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ABSTRACT
This qualitative study explores lower secondary school students' experiences with components of a universal school-based social and emotional learning (SEL) intervention in relation to coping with academic stress. The intervention aimed at promoting the following five social and emotional competencies (SEC): relationship skills, emotional regulation, mindfulness, growth mindset, and problem-solving. Three student focus group interviews were conducted ($n = 26$). Conventional content analysis was completed with the assistance of NVivo software. Findings suggest that the students experienced the SECs mindfulness, problem-solving, and growth mindset as supportive in coping with academic stress. Emotional regulation and relationship skills were considered more challenging to utilize, which may reflect a need for more practical exercises for these competencies. Overall, findings contribute with new knowledge on how SEL interventions can be developed to build resources among adolescents to cope with academic stress.

Introduction

Despite previous, promising results on how social and emotional learning (SEL) can reduce students' emotional distress, promote academic motivation, and improve peer relations in an academic context (Durlak et al., 2011), there is little empirical knowledge about how these competencies may support adolescents' coping with academic stress. The current study aims to contribute with knowledge on social and emotional competencies' (SEC) potential for stimulating coping with academic stress by exploring Norwegian lower secondary students' experiences with a SEL-intervention aiming to build such coping resources.

Adolescents report disturbingly high levels of perceived stress, primarily academic stress linked to performance expectations and academic achievements in school (Bakken, 2019; Pascoe et al., 2020). PISA results show high levels of academic stress among adolescent students within the OECD countries: 55% of students in lower secondary school felt anxious about upcoming tests, 52% felt stressed when being unable to solve an academic task, and 37% felt tense about studying in general (OECD, 2017). School-related stress is likely to challenge students' motivation for learning and reduces beliefs in the ability to establish good peer relations and secure academic support in a school context (Eriksen et al., 2017; af Ursin et al., 2020). As daily stress and hassles are some of the primary reasons for developing mental health problems (Rodríguez-Naranjo & Caño, 2016)

which typically surface in adolescence (Reneflot et al., 2018), the increase in school-related stress should be taken seriously. Adolescence is a critical period which lays a foundation for the future stage of adult life (Steiger et al., 2014). Thus, building resources for coping with academic stress during this period seems key.

Coping with Academic Stress

Coping is a dynamic process (Brough et al., 2005) involving conscious, purposeful actions employed when an individual appraises a situation as stressful (Lazarus & Folkman, 1984). Coping includes responses directed toward resolving a stressful relationship between the person and the environment (problem-focused coping) and/or toward negative emotions that arise because of stress (emotion-focused coping). Stress is an exhausting or overwhelming experience, either internal or external, that the individual appraises as lacking resources to cope with (Lazarus, 1993). In an academic context, stress refers to states based on academic demands (Walburg, 2014). Hence, coping is the process in which students' orient thoughts and behaviors toward the goals of resolving the source of, and managing emotional reactions to, academic demands. Grades are one main concern among adolescent (Seiffge-Krenke, 2012) and lower achievements than expected, high demands from school and lacking necessary resources to cope with daily hassles as well as peer relations can all lead to stress among students (Dalen, 2014; Östberg et al., 2015). As SECs are theoretically described as interrelated processes that leads to coping (Skinner & Zimmer-Gembeck, 2007) such competencies may be a contribution in coping with academic stress.

The Potential of Coping with Academic Stress Through SEL

SEL interventions focus primarily on prevention by building resiliens (Domitrovich et al., 2017) and have shown to be most effective when implemented as universal, school-based interventions with whole classes of students (Weissberg et al., 2015; Yeager, 2017). Large-scale meta-analyses from the United States (Durlak et al., 2011; Taylor et al., 2017) and Europe (Sklad et al., 2012; Wigelsworth et al., 2016) have found that school-based universal SEL interventions have beneficial outcomes on emotion regulation and academic motivation (Korpershoek et al., 2016; Mahoney et al., 2018). A recent systematic review further indicates that the ability to regulate emotions, plan and solve problems, good relationship skills, and engaging in optimistic thinking stimulate good psychosocial health (Sande et al., 2019). This gives reason to suggest that SEL interventions focusing on building resources for coping with academic stress may have a positive influence on students perceived academic stress. However, little research has explored how students experience learning about SECs through qualitative methods (Dyson et al., 2019). Furthermore, there is a research gap in the body of empirical studies that explore lower secondary school students' experiences with SEL interventions stimulating coping with academic stress (Corcoran et al., 2018).

Building Coping Resources for Academic Stress

ROBUST is a universal school-based SEL intervention aiming to stimulate students' SECs to cope with academic stress. As good relationship skills can influence the seeking of social support as a coping strategy in a positive manner (Rowsell et al., 2016), better problem-solving strategies (Wong & Power, 2019) and a more growth-oriented mindset (Molden & Dweck, 2006) may help develop more active coping approaches, and emotional regulation and mindfulness have shown to be closely linked to emotion-focused coping (Compas et al., 2017), SECs that target such problem – and emotion-focused coping are central in the intervention. Hence, ROBUST covers the SECs relationship skills, emotional regulation, mindfulness, growth mindset, and problem-solving. The theoretical rationale for the competencies in ROBUST and how these may support coping with academic stress are further elaborated on below.

Relationship Skills

Good relationship skills include competence in how to interact socially through adequate communication (Jones et al., 2015) and how to seek social support when needed (Thoits, 2011). Being able to seek social support is associated with supportive relationships among peers and academic motivation, as well as, beliefs about coping with academic stress (Sahil & Hashim, 2011; Wentzel & Miele, 2016). Seeking support can be instrumental and emotional and lead to a sense of control that provides confidence in the ability to cope with challenging situations (Thoits, 2011). Relationship skills can be linked to problem – and emotion-focused coping strategies (Wong & Power, 2019; Zeidner et al., 2016), that are considered protective factors against stress (Rowsell et al., 2016). However, seeking social support from peers can be challenging in adolescence. The most important changes in seeking support are before the age of 16 when social support from peers becomes increasingly important (Helsen et al., 2000). Although peer support is vital during adolescence (Rowsell et al., 2016), the fear of being socially excluded is one main concern that influences students' distress (Dalen, 2014). Many students find it difficult to make friends in school and even more feel lonely in school (Bakken, 2019). Thus, in line with previous research (Eckenrode, 2013), ROBUST intends to stimulate relationship skills so that students are able to establish good relations, communicate well and seek support from peers in school as a means of coping with academic stress.

Emotional Regulation

Although educational settings may engender positive emotions like pride, enjoyment, and hope, they are also contexts for negative emotions such as boredom and hopelessness regarding academic performance (Pekrun & Linnenbrink-Garcia, 2012). Research suggests that emotion-focused coping strategies are effective at regulating emotions and reducing stress (Aldao et al., 2010). Emotional regulation involves the ability to regulate, monitor, evaluate, and modify emotional reactions (Gross & Thompson, 2007). Stress is often linked to negative emotional reactions and emotional regulation is closely linked to emotion-focused coping as it involves changing one's initial assessment of a situation to alter the elicited emotional experience that leads to a more adaptive response (Compas et al., 2017; Gross, 2015). In ROBUST, emotional regulation focus on identifying and evaluating emotions and reappraisal. The strategies are related to coping with stressful academic situations.

Mindfulness

Mindfulness involves the ability to observe thoughts and feelings as temporary events of the mind, creating the possibility to accept and re-perceive experiences more appropriately (Shapiro, 2009). This reduces stressful reflections and worrying and is closely linked to emotion-focused coping. Hence, mindfulness may increase awareness about academic stress and elicit a more realistic and adaptive response that reduces stress (Tang et al., 2015; Tharaldsen & Bru, 2011) through improved emotional regulation (Broderick & Jennings, 2012). This aligns with previous studies in which mindfulness lowers students' perceptions of stress by altering emotions and increasing the timely processing, and thus regulation of, emotional signals related to school-tasks (Chen et al., 2015; Crane & Kuyken, 2013; Tharaldsen, 2019). In ROBUST mindfulness is promoted as a way of being in the present moment, with an attitude of acceptance and non-judgement toward current experiences (Bishop et al., 2004; Hill & Updegraff, 2012). Through breathing practices and visualization techniques students may learn methods for coping with acute academic stress, and the attitude of accepting challenging academic situations. Both are believed to provide a more realistic, and less stressful, perspective on perceived academic stressors and stimulate adequate coping.

Growth Mindset

Growth mindset enhances students' optimism and beliefs about accomplishing challenging school-work (Claro et al., 2016). Coping actions vary with individual beliefs (Lazarus, 1993), and students' beliefs or mindset can influence how they interpret – and cope with school-related tasks and performances. The operationalization of adequate coping strategies may thus function as a protective factor against stress in an educational setting (Molden & Dweck, 2006; Schroder et al., 2017). A growth mindset is purported to protect against educational demotivation (Aditomo, 2015), and reduce stress related to academic challenges (Moksnes & Lazarewicz, 2019; Murberg & Bru, 2004). Belief in the ability to cope with academic challenges also alleviates associated stress (Doron et al., 2009). That intelligence is malleable and developed through effort (Dweck, 1999) is emphasized through growth mindset in ROBUST. This competence may influence students' motivation to take on challenging academic tasks that otherwise could have been perceived as overwhelming.

Problem-solving

Problem-solving is closely linked to self-regulated learning (SRL) and includes goal-oriented strategies that regulate learning behavior and learning processes by selecting, monitoring, and planning for strategies that facilitate academic learning (Schunk & Zimmerman, 2012). Adequate problem-solving increases students' feelings of control and predictability (Compas et al., 2017), which are central in problem focused coping with stress (Lazarus, 1993). Problem-solving in an educational context is associated with positive academic beliefs and a reduction in school-related stress (Wong & Power, 2019). In ROBUST problem-solving aims at teaching students' systematic approaches to solve problems. Planning is central, which is an adaptive coping strategy regarding academic stress. Hence, problem-solving may contribute to students' coping with academic stress.

Based on the above, it seems that the SECs relationship skills, emotional regulation, mindfulness, growth mindset, and problem-solving as presented in ROBUST could support adolescents when coping with academic stress.

The Current Study

The main aim of the current study was to explore how a sample of Norwegian eighth-grade students in lower secondary school experienced the SECs relationship skills, emotional regulation, mindfulness, growth mindset, and problem-solving when coping with academic stress.

The study posed the following research questions:

(1) How did the students experience the social and emotional competencies as presented in ROBUST?
(2) If the competencies were perceived as supportive strategies for coping with academic stress, how? If not, why?

Method

Due to the lack of empirical research on adolescents' perceptions of SEC for building coping resources for academic stress, a qualitative, explorative research design was chosen. Focus group interviews were considered the appropriate data-gathering method as they generate a rich understanding of participants' experiences with an intervention (Krueger, 2014; Morgan, 1993) and make collective sense of the phenomenon under study (Lune & Berg, 2016).

The Robust Intervention

University staff, researchers and lower secondary school teachers cooperated in developing the universal school-based ROBUST intervention. It was delivered class-wise on a weekly basis during regular school hours by primary teachers who had attended a five-day training course. ROBUST was carried out during the 2018–19 school year. A total of 20 sessions were carried out, each of which lasted 60 min, and each topic lasted four sessions. Each session contained lectures, group assignments, and activities. An overview of the structure and content of ROBUST is presented in Figure 1.

Participants

545 students from 28 classes of eighth-grade[1] students in 11 lower secondary schools in a municipality in Eastern Norway participated in the intervention. In accordance with demographic variations, informants were recruited from each of three identified geographic areas within the municipality. This categorization was recommended and performed by staff from the municipality. One school from each area was randomly selected. To ensure that the number of participants in the focus group interviews was satisfactory (Krueger & Casey, 2002), 12 students at each school were initially invited to participate. A total of 26 students participated in three focus group interviews, eight from school one (four girls and four boys), eight from school two (six girls and two boys), and 10 from school three (five girls and five boys). Hence, the number of participants in each focus group was sufficient. Of the total sample, 11 were male and 15 were females, all between 13 and 14 years of age ($n = 26$). The remaining 10 students did not give a reason for declining to participate in the interviews.

Data Collection and Procedure

An open-ended, semi-structured interview guide was developed for the interviews. The main themes concerned students' experiences with the SECs from the intervention in relation to coping with academic stress. The interviews were conducted approximately one month post intervention.
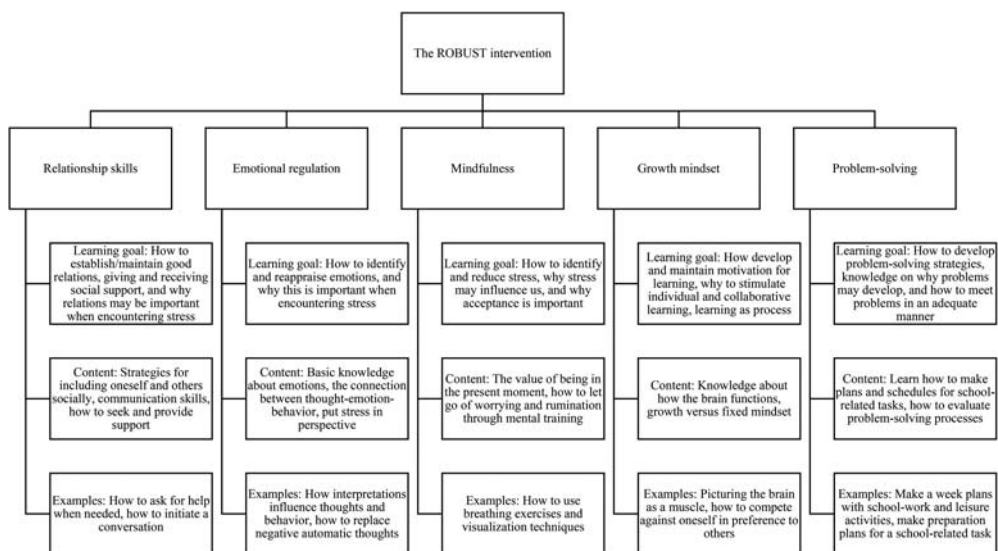

Figure 1. An overview of the structure, learning goals, content, and examples of strategies of ROBUST.

The study involved extended focus groups (Berg et al., 2004), which introduces the main topics from the interview guide to participants prior to the interview. This procedure increases the trust-worthiness of the data by making the informants aware of personal opinions regarding interview themes before the interview, thus increasing the likelihood that participants will express their opinion during the focus group interview (Breen, 2006). Two female researchers, experienced with and trained in qualitative research, conducted the interviews at the respective schools during school hours in accordance with the focus group interview guidelines (Krueger, 2014). Each inter-view lasted 60-90 min, was audio-recorded, and transcribed verbatim. No new information emerged after the third interview and findings between the three groups overlapped. Hence after the third interview data saturation (Saunders et al., 2018) and sufficient information power (Mal-terud et al., 2016) were considered to provide satisfactory descriptions of the phenomenon under study.

Analysis

Conventional content analysis, commonly used when aiming to describe a phenomenon of which existing theory and/or research is scarce (Hsieh & Shannon, 2005), was performed with the assist-ance of NVivo 12. Initially data was analyzed separately. Categories flowed from the data using inductive category development (Mayring, 2004). First, codes that captured key concepts were made. Then, codes were sorted into categories which was structured hierarchically. As findings from the focus groups were coincident, data was finally categorized within the same dimensions and narrowed down to dimensions and sub-dimensions (Patton, 2002). The researchers discussed the findings and came to agreement on the analysis and the dimensions generated by the data.

A member check (Miles et al., 2019) was carried out as it increases the trustworthiness of the analyses by giving the informants the opportunity to provide feedback on the initial analyses. The member check was carried out by e-mail for practical reasons. None of the students indicated any need for changes, thus the initial analyses were used in the continued work with the data.

Ethical Considerations

The study was formally approved by the Norwegian Social Science Data Services (NSD). All ethical guidelines were followed. Voluntary informed consent was gathered from parents or guardians, as well as from the participants, prior to data collection.

Findings

Two main dimensions were identified from the content analysis: "supportive competencies" and "challenging competencies". The first dimension comprised three sub-dimensions: "mindful accep-tance", "making plans", and "strengthened motivation". The second dimension included the sub dimension: "Potential benefits and difficulties". With the intention of strengthening the trust-worthiness of the findings, quotes from all three focus groups are presented as equally as possible. To increase transparency an overview of the total study quotes is presented in Table 1. To protect the anonymity of the participants, pseudonyms are used, and reference to the respective school rep-resents the focus group to which the respective student belong.

Supportive Competencies

The majority of the informants found the SECs mindfulness, problem-solving, and growth mindset as helpful for coping with academic stress. Findings regarding mindfulness and problem-solving

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[1]The eighth grade in Norway corresponds to the first year of lower secondary school.

Table 1. An overview of the overall quotes.

	Mindfulness	Problem – solving	Growth mindset	Emotional regulation	Relationship skills
Supportive competencies	32	20	8	8	8
	[26]	[18]	[8]	[8]	[6]
Challenging competencies	9	4	3	17	13
	[8]	[3]	[3]	[11]	[6]
References in total	41	24	11	25	21
	[24]	[21]	[11]	[19]	[12]

Note: Number of informants providing quotes are indicated by brackets ($n = 26$).

overlapped somewhat in that the competencies were perceived as supportive when preparing for and when working with academic tasks. Growth mindset, on the other hand, reflected an attitude towards learning perceived as supportive in that it motivated the students.

Mindful Acceptance

When stressed about academic work, e.g., prior to giving a presentation, most of the informants found mindfulness exercises such as mindful breathing to be supportive, as stated by Trude (school 2):

> I find it useful to take deep breaths, and to use the breathing exercise, when I am stressed before presentations in school.

This was also the case for Mia (school 1), but in a more general manner regarding schoolwork:

> The breathing exercise has helped me to relax [about academic work]. It made it easier for me to handle stress by accepting and letting go of it.

The informants expressed that mindfulness supported their ability to cope during stressful encounters such as during tests at school, as exemplified by Nora (school 3):

> I can get stressed during a test and it feels like I've not rehearsed enough. We've learned to stop, empty the head of thoughts, and to breathe. Then it works out fine for me.

Most informants found exercises for mindful acceptance helpful when coping with negative thoughts that arose when encountering new learning material or when being challenged by academic tasks, as exemplified by Emma (school 1):

> To accept and let go helps a lot when I have thoughts that I find unhelpful and that I don't like having about schoolwork.

Informants agreed that being mindful contributed to developing increased awareness and acceptance of the present moment and supported their ability to cope with challenging academic situations. The stated reason was that instead of worrying about a difficult task they had learned to focus on one thing at a time and to not let negative thoughts or difficult tasks interfere with their work, as stated by David (school 2):

> It happens quite often that one is stressed before tests (…). Before I used to be stuck at a question for a long time. But now I proceed to the next one, and [think that] the answer will come to me.

Making Plans

The majority of the informants expressed that learning a stepwise procedure to solve and evaluate academic problems was helpful to cope with school-related tasks that would otherwise be perceived as stressful. Similar to the use of mindfulness strategies to cope with stress, the stepwise problem-solving procedure was emphasized as relevant, especially in relation to preparing and conducting academic tests, as stated by Thomas (school 1):

> First, I think it through [the steps] and then I do it, [I] consider the different ways to handle a math test or a Spanish test.

A similar experience was stated by Stine (school 3) regarding preparation for academic tests:

> I have tried to prepare for tests and to reduce the stress that usually occurs if I start practice the evening before the test.

Most of the informants emphasized that learning about problem-solving supported how they appraised and coped with school-related tasks, either at school or at home. They expressed that problem-solving provided new knowledge of how to make plans and structures which supported their coping ability with school-related stress, as expressed by Line (school 1):

> I have changed the way I think about how to structure homework. Before, I was stressed about doing homework, spending every minute of my time [on it]. Now, I prioritize some homework over others, and I've become better in structuring. I automatically become less stressed about homework.

This was further exemplified by Lotte (school 2) in that the ability to choose was strengthened:

> It makes it easier for me to make plans for which day to do the different homework. It is a lot easier because I have a clear idea of what to do when.

Strengthened Motivation

The informants expressed that growth mindset highlighted the connection between academic work, the development of the brain, and learning possibilities. The competence was identified as a motivation for learning, as exemplified by Mona (school 2):

> When we learned about the brain [growth mindset] it made me want to learn more. I remember we were taught that in this period of life [adolescence] one's ability to learn is so much higher than in any other period of life. Thus, I want to use this period for learning, making the most out of it.

Informants agreed that a growth mindset differed somewhat from their initial perception about learning as an inborn talent. They emphasized that learning about a growth mindset influenced their perspective that learning was more process-oriented, as stated by Hans (school 1):

> Before I did not know that the brain was like a muscle that strengthens through exercise. I thought everybody had different talents, and if you are good at something, it is fixed. (…) Then I became aware that the brain can acquire new skills if one only works hard enough.

Informants expressed that a growth mindset encouraged a more learning-oriented perspective on making mistakes through strengthening their beliefs about learning, as expressed by Dennis (school 3):

> Growth mindset, I think, is rather important because it focuses on the part of learning which concerns doing mistakes, and most important, how to handle such mistakes.

Although the informants agreed that growth mindset strengthened their beliefs about learning, they also experienced it to be a bit complicated to begin with, as stated by Ole (school 1):

> Learning that the brain work as a muscle was a bit complicated to understand in the beginning. (…), but eventually, I saw it rather useful. I thought 'this is useful to learn'.

Challenging Competencies

The informants expressed that competencies related to emotional regulation and relationship skills were somewhat challenging to utilize, even while conveying that they perceived it as important to strengthen them.

Potential Benefits and Difficulties

Many informants stated that dealing with strong emotions was particularly difficult during adolescence and that strategies for emotional regulation were challenging to use in coping with academic stress in this period of their lives, as exemplified by Leonora (school 2):

> It seems [that it is] very easy to just change your feelings right away, but when you are in a situation, it is challenging to think of something positive when you have negative thoughts.

The majority of the informants experienced that their peers also perceived emotional regulation to be a challenging competence regarding coping with academic stressors, as expressed by Line (school 1):

> The ones [peers] I talked with said that they had to follow their own emotions instead of regulating them and that this was the only way for them to handle emotions.

The notion was also supported from Mario (school 2), who had tried to identify and change negative thoughts:

> I have tried to think differently about the situation, but I did not manage to stop and think about the situation in a more positive manner.

Although many informants perceived emotional regulation to be somewhat challenging, they expressed that it would be beneficial to learn how to use emotional regulation to cope with academic stress, as exemplified by Ole (school 1):

> We all have strong feelings in adolescence. With various and strong emotions and thoughts it seems beneficial to learn how to regulate emotions.

The informants expressed more mixed experiences with relationship skills. The majority agreed that learning about relationship skills had, to some degree, changed the learning environment by increasing their tolerance toward peers and perhaps broadening their knowledge of social responsibility. As stated by Ole (school 1):

> People [peers] say that others have feelings as well, and instead of us just saying that, we [the students] saw it in a way, at a much deeper level how different actions would affect others and how others felt.

The informants emphasized that the issue of time had to be considered when discussing relationship skills. The discussion revolved around whether it was the time spent together that allowed them to develop this competence or if it was the actual learning of relationship skills from the intervention that influenced the social interaction between peers, as stated by Anne (school 1):

> We didn't know each other, so, it is difficult to say what influenced us; ROBUST, or if it [relationship skills] just evolved during the school year.

Discussion

The main aim of this study was to explore whether the social and emotional competencies (SEC) relationship skills, emotional regulation, mindfulness, growth mindset and problem-solving were perceived as supportive regarding coping with academic stress among a sample of lower secondary school students. The findings suggest that the students found mindfulness, problem-solving and growth mindset supportive to build coping resources for dealing with academic stress. In the case of emotional regulation and relationship skills, the findings were more mixed.

Supportive Competencies

Students seemed to perceive mindful breathing exercises as beneficial in terms of reducing negative thinking about upcoming academic performances. Mindful breathing exercises may have

strengthened the students' awareness of the present moment and hence making them more able to focus on the task at hand, instead of ruminating or worrying about similar situations from the past or future. The finding is supported by previous research suggesting that mindfulness increases the capacity to pay attention and improve concentration (Biegel et al., 2009; Broderick & Frank, 2014). Furthermore, the findings suggest that mindfulness strengthens the students' ability to cope with academic stress by becoming more accepting of the stress they experience, rather than worrying about academic performances. Research indicate that mindfulness brings forth an increased cognitive flexibility and enhanced level of acceptance (Chambers et al., 2009; Roemer et al., 2008). Accordingly, the findings from the current study may suggest that mindfulness stimulated the students' adequate emotion-focused coping strategies by strengthening their acceptance of stressful academic situations. The findings of this study further suggest that stimulating problem-solving may aid students in organizing their academic work, thus supporting their ability to cope with potential academic stress. Making plans for academic tasks, preparing for tests, and making schedules for schoolwork was experienced as particularly useful. This finding may be due to the relation between problem-solving and self-regulated learning (SRL), where the latter is known to involve a goal-oriented attitude of planning, monitoring, and conducting the process of academic work (Zimmerman & Moylan, 2009). Such goal-oriented planning may provide a sense of control regarding school-related tasks. A similar finding regarding the positive influence of SRL strategies on coping with stress has been proposed elsewhere (de la Fuente et al., 2015). Hence, creating more predictability of academic work through problem-focused coping strategies such as problem-solving may reflect a stronger sense of control when encountering academic stressors. Mindfulness practices and problem-solving strategies may have been perceived as supportive due to their concrete nature. Practices such as breathing exercises and making plans may actively engage students and hence making it easier to utilize. The benefits of active coping strategies, planning and learning positive reinterpretations among others have been advocated previously (Carver & Scheier, 2017). However, further studies are needed to gain more knowledge on the relation between such strategies.

Findings from the current study indicated that growth mindset was beneficial in terms of increasing students' optimistic thoughts about learning. This seems to have strengthened their belief in being able to master academic challenges and their motivation for coping adequately with challenging academic tasks. It has been shown that growth mindset positively influences students' abilities to cope with stressors in a more general manner (Kilby & Sherman, 2016). The use of cognitive strategies in learning processes may be associated with coping through a shift in students' mindset toward a more positive attitude regarding effort and motivation for schoolwork. This could relate to students' awareness of how intelligence can be understood as a malleable developmental feature (Dweck, 1999) and to students' understanding of academic learning as a process that requires effort and persistence. However, growth mindset was initially experienced as complicated but developed to be perceived as motivating for learning. This may reflect that growth mindset is indeed malleable and can motivate students' academic learning processes.

Challenging Competencies

Regarding emotional regulation and relationship skills the findings were more mixed, suggesting that students perceived these competencies as more challenging to stimulate and utilize. Negative emotions occur more often in adolescence (Chaplin & Aldao, 2013), which may explain why the students found emotional regulation strategies challenging as it may be somewhat overwhelming to work with ongoing negative emotions. It could also be that emotional regulation was experienced as too abstract to utilize when coping with academic stress. However, as adolescents may experience strong emotions, both in general and in regard to academic challenges, they likely require such strategies, but may need a longer period of time to develop emotional regulation strategies before they experience these approaches helpful in coping with academic stress. Similar arguments have been made (Tharaldsen, 2019).

Findings regarding relationship skills suggest that the students experienced positive changes in social interaction in the learning environment, however, there was also uncertainty as to whether this was due to specific relationship skills or if such skills had developed regardless of the intervention. The time-factor in regard to change may argue in favor of a need for adolescents to learn more explicitly about how to use relationship skills that may facilitate supportive learning that reduces stressful encounters in the learning environment. This suggestion is consistent with previous research (Goldberg et al., 2019) and in line with previously mentioned challenges of social interaction during adolescence, i.e., fear of being excluded (Dalen, 2014) and difficulties in establishing friendships (Bakken, 2019). The current findings, therefore, may suggest that students need a longer period in which to practice relationship skills to perceive it as a useful resource for coping with academic stress. That relationships are reciprocal and involve peers should also be considered. Young adolescents develop new and complex social relations, and additionally experience both positive and negative influences of social interaction that are important during this stage in life. This may bring forth challenges to using relationship skills as a way of coping with academic stress, which may be the case in the current findings. For a student to benefit from strengthened relationship skills, peers need to be inclusive and supportive. Perhaps the current and mixed findings reflect that the intervention needs to have a stronger emphasis on the social responsibility for including fellow peers to strengthen the students' perception of relationship skills as beneficial. Finally, skills for identifying emotions are crucial for developing and maintaining interpersonal relationships and a reciprocal relationship has been found between awareness of emotions and social support (Rowsell et al., 2016). Therefore, that both emotional regulation and relationship skills were perceived as challenging are perhaps not that surprising. Future studies are needed to explore this relationship further.

Strengths and Limitations

The current findings were based on qualitative focus group interviews. Perceptions and experiences expressed by the informants provided important first-hand information about how the target group reacted to the stimulation of the five SECs aimed at promoting coping with academic stress. However, social conformity may influence the communication process (Norris et al., 2012), and the social influence that occurs among adolescents may have made it difficult for the informants to disagree with peers and to express their own opinions during the interviews. To strengthen individual voices and the trustworthiness of the data and findings, the focus group interviews were conducted by experienced researchers, were extended, and involved a member check.

Due to little previous research, the study's findings may contribute with important knowledge to the field by informing the design and content of universal SEL interventions for adolescents aiming to deal with academic stress. The current study is a first step towards exploring student's perception of the SECs in coping with academic stress. Future studies should additionally focus on the possible interrelationship between the SECs under study.

Concluding Remarks

This study explored lower secondary school students' experiences with five SECs regarding coping with academic stress. The findings suggest that mindfulness support the adaptive use of emotion-focused strategies in academically challenging situations, that strengthened problem-solving may contribute to a stronger feeling of control in planning and solving academic tasks, and that stimulating a growth mindset may influence effort and academic mastery expectations among students. The findings further suggest that strategies within these areas are perceived as easier to utilize than relationship skills and emotional regulation. The latter finding could reflect the design of the different topics in the SEL intervention that was carried out. In the case of relationship skills, it may also be that the students found these skills more difficult because adolescence is a socially challenging

time in life. For the development of relationship skills to help cope with academic stress, it seems adequate to also work with collaborative contexts in the classroom. Furthermore, emotions are often strong and difficult to regulate in adolescence. This may indicate that special care should be taken regarding this topic when designing an educational approach to SECs. It may be adequate to facilitate interventions over longer periods and with more practical applications than what was the case in this study. However, the current findings provide new knowledge on how adolescents perceive the five SECs in ROBUST regarding building coping resources for academic stress. Findings also support the need for future SEL interventions with this aim in mind. More research is needed to explore the current and other SECs further to design and implement future SEL interventions aiming to build resources for coping with academic stress in adolescents.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

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