

Teachers' Emotion Socialisation: The Influence of Mental Health and Self-Control

Tine Marie Hodne

PSY4090

60 Credits

Department of Psychology

Faculty of Social Sciences



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2023

Title: Teachers' Emotion Socialisation: The Influence of Mental Health and Self-Control

Author: Tine Marie Hodne

Supervisors: Evalill Bølstad and Maud Edvoll

Abstract

Background: Teachers are increasingly being recognised as important contributors to children's emotion socialisation. It is therefore interesting to look at factors that influence teachers' socialisation behaviours. Research has found that both positive and negative mental health may have a significant impact. Further, self-control is known to be highly related to both mental health and behaviour. However, there is little research exploring the influence of self-control in connection to mental health and emotion socialisation in teachers. This study therefore aimed to investigate how mental health influences teachers' emotion socialisation in Norway, as well the role of self-control in this relationship.

Method: The present study used data from an online questionnaire administered in connection with the pilot project Norwegian Tuning into Kids School Intervention (N-TIK-SI). The sample (N = 94) consisted of teachers from two primary schools in Oslo, sampled through randomised controlled trials. To examine the influences of mental health, positive mental health was measured with a life satisfaction scale (SWLS), and negative mental health was measured with a psychological distress scale (HSCL). Self-control was measured with a measure of trait self-control (BMSCS). To assess teachers' supportive and non-supportive emotion socialisation, a measure of coping with children's negative emotions (CCNES) was used. The relationships between mental health and supportive and non-supportive emotion socialisation were investigated with two hierarchical regression analyses. Further, mediation analyses were conducted to investigate the role of self-control in this relationship.

Results: The results contradicted previous research, as the mental health variables were not significantly related to emotion socialisation variables. However, self-control was highly related to both mental health and emotion socialisation. Further, self-control significantly mediated the relationship between negative mental health and emotion socialisation. Self-control's mediating role on the relationship between positive mental health and emotion socialisation was close to significant.

Conclusion: Self-control is suggested to be a stronger predictor of emotion socialisation than mental health in teachers in Norway. Self-control is also indicated to mediate the effect of mental health on emotion socialisation. Considering the bidirectional relationship between self-control and mental health proven in previous literature, self-control may function as a common cause of both mental health and emotion socialisation. Furthermore, mental health may moderate the relationship between self-control and emotion socialisation, as individuals of varying mental health may utilise self-control in different ways.

Future research should further investigate these complex interrelations and the possibility of moderated mediation. Further, future research on emotion socialisation should carefully consider the alteration of mental health and emotion socialisation measures and their relationships, as these can widely differ between cultures and socioeconomic contexts. Future initiatives focusing on teachers could benefit from considering mental health as a complete state with both positive and negative mental health, in addition to increased promotion of positive mental health. Finally, these initiatives may also gain increased effect with the inclusion of self-control.

Keywords: teachers, emotion socialisation, positive mental health, life satisfaction, negative mental health, psychological distress, complete mental health, self-control

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Teachers' Emotion Socialisation: The Influence of Mental Health and Self-Control

Emotion socialisation plays a vital role in children's socio-emotional development, and can affect important life outcomes such as well-being, social competence, and academic achievement (e.g., Denham et al., 2003; Denham et al., 2012; Pons & Harris, 2019). Emotion socialisation is the process through which children learn emotional competence; the ability to experience, express, understand, and regulate emotions (Denham et al., 2007). It is well known that parents or primary caregivers are often the child's main socialisers. However, the importance of teachers as socialisers is being increasingly recognised as well (e.g., Ahn, 2005; Denham et al., 2002; Denham et al., 2012; Harding et al., 2019; Morris et al., 2013; Turner & Theilking, 2019).

Teachers spend a considerable amount of time with children, assisting them through academic, social, and emotional challenges throughout the day. Their emotion-related socialisation behaviours (ERSBs; emotional expression, contingent reactions, and discussion of emotions) are therefore a significant facilitator of children's emotional development (e.g., Denham et al., 2007; Eisenberg et al., 1998). For instance, through contingent reactions, teachers' discouragement or encouragement of children's emotional displays is related to emotional expressivity and emotional knowledge in children (Bassett et al., 2017; Morris et al., 2013). As another example, teachers' discussion of emotions with children may facilitate emotion knowledge and competence through learning causes and consequences of, as well as solutions to, emotional events occurring at school (Ahn, 2005; Denham et al., 2002; Morris et al., 2013).

When investigating teachers' emotion socialisation, it is interesting to look at which factors influence their ERSBs. Teachers' mental health is one characteristic that has shown to have a significant impact (e.g., Turner et al., 2021; Turner & Theilking, 2019). For instance, positive mental health is known to facilitate supportive emotion socialisation, while negative mental health is associated with non-supportive emotion socialisation (e.g., Denham et al., 2012; Harding et al., 2019; Turner et al., 2021). Further, self-control has been found to be related to both mental health (e.g., de Ridder & Gillebaart, 2017; Hofmann et al., 2014; Li et al., 2021a) and socialisation behaviours (e.g., Baumeister et al., 1998; Li & Li, 2020; Rusbult et al., 1991; Wills et al., 2008), and is therefore an interesting mediating factor to investigate as well.

Although teachers are increasingly being recognised as important emotion socialisers, literature on the impact of mental health on their ERSBs is still scarce (Jeon et al., 2019;

Sutton & Wheatley, 2003; Turner et al., 2021). Further, the relationship between mental health and self-control has seldom been investigated in the context of teachers. Even less so has the interrelationships between mental health, self-control and teachers' emotion socialisation been studied. The present thesis aims to bridge this gap, and raises the following questions: 1) How does teachers' mental health influence their emotion socialisation? 2) Does self-control mediate the relationship between teachers' mental health and their emotion socialisation?

The thesis will first explore existing literature on teachers' emotion socialisation. Next, it will investigate the influence of teachers' positive and negative mental health. Following, literature on self-control will be reviewed, including its associations with mental health and socialisation behaviours, as well as its function as a mediator. The thesis will then describe the present study.

Teachers' Emotion Socialisation

Through emotion socialisation, social partners transmit information about beliefs, values, and expectations regarding emotions, which are then internalised by the child (Bronfenbrenner, 1979; Denham et al., 2017; Grusec, 2011; Saarni & Crowley, 1990). Most central to this process are the interactions between the child and the socialisers (i.e., teachers), and how the socialisers choose to engage in emotion-related socialisation behaviours (ERSBs; Denham et al., 2007; Eisenberg et al., 1998).

ERSBs can be performed in supportive and non-supportive ways, either facilitating or impeding children's emotional development (e.g. Denham et al., 2007; Eisenberg et al., 1996; Fabes et al., 2002). For instance, supportive ERSBs include empathetic, expressive encouragement and problem-focused strategies. Empathetic strategies involve showing compassion and an understanding of the child's emotions. Expressive encouragement is the encouragement of discussion of emotions to promote increased emotional understanding. Problem-focused strategies aim to provide a solution and removing the source of the negative emotions. These supportive emotion socialisation strategies have been found to increase all aspects of emotional competence in children, in addition to social competence, empathy and well-being (e.g., Denham et al., 2020; Eisenberg et al., 1998; Fabes et al., 2002; Harding et al., 2019).

Non-supportive strategies include minimising strategies (discounting or devaluing children's emotions or problems), punitive strategies (verbal/physical punishment to restrict the expression of negative emotions), or distracting strategies (to shift focus away from the

negative emotions). Non-supportive emotion socialisation has been linked to many detrimental outcomes in children, such as decreased emotion regulation (Denham et al., 2020; Eisenberg et al., 1998; Fabes et al., 2001; Gottman et al., 1997), empathy and social responsiveness (Eisenberg et al., 1991; Fabes et al., 2001), and well-being (Harding et al., 2019).

Although research often highlights parents and other primary caregivers as the child's main socialiser, teachers have a vital role in the child's socio-emotional development as well (e.g., Ahn, 2005; Bassett et al., 2017; Denham et al., 2012; Harding et al., 2019; Poulou, 2020; Roorda et al., 2011). Naturally, children learn many social and emotional skills during school hours. For instance, peer interactions, conflict management, conformity and other emotional challenges are all opportunities for emotion socialisation. In these situations, teachers facilitate children's emotional development through ERSBs by creating emotionally supportive environments with sensitivity to students' emotions, while providing opportunities for discussion of emotions and autonomy (e.g., Denham et al., 2012).

To better understand teachers' emotion socialisation, it is interesting to explore factors influencing teachers' emotion socialisation behaviour. The heuristic model of emotion socialisation illustrates this: Which factors influence the socialiser's ERSBs (Eisenberg et al., 1998). One important factor in the model is the characteristics of the socialisers, such as personality or emotion-related beliefs. Of these characteristics, mental health in particular may heavily impact ERSBs (e.g. Beck et al., 2011; Harding et al., 2019; Jain et al., 2013; Kidger et al., 2015; Turner et al., 2021).

Mental Health in Teachers

Teaching can be an extremely demanding profession, as it involves the constant executive function demands of managing student behaviour (Harmsen et al., 2019; Sandilos et al., 2018). Since the stressors involved are persistent, teachers' mental health may be impacted as a result (Allies, 2021). In fact, as many as 50-85% of teachers report mental health issues (Allies, 2021; Capone & Petrillo, 2020; Hindman & Bustamante, 2019).

Mental health is defined by WHO as "a state of mental well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (para. 1). This does not only include the presence of positive mental health (i.e., life satisfaction), but also the absence of negative mental health (i.e., psychological distress). The dual factor model of mental health captures this distinction, conceptualising positive and negative mental

health as separate yet related dimensions (Greenspoon & Saklofske, 2001; Keyes et al., 2007). The distinction is well supported in the literature, as well as them having differing causes and consequences (Keyes, 2007; Kinderman et al., 2015; Suldo & Shaffer, 2008). For instance, individuals with absence of mental disorders proved to be less productive at work, have more physical illness, and reduced psychosocial functioning compared to individuals with increased positive mental health (Keyes, 2007). As another example, work-related stress has shown to increase teachers' negative affect without decreasing positive affect (e.g., Hamama et al., 2013). Evidently, both positive and negative aspects of mental health are important to investigate, as they can have differing impacts on mental and behavioural outcomes.

Negative Mental Health in Teachers

Negative mental health can include psychopathology and psychiatric disorders, but also health problems and other subsyndromal states such as psychological distress (Schönfeld et al., 2016). Psychological distress involves symptoms of depression or anxiety, or both, without necessity of a diagnosis (Mirowsky & Ross, 2003).

Psychological distress in teachers may impact their teaching style, socialisation behaviours and child outcomes (e.g. Denham et al., 2012; Harding et al., 2019; Koenen et al., 2019; Moe & Katz, 2021; Vermote et al., 2022). For instance, psychological distress has been linked to presenteeism in teachers, which in turn may influence ERSBs (Beck et al., 2011; Jain et al., 2013; Kidger et al., 2015). Presenteeism is defined as reduced performance at work due to health problems (Henderson et al., 2011). As presenteeism reduces engagement and self-efficacy (Hamre & Pianta, 2004), teachers may develop a reduced belief in their ability to assist children in emotional challenges (Bandura, 1977; Sisask et al., 2014). Subsequently, less opportunities may be utilised for discussions about emotions (Ahun et al., 2017).

Teachers' emotion socialisation may also be hampered by psychological distress through reduced mental and physical resources (e.g., Chang, 2009; Hamre & Pianta, 2004; Hindman & Bustamante, 2019; Jeon et al., 2019). For instance, psychological distress may lead to reduced energy, empathy, attention, working memory, creativity, and problem-solving skills (Billett et al., 2022; Hamre & Pianta, 2004; Hindman & Bustamante, 2019; Jeon et al., 2019). As a consequence, teachers' responsiveness and sensitivity may be reduced, in turn impeding supportive emotion socialisation (Hamre & Pianta, 2004; Jeon et al., 2019).

Lastly, psychological distress can also detriment emotion socialisation through increased negative affect and perspectives (Jeon et al., 2019). For example, teachers may have increased sensitivity or irritability to children's negative emotions, negative interpretations of events, and difficulty reappraising situations. Consequently, teachers may display increased negative expressivity and have reactions lacking empathy or understanding (Billett et al., 2022). Therefore, decreased internal resources due to psychological distress, together with increased negative affect, may therefore detriment teachers' emotion socialisation.

Research on teachers' mental health has traditionally had a deficit-based rather than a strength-based focus (Turner et al., 2021). However, there has been a recent focal shift, with the attention turning towards complete mental health (encompassing both positive and negative mental health; Capone & Petrillo, 2020; Winzer et al., 2014). Moreover, the promotion of positive mental health has increased, including maintenance of well-being and use of positive psychology strategies in teachers (Folkman, 2008; Turner & Theilking, 2019).

Positive Mental Health in Teachers

Positive mental health can be conceptualised as well-being, involving both life satisfaction and positive affect (Diener et al., 1985; Ryan & Deci, 2001; Stewart-Brown & Janmohamed, 2008). Life satisfaction is a positive subjective evaluation of one's quality of life, either as a whole or in specific areas (Seligson et al., 2003; Veenhoven, 1991), while positive affect is the subjective experience of positive moods (Miller, 2011). Some might argue that life satisfaction is a more reliable predictor of subjective well-being, since it is stable across moods and affective states (e.g., Gilman et al., 2008; OECD, 2017; Rees et al., 2013). However, as there is scarce research specifically relating teachers' life satisfaction to their emotion socialisation, research on well-being in general will be reviewed.

Well-being in teachers may impact their emotion socialisation in many ways. First, well-being is suggested to be imperative for the maintenance of high-quality interactions with students (Li-Grining et al., 2010). High-quality interactions are beneficial in emotion socialisation because they involve gaining a deeper understanding and facilitate learning opportunities. Second, teachers with improved well-being may have increased resources to handle their own as well as children's emotional challenges (Hindman & Bustamante, 2019; Sandilos et al., 2018). These may include increased emotional awareness and attention (Denham et al., 2012; Jeon et al., 2019; Moe & Katz, 2021), increased self-control (de Ridder

& Gillebaart, 2017; Zheng et al., 2019), and increased cognitive functioning (Sutton & Wheatley, 2003). These resources are beneficial in supportive emotion socialisation as they promote responsiveness and sensitivity in teachers (Chang, 2009; Hamre & Pianta, 2004; Jones & Youngs, 2012; Koenen et al., 2019). Consequently, teachers may take more notice of children's struggles and find empathetic ways to support them.

Third, well-being in teachers has been linked to more supportive emotion socialisation through higher teaching engagement and beliefs in self-efficacy (Sisask et al., 2014; Turner & Theilking, 2019). As a result, teachers may engage in more proactive behaviour, and may take more advantage of scaffolding opportunities throughout the day (Hindman & Bustamante, 2019). Hence, teacher well-being may promote more socialisation of emotional understanding (Hindman & Bustamante, 2019).

Lastly, teachers with increased well-being may have more supportive ERSBs through increased positive affect (Harding et al., 2019; Turner et al., 2021). Teachers with increased positive affect may exhibit more positive emotional expressivity, which may in turn elicit more positive reactions to children (Harding et al., 2019). Furthermore, positive affect may lead to more positive situational appraisals, facilitating creative solutions and supportive behaviour.

As is evident, both positive and negative mental health are determinants of emotion socialisation in distinct ways. These associations may, however, be influenced by other teacher characteristics, such as self-control. In addition to being highly related to mental health, self-control is known to function as a strong influence on behaviour, as well as a mediator of mental health (e.g., Cheung et al., 2014; Li et al., 2020; Li & Li, 2020; Moe & Katz, 2021; Zheng et al., 2019).

Self-Control in Teachers

Considering the heuristic model (Eisenberg et al., 1998), self-control is another important characteristic of the socialiser, related to other internal characteristics as well as behaviour (e.g., de Ridder & Gillebaart, 2017; Duckworth & Seligman, 2005). Self-control is defined as the ability to interrupt, override, or change inner responses and undesirable behaviour (inhibitory self-control; Tangney et al., 2004), and the use of proactive and conscious strategies to reach one's long-term goals (initiatory self-control; Sklar et al., 2017). Further, self-control can be conceptualised as a state varying across situations and over time, and as a trait that is stable across situations (Nilsen et al., 2020). However, this thesis will

refer to trait-self-control only, as it is suggested to be a more stable measure of self-control (Nilsen et al., 2020).

Self-control is related to many important life outcomes, including mental health (e.g., de Ridder & Gillebaart, 2017; Hofmann et al., 2014; Li et al., 2021a), behaviour, and work performance (Duckworth & Seligman, 2005; Li et al., 2021b). More specifically, self-control has a positive and bidirectional association with mental health (e.g., de Ridder & Gillebaart, 2017; Li et al., 2021a). First, increased self-control abilities such as pursuing and attaining goals, using positive coping strategies, and increased emotion regulation, all contribute to improved mental health (e.g., Boals et al., 2011; de Ridder et al., 2011; Li et al., 2016; Olčar et al., 2017). Inversely, positive mental health may promote self-control through an increased focus on positive events, motivating more proactive and approach-oriented (as opposed to avoidance-oriented) behaviour (e.g., Cheung et al., 2014; de Ridder & Gillebaart, 2017; Zheng et al., 2019).

Research has shown that self-control also has a large influence on both behaviour and work performance, including teachers' emotion socialisation (e.g., de Ridder et al., 2012; Duckworth & Seligman, 2005; Li et al., 2016). Self-control may facilitate supportive emotion socialisation through inhibition of negative responses, and initiation of positive strategies. For example, inhibitory self-control may hinder negative responses such as yelling or minimising the child's emotions. Further, initiatory self-control may facilitate empathetic reactions or engaging in proactive discussions of emotions.

Mechanisms of Self-Control

The relationship between self-control, mental health and emotion socialisation can be understood through theories describing the underlying mechanisms of self-control, such as the limited strength model (Baumeister et al., 1988) and the positive-negative asymmetry model (Baumeister et al., 2001). The limited strength model conceptualises self-control as a limited resource that can be improved and depleted. Teachers with higher self-control will therefore have a larger capacity to engage in more supportive emotion socialisation strategies (Hindman & Bustamante, 2019). As mental health and self-control are positively correlated, increased mental health may lead to a larger self-control capacity (de Ridder & Gillebaart, 2017; Zheng et al., 2019). In this sense, the limited strength model illustrates self-control as mediating the relationship between mental health and emotion socialisation through an increased capacity to perform supportive emotion socialisation.

This conceptualisation is in line with previous research on mental health and behaviour supporting self-control as a mediator (e.g., Li et al., 2020; Li & Li, 2020; Moe & Katz, 2021; Zheng et al., 2019). For instance, Moe & Katz (2021) found that the ability to regulate one's own emotions mediated the association between teachers' need satisfaction and the use of motivating teaching styles. Similarly, Aelterman and colleagues (2019) found that teachers whose psychological needs are satisfied have increased motivational resources and adopt more supportive strategies with their students. These findings support the self-control as a mediator of mental health, in that teachers with improved mental health also have increased self-control skills, facilitating the adoption of supportive emotion strategies.

Another interesting aspect is whether teachers with increased negative mental health use more self-control resources than teachers with increased positive mental health. The positive-negative asymmetry model of self-control conceptualises this through the discrepancy of resources needed in positive and negative events (Baumeister et al., 2001). As negative events have stronger effects or weigh more than positive events, then one would utilise more self-control to inhibit negative behaviour than to initiate positive behaviour (Baumeister et al., 2001; Rusbult et al., 1991). For instance, when a child is misbehaving, it may demand more effort for a teacher to stop themselves from getting angry than to respond in a supportive way (although these two are often part of the same process). Furthermore, as negative mental health is associated with more negative events (such as negative emotions, reduced self-efficacy beliefs and so on), teachers with negative mental health may have more frequent self-control demands compared to teachers with improved mental health. Therefore, teachers with negative mental health may not only have a reduced self-control capacity but may also deplete this capacity more rapidly.

Conversely, research indicates that individuals with positive mental health have higher self-control capacities and fewer self-control demands because they use self-control differently (de Ridder & Gillebaart, 2017). For instance, individuals with positive mental health often exhibit effortless self-control (a form of initiatory self-control), as they may avoid motivational conflict by reducing exposure to situations or thoughts involving problematic desires. Hence, positive mental health may lead to a reduced need to engage in self-control behaviours, therefore depleting their self-control resources at a reduced pace (Hofmann et al., 2014).

In summary, self-control is associated with both mental health and emotion socialisation in several ways. First, self-control has a bidirectional, positive relationship with mental health. Second, self-control is highly beneficial in initiating supportive ERSBs, and

inhibiting non-supportive ERSBs. Third, self-control is suggested to mediate the relationship between mental health and emotion socialisation, through an increased capacity for ERSBs. Thus, the existing literature suggests significant, yet complicated, relationships between mental health, self-control, and emotion socialisation. There is, however, limited research supporting these interrelations in the context of teaching. This thesis aims to further develop the knowledge on mental health's influence on teachers' emotion socialisation, and to bridge the knowledge gap of self-control as a mediator of this association.

The Present Study

The present study aims to investigate the distinct influences of positive and negative mental health on supportive and non-supportive emotion socialisation, and the possible mediating role of self-control in these relationships. The following research questions (RQ) and hypotheses will be examined:

RQ1: How does teachers' mental health influence their emotion socialisation?

H1a. Life satisfaction has a positive association with supportive emotion socialisation.

H1b. Life satisfaction has a negative association with non-supportive emotion socialisation.

H2a. Psychological distress has a negative association with supportive emotion socialisation.

H2b. Psychological distress has a positive association with non-supportive emotion socialisation.

RQ2: Does self-control mediate the relationship between teachers' mental health and their emotion socialisation?

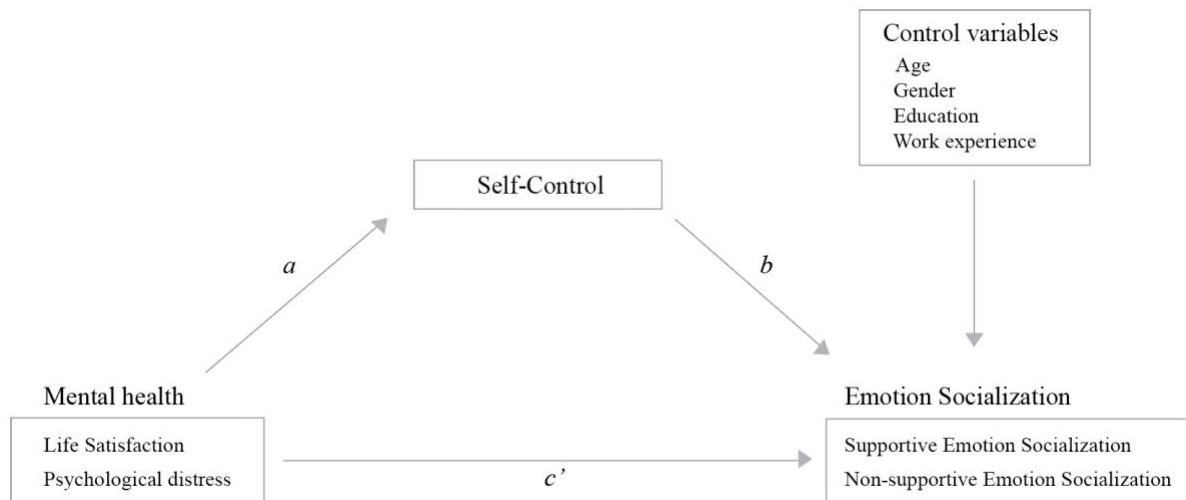
H3a. Life satisfaction is positively associated with self-control, in turn leading to more supportive, and less non-supportive emotion.

H3b. Psychological distress is negatively associated with self-control, leading to less supportive and more non-supportive emotion socialisation.

The above are hypothesised when controlling for age, gender, education, and work experience, as these may have confounding effects (Burchinal et al., 2002; Denham et al., 2012, Huberman, 1993; Sutton & Wheatley, 2003). The following theoretical model outlines the hypothesised interrelations between the factors under investigation.

Figure 1

Conceptual framework illustrating the interrelations between mental health, self-control, and emotion socialisation



Method

The present study used data from the pilot project Norwegian Tuning into Kids School Intervention (N-TIK-SI), led by principal investigator (PI) Evalill Bølstad, Associate Professor at the University of Oslo. TIK is an intervention aiming to improve parental emotional competence and parent-child interactions (Havighurst & Harley, 2007). N-TIK-SI implemented the TIK intervention in a school setting, administering a survey and CLASS observation (Pianta et al., 2008) before and after teachers received the TIK training. Due to attrition during the N-TIK-SI study, only baseline data was used in the present study.

Ethical Approval

This study is under the ethical scope of N-TIK-SI, approved by Norwegian Centre for Research data (SIKT, formerly NSD; ref. no. 580592) and the internal ethical committee (Department of Psychology, PSI; ref. no. 8382785). Personal information provided by the respondents in the study is stored in Services for Sensitive Data (TSD), only accessible to individuals involved in the project.

Procedure

Participants were sampled through a randomised controlled trial. Five schools in Oslo were randomised to an intervention or control condition based on school size and geographical areas. However, as the pilot study tested different measures in different schools, this study will only include the two schools that received the relevant questionnaire.

Headmasters of these schools were contacted and instructed to inform teachers. The survey was then administered locally through links to an online survey at the associated schools in the fall of 2021, with a research assistant present to increase response rate and be available for any inquiries.

Participants

The participants who voluntarily responded to the questionnaire included 95 teachers from grades 1-4, at two different primary schools in Oslo. There were no exclusion criteria other than the voluntary nature of the project and being able to read and understand the Norwegian questionnaire. The final sample consisted of 31 males (33%) and 63 females (67%), ranging from age 20 to over 60, with almost 40% of participants between age 20-29. Eighty four percent of participants were born in Norway or identified as having Norwegian nationality. Over 50% of the participants had at least four years of university education, and between 0-5 years of work experience. In other words, most participants were young, Norwegian, newly educated female teachers. See Table 1 in the Appendix for an overview of all sociodemographic characteristics.

Measures

The survey administered in N-TIK-SI was developed based on previous knowledge on the relevant concepts. It included several existing scales as well as scales created for the intents of N-TIK-SI. Participants were asked to fill out demographic information, as well as scales measuring mental health, self-control, and emotion socialisation behaviours. The scales that were not already translated to Norwegian were translated and back-translated, then discussed with English-speaking psychologists to find the best translated version. Measures from the questionnaire used in this study are listed below. Measures that are not utilised in this study will not be presented.

Mental Health

Mental health was measured using the *Satisfaction With Life Scale* and the *Hopkins Symptoms Checklist*. The five-item *Satisfaction With Life Scale* (SWLS, Diener et al., 2010) was used in this study as a measure of positive mental health, as life satisfaction is an important aspect of well-being (e.g. Diener et al., 1985). SWLS is measured on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). Items include for instance “In most areas, my life is near my ideal”, “I am satisfied with my life”, and “So far, I have received the most important things I want in life”. SWLS is widely used, correlates with measures of mental

health, has convergent validity with other subjective well-being measures, and has good reliability (Pavot & Diener, 2008). In the present study, the measure had a good Cronbach's alpha value ($\alpha = .89$).

The Hopkins Symptom Checklist 10 (HSCL-10, Tambs & Moum, 1993) was included in this study as a composite measure of negative mental health. It includes ten items rating frequency within a week on a Likert scale from 1 (not at all) to 4 (extremely). Four items measured anxiety (i.e., "Suddenly scared for no reason"), and six items measured depression (i.e., "Have little hope for the future"). In this study, the measure was kept as a single measure of psychological distress. HSCL-10 is a widely used and valid measure of symptoms of depression and anxiety (Schmalbach et al., 2021). The Cronbach's alpha value was good ($\alpha = .89$).

Self-Control

Self-control was measured by combining the eight-item *Brief Multidimensional Self-Control Scale* (BMSCS, Nilsen et al., 2020), with three items from the full version (MSCS, Nilsen et al., 2020). The scale is measured on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). Items included for example "When I'm feeling down, I try to think about something positive", "I am easily interrupted by impulses", and "I have a hard time starting things". Nilsen et al. (2020) concluded that the internal consistency of BMSCS was acceptable. In the present study, the adapted BMSCS was kept as a single trait measure of self-control and had an acceptable Cronbach's alpha value of $\alpha = .72$.

Emotion Socialisation

Finally, teacher's emotion socialisation was measured using the *Coping with Children's Negative Emotions Scale* (CCNES, Fabes et al., 1990), adapted to the context of teaching (originally developed for parents). CCNES assesses how caregivers would typically react in various situations where children express negative emotions. The scale was translated to Norwegian, back-translated and proofread by psychologists and bilingual scholars (Bjørk et al., 2020). The adapted CCNES scale consists of seven items involving hypothetical situations with three response options each. The scale was shortened from twelve items due to a pre-pilot pointing to the need for brief questionnaires. Teachers responded how likely it was that they would respond in each of the options on a 7-point Likert scale from 1 (very unlikely) to 7 (very likely). The adapted CCNES includes two subscales measuring response styles to children's emotions: Supportive emotion socialisation (expressive encouragement, empathy and problem solving), and non-supportive emotion socialisation (minimising and

distraction). The original punitive style was replaced with a distraction subscale, as trials of TIK in Norway suggested that distraction is preferred over punishment among Norwegian parents as strategies to dismiss emotions (Bjørk et al., 2020). An example of an item in CCNES is: “If a student’s jacket is damaged during recess and reacts with anger and externalising behaviour, I would...” 1) “Help the student to find out how he/she can fix their jacket” (problem-focused), 2) “Support the student in their negative emotions regarding the damaged jacket” (empathy), and 3) “Ask the student to calm down and tell them that the jacket can be fixed” (minimising). CCNES is a valid and reliable self-report questionnaire (Fabes et al., 2002). The adapted version in the present study had a good alpha value ($\alpha = .82$).

Data Analytic Strategy

To examine the relationship between mental health and emotion socialisation in teachers, as well as the possible mediating effect of self-control, several analyses were performed. IBM SPSS Statistics (26.0) was used for all data preparation and analyses. Preliminary analyses checked assumptions, followed by descriptive and correlational analyses. Next, hierarchical multiple regressions were conducted to assess the relationships between mental health and emotion socialisation variables (RQ1), taking control variables and self-control into account. Finally, mediation analyses were performed to investigate whether self-control mediates the relationship between mental health and emotion socialisation (RQ2). Demographic variables age, gender, education, and work experience are included in the study as control variables.

Results

Data Preparation and Preliminary Analyses

In data preparation, the data was first screened for abnormal or missing data. One participant’s response was excluded due to unserious responses (ratings of identical nature in two consecutive measures). There was also one participant with missing values in the CCNES measure. However, as this was due to measurement error (only this participant received a paper version and could therefore omit responses), the response was still included. Mean imputation was chosen as the missing responses constituted under 1% of responses, hence, neither significantly impacting the mean nor the standard deviation.

In preliminary analyses, univariate and multivariate outliers were detected in several variables. However, all outliers were genuine scores, and they were not categorized as

extreme. Additionally, winsorizing the outliers had little effect on skewness or means. Therefore, the original values were kept. Further, of all the study variables, considerable positive skewness was only detected in HSCL. This indicates that most of the respondents had low scores of psychological distress. However, measures of depression and anxiety tend to be positively skewed due to the nature of the phenomena in the general population. Unfortunately, there were no non-parametric alternatives viewed appropriate to the current statistical analyses. Further, as transforming data may lead to information loss, difficult interpretations, and impact the interrelations among variables (Lee, 2020), transformation of HSCL was not performed. Fortunately, with a sample of $N = 94$, the skewness would not significantly impact analyses due to normally distributed residuals and normal distribution in the dependent variable (Tabachnick & Fidell, 2013). Assumptions of normally distributed residuals, a linear relationship and homoscedasticity were met for all study variables.

Descriptive Statistics

The primary school teachers in Oslo had a positive trend regarding mental health, with above average life satisfaction ($M = 4.9$; $SD = 1.09$) and low psychological distress ($M = 1.46$; $SD = .46$). The teachers had slightly above average self-control ($M = 3.53$; $SD = .45$), and a stronger tendency towards supportive emotion socialisation ($M = 5.41$; $SD = .67$) than non-supportive emotion socialisation ($M = 4.11$; $SD = .87$). More detailed descriptive statistics can be found in Table 2 in the Appendix.

Correlations between variables are shown in Table 3. Regarding demographic variables, gender and supportive emotion socialisation had a significant positive correlation, indicating that females score higher on supportive emotion socialisation. Next, age had a significant negative correlation with psychological distress, and a significant positive correlation with self-control.

In relation to RQ1 (How does teachers' mental health influence their emotion socialisation?), only hypothesis H1a was supported: life satisfaction had a small significant positive correlation with supportive emotion socialisation ($p < .05$). However, life satisfaction had no significant correlation with non-supportive emotion socialisation (contradicting H1b). Psychological distress did not significantly correlate with supportive or non-supportive emotion socialisation (opposing H2a and H2b).

Table 3*Correlations*

	1	2	3	4	5	6	7	8	9
1 Life satisfaction	-	-.29**	.30**	.20*	.12	.00	.14	-.05	.04
2 Psychological distress		-	-.35**	.09	.09	.06	-.21*	.01	-.11
3 Self-control			-	.27**	.29**	.05	.21*	-.09	.15
4 Supportive emotion socialisation				-	.51**	.23*	-.15	.02	-.09
5 Non-supportive emotion socialisation					-	-.06	-.10	-.07	-.11
6 Gender						-	.17	.02	.06
7 Age							-	-.12	.76**
8 Education								-	-.22*
9 Work experience									-

Note. ** $p < 0.01$; * $p < 0.05$.

In relation to RQ 2 (Does self-control mediate the relationship between teachers' mental health and their emotion socialisation?), mental health and self-control were highly related. Life satisfaction was significantly positively correlated with self-control ($p < .01$), and psychological distress was significantly negatively correlated with self-control ($p < .01$). Self-control was also highly related to emotion socialisation, with a significant positive correlation with both supportive and non-supportive emotion socialisation ($p < .01$; $p < .01$). All correlations were small. These results may indicate partial support for mediation hypotheses (H3a and H3b).

Table 3 suggests that only the demographic variables gender and age are significantly related to the study variables. Therefore, work experience and education were removed from the main analyses.

Main Analyses

First, RQ1 (regarding the relationship between teachers' mental health and their emotion socialisation) was assessed with two hierarchical multiple regressions. The first assessed the relationship between teachers' positive and negative mental health and supportive emotion socialisation (testing H1a and H2a), and the second with non-supportive emotion socialisation (testing H1b and H2b). Hierarchical multiple regression was chosen with regards to RQ2 (self-control's mediating effect), to assess the added value when including self-control in the model. Next, RQ2 (regarding the mediating effect of self-control) was investigated with four mediation analyses, addressing H3a and H3b.

RQ1: How Does Teachers' Mental Health Influence Their Emotion Socialisation?

Results of the hierarchical multiple regression investigating supportive emotion socialisation are displayed in Table 4. In Step 1, age and gender explained 9% of variation in supportive emotion socialisation, significantly predicting supportive emotion socialisation ($F(2, 91) = 4.363, p < .05$). The results indicate that females and younger teachers scored higher on supportive emotion socialisation than males and older teachers. In Step 2, life satisfaction and psychological distress increased explained variance to 14% ($F(4, 89) = 3.646, p < .05$). This indicates that mental health explained 5% of variance in supportive emotion socialisation. However, The F change for the model as a whole was nonsignificant. In Step 2, life satisfaction was significantly positively related to supportive emotion socialisation ($b = .16, p = .021$), supporting H1a. However, when self-control was added in Step 3, this effect became nonsignificant ($b = .11, p = .079$), rejecting H1a. These and other results regarding self-control will be further elaborated under RQ2 and in the discussion.

Psychological distress had no significant relationship with supportive emotion socialisation, rejecting H2a. In relation to RQ1, teachers' mental health did not seem to be highly related to supportive emotion socialisation. Age, gender, and self-control on the other hand were significant predictors.

Table 4

Hierarchical multiple regression results: mental health and supportive emotion socialisation

	<i>B</i>	<i>SE</i>	β	95% <i>CI</i>		<i>p</i>	ΔR^2	<i>F</i>	Sig <i>F</i> Change
				<i>LL</i>	<i>UL</i>				
Model 1						.016*	.09	4.362	.016*
Age	-0.12	0.06	-0.19	-0.24	0.01	.062			
Gender	0.37	0.15	0.26	0.08	0.66	.012*			
Model 2						.008**	.05	3.646	.069
Age	-0.12	0.06	-0.21	-0.25	-0.00	.047*			
Gender	0.37	0.14	0.26	0.08	0.65	.012*			
Life satisfaction	0.16	0.07	0.25	0.02	0.29	.021*			
Psychological distress	0.14	0.16	0.10	-0.17	0.45	.381			
Model 3						<.001**	.09	5.286	.002**
Age	-0.15	0.06	-0.25	-0.27	-0.03	.014*			
Gender	0.34	0.14	0.24	0.07	0.61	.013*			
Life satisfaction	0.11	0.06	0.18	-0.01	0.24	.079			
Psychological distress	0.26	0.15	0.18	-0.04	0.57	.092			
Self-control	0.49	0.15	0.33	0.19	0.80	.002**			

Note. ** $p < .01$; * $p < .05$; *CI* = confidence interval; *LL* = lower limit; *UL* = upper limit.

Table 5*Hierarchical multiple regression results: mental health and non-supportive emotion socialisation*

	<i>B</i>	<i>SE</i>	β	95% <i>CI</i>		<i>p</i>	ΔR^2	<i>F</i>	Sig <i>F</i> Change
				<i>LL</i>	<i>UL</i>				
Model 1						.574	.01	.559	.574
Age	-0.08	0.08	-0.10	-0.24	0.09	.363			
Gender	-0.07	0.20	-0.04	-0.46	0.32	.712			
Model 2						.418	.03	.988	.249
Age	-0.08	0.08	-0.10	-0.25	0.09	.347			
Gender	-0.08	0.20	-0.04	-0.47	0.31	.677			
Life satisfaction	0.15	0.09	0.19	-0.03	0.33	.100			
Psychological distress	0.18	0.21	0.09	-0.25	0.60	.413			
Model 3						.011*	.11	3.182	.001**
Age	-0.11	0.08	-0.15	-0.27	0.05	.158			
Gender	-0.11	0.19	-0.06	-0.48	0.26	.548			
Life satisfaction	0.09	0.09	0.11	-0.08	0.26	.299			
Psychological distress	0.35	0.21	0.19	-0.06	0.77	.094			
Self-control	0.70	0.21	0.37	0.29	1.12	.001**			

Note. ** $p < .01$; * $p < .05$; CI = confidence interval; *LL* = lower limit; *UL* = upper limit.

The hierarchical multiple regression investigating non-supportive emotion socialisation is displayed in Table 5. In Step 1, age and gender explained 1% of variance in non-supportive emotion socialisation ($F(2, 91) = .559, p = .574$). Adding life satisfaction and psychological distress in Step 2 resulted in a nonsignificant *F* change, explaining a total of 4% of variance in non-supportive emotion socialisation ($F(4, 89) = .988, p = .418$). Life satisfaction did not have significant negative association with non-supportive emotion socialisation ($b = .09$), contradicting H1a. Similarly, psychological distress did not have a significant positive relation with non-supportive emotion socialisation ($b = .35$), contradicting H2a.

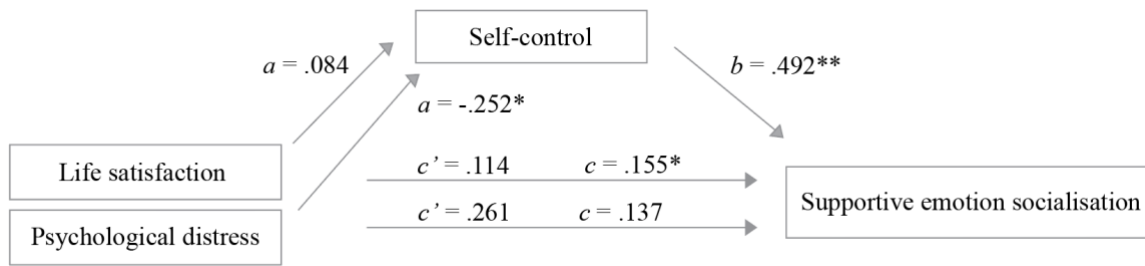
In sum, teachers' mental health was not significantly related to emotion socialisation. Self-control, however, is suggested to be a strong predictor.

RQ2) Does Self-Control Mediate the Relationship Between Teachers' Mental Health and Their Emotion Socialisation?

The mediation analyses tested whether the relationships between mental health and emotion socialisation are explained by self-control, in that mental health influences self-control, which then influences emotion socialisation. Mediation analyses were run using PROCESS macro (Hayes, 2013). Results are illustrated in Figure 2 and Figure 3.

Figure 2

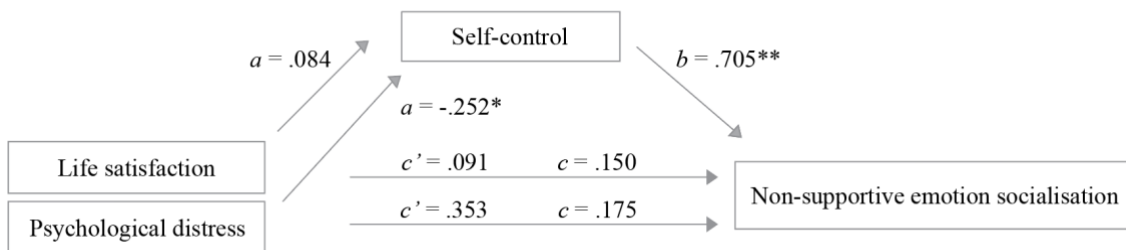
Illustration of mediation analyses results: supportive emotion socialisation



Note. ** $p < .01$; * $p < .05$.

Figure 3

Illustration of mediation analyses results: non-supportive emotion socialisation



Note. ** $p < .01$; * $p < .05$.

Figures 2 and 3 shows that self-control did not significantly mediate the relationships between life satisfaction and emotion socialisation variables (rejecting H3a), as the confidence intervals for the indirect effect included zero (see Table 6 in the Appendix). In addition, life satisfaction was not significantly related to self-control in either of the models. However, self-control was significantly positively related to both emotion socialisation variables ($p < .01$; $p < .01$).

Regarding psychological distress and emotion socialisation variables, Figures 2 and 3 show that self-control significantly mediated these relationships. This was evident as psychological distress was significantly related to self-control ($p < .05$), and self-control was significantly related to emotion socialisation variables ($p < .01$; $p < .01$) Further, the confidence intervals for the indirect effects did not include zero (supporting H3b).

Results also show a significant total effect (c) between life satisfaction and supportive emotion socialisation ($p < .05$), indicating a significant total influence from life satisfaction

to supportive emotion socialisation, including the influence from self-control. No direct effects (c') were significant.

Discussion

The current study investigated the impact of mental health and self-control on teachers' emotion socialisation. Previous studies have shown that positive mental health in teachers is related to supportive emotion socialisation, and that negative mental health is related to non-supportive emotion socialisation. The present findings contradict previous research, as no significant relationships between mental health and emotion socialisation were found. Next, self-control is known to have a bidirectional relationship with mental health, and to influence emotion socialisation. Self-control has also been suggested to function as a mediator in studies on mental health and behaviour, which this study found partial support for.

Findings

Overall, teachers in this study had above average life satisfaction and self-control, low levels of psychological distress, and a stronger tendency towards supportive than non-supportive emotion socialization. Females had significantly higher levels of supportive emotion socialization than males. Further, older teachers had significantly higher self-control and lower psychological distress than younger teachers. Work experience and education did not have any significant relationships other than with each other, and higher work experience related to higher age.

RQ1: How Does Teachers' Mental Health Influence Their Emotion Socialisation?

The present study sought out to investigate the relationship between mental health and emotion socialisation in teachers. Based on previous literature, it was hypothesised that positive mental health was positively related to supportive emotion socialisation (H1a), and negatively related to non-supportive emotion socialisation (H1b). Similarly, it was hypothesised that negative mental health was negatively related to supportive emotion socialisation (H2a), and positively related to non-supportive emotion socialisation (H2b).

Initially, the correlation analysis and the hierarchical regression showed a significant positive relationship between positive mental health and supportive emotion socialisation, supporting H1a. This is consistent with previous literature stating the powerful and discrete influences of positive mental health. Specifically, these results support the evidence that teachers with improved mental health engage in more supportive behaviours towards their

students (Hindman & Bustamante, 2019). However, it is implausible to infer the mechanisms behind this connection, as the study did not include the appropriate measures for this. For instance, one could measure internal resources such as energy, attention or affect.

Although there initially seemed to be a relationship between positive mental health and supportive emotion socialisation, this relationship may have been artificially inflated in this study. This is evident in Step 3 in the hierarchical regression, where the addition of self-control rendered the relationship nonsignificant. This suggests a confounding effect from self-control, explained by self-control being associated with both mental health (possibly bidirectionally) and emotion socialisation. Hence, after taking self-control into account, positive mental health did not have a strong influence on supportive emotion socialisation.

Next, H1b was rejected as there was no significant relationship between positive mental health and non-supportive emotion socialisation. Although it was nonsignificant, the relationship had an unexpected positive direction. This is unexpected as previous literature supports a negative relationship. However, the nonsignificant finding as well as the positive direction may be due to the emotion socialisation variables being positively correlated. The positive correlation may be explained by the alteration of the measure to a Norwegian context, therefore removing punitive strategies. Further, many of the non-supportive alternatives were positively framed (i.e., suggesting doing something fun together can be interpreted with positive intentions), thereby possibly instigating higher scores on both variables. It is therefore probable that the positive correlation between supportive and non-supportive emotion socialisation explains the lacking strength and unexpected direction of relationship between positive mental health and non-supportive emotion socialisation.

Negative mental health was not significantly related to either supportive or non-supportive emotion socialisation (rejecting both H2a and H2b), contradictory to previous research. There are several possible explanations for this. First, the demographic variables age and gender accounted for much of the variation in supportive emotion socialisation. Second, the influence of other factors not included in this study must be considered. For example, teachers' beliefs and values regarding emotions may heavily influence their automatic responses and choice of ERSBs (Denham et al., 2007; Saarni, 1999). Further, teachers' own emotional competence and awareness are also known to influence emotion socialisation (Arace et al., 2012; Ersay, 2007; Denham et al., 2020). Lastly, teacher-student relationships have also shown to be influential (e.g., Spilt et al., 2011). Third, the nonsignificant findings may be due to the small, homogeneous sample and the low internal variation in the mental health scores. It is possible that future studies on teachers' mental

health and emotions socialisation using a larger and more diverse sample may provide different findings.

An interesting occurrence was that the predictive effects of psychological distress on emotion socialisation dramatically increased after self-control was added to the regression models. This suggests a suppressor effect from self-control. As self-control and psychological distress have a strong negative relationship, and both have a positive relationship with emotion socialisation variables, there may also be a case of reciprocal suppression or suppression confounder (Pandey & Elliot, 2010). Hence, self-control and psychological distress are indicated to share error variance that is irrelevant to emotion socialisation. Therefore, the irrelevant variance in psychological distress is removed when controlling for self-control, increasing the effect of psychological distress on emotion socialisation.

The present results support the conceptualisation of positive and negative mental health as distinct concepts with different consequences. This is evident by the differing relationships between positive and negative mental health and emotion socialisation variables, as positive mental health initially seemed to have a significant predictive value, while negative mental health did not. Furthermore, the predictive values of positive and negative mental health were differently impacted by self-control, either reducing or increasing their significance. This distinction was also supported by the finding that positive and negative mental health were highly correlated yet not enough to cause collinearity.

In summary, the study found no significant relationships between mental health and emotion socialisation. Self-control, however, proved to be an important factor to consider in these relationships.

RQ2) Does Self-Control Mediate the Relationship Between Teachers' Mental Health and Their Emotion Socialisation?

The present thesis also sought out to investigate the role of self-control in the relationship between mental health and emotion socialisation. In line with previous research, it was hypothesised that self-control would have a mediating role: positive mental health would lead to increased self-control, and therefore also increased supportive emotion socialisation and decreased non-supportive emotion socialisation (H3a). Conversely, it was hypothesised that negative mental health would lead to decreased self-control, and therefore also decreased supportive emotion socialisation and increased non-supportive emotion socialisation (H3b).

The results did not support H3a, as self-control did not mediate the relationship between positive mental health and emotion socialisation variables. This finding is explained by the weak relationship between life satisfaction and self-control in the mediation analyses. However, this finding contradicts the correlation analysis showing a significant positive relationship between life satisfaction and self-control. Therefore, there may be an indication that this relationship functions in the opposite direction, with self-control having a causal effect on life satisfaction. This has previously also been supported in the literature (e.g., de Ridder & Gillebaart, 2017). In this case, self-control would be a confounder, rather than a mediator, due to its function as a common cause of mental health and emotion socialisation. In other words, instead of the effect of positive mental health going through self-control to influence emotion socialisation, self-control would possibly influence both variables independently.

Although the present study did not find a significant mediating effect of self-control on the relationship between positive mental health and emotion socialisation, this effect was only slightly nonsignificant. First, paths a and b should typically be significant to find mediation. Path b, the relationship between self-control and supportive emotion socialisation, was significant. Path a, the relationship between life satisfaction and self-control, was not far from significant. Next, looking at the confidence intervals in the mediation analysis, (see Table 6 in the Appendix), self-control was close to positively mediating the relationship between life satisfaction and emotion socialisation variables. In this case, as self-control was also positively related to both supportive and non-supportive emotion socialisation (as with mental health variables), a mediation effect would infer that increased positive mental health increases self-control, which increases both supportive and non-supportive emotion socialisation.

Consistent with H3b, the results indicate that self-control mediated the relationship between negative mental health and both supportive and non-supportive emotion socialisation. This finding is consistent with the limited strength model (Baumeister et al., 1988), in which increased negative mental health may result in a decreased self-control capacity, and consequently in less supportive emotion socialisation. This is known as negative mediation, or a suppression model of mediation, as the indirect effects (path a*b) of psychological distress on emotion socialisation have a negative direction, and the total effect was close to zero. The suppression model explains why there initially wasn't detected any relationship between psychological distress and emotion socialisation, instead of explaining why a relationship was found. In this case, the potential effect of psychological distress on

emotion socialisation would be present, had it not been for the negative relationship between psychological distress and self-control interfering.

This study found a mediation effect from self-control for negative mental health, but not for positive mental health. There are several reasons possible for this finding. It might be due to negative mental health having a stronger influence on self-control than life satisfaction. This finding supports the distinction between positive and negative mental health as separate concepts (Greenspoon & Saklofske, 2001): absence of positive mental health does not equal the presence of negative mental health, and similarly, does not produce the same variations in self-control. Therefore, it is also vital that research investigate both negative and positive aspects of mental health.

Another explanation for the mediation of negative mental health, but not positive mental health, may be that individuals with differing mental health levels have varying dependency on self-control to perform supportive ERSBs. Consistent with the positive-negative asymmetry model (Baumeister et al., 2001), having a higher level of negative mental health may place higher demands on self-control in emotion socialisation situations. Therefore, individuals with negative mental health and positive mental health may not utilize self-control in the same way when engaging in emotion socialisation. This supports a case of moderated mediation, as the amount of self-control used in socialisation situations would depend on the teachers' mental health levels. However, if this were the case, life satisfaction would likely have a positive relationship with supportive emotion socialisation when controlling for self-control in the hierarchical regression.

In sum, the present study found that mental health in teachers was not strongly related to emotion socialisation, but that this relationship was influenced by self-control. Self-control had a confounding effect on positive mental health, and a suppressor effect on negative mental health. This may be due to self-control being associated with both mental health and emotion socialisation, functioning as a common cause. Further, self-control was close to mediating both positive and negative mental health's relationship with emotion socialisation, indicating the need for further investigations on self-control in emotion socialisation research. Lastly, together with the positive-negative asymmetry model, the results indicate a possible case of moderated mediation, as the effect of self-control on emotion socialisation may depend on mental health levels (Baumeister et al., 2001).

Collectively, the results indicate deviance from current consensus in research on teachers' emotion socialisation, indicating that these complex interrelations may vary greatly

between populations. Further, this study highlighted a knowledge gap of the consideration of self-control as a strong contributor.

Limitations

This study may be subject to many limitations, including the measures used, the nature of the sample, the cultural context, and the historical context.

Measures

The measures used in this study may not have accurately investigated the interrelations between mental health, self-control, and emotion socialisation, as they were intended for another purpose (N-TIK-SI). Other measures would perhaps have been more appropriate for the present intents. Furthermore, as research investigating these concepts may have utilised different measures, the present findings may not be comparable to previous findings.

Emotion Socialisation. The adaptation of CCNES may have contributed to a blurred distinction between supportive and non-supportive emotion socialisation, resulting in teachers scoring similarly on both concepts. First, the cultural context is imperative when interpreting the findings. CCNES was altered because it is generally disapproved of to punish children in Norway. Similarly, other non-supportive reactions may also be less severe in Norway and may therefore differ between cultures. Nonetheless, non-supportive emotion socialisation strategies still involve reduced support, and the results capture the important finding that teachers engage similarly in both supportive and non-supportive emotion socialisation.

Second, the findings represent possible inaccuracies related to the use of self-reports on intentions instead of behavioural measures. First, the social desirability effect (a tendency to respond in a socially favourable way; Krumpal, 2013) may elicit more supportive responses from participants. Second, teachers may believe themselves to be supportive emotion socialisers, or at least to have positive intentions. This may elicit more supportive scores that do perhaps not accurately represent behaviour. This gap between intentions and behaviour is well supported in the field of psychology (Sheeran, 2002). In a teaching context, the discrepancy may be explained by hypothetical situations not considering the multiple demands that teachers may experience in socialisation situations, such as time pressures to get through curriculum and attending to many students simultaneously.

Mental Health. Research on mental health has traditionally had varying focus, definitions and operationalisations, and related findings may therefore be incomparable. First, there has been a tendency to focus on negative mental health, often overlooking positive mental health

(Winzer et al., 2014). Second, mental health measures tend to include the extreme end of the negative continuum, such as measuring diagnosed mental illness, therefore overlooking subsyndromal aspects (Keyes, 2007; Suldo & Schaffer, 2008). Third, mental health has traditionally been measured as a composite concept, with no distinction between positive and negative mental health.

Other Potential Influences on Emotion Socialisation in Teachers. It is also important to consider that there are other factors, apart from mental health, that influence teachers' emotion socialisation. For instance, personal beliefs about emotions, the teachers' own emotional competence and awareness, and teacher-student relationships, may all impact teachers' emotion socialisation (e.g., Denham et al., 2007; Denham et al., 2020; Spilt et al., 2011).

Sample

The sample in this study was small (N = 94) and noticeably homogeneous, as it consisted of mostly young, newly educated Norwegian women with little work experience, working in the capital city of Norway. Thus, the findings have limited generalisability.

COVID-19

As the data used in this study was collected in the fall of 2021, teachers may have had increased challenges during the pandemic. However, this study did not include COVID-19 as a control factor, and the present findings may therefore not be comparable to previous findings on teachers' emotion socialisation.

Future Directions

Future research should carefully examine appropriate measures, considering the cultural contexts while striving for common definitions and operationalisations of concepts. Future research should also strive for a more representative sample to gain generalisable results. Lastly, future investigations on teachers' emotion socialisation would benefit from considering other influential factors, such as emotional beliefs, emotional competence and awareness, and teacher-student relationships.

Implications

The present study contributes to expanding the current knowledge basis of teachers' emotion socialisation and the potential influence of mental health and self-control. Even more so, it illuminates the knowledge gap on these complex interrelations and directions for the future.

The current findings, together with future investigations, may contribute to developing national health strategies and teacher-focused interventions aimed at improving teachers' mental health and emotion socialisation. First, initiatives should continue to promote positive mental health, as individuals may be lacking positive mental health, without having increased negative mental health (Keyes, 2010). This may also have a preventive function. Second, increased focus on subsyndromal aspects of negative mental health (in addition to support for those already diagnosed) may help capture a larger population and more nuanced effects, as well as identifying and aiding at-risk individuals.

Third, many teachers may be intuitively aware of the influence of their own mental health, emotional competence, and emotional awareness. However, many could benefit from awareness and concrete training in these concepts in addition to training in supportive emotion socialisation (Denham et al., 2020; Jennings & Greenberg, 2019; Sutton & Wheatley, 2003). These practices could benefit teachers in understanding and regulating themselves, while also expanding their knowledge regarding understanding and discussion emotions with children.

Fourth, teacher-focused interventions and educations may benefit from including self-control strategies to their curriculum to maintain supportive emotion socialisation in adverse situations. This may especially be important with regards to the many demands teachers experience on a regular basis. Self-control strategies may therefore ensure consistent ERSBs despite varying mental health considerations, time pressures or attention demands across schools and cultural contexts.

Conclusion

This study is one of the first to investigate the interrelations between mental health, self-control, and emotion socialisation in the context of teachers. Results differed from the established relationships typically found in emotion socialisation literature, highlighting the need for future research, the importance of diverse samples, and the cultural sensitivity of such studies.

Mental health was not a strong predictor of teachers' emotion socialisation, perhaps due to influences from other factors such as age, gender, and factors not included in this study. Self-control, however, proved to be an important contributor, as it influenced the predictive value of mental health on emotion socialisation. Further, self-control mediated the relationship between negative mental health and emotion socialisation and was close to mediating the influence of positive mental health as well.

It is possible that differing mediating effects were found due to the distinct nature of positive and negative mental health and the varying strength of their relationships with self-control. Further, individuals may utilise self-control differently depending on mental health levels. Therefore, there may also be a case of moderated mediation, where mental health moderates the relationship between self-control and emotion socialisation.

Future research should continue to examine the complex interrelations investigated here while considering other influential factors. Increased knowledge in this field may facilitate beneficial emotional development for both teachers and children in the future, as well as contribute to development of educational interventions, policies, and practices.

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Appendix

Tables and Figures

Table 1

Sociodemographic characteristics

	<i>N</i>	<i>%</i>
Gender		
Female	63	67.0
Male	31	33.0
Age		
20-29	36	38.3
30-39	32	34.0
40-49	12	12.8
50-59	11	11.7
60+	3	3.2
Education		
Primary School	7	7.4
High School	4	4.3
Vocational School	1	1.1
University, 0-4 years	31	33.0
University, 4+ years	50	53.2
Other	1	1.1
Work experience		
0-5 years	50	53.2
6-10 years	19	20.2
11-20 years	13	13.8
20+ years	12	12.8

Table 2

Descriptive statistics study variables

	<i>M</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>
1 Life satisfaction	4.90	1.09	-.64	.29
2 Psychological distress	1.46	.46	.45	.67
3 Self-control	3.53	.45	-.07	-.01
4 Supportive emotion socialisation	5.41	.67	-.26	.01
5 Non-supportive emotion socialisation	4.11	.87	.20	-.53

Table 6*Mediation analysis results*

	<i>b</i>	<i>SE</i>	<i>95% CI</i>		<i>p</i>
			<i>LL</i>	<i>UL</i>	
<i>X1 → Y1</i>					
Total effect	0.16	0.07	0.02	0.29	.021*
Direct effect	0.11	0.06	-0.01	-0.24	.079
Indirect effect through M	0.04	0.03	-0.01	0.10	
<i>X2 → Y1</i>					
Total effect	0.14	0.16	-0.17	0.45	.381
Direct effect	0.26	0.15	-0.04	0.57	.092
Indirect effect through M	-0.12	0.07	-0.30	-0.01	
<i>X1 → Y2</i>					
Total effect	0.15	0.09	-0.03	0.33	.100
Direct effect	0.09	0.09	-0.08	0.26	.299
Indirect effect through M	0.06	0.04	-0.01	0.14	
<i>X2 → Y2</i>					
Total effect	0.18	0.21	-0.25	0.60	.413
Direct effect	0.35	0.21	-0.06	0.77	.094
Indirect effect through M	-0.10	0.05	-0.21	-0.01	

Note. ** $p < .01$; * $p < .05$; X1 = Life satisfaction; X2 = Psychological distress; M = Self-control; Y1 = Supportive emotion socialization; Y2 = Non-supportive emotion socialization.