, teachers considered it crucial that parents are not "codependent" on their children's negative school behaviors. Parents can understand or even sanction students' failures because they may have behaved in a similar way when they were young. Regarding social relations, there were similar views among teachers and students. The right peers were stated to be decisive for study motivation in such a way that they could influence the study motivation positively, and with the wrong peers, the influence became negative. However, it seemed difficult to break away from a group of friends who do not want to study: *"If I hang out with some friends and they do not even want to work, I lose the motivation. It is difficult to change friends. It's up to me if I should follow them /. . . / I still have my own responsibility"* (S10).

A distinctive perception between students and teachers in the category of social relations was the teachers 'marking of "correct" parental support for students' study motivation. The right parental support was described as a dialogue between teachers and parents, where the parents do not sanction the students' absences or negative behaviors and where they influence their children's positive views of the school. The opposite was parents who more or less had given up or contributed to a reduced study motivation for their children. The students expressed that parental support could vary. Some students had parents who supported them; others did not have this support. A dilemma that the students described was that

supportive parents could also lead to perceived pressure for the students to continue to perform well. This could be perceived as a negative or problematic expectation structure.

4.5 Students´ and Teachers' Equal and Different Perceptions

In summary, it can be stated that the four themes of the analysis partly overlap. The same applies to the five categories that were condensed based on the units of meaning in the interviews. Apparent differences and similarities emerge in the comparisons between students and teachers in terms of codes within each category. This provides indications of the answers to the research questions about students' study motivation. Figures 2 and 3 below give an overview of the codes that were condensed from the empirical data in each group.

There is a complex interplay between results and motivation regarding what teachers and students put in the concept of study motivation. Study results affect motivation and vice versa both in a positive and in a negative sense. Grades also affect the study motivation in different directions.

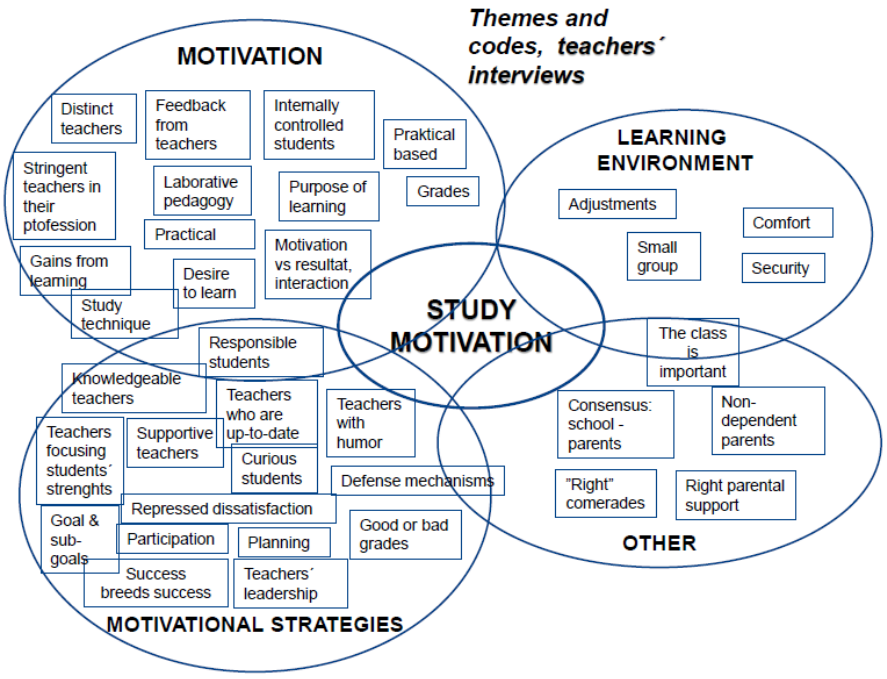

Figure 2. Picture of condensed codes within each theme of the teacher interviews

The importance of teachers in promoting students' academic motivation is evident. Teacher leadership is also a crucial factor in study motivation. However, there is a difference between the interview groups; teachers point more to the importance of knowledge, whereas students emphasize more personal qualities such as being understanding, happy, and giving support.

An substantial similarity between teachers and students regarding study motivation is that lessons or subjects that have more practical (life-skill-oriented) content are motivating and that the students have and see the benefit of the

knowledge. A major difference between teachers and students' responses is that the teachers emphasized "life skills" in learning more, such as strategies regarding goals, objectives, and sub-objectives, whereas the students did not touch on these strategies at all. A consistent view between teachers and students is the importance of well-being and security in the learning environment and that the class, groups, or peers should offer a motivating environment. The teachers pointed out the importance of adaptations and smaller groups in the learning environment. The students believed that the external learning environment, such as rooms and benches, also plays an essential role in study motivation.

The significance of social relations is confirmed by Ahlberg's (2001) communicative relation-oriented theory, which focuses on the concept of learning environment in a broader sense. It concerns cognitive, perceptual, socio-emotional, and socio-cultural aspects, as well as communicative and linguistic interactions. Regarding the surrounding environment, both teachers and students pointed out the importance of the right peers as a motivating factor. Peer friends can help increase or decrease study motivation. Distinctive within this theme was that teachers pointed to the right parental support, whereas the students pointed out that parental support can vary and have different effects.

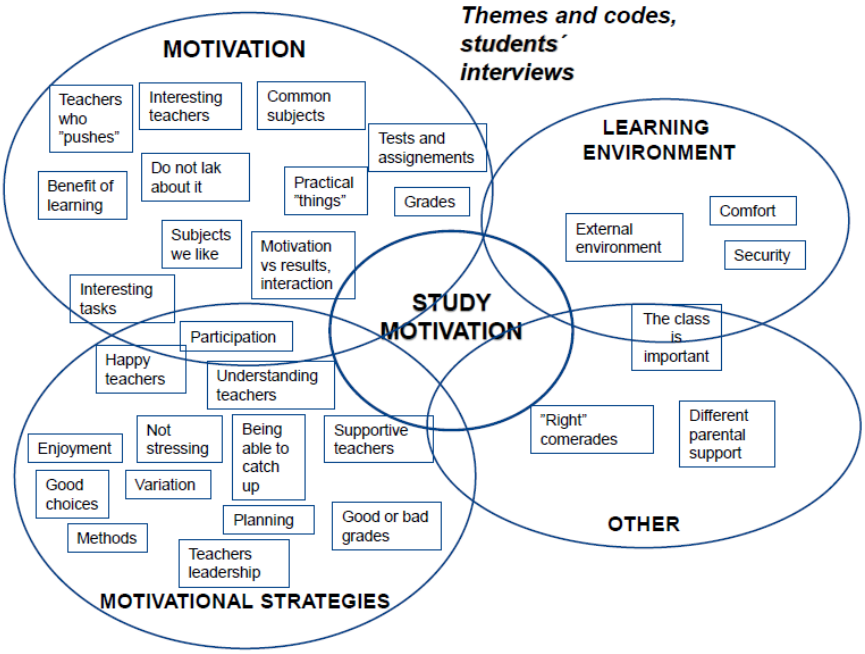

Figure 3. Picture of condensed codes within each theme of the student interviews

5. Conclusions

In this final part the conclusions reflect the research questions, and implications from the results of the study are described.

5.1 Research conclusions

To understand the phenomenon of study motivation, we require a synthesis of theories (Blomgren, 2016; Wery & Thomson, 2013) and practical studies in collaboration with teachers (Hofvenberg, 2020). Motivation can be analyzed from

an interactive (Stensmo, 2005) or a transactional perspective (Perry et.al 2006). The perspective in this article is broader than a mere focus on individual characteristics.

The first and the second research question about teachers´ and students´ experiences about factors increasing/decreasing students' study motivation, and differences and similarities between the populations, are answered in the study from different aspects.

The teachers appear as a very important group of actors for the students' study motivation. Teachers play a crucial role for study motivation, i.e. particularly in how they convey expectations to students and organize classroom activities This conclusion is also found in Stenmos' (2005) and Giota´s (2017) argumentation that teachers function as motivators by stimulating commitment and effort, strengthening teaching conditions, supporting individuals and groups, and shaping the classroom climate. The teachers' approach, choice of didactic working methods, leadership etc. are an important interactive motivating factor. This is also confirmed in Blomgrens study (2016) where motivation is also linked to pedagogical approaches, learning environments, didactic issues, and the importance of teachers, and links this with planning of teaching, learning, and views on knowledge. Blomgren clarified that teachers' didactic action competence is crucial for a successful school operation (cf Augustsson & Boström, 2016). In contrast to Mahler et al. (2018) and Blomgren (2016) we found no evidence that teacher's subject-specific enthusiasm was crucial for study motivation. The students in this study instead emphasized the teacher's personality as a motivating factor, while the teachers emphasized teachers' subject competence as crucial.

The study clearly demonstrates the need for a practically oriented and laborative pedagogy (cf. Boström & Bostedt, 2020; Boström 2013) such as pedagogy built on learning-by-doing (Dewey, 1897). The students especially emphasized that when the pedagogy was adapted to their way of learning, it was motivating. Thus, teachers' leadership in the didactic space is an important competence for teachers to be able to motivate students (Augustsson & Boström, 2016). Also need for variation in teaching, was also confirmed by the results.

The result show a number of learning strategies which support study motivation at a collective level, but these do not emerge as clearly at the individual. The teachers emphasized the importance of adaptations and smaller groups in the learning environment, whereas the students believed that the external learning environment also played an important role in the study motivation. According to Blomgren (2016), it is particularly important that "*… students' ability is strengthened by support that aims to get students to use effective learning strategies and make an effort*" (p. 243). Blomgren, however, did not clarify what effective learning strategies are meant to include. In this study, a number of strategies have emerged, such as students' needs for structure, the teacher's personality, participation in planning, choices and appropriate learning methods.

In addition, the empirical results show that teachers and students have slightly different views on students' ability and insight into taking responsibility for their own learning. The teachers believed in the students' own responsibility whereas students prefer to highlight pleasurable learning. We believe that the discrepancy between students 'and teachers' views should be clarified, problematized, and used in a constructive way to further explore the issue of study motivation.

The third research question about how is study motivation linked to various aspects of education according to teachers and students, is highlighted both in the theoretical framework used and the results of the study: motivating or demotivating factors, motivational strategies that support or inhibit students, learning environments that support or hinder students' study motivation and "other" factors. Good learning environments are thus important in school, as well as in other work-places or learning situations (Björklid & Fischbein, 2011). To best support students' ability to take responsibility for their own learning, knowledge is needed about the ways that good learning environments can be established because people interact, influence, and are influenced by the social and physical environment

5.2 Implications

A broader perspective, on study motivation as a composite phenomenon that affects internal and external motivational factors and the relationships between them, then becomes significant. One conclusion drawn from the empirical material is that teachers need to encourage inner motivation, while at the same time ensuring that external motivation promotes learning (Anderman & Anderman, 2009; Wery & Thomson, 2013). It is preferable to seek out lack of study motivation in such factors as environments, learning strategies, teaching planning, individual ambitions, home-school interaction, didactic choices, and the physical environment (Giota, 2017). Both internal and external motivational factors thus need to be taken into account.

To reconnect with motivation theories, the empirical evidence in this study points unequivocally to the validity of the interactive, as well as the transitive perspective. It proves that well-being and security in the learning environment are important and that the class/ group/peers constitute a motivational context for the students. The conclusions in this article point to the validity of the interactive motivational perspective, in which the student's own choice and responsibility for school work and learning (internal motivational factors) must be linked to external motivational factors. There is an interaction between situation and person (interaction), in which processes concerning negotiations of meaning in the social interaction (transaction) take place. Motivation can thus be seen as a process integrated into a larger whole, impossible to separate from learning, individual differences, the nature of tasks, or societal context.

Important research questions for further studies are to a) broaden the study to further study programs to find variations, b) conduct observational studies in the classroom to examine teachers' and students' interaction, c) deepen the interviews

with students with, for example, case descriptions or d) conduct case studies at different schools to examine school cultures.

6. References

Ahlberg, A. (2001). *Lärande och delaktighet* [*Learning and participation*]. Lund: Studentlitteratur.

Anderman, E. M., & Anderman, L. H. (2009). *Motivating children and adolescents in Schools*. Columbus, OH: Merrill/Prentice Hall.

Antonovsky, A. (2005). *Hälsans mysterium* [*The mystery of health*]. Stockholm: Natur och Kultur.

Aspelin, J. (2018). *Lärares relationskompetens* [*Teacher's relationship skills*]. Stockholm: Liber.

Augustsson, G., & Boström, L. (2016). Teachers' leadership in the didactic room: A systematic literature review of international research. *Acta Didactica Norge - tidsskrift for fagdidaktisk forsknings- og utviklingsarbeid i Norge, 10*, 1-19. https://doi.org/10.5617/adno.2883

Björklid, P., & Fischbein, P. (2011). *Det pedagogiska samspelet.* [*The pedagogical interaction*]. Lund: Studentlitteratur.

Blomgren, J. (2016). *Den svårfångade motivationen: elever i en digital lärmiljö* [*The difficult-to-capture motivation: Students in a digital learning environment*]. (Diss) Göteborg: Göteborgs Universitet.

Boström, L. (2013). Hur lär sig elever på sex olika yrkesprogram? En studie om skillnader och likheter i lärstilar. [How do students learn in six different vocational programs? A study of differences and similarities in learning styles]. *Utbildning & Lärande, 4*(1), 48-65.

Boström, L., & Bostedt, G. (2020). Hur lär sig elever på två olika yrkesprogram? En studie om skillnader och likheter i lär- och undervisningsstrategier av betydelse för elevers studiemotivation. [How do students learn in two different vocational programs? A study about differences and similarities in learning and teaching strategies of importance for study motivation]. *Kognition og Pædagogik,* 116, 100-115.

Boström, L., & Gidlund, U. (2016). Students' need for structure—the forgotten learning styles preference. In N. Preston (ed.), *Assessment, performance and effectiveness* (pp. 12-20). Nova Science Publishers.

Covington, M. V., & Mueller, K. J. (2001). Intrinsic versus extrinsic motivation: An approach/avoidance reformulation. *Education Psychology Review*, *13*, 157-176.

Dewey, J. (1897). *My pedagogic creed.* Retrieved from http://dewey.pragmatism.org/creed.htm

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis. *Journal of Advanced Nursing 62(1),* 107-115. https://doi.org/10.1111/j.1365-2648.2007.04569.x

Farrington, C., Roderick, E., Allensworth, E., Nagaoka, J., Keyes, T., Johnson, D., & Beechum, N. (2012). *Teaching adolescents to become learners. The role of noncognitive factors in shaping school performance: A critical review*. Chicago: University of Chicago Consortium and Chicago School Research.

Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, *5(1),* 80-92. https://doi.org/10.1177/160940690600500107

Gidlund, U., & Boström, L. (2017). What is inclusive didactics? Teachers´ understanding of inclusive didactics for students with EBD in Swedish mainstream schools. *International Education Studies, 10*(5), 87-99. https://doi.org/10.5539/ies.v10n5p87

Giotta, J. (2017). Den svårfångade motivationen, elevers välmående och skolprestationer [The hard-captured motivation, student well-being and school achievement]. Lecture 2017-10-30, Sundsvall.

Giota, J. (2013). *Individualisering i skolan – vilken, varför och hur*? [*Individualization at school - which, why and how?*] Vetenskapsrådets rapportserie, 3. Stockholm.

Granström, K. (2012). Tre aspekter på lärares ledarskap i klassrummet. In G. Berg, F. Sundh, C. Wede (eds.), *Lärare som ledare* [*Teacher as leader*](pp. 27-48). Lund: Studentlitteratur.

Grönqvist, E., & Vlachos, J. (2008). *Hur lärares förmågor påverkar elevers studieresultat* [*How teachers 'abilities affect students' learning outcomes*]. IFAU. Rapport 2008:25

Håkansson, J., & Sundberg, D. (2012) *Utmärkt undervisning. Framgångsfaktorer i svensk och internationell belysning* [*Excellent teaching. Success factors in Swedish and international lighting]*. Stockholm: Natur och Kultur.

Hattie, J. A. C. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. New York: Routledge.

Hofvenberg, A. (2020). *Motivation, students, and the classroom environment. Exploring the role of Swedish students´ achievement goals in chemistry*. (Diss) Umeå: Umeå Universitet.

Hsieh, H.-S., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277-1288. https://doi.org/10.1177/1049732305276687

Hugo, M. (2011). *Från motstånd till framgång - att motivera när ingen motivations finns* [*From resistance to success - to motivate when there is no motivation*]. Stockholm: Liber.

Imsen, G. (2006). *Elevens värld. Introduktion till pedagogisk psykologi* [*The student's world. Introduction to educational psychology*]. Lund: Studentlitteratur.

Jerkeby, S. (2019). *Att redan vara motiverad – om hinder och möjligheter för lärande* [*To be motivated already - about barriers and opportunities for learning*]. Lund: Studentlitteratur.

Lundahl, L., Lidström, L., Lindblad, M., Lovén, A., Olofsson, J., & Öst, J. (2015) Osäkra övergångar. *Resultatdialog 2015* (pp. 107-116). Stockholm: Vetenskapsrådet.

Mahler, D., Großschedl, J., & Harms, U. (2018): Does motivation matter? – The relationship between teachers' self-efficacy and enthusiasm and students' performance. *PLOS ONE, 13*(11). https://doi.org/10.1371/journal.pone.0207252

Mayring, P. (2000). Qualitative Content Analysis. *Qualitative Social Researc*h**,** *1*(2).

Niemivirta, M. (2004). Skillnader mellan flickor och pojkar i inlärningsmotivation. *Skola-kön-inlärningsresultat* [Differences between girls and boys in learning motivation. School-gender-learning results]. Helsingfors: Utbildningsstyrelsen.

Perry, N. E., Turner, J. C., & Meyer, D. K. (2006). Classrooms as context for motivating learning. In P.A. Alexander & P.H. Winne (ed.), *Handbook of educational psychology* (pp. 1-64). Mahwah, N.J.: Erlbaum.

Rising Holmström, M., Häggström, M., & Kristiansen, L. (2015). Skolsköterskans rolltransformering till den hälsofrämjande positionen [The role of the school nurse in transforming the health-promoting position]. *Nordic Journal of Nursing Research*, *25*(4), 210-217. https://doi.org/10.1177/0107408315587860

Ryan, R. M., & Deci, E. L. (2002). An overview of self-determination theory. In E. L. Deci & R. M. Ryan (ed.), *Handbook of self-determination research* (pp. 3-33). Rochester, NY: University of Rochester Press.

Skolverket. (2016). *Uppföljning av gymnasieskolan* [*Follow-up of upper secondary school*]. Skolverket: Stockholm.

Skolverket. (2018). *Från gymnasieskola till högskola* [*From upper secondary school to university*]. Rapport 466. Stockholm: Skolverket.

Skolverket. (2019). *Redovisning av Skolverkets uppdrag om att genomföra verksamhetsnära insatser för att förebygga avhopp från gymnasieskolan* [*Report on the National Agency for Education's assignment to implement business-related initiatives to prevent dropping out of upper secondary school*]. Dnr 7.2.1-2016:32

Stensmo, C. (2005). *Ledarskap i klassrummet* [*Leadership in the classroom*]. Lund: Studentlitteratur.

Sveriges Elevkårer & Lärarnas Riksförbund. (2015). *Från avhopp till examen - en undersökning bland gymnasieelever och lärare om faktorer som påverkar genomströmningen i gymnasieskolan* [*From drop-out to graduation - a survey among high school students and teachers about factors that affect the throughput in high school*]. Stockholm.

Sveriges Kommuner och Landsting (SKL). (2017). *Olika är normen. Att skapa inkluderande lärmiljöer i skolan [Different is the norm. To create inclusive learning environments in the school*]. Sveriges kommuner och Landsting.

Säljö, R. (2014). *Lärande i praktiken. Ett sociokulturellt perspektiv* [*Learning in practice. A socio-cultural perspective*]. Lund: Studentlitteratur

Vaanstenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory. Another look at the quality of academic motivation. *Educational Psychologist*, *41*, 19-31. https://doi.org/10.1207/s15326985ep4101_4

Valsö, M., & Malmgren, F. (2019). *Fysisk lärmiljö: optimera för trygghet, arbetsro och lärande [Physical learning environment: optimize for security, work peace and learning]*. Lund: Studentlitteratur.

Vetenskapsrådet. (2017). *God forskningssed [Good research practice]*. Vetenskapsrådet.

Wery, J., & Thomson, M. (2013). Motivational strategies to enhance effective learning in teaching struggling students. *British Journal of Learning Support*. *28*(3), 103-108. https://doi.org/10.1111/1467-9604.12027

Woolfolk, A., & Karlberg, M. (2015) *Pedagogisk psykologi [Individualization in a school context]*. Edinburgh: Pearson Education Limited.

X Municipality, (2016). *Mål och resultatplan 2016* [*Goal-and result plan 2016*]. Barn- och Utbildningsnämnden.

Zimmerman, F. (2018). *Det tillåtande och det begränsande. En studie om pojkars syn på studier och ungdomars normer kring maskulinitet* [*The permissive and the restrictive. A study on boys 'views on studies and adolescents' norms about masculinity*] (Dissertation). Göteborg: Göteborgs universitet.