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Preschool Teacher-Child Conflict Predicts Social Exclusion After Transitioning to School

Graduate thesis

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Abstract

The success of early social development can have impact on well-being and mental health throughout the life. Social exclusion is thought to have several negative consequences, and the understanding of factors that may predict exclusion early in life may be significant in trying to understand and prevent social exclusion. The current study investigated the prospective association between conflict in the teacher-child relationship in preschool and later social exclusion of the child after transitioning into school. The study was conducted on a cohort sample of Norwegian children (n = 1003) at both age 4 and 6, while controlling for children's effortful control, social skills, family climate and socioeconomic status. The results indicated that higher levels of conflict in the teacher-child relationship during preschool predicted higher risk of social exclusion in school (β = .18, p < .001). The study also found an effect of Effortful Control (β = -.12, p = .003) and Social Skills (β = -.09, p = .040). The findings may be important in understanding why some children are excluded, and hence contribute with knowledge relevant for early prevention of social exclusion.

Keywords: longitudinal, preschool, childhood social exclusion, teacher-child conflict, transition to school

Sammendrag

Suksessen av tidlig sosial utvikling kan ha betydning for trivsel og psykisk helse videre i livet. Sosial ekskludering antas å ha flere negative konsekvenser, og forståelse av faktorer som kan predikere ekskludering tidlig i livet kan være betydningsfull for forståelse og forebygging av sosial ekskludering. Den aktuelle studien undersøkte den prospektive sammenhengen mellom konflikt i lærer-barn relasjonen i førskolen, og senere sosial ekskludering av barnet etter overgang til skolen. Studien ble gjennomført med et kohortutvalg norske barn (n = 1003) ved både 4 og 6 års alder, samtidig som den kontrollerte for barnas grad av «effortful control», sosiale ferdigheter, familiemiljø og sosioøkonomisk status. Resultatene indikerte at høyere nivåer av konflikt i relasjonen mellom barn og lærer i førskolen predikerte økt risiko for sosial ekskludering i skolen (β = .18, p < .001). Studien fant også en effekt av Effortful Control (β = -.12, p = .003) og Social Skills (β = -.09, p = .040). Funnene kan være viktige for å predikere hvorfor noen barn blir ekskludert, og dermed bidra med relevant kunnskap for tidlig forebygging av sosial ekskludering.

Nøkkelord: longitudinell, førskole, sosial ekskludering hos barn, lærer-barn konflikt, transisjon/overgang til skole

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Preschool Teacher-Child Conflict Predicts Social Exclusion After Transitioning to School

Throughout humans' evolutionary history, being able to detect and avoid rejection and to keep a sense of membership in the group have been crucial for survival (Williams et al., 2005, p. 2). Although society has evolved, our daily life is still often characterized by social interactions and possible dangers of being excluded. Humans can be thought of as being existentially dependent on social belonging and having an innate and biological need to belong (Baumeister & Leary, 1995; Søndergaard & Rabøl Hansen, 2018). Various mechanisms and psychological processes motivate people to be together, and influence how we behave, think, and feel around others, and by evoking feelings of distress when faced with exclusion from a social group (Baumeister & Tice, 1990; Fiske, 2018, p. 12). Indeed, multiple studies have demonstrated the important role social interactions have in our lives, by affecting for example happiness (Leung, 2011), mental health (Kawachi & Berkman, 2001), physical health (Hale et al., 2005) and quality of life (Helgeson, 2003).

The Need-to-belong has been explained as a desire to create and maintain strong, stable interpersonal relationships with others, and focuses on significant relationships in general, not just caregivers or attachment figures (Baumeister & Leary, 1995). To fulfil the need to belong, it has been proposed that the individual must have relatively frequent and lasting positive or non-aversive interactions with others (Over, 2016). Experiencing social exclusion is therefore a threat to this basic need (Baumeister et al., 2007; Stenseng et al., 2014). Even infants show signs of distress when they are briefly deprived of social contact, as shown when caregivers suddenly stop interacting with them (DiCorcia & Tronick, 2011). Further studies also indicate that children as young as five years of age imitate others more closely when reminded of the possibility of social exclusion (Over & Carpenter, 2009). In addition, it has been found that preschool aged children conform to group member´s incorrect opinions when giving answers on tasks and prefer to work with peers rather than alone (Butler & Walton, 2013; Haun & Tomasello, 2011; Rekers et al., 2011). This suggests that young children match their behavior to the group, wishing to be accepted and to avoid disapproval by their peers, as well as preferring peer interaction. It has been argued that also children´s social behavior is influenced by a need to belong (Baumeister & Leary, 1995; Bowlby, 1982). However, fewer studies have focused on the preschool age group, and longitudinal, real-life experiences (Stenseng et al., 2015).

It has been suggested that more stable individual differences among children, and their preferences for certain peers, start to emerge by three years of age (Hay et al., 2004). This indicates that the early signs of social exclusion might start to appear already during this time, as some peers are less preferred than others. It has also been found that the preschool years is the period where children start to form durable friendships that last over time (Gifford-Smith & Brownell, 2003; Hay et al., 2004). From this time forward the interactions children have with their peers are thought to increase, and by middle and high school almost half of children´s social contact with others involves their peers (Gifford-Smith & Brownell, 2003; Ortiz-Ospina, 2020). By this time the social contact often occurs in a wide range of different settings, also outside the home and classroom (Rubin et al., 2008, p. 149). Arguably, therefore, assessment or prevention of social exclusion may be easier during the preschool years, when interaction with peers and forming of friendships are in it´s starting phase, as well as primarily taking place in more enclosed environments of the home or preschool (Gifford-Smith & Brownell, 2003; Hay et al., 2004; Rubin et al., 2008, p. 149). It has for example been found that peer rejection measured as early as in preschool can predict later academic difficulties and aggressive behavior in children (O´Neil et al., 1997; Stenseng et al., 2014; Werner & Crick, 2004).

Given the lasting nature of social exclusion and its consequences on development, the uncovering of factors that may influence social exclusion early in life may be crucial (Cacioppo & Hawkley, 2005, p. 104; Juvonen & Gross, 2005, p. 167). Second to the closest family, the social development of children in this age group typically occurs in preschool environments (Shonkoff & Phillips, 2000, p. 297). Children´s relationship with their preschool teacher can therefore be thought of as a relevant factor in influencing social development (Davis, 2003; Gillespie, 2005). By following a cohort sample from ages 4 to 6, the present study aims to shed light on how the teacher-child relationship might influence the risk of social exclusion after transitioning into first grade.

Defining social exclusion

Social exclusion can be defined in different ways, with one as being among the least liked by members of a peer group, or by being marginalized or failing to become integrated in the group (Ladd & Kochenderfer-Ladd, 2016, p. 111). Social exclusion can occur as someone is generally more rejected by the peer group than accepted (Baumeister & Tice, 1990; Ladd & Kochenderfer-Ladd, 2016, p. 113). Dismissing or punishing someone's social initiations, or in another way impeding their access or involvement in social activities can be thought of as

exclusion. This can occur when peers fail to initiate contact, respond to, or include someone, or when they more actively display rejective behavior, and perform activities intended to hinder social involvement in the group (Ladd & Kochenderfer-Ladd, 2016, p. 112).

The term social exclusion is challenging to define. It is closely related to terms like rejection, ostracism and bullying, and there may be overlaps between them (Søndergaard, 2014, p. 63; Williams et al., 2005, p. 2). Firstly, to try to distinguish, bullying can be seen as a practice where the victim is deprived of relational empathy and subjected to an increase in contempt from the aggressors (Søndergaard, 2014, p. 67). Bullying can be intentional harming of others through verbal harassment, assault, exclusion, or other coercion (Lindsay & McPherson, 2012). Social exclusion may be a possible means of bullying. On the other hand, exclusion might not necessarily be bullying, and bullying might not always involve exclusion. In fact, it has been found that bullying is often thought of as involving both physical and verbal aggression, but not as often psychological behavior like social exclusion (Boulton, 1997; Smith et al., 2002).

Secondly, the terms *social exclusion* and *rejection* are often used to describe similar phenomenon (Blackhart et al., 2009; Eisenberger et al., 2003; Mulvey et al., 2017). One suggested difference is that whereas social exclusion refers to not being included in the group, rejection is a more explicit verbal or physical behavior or action that states the person as not welcomed in the group (Williams et al., 2005, p. 2-3). It has been suggested that rejected children are disliked by peers, but wish to have friends (Killen et al., 2013). Similarly, ostracism has been referred to as the general process of exclusion or social rejection, leading to a person being excluded from social interactions (Gruter & Masters, 1986). Social ostracism or exclusion typically refer to ignoring or being ignored while still in the physical presence of others, like freezing someone out, giving the silent treatment or cold shoulder (Williams & Sommer, 1997). In the present work, social exclusion will refer to processes similar to rejection and ostracism. In short, it will be used to describe being disliked, rejected, and impeded in social interaction with the group and hence hindered in fulfilling the need to belong (Baumeister et al., 2007; Smart Richman & Leary, 2009; Stenseng et al., 2015).

Social exclusion and its consequences

Many of the participants in studies on social exclusion are adolescents, students, or adults (Beeri & Lev-Wiesel, 2012; Gerber & Wheeler, 2009; Williams et al., 2000; Williams, 2007). Even though research in recent years has started to focus more on the effects of exclusion and ostracism in young children (Zadro et al., 2013), there still seems to be a lack of studies

investigating long-term social exclusion in this age group (Hawes et al., 2012; Hwang & Markson, 2020; Wölfer & Scheithauer, 2013).

Children spend a lot of their days interacting with other children their age, and it has been proposed that peers may have a greater impact on a child's adjustment in school than that of teachers and parents (Ryan & Ladd, 2012). It has been shown in several studies that social exclusion in the forms of rejection, isolation, and ostracism, can have many negative consequences for those experiencing it (Baumeister & Leary, 1995; Williams, 2007). Moreover, being excluded by peers is thought to be disadvantageous for the child both socially (e.g., loneliness, withdrawal, poorer social skills), cognitively (e.g., poorer academical performance and a lack of motivation), and psychologically (e.g., anxiousness, depressive symptoms) (Killen et al., 2013; Ladd & Kochenderfer-Ladd, 2016, p. 110).

Studies on exclusion from a virtual ball game found that children were affected in similar ways as adults when faced with instant exclusion, even reporting higher experienced threats to self-esteem (Abrams et al., 2011). A longitudinal study of children from third to fifth grade showed a lowering of academic self-concept and skills after being excluded (Gest et al., 2005). Other research has found impacts of peer rejection on externalizing problems such as antisocial behavior (Boivin et al., 2005). As well as increased risks of internalizing problems including depressed mood, psychological distress, social avoidance, and loneliness in childhood (Beeri & Lev-Wiesel, 2012; Ladd & Troop-Gordon, 2003). Similarly, research on children from age 4 to 6 has revealed an association between exclusion in preschool and later developmental outcomes and behaviors not compatible with improving social ties (Stenseng et al., 2015). Social belonging has been shown to be important for even the youngest children, and this adds to the importance of early intervention and prevention of social exclusion, and further highlights the need to uncover early predictors of exclusion.

The vicious cycle of social exclusion

Social rejection of a child from a peer group can trigger different interpersonal and intrapersonal processes that appear to push the socially rejected child toward increasingly maladaptive functioning, and in turn sustain further social exclusion (Juvonen & Gross, 2005, p. 167). Social exclusion is also found to influence social information processing in various ways. Being socially excluded can affect cognitive mechanisms like the attention, memory, evaluation, and perception of social information, which in turn may affect social interactions (Syrjämäki & Hietanen, 2019). Research further suggests that being disliked by peers can increasingly predict social exclusion of children (Ladd & Kochenderfer-Ladd, 2016, p. 110).

A yearlong observational study showed that rejected children performed less positive and prosocial behavior, and more threatening and unoccupied behavior than their peers (Ladd et al., 1990, p. 100). It was also found moderate stability of preschool children´s behavior and peer contact over time, and a tendency for rejected children´s social network to decrease. Newer studies have found similar results, associating social exclusion to more aggressive and less cooperative behavior (Stenseng et al., 2014). Further, it has been found that almost half of the children rated as rejected in fifth grade were still rated as rejected over a five-year period (Coie & Cillessen, 1993). Similarly, one third of the children who were assessed as rejected in preschool, were still rejected in first grade, in addition to rejection status in preschool being associated with later social exclusion (Hodges & Perry, 1999; Vitaro et al., 1990; Vitaro et al., 1992).

It has been found that being socially excluded predicted impaired self-regulation in children from ages 4 to 6 years (Stenseng et al., 2015). Poor self-regulation in preschool also predicted increased likelihood of social exclusion two years later (Stenseng et al., 2015). Poor self-regulation has in turn been related to behaviors shown to increase risks of social exclusion (Card et al, 2008; Glenn et al., 2021; Rathert et al., 2011). Yet another study found that children who were socially withdrawn and experienced peer rejection, were more likely to become even more socially withdrawn over time (Oh et al., 2008). The same has been found for aggressive children and social exclusion (Mulvey et al., 2017; Twenge et al., 2001). It has been proposed that children facing rejection process social-cognitive information differently than their peers, and that some children even before the age of school entry processes social encounters in a more negative way than others (Belsky & MacKinnon, 1994). The indications that the experience of social isolation, exclusion and loneliness can turn into a vicious cycle and foster further loneliness again highlight the importance of understanding and preventing social exclusion as early as possible (Cacioppo & Hawkley, 2005, p. 104).

Transitioning from preschool to school

The transition into school can be viewed as one of the important developmental challenges children go through (Silver et al., 2005). Academic achievement and success of school children can be traced back to the first years of schooling, and the transition from preschool and early school years have been shown to be crucial for the children's later achievements and development (Belsky & MacKinnon, 1994; Margetts, 2002). Indications have been found that social exclusion emerges during the preschool years, tends to be stable over time and has several negative consequences (Hwang & Markson, 2020; Killen et al., 2013; Ladd &

Kochenderfer-Ladd, 2016, p. 122; Over & Carpenter, 2009). Similarly, it has been proposed that investments and interventions focusing on children´s earlier years have much higher returns than interventions during later stages in life (Heckman, 2006). A study of 4-year-olds during an intervention in their last preschool year, found that factors experienced or learned in preschool predicted functioning a year later, when they had transitioned into elementary school (Nix et al., 2013). This was also the case for social skills achieved in preschool.

Transitioning into school can be a challenging task, that often involves many changes, like those of the physical environment, the educational goals, the teachers, and staff the children relate to and differences in the social context (Margetts, 2002; Rimm-Kaufmann et al., 2000). It has been proposed that an ecology of transition is suited to explain the outcome and readiness of the child when entering school (Bronfenbrenner, 1979). The transition ecology has been described as an organized system of interactions among different people (e.g., children, parents, and teachers), different settings (e.g., home, childcare, and school) and different institutions (e.g., the community and government) (Bronfenbrenner, 1979; Pianta & Walsh, 1996, as cited in Pianta & Rimm-Kaufman, 2006). For a child´s transition to be successful and to ensure a good foundation for later functioning, various factors surrounding the transition period could be relevant to investigate.

Research shows that relationships with teachers and early social behavior can be important for children´s school adjustment and later interpersonal relatedness (Davidson et al, 2010; Doll & Cummings, 2008, p. 11). Several studies have found indications that positive and supportive teacher-child relationships, even from as young as preschool age, can contribute to children´s development, such as higher academic performance, lower risk of behavioral problems, more positive views on themselves and school, as well as more adaptive social development for the child, like feeling less lonely and increased competence in interactions and play with others (e.g. Crosnoe et al., 2004; Davidson et al., 2010; Howes & Hamilton, 1993; Ladd et al., 1999). Furthermore, research has shown an association between emotional support before and during the transition to preschool and children's subsequent social skills and behavior problems in elementary school (Broekhuizen et al., 2016). It has also been found an association between decrease in closeness and interaction with the preschool teacher, and subsequently lower social-emotional skills and self-regulation (Vitiello et al., 2022).

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As illustrated above, there are several adverse consequences of social exclusion, and social exclusion can occur very early in children's lives and is relatively stable over time (Killen et al., 2013; Ladd & Kochenderfer-Ladd, 2016, p. 122; Over & Carpenter, 2009). Moreover, transitioning periods, such as from preschool to school, has been highlighted as an important context for children´s development (Nix et al., 2013; Ray & Smith, 2010). For these reasons, early prediction of social exclusion in preschool, and factors influencing the transitioning into school can be viewed as crucial. The current study will focus on the transition from preschool to school and investigate the influence of preschool teacher-child relationships on later social exclusion.

Relationship with preschool teacher and social exclusion

After the closest family, childcare settings are the context in which most young children´s development occurs (Shonkoff & Phillips, 2000, p. 297). The effects of classroom environment and teacher involvement has been shown in an intervention aimed at preventing peer rejection in middle school (Mikami et al., 2005). The quality of teacher-child relationships has also been found to influence children´s development (Doumen et al., 2008). After controlling for prior peer rejection, Taylor (1989) found that early teacher preference predicted subsequent peer rejection. The study conducted on preschool children and first year students showed that the children who were less preferred by their preschool or first year teachers were more likely to experience later rejection by peers. Another study found that observed negative teacher behavior towards preschool children, as well as less optimal classroom climate, predicted teachers' negative rating of the children´s social competence (Brophy-Herb et al., 2007). Similarly, it has been indicated that children who have positive relationships with their teachers in first grade are less likely to be socially excluded a year later (Hughes & Kwok, 2006). In addition, emotional support from teachers is shown to minimize effects of problematic behavior on children´s peer relationships (Buyse et al., 2008),

thereby indicating that the preschool teacher might influence the child´s later functioning in various ways.

An overview of studies found indications that the distress of being socially excluded might be less if the child is able to get support from a caring adult (Maxwell et al., 2013). A study found that social support from school workers, amongst others, influenced the association between social exclusion, coping mechanisms and psychological wellbeing (Arslan, 2018). If an accepting and caring figure is not available, the person experiencing social exclusion might turn to more negative strategies like emotional numbness, devaluing others, or aggressive behavior, fostering further exclusion by peers (Maxwell et al., 2013; Twenge et al., 2001). This might in turn contribute to explaining the previously mentioned vicious cycle of social exclusion and highlight the importance of relationships with caring adults.

Conflict in the relationship with the preschool teacher may influence the children´s peer relationships and risks of social exclusion. Longitudinal studies have for example found association between negative teacher-child relationship in preschool and subsequently lower social skills and increased problematic behaviors and aggression displayed by the child, which in turn is found to increase exclusion by peers (Doumen et al., 2008; Hamre & Pianta, 2001; Hamre & Pianta, 2005; Pianta & Stuhlman, 2004; Sabol & Pianta, 2012; Skalická et al., 2015). Some studies have found that conflict in the teacher-child relationship have more impact on children´s behavior than levels of closeness (Doumen et al., 2008; Hamre & Pianta, 2001). It has been indicated that conflict in the teacher-child relationship during the child´s transition from preschool to school contributed to increased externalizing behavior like aggression and conduct problems (Silver et al., 2005). Teacher-child conflict might in turn lead to increased risk of social exclusion, by increasing behaviors that are not favorable in social interactions, like aggression and lack of social skills.

Conflict in the teacher-child relationship might also contribute to increased social exclusion by role modelling for the peers to behave more hostile towards the child (Cheung, 2020). Additionally, conflicted relationship with the teacher might increase the child´s problematic social coping mechanisms and behaviors that are devalued by peers, and thus lead to social exclusion (Card et al, 2008; Glenn et al., 2021; Ladd & Troop-Gordon, 2003; Maxwell et al., 2013). A previous study has found that support versus conflict in the teacher-child relationship in first grade predicted peer acceptance a year later (Hughes & Kwok, 2006). For these reasons teacher-child conflict may be thought to have significant influence

on the risk of social exclusion, also for the youngest children. The current study will add to this research, by investigating the possible predictive effect of conflict in the teacher-child relationship on social exclusion after the transition from preschool to school. In addition, other factors – such as child and family related factors – may be important to control for when trying to understand the impact of teacher-child conflict on the risk of exclusion after transition into school.

Child characteristics

Characteristics of the child itself may render some children prone to social exclusion by peers. After all, children may be excluded simply because they behave in ways that their peers do not like (Harrist & Bradley, 2003). Low temperamental self-control is one such characteristic that increases the likelihood of different forms of victimization by peers (Kulig et al., 2017). Children in general might be less able to think about consequences of their actions and more often put themselves in situations where they are vulnerable of victimization, but this may especially be true for children with lower self-control (Jensen-Campbell et al., 2009, p. 107). These children may also engage in impulsive, externalizing behaviors that are thought to provoke their peers (Hodges et al., 1997). Research has suggested prosocial, aggressive, and asocial behaviors as being of importance in understanding which children are accepted or excluded (Ladd & Kochenderfer-Ladd, 2016, p. 119). A meta-analysis has found that higher levels of aggression predict higher risks of social exclusion (Card et al, 2008; Glenn et al., 2021). Similarly, children who displayed preschool aggressiveness have been inferred to remain friendless and experience persistent rejection by peers (Ladd & Troop-Gordon, 2003).

To take low temperamental self-control into account, the present study will control for children's effortful control, which is indicated to influence social exclusion. Effortful control can be defined as the ability to suppress a dominant response to execute a more subdominant response (Rothbart et al., 2003). This ability allows children to suppress the affective systems that drive behavior, and to control behavior in conflict situations (Rothbart et al., 2003). Low effortful control or self-control measured by poorer ability to delay gratification has been shown as a risk factor for aggressive behavior (Krueger at el., 1996; Rathert et al., 2011). In addition to aggressive behavior, poor effortful control has also been linked to communication problems, victimization, and social rejection (Bagwell & Schmidt, 2013, p. 16; Jensen-Campbell et al., 2009, p. 107; Hodges et al., 1997; Rathert et al., 2011).

In addition to self-control, *social skills* may be of importance when predicting social rejection. After all, poor social skills can also be seen as tiresome for the other children because the child comes across as being unskillful and fail to contribute to the social interactions (Ladd & Kochenderfer-Ladd, 2016, p. 119). Social skills are related to the ability to form good peer relations, to control one's temper, cooperate and show adequate self-management, to follow rules and to show social assertion by initiating conversations and interactions with others (Caldarella & Merrell, 1997). Social skills are also associated with behaviors leading to acceptance by peers and positive social outcomes (Bagwell & Schmidt, 2013, p. 15; Elliott & Gresham, 1987). Victims of social rejection have been reported by peers as unable to understand others, having difficulties with communications, being immature, disagreeable, and not relate well with the teachers (Martins & Castro, 2010). It has also been shown that increased social skills functions as a buffer, by decreasing the likelihood of negative social repercussions, like rejection, for aggressive children (Glenn et al., 2021). These findings indicate an association between social exclusion and poor social skills; thus, the latter factor will be controlled for.

Finally, previous studies have found moderating effects of gender on factors possibly predicting social exclusion. It has for example been found that the effect of social support on consequences of social exclusion is greater in girls (Arslan, 2018). There has also been found gender differences in how relationships with adults affect effortful control (Viddal et al., 2015). Low effortful control displayed by boys have in turn been found to more often result in behaviours that is considered bothersome for peers, such as increased aggression and less prosocial acts (Card et al., 2008; Karreman et al., 2009; Ladd & Kochenderfer-Ladd, 2016, p. 119). There has also been found gender differences in how dependent children are on context when acting to exclude peers (Underwood et al., 2004). For these reasons the current study will investigate whether the possible predictors of social exclusion are moderated by gender.

Family factors

Parenting practices and parent-child relationships may influence the children´s later adjustment and their relationships with peers in various ways (Brown & Bakken, 2011). Studies have found associations between family climate and different outcomes for children, such as early adjustment in school (Kurdek et al., 1995), general well-being (Phillips, 2012), and cyber-bullying (Buelga et al., 2017). Having positive relationships to one´s caregivers, as well as having parents who value teaching social skills, are feelings-oriented, warm and encourage social contact, may have positive influence on children´s peer relationships

(Shonkoff & Phillips, 2000, p. 170). High family stress is found to be associated with more aggressive behavior and in some cases increased peer rejection (Lockwood et al., 2002). Patterson et al. (1991) mentioned several studies that show associations between family background and the likelihood of peer rejection. For example, a study of school children found that the children who were rated as having more adverse family environments by their teachers were more often rejected by their peers (Patterson et al., 1991). The concept of *Family climate* involves factors of general family functioning such as mutual understanding, support, communication, and satisfaction within the family, (Epstein et al., 1983). Based on the findings it is possible to hypothesize that poorer family climate will be associated with increased risks of social exclusion. Family climate and functioning has been shown to have more influence on children than factors such as family structure (Phillips, 2012), and will therefore be controlled for in this study.

Finally, it has been indicated that children from lower-income homes are more likely to face peer rejection (Patterson et al., 1991). A review of research on connections between family and children´s peer relationships found an association between lower socioeconomic status (SES) and more peer rejection (Cohn et al, 1991). A study examined peer rejection in young children by conducting family interviews and school ratings: It was found that preschool and first-grade children rated by their peers and teachers as rejected, were more often from families with lower socioeconomic status (Pettit et al., 1996). Other studies show similar results, that in classes where the peers´ parents have lower education and socioeconomic status, ostracism is more frequently experienced by the children (Hakim & Shavit, 2017, p. 238). Based on the above findings both family climate and SES will be adjusted for in the present investigation.

Aims of the current study

In summary, there is a dearth of studies on social exclusion in preschool children. In addition, it has been pointed out that the transition period from preschool to school may be a critical period for social development, which, in turn has relevance for possible prevention efforts and early interventions. To add to the literature on the development of social exclusion, the present study will investigate whether conflicted relationship between children and their preschool teacher at age 4 might influence the risk of social exclusion in first grade, at age 6. The study will also control for child factors – effortful control and social skills – as well as the family factors of family climate and SES. In addition, it will explore if the effects of the predictors are moderated by gender. Previous studies have found gender differences in

factors like behavior, effortful control, and the significance of relationships to adults in relation to social exclusion and its consequences (Arslan, 2018; Karreman et al., 2009; Ladd & Kochenderfer-Ladd, 2016, p. 119; Viddal et al., 2015). Hence, there is a possibility that conflicted teacher-child relationship and other factors might exert different effects on social exclusion based on the child´s gender.

Methods

Participants and procedure

The Trondheim Early Secure Study (TESS; Steinsbekk & Wichstrøm, 2018) began during 2007 and 2008. It is a longitudinal study of mental health and socioemotional development in a cohort followed biannually from the age of 4. Parents and their children living in the city of Trondheim, Norway were invited to participate by a letter that also included The Strengths and Difficulties Questionnaire (SDQ) 4-6 version (Goodman, 1997) (N=3,456). The questionnaire was brought by the parents when attending an ordinary health checkup for 4-year-olds. The parents received information about the study from a nurse working at their local Well Child Clinic, in addition to being asked to give a written consent to participate in the longitudinal study. Due to the aim of TESS to study mental health risks and protective factors in children, those who scored higher on emotional or behavioral problems, or more likelihood of developing such problems, were oversampled to increase the study's statistical power (Berg-Nielsen & Wichström, 2012). The scores on the SDQ-forms influenced the possibility to be selected to participate in the study. This was achieved by dividing the children into four strata based on the SDQ-scores, with the cut-offs 0-4, 5-8, 9-11 and 12-40. By using a random number generator, the possibility to be selected to participate increased with increasing scores on the SDQ-questionnaire.

One of the parents and their child were shortly after the visit to the clinic invited to the university to participate in testing and observation. Parent information was collected by using both interviews and questionnaires, whereas data from preschool teachers was collected using questionnaires. The children were also observed and interviewed when participating in the study. Two years later new testing was conducted, and questionnaires sent out. The questionnaires on the first occasion were sent to the child's preschool, and two years later to their primary school. It was requested that the teacher who knew the child best at each time point should fill out the questionnaires. On average, the preschool teachers knew the child for 13 months, whereas the primary school teacher knew the child on average for 6 months. Most

of the children attended state-sponsored preschool centers at the first assessment (T1) and were all in school at the follow up assessment (T2).

The TESS participants are now approximately 20 years old. However, the present study only applies data from the first and the second wave of data collection, when the children were 4 and 6 years old. A flow chart describing the recruitment and participation rate is shown in Figure 1. 1250 children were drawn to participate in the study, and at the first wave of collecting data 1007 children were interviewed (74.9%, M age = 4.55). The dropout rate was low, and there were no differences in dropout rate after consent regarding SDQ score ($P = 0.86$) nor gender ($P = 0.31$). Among the children´s teachers there was a response rate of 90.6% when the child was 4 years old, and 92.2% at the follow-up assessment when the child was 6 years old. In the current study information from a sample of 1003 children were used. This included 508 boys and 495 girls. Of the participants 865 reported on the factor of social exclusion. None of the measures employed in the current analysis predicted attrition at T2. The sample was mainly based on children with parents form Norway (93.1 % Norwegian had mothers and 90.8 Norwegian fathers), with varying socioeconomical status, as seen in Table 1. The research project was approved by the Reginal Committee for Research Ethics, Mid-Norway (www.etikkom.no; REK 4.2008.2632).

Table 1

Sample Characteristics

Characteristics % (*n*=1003)	
Gender of child	
Male	50.6
Female	49.3
Ethnic origin of biological mother	
Norwegian	93.1
Western countries	3.4
Other countries	3.5
Ethnic origin of biological father	
Norwegian	90.8
Western countries	6.5
Other countries	2.7
Parental highest SES after ISCO-88 at T4	
Leaders	12.8
Higher professionals	35.7
Lower professionals	33.8
Skilled and unskilled workers, farmer/fishermen	17.8

Figure 1

Procedure and flow of participants
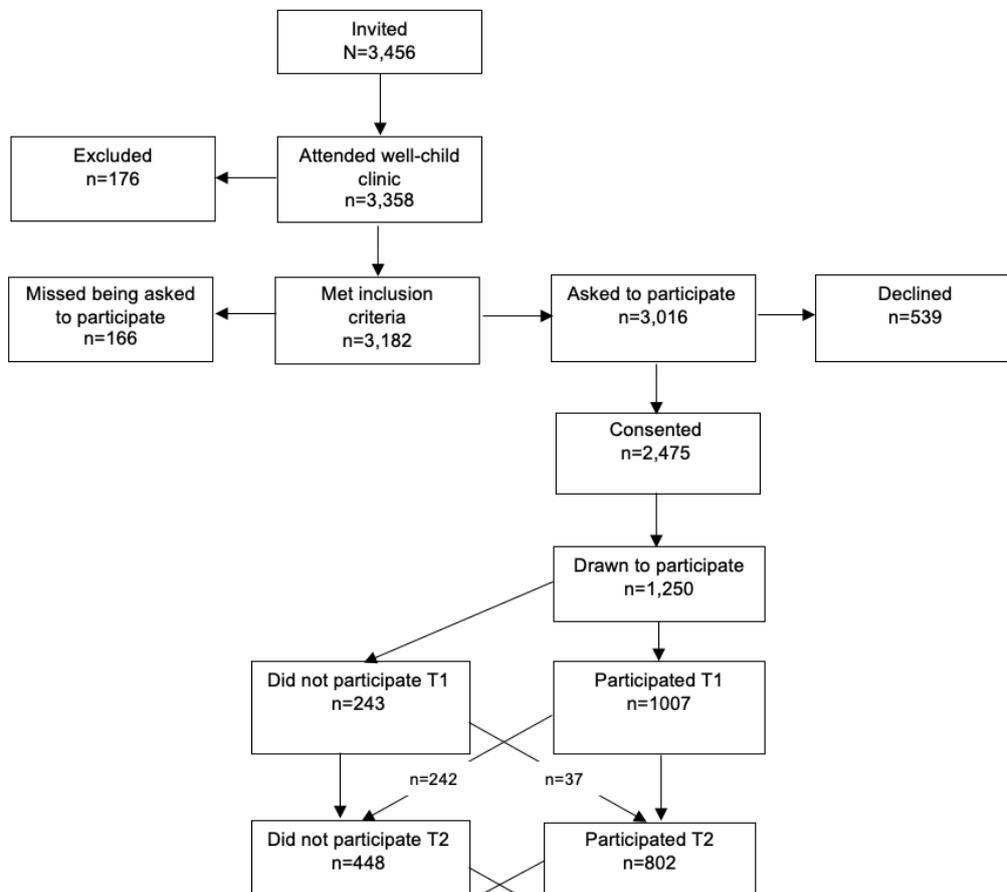
Measures

Social exclusion

      The Teacher-Report Form (TRF) from the Achenbach System of Empirically Based Assessment (ASEBA) was used to measure social exclusion of the children (Achenbach & Rescorla, 2000). The forms of ASEBA provide standardized ratings of different aspects of behavioral, emotional, and social functioning. To reflect the need-oriented side of social exclusion, three items of the TRF were used (Baumeister & Leary, 1995): "not liked by other children/pupils", "does not get along with other children/pupils", and "gets teased a lot". Teachers were requested to rate the child on a 3-point scale ranging from 0 "not true" to 1 "somewhat or sometimes true" and 2 "very true or often true". The three items were initially selected by Stenseng et al. (2015) by using factor and reliability analysis, and with a need-oriented focus. The items were deemed satisfactory based on criteria for statistical reliability and theoretical validity. Ratings from teachers have been shown to be an important source of information about children´s social status and peer relationships (Bierman, 2004, p.121).

Measures of social exclusion of the children from both preschool at age 4 (T1, Cronbach´s alpha = .73) and first year of school at age 6 (T2, Cronbach´s alpha = .68) were used in this study.

Effortful control

The Children´s Behavior Questionnaire (CBQ) was used to measure the children´s different temperament factors, including Negative affectivity, Surgency, and Effortful control (Putnam et al., 2014). The CBQ is a caregiver report measure used to evaluate temperament in children ranging from age 3 to 7 (Rothbart et al., 2001). The questionnaire is based on the reactive and self-regulative model of temperament and consists of 195 times divided into 16 scales. The caregivers are requested to rate their children on a 7-point scale that ranges from 1 "extremely untrue for your child" to 7 "extremely true for your child". In the current study the factor Effortful control was selected because it has been shown to associate with factors related to social exclusion, like externalizing behavior, closeness to others, popularity, social behavior, and teacher-child relationships (Arsenio & Lemerise, 2004; Putnam et al., 2008; Valiente et al., 2003; Valiente et al., 2012). Effortful control is based on the scales Attention Shifting, Attention Focusing, Low-Intensity-Pleasure, Inhibitory Control and Perceptual Sensitivity (Rothbart et al., 2001). In this study the measure of effortful control in preschool (T1, Cronbach´s alpha = .84) was used to investigate a possible predictive effect on following rates of social exclusion.

Social skills

The Social Skills Rating System (SSRS) was used to evaluate the children´s social skills (Gresham & Elliot, 1990). The SSRS is a broad assessment of students' social behavior, and it encompasses peer interactions, teacher-child relationships, and academic performance. The preschool version of the rating system allows information about the child´s social skills to be gathered from teachers (Gresham et al., 2011). The SSRS-T is comprised of three social skills subscales, Cooperation, Assertiveness and Self-Control and mean subscale scores were calculated and utilized in the current study. Teachers rated items on a 4-point Likert scale where higher scores indicated greater social competence. Social skills measures from T1, assessed by the preschool teacher, were used in the analysis, with Cronbach's alpha = .93.

Teacher-child relationships

The conflict subscale of the Student-Teacher Relationship Scale (STRS) (Pianta, 2001) was used to measure the relationship between the children and their teachers. The questionnaire with a 5-point Likert scale ranging from 1 "definitely does not apply" to 5

"definitely applies" was first answered by the preschool teacher, and later by the child's main teacher in first grade. The conflict subscale with its 12 items provides teacher-perceived negativity within their relationship with the child (Jerome et al., 2009). "This child and I always seem to be struggling with each other" and "Dealing with this child drains my energy" are samples of the items in the scale. In this study, conflict in the relationship between the children and their preschool teacher (T1, Cronbach´s alpha = .77) was used to investigate possible effects on social exclusion.

Family functioning

The McMaster Family Assessment Device (FAD) was used to measure the family climate of the children´s families at T1 (Epstein et al., 1983). FAD is made up of seven scales with a total of 53 items and identifies six domains of families functioning and one domain of the family´s general functioning. The scale involving General Functioning assesses the overall functioning of the family on areas like communication, problem solving, clarity of roles, affective responses, and behavioral control, and was used to measure family climate in the current study (Cronbach´s alpha = .89). This domain includes items like "Planning family activities is difficult because we misunderstand each other" and "In times of crisis we can turn to each other for support" (Epstein et al., 1983). In the current study, parent ratings on FAD was used to assess family climate.

Socioeconomic status

Socioeconomic status (SES) can be defined as a someone´s combined economic and social status and is thought to be closely linked to occupational status (Galobardes et al., 2006). It has been proven a relatively strong relation between SES and children's mental health, as well as indications of influences on social exclusion (Hakim & Shavit, 2017, p. 238; Pettit et al., 1996; Reiss, 2013). Factors of SES such as education, occupation and income can be related to health factors because of the rewards associated with scoring higher on these factors (Baker, 2014). In this study SES was measured as the highest parental occupation of the family household. This was coded accordingly to the International Classifications of Occupations (International Labour Office, 1990), which is based on skill level (e.g., formal and technical skill requirement, such as years of formal education) and skill specialization (knowledge required, use of tools or machines, goods or services produced, or the materials being worked on). A scale from 1 to 6 was used to code occupational status, where unskilled manual workers was classified as "1 – low status" and professionals and leaders as "6 – high status". Socioeconomic status of the children´s families was measured at T1.

Data analysis and predictors

To examine possible predictors of social exclusion, regression analysis was conducted using variables related to both the child, the preschool teacher, and characteristics of the family. Stipulated child predictors of social exclusion included effortful control and social skills, preschool variable was the conflicted relationship between the child and the preschool teacher, and family characteristics were captured by family climate and socioeconomic status.

Regression analysis was conducted in Mplus (Muthén & Muthén, 2008), to examine possible predictors of children's social exclusion in the transition from preschool to first grade. Social exclusion at T2 was auto-regressed on social exclusion at T1, while conflicted student-teacher relationships, effortful control, social skills, family climate and socioeconomic status (all measured at T1) were treated as possible predictors of social exclusion at T2. All predictors at T1 were correlated with each other. Analyses were conducted in three steps. First the main analysis measured variations in social exclusion using the predictors of effortful control, social skills, student-teacher relationship, family climate and parental socioeconomical status, see Figure 2. Model fit was assessed according to the criteria of Hu and Bentler (1999), including a root mean square error of approximation (RMSEA) <.06, a standardized root mean square residual (SRMR) <.05, as well as a comparative fit index (CFI) and Tucker-Lewis index (TLI) >.90 indicating a good model fit. In the second step gender was added as a predictor of social exclusion. In the final analysis gender was explored as a possible moderator of significant predictors of social exclusion, using the Satorra Bentler corrected chi-square difference test (Satorra & Bentler, 2001). Since the sample was overrepresented with children scoring high on SDQ, the analyses were weighted proportionally to the inverse of the selection probability, based on the SDQ scores, to generate true population estimates (Steinsbekk & Wichstrøm, 2018). Missing data was handled by using the procedure of a Full Information Maximum Likelihood (FIML).

Figure 2

Conceptual model of variables
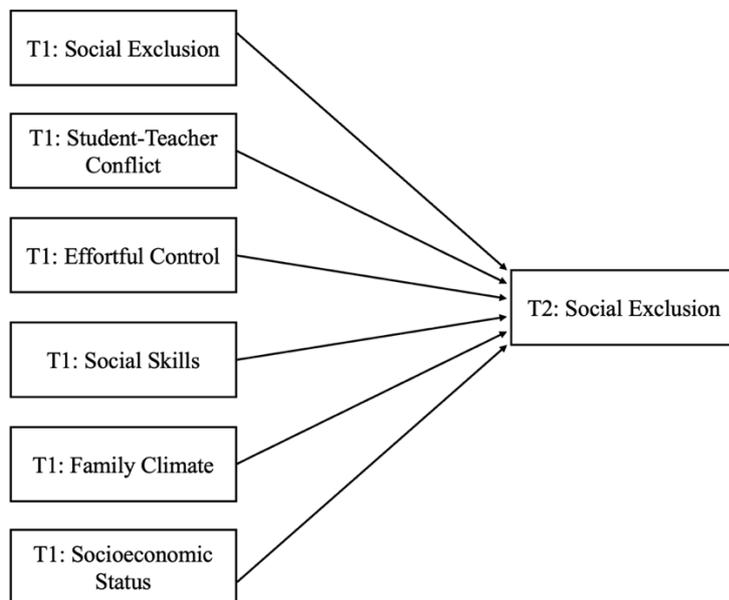
Note. Time 1 (T1) = 4 years/preschool, Time 2 (T2) = 6 years/school.

Results

The prevalence of social exclusion was slightly higher in first grade (T2) than in preschool (T1) (Wald = 44.218, *df* = 1, *p* < .001), with a mean of .38 and a variance of .49 at T2 versus a mean of .18 and variance .33 at T1, see Table 2. The descriptive results showed significant correlations between several of the predictors and the measured outcome of social exclusion in the children at the second time of data collection. Conflicted relationship with teacher was associated with higher levels of social exclusion at T2. In addition, children´s social skills and effortful control were associated with lower levels of social exclusion at T2. The possible predictors measured at T1 was also correlated with each other with moderate effects, see Table 3.

Regression analyses were conducted to investigate which factors measured during preschool may contribute to social exclusion of children in the first grade. The regression analyses were performed in three steps. First by including all the T1 predictors of social exclusion (e.g., preschool conflicted student-teacher relationships, child social skills and effortful control, socioeconomic status, and family climate to explore their effects on social exclusion at time 2 (first grade), while controlling for social exclusion at time 1. This model

showed full saturation without indices on model fit, (χ2 (0) <.001; CFI = 1.00; TLI = 1.00; RMSEA = 0.00; SRMR = 0.00). In the second analysis, gender was added as a predictor of social exclusion. This resulted in a weaker model with a poor model fit, (χ2 (0) <.001; CFI = 0.408; TLI = 0.310; RMSEA = 0.096; SRMR = 0.049). As a result, a third analysis (a multigroup analysis) was conducted separately for boys and girls. This model displayed a saturated model fit (χ2 (0) <.001; CFI = 1.00; TLI = 1.00; RMSEA = 0.00; SRMR = 0.00).

In the first regression analysis, conflicted student-teacher relationship reported by the teacher in preschool (T1) predicted higher levels of social exclusion of the child in first grade (T2) (β = .18, p < .001). The child's social skills (T1) predicted lower levels of social exclusion in first grade (T2) (β = -.09, p = .040). Similarly, children's higher levels of effortful control at T1 predicted lower levels of social exclusion measured in first grade (T2) (β = -.12, p = .003). The analysis revealed no statistically significant associations between the family factors family climate (β = .03, p = .411) nor socioeconomic status (β = -.03, p = .442) and later social exclusion of the child, see Figure 3. The effect size in the current investigation was small (R^2 = 0.139).

Figure 3

Predictive factors on Social Exclusion
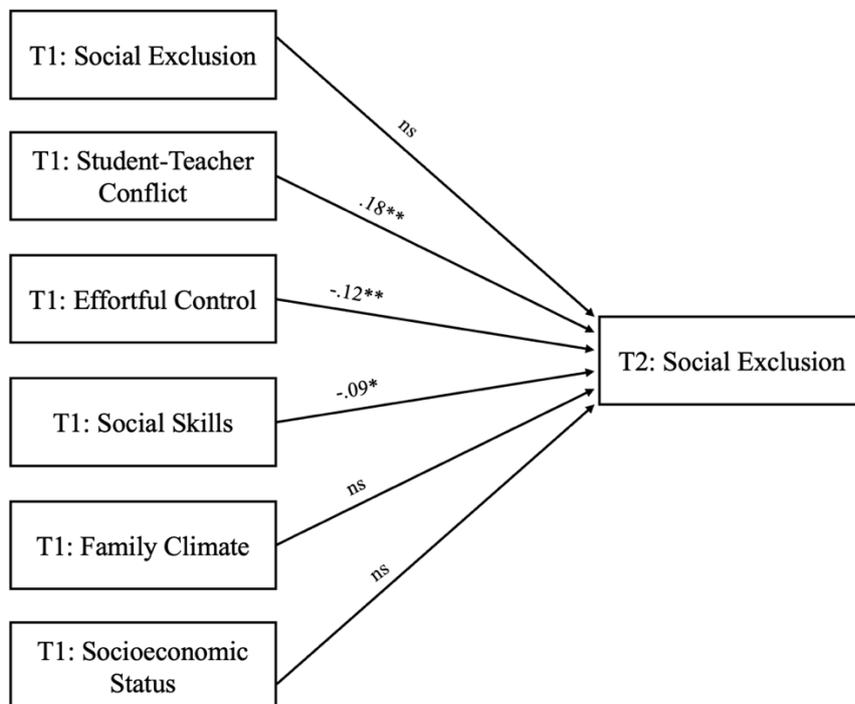
Note. *p < .05, **p < .01, ns = not significant.

Gender differences

In the third conducted analysis gender was examined as a possible moderator of the significant predictors (i.e., conflict with teacher and effortful control) on social exclusion, since family climate, social skills, and socioeconomic status did not predict social exclusion in multigroup group model (p>.05). We constrained effects of conflict to be equal across gender in a first constrained model and we also constrained effects of effortful control to be equal across gender in a second constrained model. Then we compared these models to a third model where both conflict and effortful control were constrained to be equal across gender. A χ^2 difference Sattora Bentler test confirmed that the effects of both predictors were equal across gender (with χ^2 (1) =.103 for conflict and χ^2 (1) =.732 for effortful control). The model fit of the third, constrained model was good, ($\chi2$ (2) <.299; CFI = 0.993; TLI = 0.957; RMSEA = 0.020; SRMR = 0.009).

Table 2

Descriptive statistics of study variables

Variable	Min	Max	M	Variance	SD
Social exclusion T2 (TRF2)	0	5	.38	.49	.70
Social exclusion T1 (TRF1)	0	6	.18	.33	.58
Student-teacher relationship (STRS)	12	46	16.00	21.44	4.63
Social skills (SSRS)	22.67	117.33	76.94	264.57	16.27
Socioeconomic status (SES)	1	6	4.488	0.91	0.96
Effortful control (CBQ)	2.33	6.27	4.91	0.18	0.42
Family climate (FAD)	1	.08	1.63	0.16	0.40
Gender (G)	1	2	1.50	0.25	0.50

Note. Gender is coded 1=boy, 2=girl.

Table 3

Correlations (p-value)

	Variable	1	2	3	4	5	6
1	Social exclusion T2 (TRF2)						
2	Social exclusion T1 (TRF1)	.20 (<.001)					
3	Student-teacher relationship (STRS)	.27 (<.001)	.41 (<.001)				
4	Social skills (SSRS)	-.25 (<.000)	-.37(<.000)	-.50(<.001)			
5	Socioeconomic status (SES)	-.05(0.248)	-0,01(0.737)	-.10 (0.008)	.10 (0.005)		
6	Effortful control (CBQ)	-.23(<.001)	-.20 (<.001)	-.15 (<.001)	.20 (<.001)	.06 (0.088)	
7	Family climate (FAD)	.10 (0.011)	.11 (<.001)	.06 (0.071)	-.06 (0,081)	-.04 (0.280)	-.32 (<.001)
8	Gender (G)	-.24 (<0.001)	-.11 (<.001)	-.07 (.050)	.18 (<.001)	-.05 (.153)	-.03 (.438)

Note. Gender is coded 1=boy, 2=girl.

Discussion

This study has examined conflicted teacher-child relationship as a possible predictor of social exclusion, using a longitudinal design focusing on early childhood. It has examined the transition period from preschool to first grade, at the very start of children´s school career and social development outside the home (Gifford-Smith & Brownell, 2003; Hay et al., 2004). As expected, the results of the current study uncovered a predictive effect of conflict in the teacher-child relationship during preschool, at age 4, on the risk of social exclusion in first grade, at age 6. In addition, and in line with other literature on social exclusion, the results from this study found an association between better social skills at age 4 and subsequently lower ratings of social exclusion at age 6. Similar associations were found regarding higher levels of effortful control measured at age 4 and lower levels of social exclusion at age 6.

Social exclusion has been presented as a phenomenon that often have negative consequences and turns into a vicious cycle (Ladd & Kochenderfer-Ladd, 2016, p. 122; Oh et al., 2008; Stenseng et al., 2015). It has previously been found indications that child characteristics, as well as characteristics of the family can increase the risk of social exclusion (Glenn et al., 2021; Hakim & Shavit, 2017, p. 238; Harrist & Bradley, 2003; Lockwood et al., 2002). In addition, it has been indicated that teacher involvement, support, and quality of relationship with the child may have direct or indirect effects on social exclusion, at least when studying older children (Brophy-Herb et al., 2007; Chang, 2004; Hughes & Kwok, 2006; Killen et al., 2013; Mikami et al., 2005; Sentse et al., 2007). The current study adds to the knowledge on social exclusion, by focusing on children in their earliest period of social interactions, and on effects of conflicted relationships during the crucial transition from preschool to school (Gifford-Smith & Brownell, 2003; Hay et al., 2004; Margetts, 2002; Nix et al., 2013). The current investigation contributes by uncovering conflict in the teacher-child relationship before this transitioning period as a significant risk factor of later social exclusion. The study also controlled for effects of child and family characteristics, namely effortful control, social skills, family climate and socioeconomic status, as well as possible moderating effects of gender. As expected in developmental studies, the effect sizes in the current investigations are small, indicating that additional factors influence the risk of social exclusion.

Conflict in teacher-child relationship in preschool predicts social exclusion

The findings in the current study might be explained by different aspects of the process leading to certain children being at risk of social exclusion. Firstly, children might use their teachers as role models on how to treat and behave towards peers. It has been found an association between preschool teachers' behavior and children's behavior (Cheung, 2020). If there is a higher level of conflict in the relationship between a certain child and the preschool teacher, the teacher might, even unintentionally, display more negative behavior towards that child. This in turn might lead peers to show a similar increase in negative behavior or exclude the child, using the teacher as a role model on how to behave and who to interact with.

Secondly, experiencing conflict in the relationship with their preschool teacher might deprive the child of a secure and supporting adult. Studies have shown that having a secure attachment in the relationship with the preschool teacher might function as a protective factor for later social exclusion (Davidson et al, 2010; Doll & Cummings, 2008). It has been suggested that if an attachment person is not available to help the child cope and give comfort in distressing situations, the child will cope with exclusion by devaluing others and display aggressive behavior to reduce distress, which in turn might lead to further exclusion by peers (Boivin et al., 2005; Maxwell et al., 2013; Stenseng et al., 2014; Twenge et al., 2001). Negative teacher-child relationships might increase the risk of negative coping mechanisms, like externalizing behavior, as a response to negative social interactions, which in turn increases the risk of social exclusion (Card et al, 2008; Glenn et al., 2021). Reversely, having a supportive and secure relationship with an adult might increase the child´s social confidence and hope of being included, and in turn lead to more appropriate coping mechanisms (Broekhuizen et al., 2016; Vitiello et al., 2022). In addition to decreasing problematic coping mechanisms, emotional support from the teacher can minimize the consequences that the problem behavior the child does display has on his or her social relationships, thus minimizing risks of exclusion (Buyse et al., 2008). However, the current study did not investigate effects of closeness or support in the teacher-child relationship on social exclusion. Even though this can be thought to have an opposite effect than that of conflicted teacher-child relationship, there are potential for further investigations on the subject.

Third, literature on children and their development has found that transitions in the early developmental stages may have great significance and influence on further functioning (Davidson et al, 2010; Heckman, 2006; Nix et al., 2013; Margetts, 2002). This indicates that what happens in preschool is important for successful social development. Experiencing

social conflict with the teacher might affect the development of a range of processes and important cognitive mechanisms like attention, memory, perception, social processing, interpersonal and intrapersonal processing, and self-regulation (Juvonen & Gross, 2005, p. 167; Stenseng et al., 2015; Syrjämäki & Hietanen, 2019). These factors may impact the child to interpret the social world as more hostile, leading to withdrawal from social activities or affect increased externalizing behavior because of poorer self-regulation (DeWall et al., 2009; Syrjämäki & Hietanen, 2019). Self-regulation has been shown to impact externalizing behavior which in turn increases the risk of exclusion (Card et al, 2008; Glenn et al., 2021; Rathert et al., 2011). The association between conflict, and developmental consequences and exclusion might be explained by the conflict both pushing development in a disadvantageous direction leading to further rejection and social exclusion, and by having a negative impact on development in a crucial transitioning period where the child is already vulnerable.

Besides the family, the preschool and school environments are the arenas most of the child´s development occurs (Shonkoff & Phillips, 2000, p. 297). Relationships and friendships outside the family start to emerge early, by three years of age, and increase in frequency over the following years (Hay et al., 2004). In addition, peer contact often becomes increasingly important as the child ages, and this highlights the importance of being able to form a good foundation for social development early in life (Gifford-Smith & Brownell, 2003). Having a conflicted relationship with the preschool teacher may have a negative effect on the child´s transitioning period and ability to experience a safe environment for development. This may in turn increase the risk of negative outcomes like social exclusion because the child does not have sufficient relationships with adults to help them regulate their emotions and behavior (Davidson et al, 2010; et al., 2023; Viddal et al., 2015), which in turn can lead to behaviors that are costly for peers and lead to exclusion (Maxwell et al., 2013; Twenge et al., 2001; Vitiello et al., 2022).

Fourth, there may be characteristics of the child that affect both their relationships with the preschool teacher and their relationships with peers. There has been presented studies that indicate a predictive effect of behavioral factors like low effortful control, aggression, and poor social abilities on social exclusion (Carter et al., 2017; Glenn et al., 2021; Jensen-Campbell et al., 2009, p. 107; Ladd & Kochenderfer-Ladd, 2016, p. 119). It is possible that the child displays characteristics that increase conflict with the preschool teacher, and that these characteristics simultaneously increase the risk of social exclusion. It has previously been found evidence of a reciprocal association between conflict in the teacher-child

relationship and externalizing behavior displayed by the child (Husby et al., 2023). In this study child characteristics like effortful control and social skills have been included to control for possible confounding effects on the predictive effect of conflict in the teacher-child relationship on social exclusion. However, a limitation of the current investigations is that we have not controlled for other possible confounders, such as externalizing behavior or extroversion. Other than child characteristics, the current study has controlled for possibly confounding factors related to the family, such as family climate and socioeconomic status.

Effects of control variables

Social skills

This study found a small effect of social skills measured in preschool on predicting social exclusion in first grade. Having better social skills can give the child a benefit in dealing with the social world and acting in a way that is not bothersome for the peers, and hence minimize the risk of rejection (Bagwell & Schmidt, 2013, p. 15; Ladd & Kochenderfer-Ladd, 2016, p. 119). Increased social skills have also been found to decrease the likelihood of negative social repercussions, like exclusion, if the child behaves in a problematic way (Glenn et al., 2021). Social skills training programs focus on improving the skills of the rejected child. However, it has been found that even in the most successful programs, the children who improve the most are often still rejected, just less than before the training (Conduct Problems Prevention Research Group, 1999). Approaches to diminish social exclusion by focusing on social skills training of the victims are unlikely to be helpful if exclusion is based upon factors other than specific social deficits (Killen et al., 2013). A review showed mixed results or no positive outcomes for almost half of the studies that investigated the effects of social skills training (Moote et al., 1999). Some research argues that deviancy or being different might not be the most important factors in predicting social exclusion, but that the intergroup context and characteristics are equally or more important in determining exclusion of members (Abrams et al., 2005). The social skills training program´s effect may be limited because of its exclusive focus on the characteristics of the child who is rejected by its peers (Mikami et al., 2005).

Effortful control

There was found an association between lower effortful control measured in preschool and higher risk of social exclusion in first grade. As noted earlier, low effortful control has in previous studies consistently been found to associate with aggressive behavior and rejection by peers (Bagwell & Schmidt, 2013, p. 16; Card et al, 2008; Jensen-Campbell et al., 2009, p.

107; Krugeer at el., 1996; Rathert et al., 2011). This association can be explained by the fact that these types of temperament, characteristics or behaviors are costly for the peer group or leads to the child not being perceived as contributing to the group in a positive way (Card et al, 2008; Ladd & Kochenderfer-Ladd, 2016, p. 119). If the child behaves in an unpredictive, aggressive or not well-adjusted manner, it can become tiresome or difficult for the peers to interact with the child, leading to rejection and exclusion over time.

Family climate, socioeconomic status, and gender

In addition to looking at the predictive effect of teacher-child conflict on social exclusion and controlling for various effects of the child´s characteristics, this study also controlled for family factors and gender. The results however showed no significant association between the climate of the child´s family, nor their socioeconomic status in predicting social exclusion in school. The findings in the study were not moderated by gender.

Implications

This study uncovers several possible predictors of social exclusion in children´s early development. It highlights the importance of conflict in the relationship between the preschooler and their teacher in predicting social exclusion, in addition to adding to knowledge about the predictive effects of the child´s characteristics The study indicates that social exclusion can be predicted as early as 4 to 6 years of age, and that conflict with the preschool teacher might contribute to understanding and predicting which children are more likely to experience social exclusion after starting in first grade. Social exclusion is often a lasting phenomenon (Cacioppo & Hawkley, 2005, p. 104; Juvonen & Gross, 2005, p. 167), that can have a variety of negative effects on the victim and his or her development, and early prevention can be thought of as crucial. The findings of this study might contribute to the prevention of social exclusion, by highlighting the preschool teacher's role, and how minimizing of conflict in the teacher-child relationship possibly could reduce the child´s risk of experiencing exclusion.

Future research could be focused on further understanding the factors that might lead to a conflicted teacher-child relationship. Child characteristics, teacher characteristics and how these interact in the relationship might be valuable information. Further studies could also be important for investigating the effects of preventing conflict in the teacher-child relationship on risks of social exclusion.

Strengths and Limitations

The current study has several strengths. It is based on a large longitudinal sample of children, using validated measures reported from both teachers and caregivers. The study also focuses on a young age group and early transition- and developmental period from preschool to school that might not yet have been sufficiently studied. Regardless of this, there are also limitations to this study. Firstly, the current study investigated the possible moderating effect of gender on the predictive effect of conflict, but due to poor model fit, it did not control for gender itself. Future research could investigate more in depth the relation between gender and prediction of social exclusion.

Secondly, there could have been included additional possible predictive factors of social exclusion. Although effortful control, social skills, family climate and socioeconomic status have been controlled for, there might be other factors that could contribute to predict social exclusion, such as the child´s level of externalizing behavior and aggression, or stable characteristics like genes. In addition, factors that could moderate or influence conflicted teacher-child relationships and exclusion, such as teacher personality or preferences could have been investigated. It has for example been indicated that children´s externalizing behavior might affect conflict level in the teacher-child relationship (Husby et al., 2023). Other statistical methods could be used in future research, to better control for possible confounders, but is beyond the scope of this thesis. Future research could also include measures on additional time points to investigate possible transactional patterns.

Third, the term *social exclusion* can be challenging to define, and it may also overlap with other terms (Ladd & Kochenderfer-Ladd, 2016, p. 111; Søndergaard, 2014, p. 63; Williams et al., 2005, p. 2). In this study social exclusion was defined as being disliked, rejected, or impeded in social interactions, as well as missing opportunities to fulfill the need to belong (Baumeister et al., 2007; Smart Richman & Leary, 2009; Stenseng et al., 2015). Some of the research presented in the study have used other terms in defining processes like exclusion, such as rejection, ostracism, or lack of acceptance by peers. Because different terms are used in research, there can be challenging to conclude whether studies measure the same factors. Additionally, the current study used The Teacher Report Form (TRF) to measure social exclusion (Achenbach & Rescorla, 2000). The measures of social exclusion at the second time of testing (T2) may ideally have had a higher reliability (Cronbach´s alpha = .68) (Taber, 2018).

Fourth, there could have been included child reported measures on how the child experienced its relationship with their closest preschool teacher as well as experiences of social exclusion, in addition to the teacher reporting. Peer reporting of social exclusion could also have been measured. Both the level of conflict in teacher-child relationships and the level of social exclusion was measured using teacher reports. However, since the study is focused on the transition from preschool to school, the measures were not relying on the reports of the same teacher, reducing the likelihood of the teacher's bias affecting how the children were rated in terms of conflict and subsequent social exclusion. Another possible strength with teacher reporting is that the teachers often have a greater comparative basis because of their contact with many children. It also minimizes the potential of parent-reported bias or differences in style in reporting of the child´s relationships. 2

Conclusion

Social exclusion is a significant threat to children's need to belong. The present findings of longitudinal associations between conflicted teacher-child relationship in preschool (age 4) and social exclusion in first grade (age 6), as measured in a cohort sample, highlight the role of preschool teachers in early social development. After all, children in this age group go through an important transitioning period in which they need to be included, liked, and able to establish social relationships, which, in turn, may impact their further development. The current study controlled for characteristics of the child and family, and showed that also children's lower effortful control and poor social skills predicted social exclusion. As such, these factors may inform preventive efforts. These may be factors that both the teachers, parents, and children themselves could influence. Interestingly, though, controlling for these factors did not undermine the effect of the teacher-child relationship itself.

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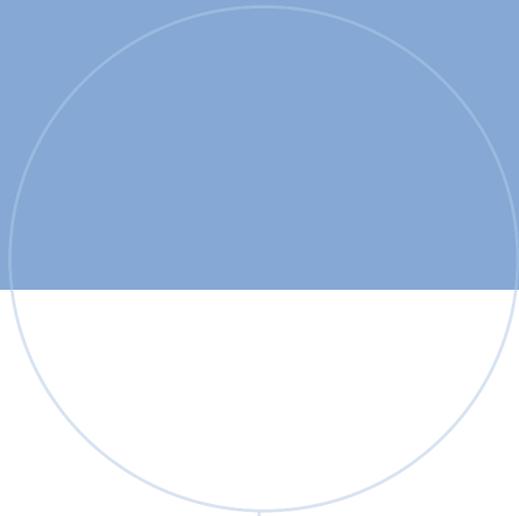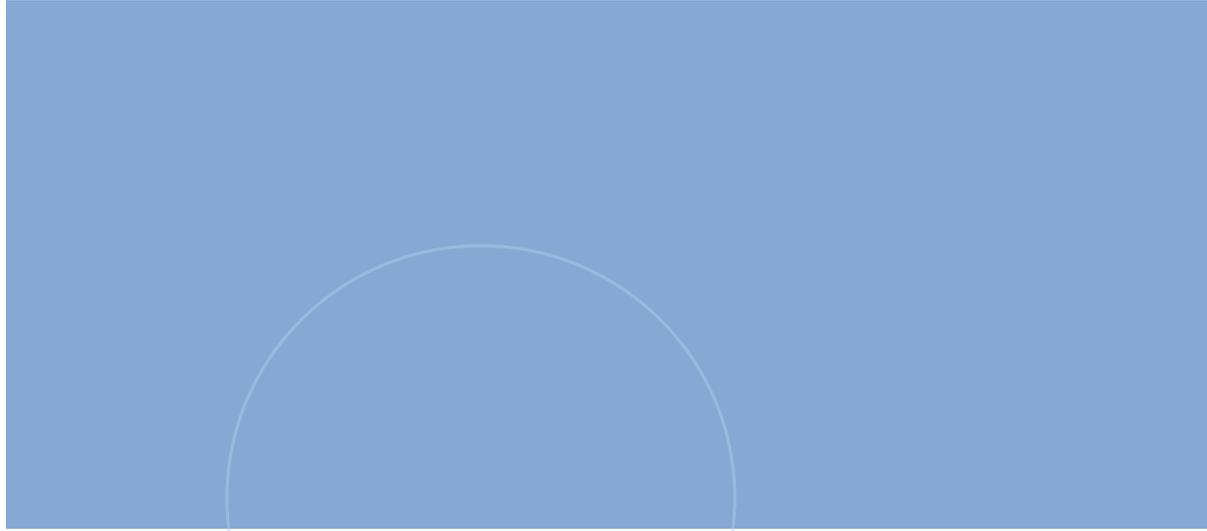
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