# Exploring the Relationship Between Parental Socialization of Emotion and Low Risk and High Risk Alcohol Use in a Non-Clinical Norwegian Sample



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Submitted as a Master's Thesis at the Department of Psychology

UNIVERSITY OF OSLO

Spring 2023

# Acknowledgements

There are a number of individuals that we would like to acknowledge who played important roles in contributing to this research. First and foremost, we would like to thank our supervisor, Stella Tsotsi, for her assistance and support throughout the entirety of this project. We would also like to thank our co-supervisor, Evalill Bølstad, for her valuable knowledge and input. Secondly, we would like to thank everyone involved in the FiN project that has made it possible for us to conduct our analyses and share this research. Thirdly, the completion of this project would not have been made possible without the voluntary participation of all the Norwegian parents whose names cannot all be enumerated. Lastly, we would like to thank all of those who were encouraging and helpful in fulfilling this project to its full potential, including each other. The process of writing this thesis would not have been possible without each other's continuous support and encouragement.

#### **Abstract**

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**Background:** Contemporarily, there has been a substantial growth in interest regarding how parental behaviors influence the development of emotional competence in children through their reactions to children's emotions, referred to as parental emotion socialization. Although alcohol use as a parental characteristic has previously been studied in conjunction with various facets of parenting, it has only recently, and scarcely, been examined in combination with emotion socialization. There remains a lack of research investigating various forms of parental alcohol use, especially lower levels, within the context of emotion-related aspects of parenting. Therefore, the aim of our study was to examine the association between parental alcohol use, including low and high risk, and emotion-related socialization behaviors (ERSBs) while also exploring the potential moderating effect of parent sex in this association.

Methods: This quantitative study was part of the larger research project "Parenting Practices in Norway" (Norwegian: Foreldrepraksis i Norge (FiN)). The present study's sample consisted of 4,107 (1,594 fathers) parents of children aged 4-13. The study's data involved emotion socialization and alcohol use measured through parental self-reports on the Coping with Children's Negative Emotions Scale (CCNES) and Alcohol Use Disorder Identification Test - Consumption (AUDIT-C), respectively. In addition, parental mental health and stress were measured through Parental Stress Scale (PSS) and Hopkins Symptom Checklist-5 (HSCL-5), respectively. Finally, participant demographics (socioeconomic status, relationship status, birth order, and biological/adoptive child status) were also collected with the utilization of questionnaires.

**Results:** The results supported some of our hypotheses. Our findings indicated that increased parental alcohol use was associated with lower levels of supportive and higher levels of non-supportive ERSBs. Both low and high risk alcohol use was significantly associated with lower levels of supportive ERSBs and higher levels of non-supportive ERSBs when compared to the no risk group. Finally, parent sex did not moderate the relationship between alcohol use and supportive and non-supportive ERSBs.

Conclusion: Overall, various levels of parental alcohol use predicted poorer emotion socialization, which was additionally similar for mothers and fathers. These findings illustrate that the consumption of alcohol, including low risk, is associated with how parents socialize emotions. This further support previous literature on the role of parental alcohol use in parenting practices and add novel knowledge regarding the association between various levels of parental alcohol use and ERSBs in a Norwegian context. Theoretical implications of our findings include empirical support on proposed theoretical models on parental emotion socialization (e.g., Eisenberg et al.'s Socialization of Emotion Model) by identifying both lower and higher levels of alcohol use as important parent characteristics which may influence ERSBs. An important applied implication of these findings is that early intervention and prevention work in Norway should focus on multiple levels of parental alcohol use. Additionally, the present study contributes greatly to a research field that has scarcely concerned parental ERSBs in conjunction with parental alcohol use, especially in the context of less severe or detrimental alcohol consumption practices.

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# Exploring the Relationship Between Parental Socialization of Emotion and Low Risk and High Risk Alcohol Use in a Non-Clinical Norwegian Sample

Drinking alcohol is both common and accepted in Norwegian culture (Merakerås, 2022). In general, the Norwegian Directorate for Health (Norwegian: Helsedirektoratet) reports that alcohol may create negative consequences on a societal level which may further cause health-related damages (Helsedirektoratet, 2021). Because of this, the national goal in Norway is to reduce alcohol consumption in the population and increase knowledge surrounding its impact on our health (Helsedirektoratet, 2021). With regards to parenting specifically, research has shown that consuming alcohol may inhibit a parent's ability to regulate their own emotions, as well as their capacity to display sensitivity and positive parenting (E. Johnson et al., 2022; Morris et al., 2007; Rutherford et al., 1998). As such, expanding our knowledge of alcohol use in parents is both necessary and prudent when considering the prevalence of this parental behavior within Norwegian households. A previous report on parental alcohol use in Norway, carried out by The Norwegian Institute for Narcotics Research in 2009, revealed that up to 150,000 children and 100,000 partners/spouses are estimated to live in a household containing higer alcohol consumption (Rossow et al., 2009). Correspondingly, one in five Norwegian offspring have reported such parental intoxication to occur too frequently (Blå Kors, 2023) and a large number have additionally reported experiencing discomfort regarding their parent's intoxication at least once in their lifetime (Rossow et al., 2009). Thus, the reported prevalence and frequency of alcohol consumption among Norwegian parents are not merely high but also worrisome, especially considering the amount of close relationships that are affected by this behavior.

The study of parental alcohol use has been extensive and dynamic, yet the majority of previous literature has focused mainly on parents with more severe, problematic, and often clinically diagnosed alcohol use. On the other hand, the effects of less severe forms of parental alcohol, seem to have been deemed insignificant (Lund et al., 2015). More recent evidence has found that even small amounts of alcohol alter the way parents behave, and reports from offspring have revealed these small amounts of parental alcohol use to be uncomfortable or frightening (Blå Kors, 2023; Sola, 2022). This highlights the importance of examining less severe levels of parental alcohol use. With this in mind, and with how commonly Norwegian parents consume alcohol, it is additionally important to consider the ramifications of this behavior on aspects of parenting, such as how parents teach ways of expressing, interpreting, and regulating emotions to their children.

Thus, in the present investigation, we will focus specifically on one aspect of parenting behavior, namely emotion-related socialization behaviors (ERSBs), and examine how it may be influenced by various levels of parental alcohol use, including high risk (i.e., consuming alcohol in excessive amounts and increasing the risk of highly hazardous or dangerous consequences) and low risk (i.e., drinking habits that are not as copious and have the potential of resulting in less hazardous or dangerous consequences) in a non-clinical sample (Babor et al., 2001; Norsk Helseinformatikk, 2020; U.S. Department of Veteran Affairs, 2019). Firstly, an introduction of parental socialization of emotion will be provided followed by a brief presentation of the Socialization of Emotion Model (SE model). Next, the importance of supportive parental socialization behaviors for the child's emotional development, along with parents' ability to engage in such behaviors, will be discussed. Having established the significance of parental socialization of emotion, parental alcohol use will be highlighted as an important influencing risk factor. Following this, a review of the pertinent literature on the relation between parental alcohol use and parental emotion socialization will be presented along with a discussion of potential parent sex differences in this association. Afterwards, the current study's research questions and hypotheses will be presented.

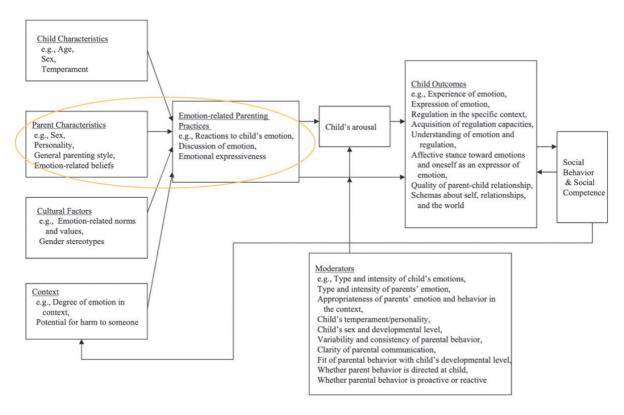
## **Parental Socialization of Emotion**

Parents' manners of practicing parenthood are crucial aspects of children's upbringing and development (Barne-, ungdoms- og familiedirektoratet (Bufdir), 2021), and disruptions in caregiving can leave children at an increased risk for poorer outcomes (Callaghan et al., 2019). During the past two decades, there has been a substantial growth in interest regarding the development of emotional processes, especially within the field of developmental psychology (Spinrad et al., 2020). The pioneering work of Eisenberg and colleagues (1998a; 1998b) led to increased attention on the role of parents in the process of socialization of emotion (Morris et al., 2007). Based on an extensive review of relevant literature, Eisenberg and colleagues (1998a) introduced a theoretical framework, the SE model (Figure 1), describing children's development of emotional and social competence through the process of parental socialization of emotion. Socialization of emotion refers to the lifelong process through which one gradually develops emotional competence in interaction with the surrounding world (Denham et al., 2007). As such, parental socialization of emotion can be understood as the influential effect a broad range of social-emotional parenting behaviors have on children's learning about emotions, including the understanding of emotions in self and others, the understanding of emotions in social situations or interactions (situation

awareness), and the expression and regulation of emotions (Denham et al., 2007; Eisenberg et al., 1998a). Together, these skills constitute what is commonly referred to as emotional competence (Denham et al., 2007; Eisenberg et al., 1998a; Eisenberg et al., 1998b). As emotional competence is closely linked to social competence (Eisenberg et al., 1998a), which can be defined as the effectiveness of an individual's functioning in dyadic relationships and in groups (Bukowski et al., 2001), both are often considered as outcomes of parental socialization of emotion (Eisenberg, 2020; Eisenberg et al., 1998a).

Figure 1

A Heuristic Model of the Socialization of Emotion (SE model)



*Note*. This figure was obtained from Eisenberg's (2020) recent commentary article from the special issue of the Journal of Developmental Psychology dedicated to research on Eisenberg and colleagues' (1998a; 1998b) model of emotion socialization processes. The model illustrates parental ERSBs and the relations between predictors, moderators, and child outcomes.

#### Early Parent-Child Interactions and Child Emotional Competence

The role of primary caregivers is among the most influential factors in children's emotional development, especially in early childhood (Thompson, 2014). Through early parent-child interactions, parents teach their child about emotion regulation through, for instance, specific responses to the negative emotions of their child (Eisenberg al., 1998a; Eisenberg et al., 1998b). Emotion regulation is regarded as one of the core components of emotional competence and is commonly defined as the extrinsic (i.e., relying on other people for efficient emotion regulation, usually the main caregiver; Gross, 2015; Nigg, 2017; Thompson, 1994; Thompson, 2014) and intrinsic (i.e., the acquired skills and strategies for managing one's own emotions, also referred to as emotion self-regulation; Nigg, 2017) processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features to accomplish one's goals and adapt to environmental demands (Thompson, 2014).

Emotion regulation skills are essential to both the socialization process and to subsequent developmental outcomes (Thompson, 2014), and hold unique importance to social and emotional health (Nigg, 2017). For instance, the ability to regulate emotions effectively is essential for maintaining successful interpersonal relationships, academic success, and mental health (Denham, 2018; Morris et al., 2017). Accordingly, children who have developed inefficient emotion regulation skills are expected to differ in several aspects of socioemotional functioning (Eisenberg et al., 2014). During the first years of the child's life, emotion regulation gradually shifts from extrinsic to intrinsic. Thus, the early parent-child relationship is suggested to "set the stage" for the process of socialization of emotion and the development of emotional competence (Boldt et al., 2020).

# The SE Model as a Theoretical Framework

Through socialization of emotions, parents guide their children toward understanding and regulating emotions on their own (Thompson, 2014). Eisenberg and colleagues (1998a; 1998b) suggest that parental socialization of emotion occurs through numerous types of parental strategies, highlighting three distinct strategies in the SE model (Figure 1): a) reactions to a child's emotion, b) discussion of emotion, c) emotional expressiveness, collectively referred to as parental ERSBs. For instance, parents who tend to express their own emotions or encourage conversations about emotions may guide their child to better understand both their own and others' experiences of emotions. As a result, the child may also be better at communicating and regulating their own emotions (Eisenberg et al., 1998a). Parental reactions to a child's negative emotional expressions may include behavioral and

emotional encouragement or punishment and convey information about the degree to which the expressed emotion is accepted or not (Denham et al., 2007). Parental reactions have emerged as an especially important mechanism of emotion socialization (Keller et al., 2022) as they provide rich opportunities for intimacy and teaching of emotions in a present moment (Denham et al., 2007; Eisenberg et al., 1998a; Eisenberg et al., 1996; Eisenberg et al., 1999; Fabes et al., 2002). Such "in-the-moment" parenting practices (Spinrad et al., 2020) are thought to represent direct contributions to emotion socialization in comparison to parental discussion and expression of emotions, which are conceptualized as more indirect strategies (Cassano et al., 2007; Denham et al., 2007; Eisenberg et al., 1998a; Root & Denham, 2010).

It is important to emphasize that the emotion socialization strategies overlap. For instance, discussion of emotions is often part of parents' reactions to children's emotions (Eisenberg et al., 1998a). However, as the present study utilizes measures specific to how parents cope with and react to children's negative emotions in imagined scenarios, parental reactions will be the primary focus of this study.

# Supportive and Non-Supportive ERSBs

Parental ERSBs are typically operationalized as either supportive or non-supportive (Bjørk et al., 2020; Bølstad et al., 2021; Eisenberg et al., 1998a). Supportive ERSBs are characterized by parents' acceptance of emotions, offering help and comfort, and encouraging both the expression and discussion of negative emotions (Fabes et al., 2002). In contrast, non-supportive ERSBs are characterized by minimization or punishment of a child's expression of emotions, becoming distressed, avoiding contact, or using distraction as a way of coping with difficult emotions (Bjørk et al., 2020; Eisenberg et al., 1998a; Fabes et al., 2002). Although the present study is based on the SE model, similar approaches of conceptualizing and classifying ERSBs have been proposed by other theoretical frameworks. For example, supportive and non-supportive ERSBs may respectively overlap with the concepts of *emotion coaching* and *emotion dismissing* parenting proposed by Gottman et al., (1996) in their *Meta-Emotion Theory*. Both theories have been highly influential in the parental socialization of emotion theory. The SE model (Eisenberg et al., 1998a; Eisenberg et al., 1998b) was chosen as the foundation for the present study as it incorporates the pathway between parental ERSBs and their predictors as highlighted in Figure 1.

The SE model suggests that supportive ERSBs are central in promoting healthy socioemotional development in children (Eisenberg et al., 1998a; Eisenberg et al., 1998b). For instance, if a parent responds to a child's anger or sadness with acceptance and acknowledgement, it is likely that the child will learn that both the experience and expression

of these emotions are acceptable. Such supportive behaviors can help the child better understand why they feel angry or sad and thereby facilitate the learning of adaptive regulation skills for the next time they experience similar emotions (Eisenberg et al., 1996; G. L. King et al., 2022; Nelson & Boyer, 2018). On the contrary, if a parent responds in a minimizing or punitive manner, such as saying "it's not a big deal" or "stop crying", it may teach the child that their negative emotions are not important and should be avoided (Eisenberg et al., 1996), which provides no information on how to regulate these emotions (Cui et al., 2020; G. L. King et al., 2022). This can lead to increased emotional arousal, difficulty regulating emotions in a constructive manner, and less optimal social behavior in the child (Eisenberg et al., 1996; Nelson & Boyer, 2018). For instance, non-supportive parental reactions have been related to more social problems and aggression in children (Eisenberg et al., 1999), indicating that such reactions undermine the learning of efficient emotion regulation skills and may hinder healthy socioemotional development in the child (Eisenberg et al., 1996).

The critical importance of parents' ERSBs for the child's socioemotional development is supported by a large body of empirical evidence (Eisenberg, 2020; G. L. King et al., 2022; Spinrad et al., 2020). Overall, the pattern of findings reveals associations between parents' supportive behaviors and positive outcomes in the child (Eisenberg et al., 1998a), for instance, higher emotion regulation skills (Gottman et al., 1996; Perry et al., 2020) and lower levels of conduct problems (A. M. Johnson et al., 2017). Conversely, parents' lower supportive, and non-supportive, behaviors have been repeatedly linked to poorer outcomes in the child (Eisenberg et al., 1996; Gottman et al., 1996), for instance, emotion dysregulation (Denham et al., 2007; Eisenberg, 2020; Morelen et al., 2016; Perry et al., 2020; Shaffer et al., 2012), increased behavioral adjustment problems (Bjørk et al., 2020; A. M. Johnson et al., 2017; Thompson, 2014), and low quality of social functioning (Morris et al., 2007).

# What Can Predict Parental ERSBs?

Several factors are thought to influence parental ERSBs and the degree to which parents react in a supportive or non-supportive manner (Eisenberg, 2020; Eisenberg et al., 1998a; Spinrad et al., 2020). Parents' ability to regulate their own emotions has been found to have a mediating effect on the relation between parental psychological distress and parental ERSBs (Bertie et al., 2021). Parental emotion regulation is further suggested to be one of the most proximal contributors to ERSBs (Spinrad et al., 2020) as optimal self-regulation abilities tend to predict optimal usage of ERSBs (Hajal & Paley, 2020). For instance, research has shown that parents with difficulties in regulating their own emotions are more likely to react

non-supportively to children's negative emotions (Maliken & Katz, 2013; Morelen et al., 2016).

Although various sources of influence seem to interact when predicting ERSBs (Eisenberg, 2020; Godleski et al., 2020; Morris et al., 2007), parental mental health difficulties appear to directly interfere with the ability for efficient and positive parenting (Breaux et al., 2016). For instance, Morris et al. (2007) pointed to how parents' capacity to be sensitive and provide positive parenting may be compromised by other characteristics, such as their mental health or stress. This corresponds to the fact that parent emotion regulation is closely related to parental psychopathology (e.g., Breaux et al., 2016; Godleski et al., 2020; Maliken & Katz, 2013) as most aspects of psychopathology involve symptoms of emotion dysregulation (Breaux et al., 2016). For instance, a study of mothers with symptoms of anxiety showed increased likelihood of non-supportive responses or not responding to children's negative emotions, where maternal emotional dysregulation was suggested to be a potential cause (Breaux et al., 2016). Similarly, Godleski et al. (2020) found that depression in mothers and fathers in early years of their children's life were predictive of non-supportive ERSBs when the child was in kindergarten. Supporting these findings, researchers have argued that parents' ability to adjust their own negative emotions is necessary to be sensitive and responsive towards their child (Pereira et al., 2022). Related to this, Godleski et al. (2020) claimed that alcohol use problems can have a cascading impact on parents' abilities to regulate their own emotions in response to their child's emotions. Specifically, it may reduce their capacity to respond in a sensitive and supportive manner.

Altogether, parents' engagement in supportive or non-supportive responses seem to be affected by various factors. As non-supportive parenting has frequently been related to negative child outcomes, Spinrad et al. (2020) argues that non-supportive ERSBs should be discouraged. However, to help parents engage in more supportive and less non-supportive parenting, increased knowledge about factors influencing parental ERSBs is needed.

## Alcohol Use as a Risk Factor

Alcohol depresses an individual's nervous system, affecting both the neurotransmitters (which relay electrochemical messages within the body) and autonomic bodily functions (involuntary functions within the body) (E. Johnson et al., 2022). This results in an inhibition of cognition and judgment by affecting motor and sensory processes. Throughout the years, researchers have studied the use of alcohol in parents, and more severe or clinically diagnosed alcohol use has been established to correlate with unreliable discipline, lower nurturing and affectionate displays (Windle, 1996), lack of parental monitoring and discipline (Chassin et

al., 1996; DeLucia et al., 2001; K. M. King & Chassin, 2004; Windle, 1996), more parent-child conflict, fewer parent-child interactions (Reich et al., 1988), abusive parenting practices (Freisthler, 2011; Freisthler & Gruenewald, 2013), and increased risk of punitive parenting during times of stress (Wolf et al., 2021). In addition, clinical parental alcohol use has additionally been found to decrease positive parenting practices (Sternberg et al., 2018). Individuals living with at least one parent diagnosed with an alcohol use disorder have reported perceiving their family's emotional climate as more negative (e.g., anger, hostility, acute distress) when compared to children of parents without an alcohol use disorder (Iacopetti et al., 2021). Together, these findings indicate that parents with more severe or clinically diagnosed alcohol use contribute to an increased negative emotional family climate.

While more severe alcohol use in parents may function as a risk in many facets of parenting, recent literature has additionally found several levels of parental alcohol use, including those considered as low risk, to be linked to a range of negative child outcomes when studied in combination with other risk factors in the family (Bryant et al., 2020; Burdzovic Andreas, Torvik, Ystrom, et al., 2022; Lund et al., 2019; Vermeulen-Smit et al., 2012) Adding to this, a Norwegian study carried out by Burdzovic Andreas, Torvik, & Lund (2022) endeavored to explore associations between parental alcohol consumption, which do not necessarily meet clinical criteria for substance-related disorders, and offspring's high school non-completion. Results demonstrated parental alcohol consumption, occurring on a weekly or more frequent basis, and offspring's non-completion of high school to be significantly associated (Burdzovic Andreas, Torvik, & Lund, 2022). This suggests that there exist several risk dimensions of alcohol use in Norwegian parents, including those at levels below clinically diagnosable alcohol problem standards.

Although clear associations between parental alcohol use and negative child outcomes are established, less is known about the confounding factors of this relationship. Specifically, what makes parental alcohol use negatively affect child outcomes remains unclear to-date. Burdzovic Andreas, Torvik, & Lund (2022) did not necessarily account for underlying variables, such as parental ERSBs, however, parental ERSBs could potentially be a factor that accounts for the significant association discovered. More specifically, as the researchers themselves hinted, it is possible that binge drinking may function as a risk factor to various facets of parenting, such as the parent's ability to respond optimally to their child's negative emotions, and ultimately cultivate negative outcomes in the offspring (Burdzovic Andreas, Torvik, & Lund, 2022). Acknowledging that various levels of parental alcohol use may lead to several detrimental outcomes, it is important to deepen our knowledge of mechanisms

behind this association to fully comprehend the effects of parental alcohol use, as well as construct preventive measures that may shelter many of these children from negative developmental outcomes.

Overall, more parents consume alcohol in a non-clinical manner compared to the number of parents diagnosed with an alcohol use disorder (Burdzovic Andreas, Torvik, Ystrom, et al., 2022). The focus on parents with severe alcohol use or alcohol disorders overshadows the potentially detrimental effects of lower levels of parental alcohol use. Hence, a study exploring parental alcohol use, including these overshadowed levels, and its association with facets of parenting, such as parental ERSBs, is warranted.

#### Parental Alcohol Use and Parental ERSBs

Parental alcohol use has only recently been researched in combination with emotion socialization. Only two studies have, to the best of our knowledge, explored parental alcohol use and emotion socialization together. The first study, carried out by Godleski et al. (2020), set out to examine the SE model through the utilization of subgroups consisting of alcoholic and non-alcoholic father families. The researchers found that paternal alcohol problems moderated the associations between parent partner conflict and non-supportive reactions. Thus, the results may point to the fact that problematic alcohol use can be a significant contributor toward the adoption of non-supportive paternal reactions. However, this study included only a small, homogeneous sample size with a primary focus on fathers' alcohol problems. Limited homogeneous sample sizes restrict the degree to which the findings may be generalizable (Godleski et al., 2020). In addition, while the researchers indicated alcohol to be an important risk factor, they did not examine alcohol as a predictor variable specifically for non-supportive reactions. As a result, there remains a gap in knowledge on the potential direct effect this may have on ERSBs.

The second study, carried out by Keller et al. (2022), aimed to explore the association between parental problem drinking, which encompasses a spectrum of symptoms related to excessive alcohol consumption, and parental socialization of emotion. Through the utilization of retrospective reports wherein college students in the US reported on their parents' ERSBs and parental problem drinking from the past, parental problem drinking was linked to greater perceived non-supportive and fewer perceived supportive parental ERSBs. Thus, parental problematic drinking behavior seems to negatively affect the emotional environment of those within the household (Keller et al., 2022). However, it is important to highlight that these findings are not fully generalizable. For example, retrospective reports, such as these, are prone to greater recall bias (Jager et al., 2020). In addition, the findings are not generalizable

much beyond the population measured, college students, which limits extrapolation to other populations.

In conclusion, while these studies contribute important information to an already limited knowledge base, they exclude crucial variables, such as less severe levels of alcohol use, that could be important to expand upon. This is especially so as previous literature has hinted towards a need to incorporate explorations of less severe parental alcohol use when examined together with parenting. Thus, the main aim of the present study is to fill this gap in knowledge by including an exploration of this relationship.

#### Parent Sex Differences in Alcohol Use and Parental ERSBs

While previous literature suggests an association between more severe alcohol use and parental ERSBs, few studies have directly explored potential parental sex differences in this association. There are two key considerations that highlight the importance of including an exploration of parental sex differences for the purposes of this study. Firstly, parent sex is widely thought to influence emotion socialization behaviors (Brown et al., 2015). Mothers are found to socialize more sensitive and warm parenting behaviors in comparison to fathers that more commonly utilize disciplinary techniques involving less supportive parenting behaviors (Brown et al., 2015). Moreover, an increasing body of evidence points toward important sex differences in the emotional aspects of parenting (Brown et al., 2015; Cassano et al., 2007; Eisenberg et al., 1996; Klimes-Dougan et al., 2007; Nelson et al., 2009) and the unique impact this may have on future socioemotional adjustment in the child (Root & Denham, 2010). Accordingly, mothers and fathers seem to differ from each other in both how they respond to and encourage emotions in their child (Root & Denham, 2010).

Concurrently, fathers report more punitive responses and less supportive reactions than mothers in response to children's negative emotions (Brown et al., 2015; Cassano et al., 2007; Eisenberg et al., 1998a; Eisenberg et al., 1996; McElwain et al., 2007; Nelson et al., 2009), and are found to be more likely than mothers to use dismissive or distracting strategies when their child is afraid or sad (Klimes-Dougan & Zeman, 2007). Thus, there is clear evidence supporting the view that mothers and fathers respond differently to children's expression of negative emotions, where there seems to be an overall tendency for fathers to use more non-supportive ERSBs than mothers (Brown et al., 2015; Cassano et al., 2007; Eisenberg et al., 1998a; Klimes-Dougan & Zeman, 2007; Nelson et al., 2009). This is important to highlight as it points to a potential qualitative difference between mothering and fathering in regard to socialization of emotions.

Secondly, while previous literature exploring the association between parent sex and parenting has indicated fathers to engage in less supportive parenting, and mothers in more supportive parenting, previous research exploring the relationship between parent sex and alcohol use has highlighted contrasting differences. For instance, maternal alcohol misuse has been found to have greater damaging repercussions within the family context than paternal alcohol misuse (E. Johnson et al., 2022). Interestingly, mothers have been found to be more affected by family-related stresses and consume alcohol to cope with this as well as other negative emotions. Fathers, on the other hand, intoxicate more commonly for positive reinforcement (E. Johnson et al., 2022), suggesting the reasons and intentions behind paternal intoxication to be more positive in nature in comparison to maternal intoxication.

All in all, as mothers and fathers seem to be distinctively influenced by alcohol, and uniquely respond to children's negative emotions, the association between parental ERSBs and alcohol use may potentially vary based on parent sex. Aligning with this, an examination of the potential moderating effect of parent sex on the relationship between various levels of alcohol use and parental ERSBs will be conducted in the present thesis. With previous research providing no clear expectations for the directionality of how alcohol use will predict ERSBs differently for mothers and fathers, this will be investigated in an exploratory fashion.

# **The Current Study**

According to previous empirical evidence, there exists a reasonable amount of evidence suggesting a relationship between more severe alcohol use and parenting practices, which may further differ according to parental sex. However, there remains a lack of research investigating lower levels of alcohol use in the context of emotion socialization. The present study's aim was to include an exploration of this relationship, more specifically, the relationship between both high and low risk alcohol use and parental ERSBs in a non-clinical sample. This would help provide crucial information about some of the contributing factors to the practice of parenthood in Norway as lower, non-clinical levels of alcohol consumption among parents in Norway is seemingly high (Burdzovic Andreas, Torvik, Ystrom, et al., 2022). Additionally, previous literature has indicated sex differences in both alcohol use and parental ERSBs. Hence, an exploratory examination of whether parental sex can act as a moderator in this relationship was also conducted. This may be of importance for tailoring the implementation of future interventions to the general parental population in Norway.

# Research Questions and Hypotheses

The following research questions and hypotheses were the main aims of the present study:

RQ1: Will alcohol use be significantly associated with ERSBs in parents? (Figure 2)

H1: We expected increased alcohol use to be significantly associated with both lower levels of supportive ERSBs and higher levels of non-supportive ERSBs.

RQ2: Will both low and high risk alcohol use be significantly associated with lower levels of supportive and higher levels of non-supportive ERSBs when compared to a no risk alcohol use control group? (Figure 3)

H2: We expected both low and high risk alcohol use to significantly associate with lower levels of supportive ERSBs and higher levels of non-supportive ERSBs when compared to the control group.

RQ3: Will the association between alcohol use and ERSBs be moderated by parent sex? (Figure 3)

H3: We expected the association between alcohol use and ERSBs to be different for mothers and fathers.

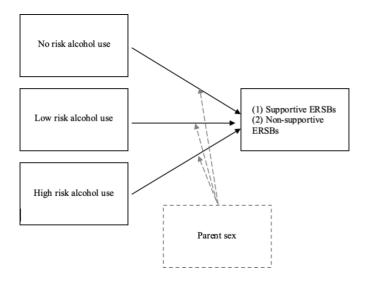
Figure 2

Conceptual Model of Research Question One



Figure 3

Conceptual Model of Research Questions Two and Three



*Note*. Parental alcohol use illustrated as a categorical variable for both research questions. The grey dotted lines represent research question three.

#### **Methods**

The current study was part of the larger research project "Parenting Practices in Norway" (Norwegian: Foreldrepraksis i Norge (FiN)) carried out by The Department of Psychology at the University of Oslo coordinated by Professor Egil Nygaard (UiO). The FiN project is conducted on assignment by The Norwegian Directorate for Children, Youth and Family (Norwegian: Barne-, ungdoms og familiedirektoratet (Bufdir)). Bufdir's request for assistance from The Department of Psychology was grounded in the need for new and increased knowledge about Norwegian parents, how they practice their parenthood, and, especially, which factors contribute to emotion-related parenting practices. Data collection was carried out during the autumn of 2022 in Oslo, Norway over a three-month period (calendar weeks 38-48).

# **Ethical Considerations**

The FiN project collected sensitive information and health-related data from the participants which required approvals from REK (English: Regional Committees for Medical and Health Research Ethics) and NSD (English: Norwegian Center for Research Data). As the present thesis is part of a larger research project, approvals were covered by the ones applied for by the FiN project. Ethical approval was obtained from REK (REK- 2022/346141).

Further, an assessment of privacy consequences (DPIA) was developed in collaboration with the NSD (NSD-2022/584188) and approved by UiO's Head of Department and Data Protection Office.

Information regarding a participant's right to withdraw at any time up until, or after, responses had been submitted was provided in the invitation letter (see Appendix A). To take part in the survey, parents needed to provide informed consent (see Appendix B). Information about children was reported by the parents instead of the children themselves, as they were under the age of consent (16 years) (Helseforskningsloven, 2008, §17). Thus, no consent from the children was obtained in this study. Additionally, all data was anonymized and safely stored and handled within TSD (English: Services for Sensitive Data; tsd-drift@usit.uio.no), a secure and private cloud storage and computational space developed and owned by the University of Oslo used for the collection, storing, and analysis of sensitive research data that requires a high level of security. Thus, no sensitive information was, or could be, handled outside TSD.

# **Participants**

The population of interest for the FiN project was parents of 4-12-year-olds. More specifically, participants were randomly drawn from the National Register of Citizens (Norwegian: Folkeregister) by the following criteria: They were parents of children in the age range of 4-12 (registered in 2021, meaning that some of the children had turned 13 when data collection took place) who were also either a) twins, b) siblings of twins, c) children of parents who are twins, or d) the partner of one of the preceding groups. The purpose of inviting parents from the same families is the research design (generational twin/sibling design) applied by the FiN project, a design that makes it possible to disentangle between genetic and environmental influences on parenting. Moreover, it was desirable to recruit a national sample which included parents with a non-Norwegian cultural background. To ensure a sufficient selection of participants with a different country of origin, parents who were not twins, such as siblings, were also invited to participate. The final sample consisted of approximately 20% twins, 20% children of twins, and 60% who were siblings or partners of the twins or siblings. As many of the participants had more than one child between the indicated age range, they were asked to answer the questions in relation to their child closest to eight years of age. Additionally, in families where the current partner was not the parent of the child who is closest to eight years old, both the current partner and the biological parent of that child were invited to participate.

Planned missingness was used to minimize subject burden and increase the likelihood to complete the entire questionnaire. This was done through a random selection of one of four questionnaire sets for each participant, wherein one included the full list of questionnaires (Table 1) and the remaining had omitted one or two measures (either Parental Stress Scale (PSS) or Big Five Inventory – 2 (BFI-2), or Hopkins Symptom Checklist (HSCL-5) and Social Values (WVS)).

Out of 15,589 parents invited, a total of 5,419 participants were included in the finalized dataset received from the FiN project. Prior to this, the main project had excluded some participants, specifically, seventeen had answered the questionnaire without being invited and were removed. Additionally, a few had completed the entire questionnaire twice, where only the most recent version was kept. Some participants had also agreed to participate and complete the questionnaire only to later withdraw their consent. Thus, responses from these participants were deleted in line with NSD guidelines. Data preparations and description of participant attrition for the present study are described in detail in the section "Data Preparation".

# **Procedure**

The survey was conducted online in Nettskjema (nettskjema@usit.uio.no) and invitations were sent out via email and SMS. In an attempt to increase the number of responses, follow-up contact with participants that had not completed the online survey was completed by several master students and research assistants. To increase the number of responses further, the team applied for a grant which was accepted six weeks after data collection had started. Participants responding to the survey after this received a monetary award of 400 NOK in the form of a universal gift card.

Upon clicking the link to the survey, participants were provided information regarding the study as well as a consent sheet. As the present study is a part of a larger research project, the online survey consisted of additional measures which did not pertain to our study and, therefore, were not utilized. An overview of these measures can be found in Table 1.

On top of monetary reimbursement, at the study's termination, participants were given the option to receive feedback regarding their parenting styles based on their average scores. After an ethical consideration, it was decided that this feedback was of minimal ethical risk as participants' scores were not compared to other participants, but simply a reflection of their own average scores. While participants may have received a lower score than expected, and may experience discomfort and demotivation, the feedback was intended to lead to positive

consequences (i.e., increased knowledge, parental behavior changes etc.) rather than negative ones.

**Table 1**Overview and Order of Procedure Measures

Section	Section Theme	Measurement
Section 1	About Children	Number of children the parent has parental responsibility for  Child demographics including birth order and biological/adoptive child status
Section 2	About Parents	Parents as social context questionnaire (PASCQ-18)  Coping with Children's Negative Emotions Scale  CCNES: Own parenting style
Section 3	More About Parents	Parent Stress Scale (PSS) Hopkins Symptom Checklist-5 (HSCL-5) Big Five Inventory-2 (BFI-2) Alcohol Use Disorder Identification Test (AUDIT-C) Social Values (WVS) Coping with Children's Negative Emotions Scale (CCNES): Own upgrowing
Section 4	Background Information	Demographic information including relationship status, education, income, and occupation Relationship Assessment Scale (RAS-1) Demographics regarding the participant's partner Own childhood family Demographic information including country of birth Information regarding zygosity Information regarding adoption
Section 5	About Parent-Child Relationship	Emotionality, Activity and Sociability (EAS) Temperament Survey Parent/teacher Rating Scale for Disruptive Behavior (RS-DBD) KIDSCREEN-10 Conflict and Problem Solving Scale (CPS)

*Note*. A comprehensive list of the measures used by the FiN project listed in order of participant completion. Bold text = measures utilized by the current study.

#### **Measures**

# Supportive and Non-Supportive Reactions to Child Negative Emotions

Parent emotion socialization was measured using a modified version of the Coping with Children's Negative Emotions Scale (CCNES) (Fabes et al., 1990). The scale was translated to Norwegian by members of the FiN project through a process of translation and back-translation. The original CCNES is a self-report scale consisting of 72 items where the respondents are presented with 12 hypothetical scenarios in which their child experiences negative emotions (e.g., being scared or sad about the parent leaving, being nervous of possibly embarrassing him/herself in front of others, etc.). Respondents are then asked to indicate the degree to which they would respond to these scenarios in six different ways on a Likert scale of 1 (very unlikely) to 7 (very likely). Based on the response options for each scenario, scores for six subscales can be calculated, reflecting qualitatively different types of coping responses parents tend to use in a variety of parenting situations (Fabes et al., 1990). These include Problem-Focused Reactions (PFR), Emotion-Focused Reactions (PR), and Distress Reactions (DR).

The modified version used in the present project was developed by four members of the FiN project with the purpose of increasing the scale's relevance for today's modern parental roles in Norwegian culture. One of the main alterations was the inclusion of a scenario about tantrums in the context of screen time (e.g., usage of social media, online gaming). Further modifications entailed the omission of DR and the addition of three items constituting a new subscale, namely Distraction (DIS) (e.g., "try to change the focus of the child's attention"). The purpose of this was to capture the degree to which parents use distraction as a way of coping with their child's emotions. DIS was created as a response category based on previous research in the Norwegian context which has shown that Norwegian parents tend to use distraction rather than punitive strategies (Bjørk et al., 2022; Bølstad et al., 2021). Furthermore, a recent evaluation of the scale recommended inclusion of distraction as a dimension in the CCNES, as well as argued that the addition of a subscale measuring empathy could be beneficial (G. L. King et al., 2022). Thus, three items for an additional subscale, Empathy (EMP) (e.g., "confirm the child's feeling that it is sad to end something that is fun."), were added with the intent of capturing the degree to which parents show empathy when their child displays negative emotions.

As such, the modified version (25 items) used in the present study consisted of seven hypothetical scenarios with three or four possible responses in each scenario corresponding to

one of seven subscales; the two newly added mentioned above (DIS and EMP), and (1) PFR, reflecting the degree to which the parent helps the child to solve the problem which caused the negative emotions (e.g., "help my child figure out how to get the bike fixed"), (2) EFR, reflecting the degree to which the parent responds with an attempt to make the child feel better to reduce the negative emotions (e.g., "comfort my child and do something fun with him/her to make him/her feel better"), (3) EE, reflecting the degree to which the parent confirms the child's emotion or encourages them to express their feelings (e.g., "tell my child it's ok to cry"), (4) MR, reflecting the degree to which the parent devalues the child's problem or reactions, or minimizes the severity of the situation (e.g., "tell my child that he/she is overreacting"), and (5) PR, reflecting the degree to which the parent reacts with punishment to reduce the need to attend to the negative emotions of their child (e.g., "tell my child to straighten up or we'll go home right away").

In line with empirical and theoretical background for the CCNES (e.g., Eisenberg et al., 1996; Fabes et al., 2002) and previous work (e.g., Bjørk et al., 2020; Bjørk et al., 2021; Godleski et al., 2020; Keller et al., 2021; Nelson et al., 2009), the PFR, EFR, EE, and EMP, and the DIS, MR, and PR subscales were used as measures of supportive and non-supportive ERSBs, respectively. A total score of the supportive and non-supportive ERSBs were calculated, with scores ranging between 16-112 and 10-63, respectively. Higher scores on both measures indicate a higher degree of supportive or non-supportive ERSBs. It is important to mention that the total number of items in the non-supportive subscale was originally reported to be nine in the codebook of the FiN project. However, after exploring the collected data, an additional item of this subscale was discovered to have not been reported by the FiN project. Thus, the total number of items for this subscale was 10.

A total score of all the subscales was not calculated as the literature suggests that the two concepts are distinct as opposed to two opposites existing on a single continuum (Fabes et al., 2002; Nelson & Boyer, 2018). In other words, a high degree of supportive ERSBs is not necessarily the same as a low degree of non-supportive ERSBs, and vice versa.

In the current sample, internal consistency for the CCNES non-supportive subscale was found to be inadequate ( $\alpha = 0.510$ ), indicating that the items constituting this subscale might not capture the same construct (Tavakol & Dennick, 2011). However, internal consistency estimated with Cronbach's Alpha was found to be good ( $\alpha = 0.851$ ) for the CCNES supportive subscale, indicating that the items constituting this subscale are a reliable measure of parents supportive ERSBs.

#### Parental Alcohol Use

The amount and frequency of alcohol use were measured with a short version of the Alcohol Use Disorder Identification Test (AUDIT) (Babor et al., 2001), namely, AUDIT-C (Bush et al., 1998). Translation of this scale to Norwegian was gathered from "Nasjonal kompetansetjeneste". This Norwegian version consists of three items encompassing the frequency of alcohol consumption ("How often do you have a drink containing alcohol?"), number of units consumed on a typical drinking day ("How many drinks containing alcohol do you have on a typical drinking day?"), and the frequency of exceeding 6 or more units ("How often do you have six or more drinks on one occasion?").

Scores were assembled from a 5-point Likert scale questionnaire format, where the total score ranged from 0 to 12 points. The original AUDIT-C is scored in such a way that lower scores correspond to lower risk, and vice versa. The response options in the FiN project were as follows; for item 1: 5=never, 4=monthly or less, 3=2-4 times per month, 2=2-3 times per week, 1=4+ times per week; for item 2: 6=0-1, 5=1-2, 4=3-4, 3=5-6, 2=7-9, 1=10+; for item 3: 1=never, 2=less than monthly, 3=monthly, 4=weekly, 5=daily. In the present project, items 1 and 2 were reversed coded so that lower scores reflected lower risk. Furthermore, the scores were recoded to align with the original AUDIT-C scores as follows; for item 1: 0=never, 1=monthly or less, 2=2-4 times per month, 3=2-3 times per week, 4=4+ times per week; for item 2: 0=0-1, 0=1-2, 1=3-4, 2=5-6, 3=7-9, 4=10+; for item 3: 0=never, 1=less than monthly, 2=monthly, 3=weekly, 4=daily.

To measure alcohol use as a continuous variable, a total score was calculated from the three questions. In the original AUDIT-C, participants were divided into four respective groups from the total scores compiled: low risk, moderate risk, high risk, and severe risk. In the present study, however, for the purpose of measuring alcohol use as a categorical variable, the four original groups were merged into low risk (consisting of both the original low risk and moderate risk groups) and high risk (consisting of both the original high risk and severe risk groups). In addition, a "no risk alcohol use" group was added as control. No risk alcohol use was classified as a total score of 0-1, low risk alcohol use was classified as a total score of 2-5, and high risk alcohol use was classified as a total score of 6-12 (U.S. Department of Veteran Affairs, 2019). It is important to mention that the total score for classifying the no risk alcohol use group was originally intended to be 0. However, after data collection, it was discovered that the number of participants who scored 0 was too low to comprise a meaningfully large group for statistical analyses. Thus, the total score for classifying the no risk alcohol use group was adjusted to 0-1.

Previous research has highlighted the measurement properties of AUDIT-C to be similar to those in AUDIT. More specifically, AUDIT-C was chosen for its ability to gather reliable and valid measures (Barry et al., 2015; Bush et al., 1998).

#### Control Variables

**Parental Stress.** Parental stress was measured with seven items through the utilization of a short version of the PSS (Berry & Jones, 1995). Approval for the utilization of the translated, Norwegian short version was gathered through email communication between the FiN project and Ane Nærde (personal communication, 19th of April 2022). Participants were asked to consider the degree to which they agreed on a 5- point Likert scale of 1 (strongly disagree) to 5 (strongly agree) on statements regarding their stress related to aspects of parenting. Total scores ranged from 7 to 35, wherein higher total scores signified greater feelings of stress related to parenting. Items 2 and 3 were reverse scored so that the directionality of the scale would remain intact. In the current sample, internal consistency estimated with Cronbach's Alpha was found to be low ( $\alpha = 0.610$ ). However, the Norwegian version of the PSS has been shown by previous studies to capture abundant, reliable, and valid measures of parental stress (Nærde & Sommer Hukkelberg, 2020). (KOMMET HIT)

Parental Mental Health. Parental mental health was measured with a short version of HSCL, namely HSCL-5. This version consists of five questions and has been previously utilized in the "Norwegian mor, far og barn undersøkelsen" (MoBa), where it was also translated to Norwegian (Jin, 2016). Scores were assembled on a 4-point Likert scale. Average scores were calculated with a minimum score of 5 and a maximum score of 20. Higher scores indicated higher levels of a person being affected by anxiety and/or depression symptoms. Previous studies have reported the HSCL-5 to be a reliable and valid short form of the HSCL-25 (Schmalbach et al., 2021) including the Norwegian, translated version (Magnus et al., 2018). In the current sample, internal consistency estimated with Cronbach's Alpha was found to be good ( $\alpha = 0.859$ ).

# **Participant Demographics.**

Country of Birth. Country of birth was measured by asking participants what country they were born in. In the present study, participants were divided into two groups, Norwegians and non-Norwegians. This was due to the vast majority of the sample being born in Norway while the number of non-Norwegian participants born in the same country was not sufficient to create separate groups for each country. Norwegians were given the value 0, and non-Norwegians the value 1.

*Education.* Education was measured by asking participants about their highest completed education. Response categories were: 1= No education or preschool, 2= Elementary school, 3= High school, 4= Professional degree, 5= University- or higher education, up to four years, and 6= University- or higher education, more than four years. Scores were recoded to range from 0 (No education or preschool) to 5 (University- or higher education, more than four years).

*Income*. Income was measured by asking participants what their total gross annual income was (including salary before taxes and income from assets). Response categories ranged from 1=0-100,000 NOK to 20= above 2,000,000 NOK, with the categories in between increasing by 100,000 NOK each. In alignment with statistics of average income in Norway (Fløtre & Tuv, 2023), the responses were grouped into three categories; low income (0-300,000) were merged and given the value of 0), middle income (300,001-700,000) were given the value of 1), and high income (700,001) or more were given the value of 2).

*Occupation*. Occupation was measured by asking participants whether they were currently working or studying with the following response categories; 1= Studying (enrolled in a study program), 2= Working (hired, self-employed): Full time, 3= Working (hired, self-employed): Between 50-100%, 4= Working (hired, self-employed): Between 10-49%, 5= Laid off or on sick leave, 6= Retired, 7= Job seeker, 8= Disability benefit, or 9= other. Response categories 1 and 2 were kept and recoded to 0 and 1, respectively, while responses 3 and 4 were merged into one category "Work part time" (given the value 2), and responses 4, 5, 6, 7, 8, and 9 were merged into a "Non-working" category (given the value 3).

**Relationship Status.** Relationship status was measured with the question "Are you in a relationship?" where the participants responded either 1= Yes or 2= No. Scores were recoded as follows: 0= Yes and 1= No.

*Birth Order*. Birth order of the child was measured with the question "What number in the order of siblings is this child" where the participants could choose a value between 1= First and 20= Twentieth.

*Biological/Adoptive Child Status*. Participants were asked about their relation to the child they provided their responses on behalf of, where they could choose between four possible answers: 1= your adoptive child, 2= your biological child, 3= your foster child, and 4= your bonus/stepchild. As the parent-child interaction might differ depending on the nature of the relation, participants who answered 3 or 4 were removed. Response category 2 was recoded to get the value 0.

#### **Data Analyses**

All data manipulation and analyses for the present study have been pre-registered in the Open Science Framework (https://doi.org/10.17605/OSF.IO/VCNPQ). Data analyses were conducted using SPSS version 29.0. Initially, a priori power analysis using the G\*Power software, version 3.1.9.6 (Faul et al., 2009), was used to estimate the appropriate sample size for the present study. This estimation calculated the total appropriate sample size to equal 779 participants. With three tested variables and 12 predictors in total, this value was the required minimum sample size for a multiple linear regression to achieve an effect size of  $f^2$ =0.02, p value of 0.01, and observed power at 0.80.

For the first research question, two multiple linear regressions were performed separately for supportive and non-supportive ERSBs to examine the relationship between supportive or non-supportive parental ERSBs, as the outcome variable, and parental alcohol use, as the predictor variable. Two blocks of predictor variables were used: 1) Block 1 included all control variables and 2) Block 2 included parental alcohol use.

To examine the second research question, two univariate multiple linear regressions were performed separately for supportive and non-supportive ERSBs. In these analyses, alcohol use was examined as an ordered categorical variable, consisting of the three participant groups: no risk alcohol use, low risk alcohol use, and high risk alcohol use. The no risk alcohol use group was used as the reference to examine whether differences exist between levels of parental alcohol use in supportive and non-supportive ERSBs. Predictor variables were entered in two blocks in the same fashion as for research question 1.

For the third research question, four exploratory moderation analyses were performed, through the utilization of PROCESS macro (Hayes, 2018) in SPSS, to investigate whether the association between parental alcohol use (independent variable) and parental ERSBs (dependent variable) was moderated by parent sex (i.e., mothers and fathers). Parental alcohol use was both explored as a continuous variable, as in research question 1, and as an ordered categorical variable, as in research question 2 (no risk alcohol use, low risk alcohol use, and high risk alcohol use).

Parental stress, parents' mental health, country of birth, education, income, occupation, relationship status, the child's birth order, and biological/adoptive child status were added as control variables in all the aforementioned analyses.

#### **Data Preparation**

Prior to conducting any analyses, data were screened for errors, missingness, and outliers, as well as checked for several assumptions that the statistical method of multiple regression is based upon.

# Data Screening

Several errors were identified upon screening the data. First, of the initial 5,419 participants, 232 either reported their child's age to be outside the range of 4-12 (in 2021) or failed to report their age entirely. These participant responses did not meet the inclusion criteria for the present study and were excluded from the dataset. Second, 12 participants reported their child to be their foster or bonus/stepchild, while 360 participants failed to respond to this question, and were also excluded from the dataset for the same reason as previously mentioned.

# Handling of Missing Data

A decision was made to remove participants with more than 20% missing data on any of the main variables. Missing Value Analysis (MVA) was conducted to examine the main variables for missingness. A significant number of participants (n = 1248) had one or more missing values on AUDIT-C. As the scale comprises only three questions, missing one item equates to 33.33% missingness for the whole scale. All of these were excluded, leaving AUDIT-C with no further missingness. A significant number of participants also exceeded 20% missingness on the CCNES subscales (supportive- and non-supportive ERSBs) and were removed.

After excluding all participants with more than 20% missing values on our main variables, a new MVA was run to inspect the remaining data for missingness. For the CCNES subscales, 116 participants still had between one to four missing values in the subscales. Additionally, 25 and 22 participants, for the PSS and HSCL-5 respectively, had either one or two missing values, equating to less than 20% missingness. For these, mean imputation method was used to fill in the missing values.

For the remaining variables of interest, Little's (1988) test for Missing Completely At Random (MCAR) test was conducted to assess whether missing values were random or could be due to a systematic pattern in the lack of responding. MCAR was found to be significant (p<.001), indicating that the missingness might be systematic. However, as the number of participants with missing values on these variables constituted less than 1% of the entire sample, we still assumed missingness at random and chose to proceed with imputation through expectation maximization method. This method was conducted for the following

variables: income, occupation, and education, as well as for PSS and HSCL-5. For the remaining variables (country of birth, relationship status, birth order, relation to child, and parent sex), missing values were not handled any further as it would not make sense to impute values here. Therefore, only participants with complete data on these variables were used in the analyses.

#### **Outliers**

Lastly, the main variables were inspected for outliers. Outliers were defined as any values 3 standard deviations, or greater, away from the mean. This was assessed through both observation of box plots and conversion to standardized scores, where any Z-scores above 3 were defined as outliers. A total of 33 participants (AUDIT-C: n= 16, CCNES: n= 17) met this criterion and were excluded from the dataset.

#### Participants in the Present Study

After preparing the data for analyses, the final sample consisted of 4,107 parents out of the initial 5,419 respondents. Participants' ages ranged from 25-61 years (M = 40.34, SD = 5.13). Concurrently, 2250 (58.5%) of these were mothers, 1594 (38.8%) were fathers, and 263 (6.4%) did not report their sex. Further descriptive statistics of participant demographic information are presented in the results section (Table 2).

#### Distribution of Data

Before continuing with the main analyses, several assumptions related to the distribution of data were assessed to ensure no violation of normality, linearity, homoskedasticity, or multicollinearity. Ensuring these assumptions is necessary for multiple regression analyses to be conducted and interpreted properly (Field, 2017).

The assumption of normality was first checked with tests of normality for our main variables. All results were significant (p < .05), indicating non-normal distribution. However, due to the large sample size, the analyses were robust enough to handle violations of normality (Field, 2017). Normality was further assessed through skewness, kurtosis and observations of histograms, and Q-Q Plots for all continuous variables. Values of skewness and kurtosis for these remained between -0.72 - 1.72 and -0.70 - 3.52, respectively, which were well within what previous researchers have considered as an acceptable range (e.g., Aminu & Shariff, 2014). Further, all graphs indicated normal distribution, suggesting that the assumption of normality was met.

The assumptions of homoskedasticity (equality of variances) and linearity were assessed by observing histograms, P-P Plots, and scatterplots of residuals against the dependent variable in both models (Supportive ERSBs and Non-Supportive ERSBs). All

graphs displayed normally distributed values. It was therefore assumed that the variances were equal, that heteroskedasticity was not violated, and that a linear model was a good fit for the data as the predictors and outcome variables were approximately linear in their relationship (Field, 2017).

#### **Results**

# **Descriptive Information and Preliminary Analyses**

Preliminary analyses were conducted to examine the frequencies, descriptive information, distributions, and correlations for all variables. Descriptive statistics of participant demographic information are presented in Table 2. Further descriptive statistics and correlations between all variables are presented in Table 3. Of note, both supportive and non-supportive ERSBs were significantly correlated with parental alcohol use, with a small effect and in the expected direction with supportive ERSBs correlating negatively with alcohol use, and non-supportive ERSBs correlating positively with alcohol use. Of further note, a positive, medium effect size correlation between the variables PSS and HSCL-5 were found. The presence of multicollinearity was not indicated in the regression models, as revealed by all VIF-values being significantly below 10 (ranging between 1.01 - 1.23) and their corresponding tolerance values being well above 0.2 (Field, 2017).

Table 2

Descriptive Statistics of Demographic Information Split by Alcohol Use Group

Variable	N (%)							
	Total	No Risk	Low Risk	High Risk				
Country of birth								
Norway	3826 (93.2%)	432 (87.6%)	3066 (93.9%)	328 (94.0%)				
Other*	269 (6.5%)	58 (11.8%)	191 (5.8%)	20 (5.7%)				
Missing	12 (0.3%)	3 (0.6%)	8 (0.2%)	1 (0.3%)				
Education								
Elementary school	68 (1.7 %)	14 (2.8%)	44 (1.3%)	10 (2.9%)				
High school	705 (17.2%)	80 (16.2%)	539 (16.5%)	86 (24.6%)				
Professional degree	443 (10.8%)	39 (7.9%)	351 (10.8%)	53 (15.2%)				
University* (up to 4 years)	1334 (32.5%)	155 (31.4%)	1081 (33.1%)	98 (28.1%)				
University* (more than 4 years)	1557 (37.9%)	205 (41.6%)	1250 (38.3%)	102 (29.2%)				
Income								
Lower income (0-300 000)	204 (5.0%)	55 (11.2%)	133 (4.1%)	16 (4.6%)				
Middle income (300 001-700 000)	2395 (58.3%)	322 (65.3%)	1912 (58.6%)	161 (46.1%)				
High income (700 001 or more)	1508 (36.7%)	116 (23.5%)	1220 (37.4%)	172 (49.3%)				
Occupation								

Student	71 (1.7%)	13 (2.6%)	56 (1.7%)	2 (0.6%)
Work full time	3153 (76.8%)	302 (61.3%)	2553 (78.2%)	298 (85.4%)
Work part time	622 (15.1%)	99 (20.1%)	491 (15.0%)	32 (9.2%)
Non-working*	244 (5.9%)	76 (15.4%)	153 (4.7%)	15 (4.3%)
Missing	17 (0.4%)	3 (0.6%)	12 (0.4%)	2 (0.6%)
Relationship status				
In a relationship	3784 (92.1%)	453 (91.9%)	3014 (92.3%)	317 (90.8%)
Not in a relationship	314(7.6%)	39 (7.9%)	245 (7.5%)	30 (8.6%)
Missing	9 (0.2%)	1 (0.2%)	6 (0.2%)	2 (0.6%)
Birth order				
1st	1333 (32.5%)	144 (29.2%)	1088 (33.3%)	101 (28.9%)
2nd	1560 (38.0%)	184 (37.3%)	1230 (37.7%)	146 (41.8%)
3rd	671 (16.3%)	98 (19.9%)	527 (16.1%)	46 (13.2%)
4th	118 (2.9%)	16 (3.2%)	90 (2.8%)	12 (3.4%)
5th	16 (0.4%)	2 (0.4%)	13 (0.4%)	1 (0.3%)
6th	6 (0.1%)	-	5 (0.2%)	1 (0.3%)
7th	3 (0.1%)	1 (0.2%)	2 (0.1%)	-
Missing	400 (9.7%)	48 (9.7%)	310 (9.5%)	42 (12.0%)
Biological/adoptive child status				
Biological	4094 (99.7%)	492 (99.8%)	3253 (99.6%)	349 (100%)
Adoptive	13 (0.3%)	1 (0.2%)	12 (0.4%)	-

*Note*. N = number of participants. \*Other includes all participants who has answered other countries than Norway as their birth country. \*University includes "or higher degree". \*Nonworking includes laid off/sick-leave, job seeker, disability benefit, retired and other.

 Table 3

 Descriptive Statistics and Bivariate Correlations Between Study Variables

Variable	M	SD	N	1	2	3	4	5	6	7	8	9	10	11	12	13
1.Supportive ERSBs	90.9	11.86	4107	1												
2.Non-Supportive ERSBs	31.10	5.83	4107	.01	1											
3.Alcohol Use	3.28	1.52	4107	16**	.12**	1										
4.PSS	14.42	3.80	4107	14**	.09**	.04*	1									
5.HSCL-5	7.09	2.52	4107	.01	.02	.04**	.38**	1								
6.Country of birth	-	-	4095	.03*	.05**	06**	.03*	.03*	1							
7.Relationship Status	-	-	4098	.06	.00	.05**	.13**	.13**	.05**	1						
8.Occupation	-	-	4090	.10**	04**	12**	.06**	.20**	.02	.08**	1					
9.Income	1.32	0.56	4107	15**	.11**	.14**	07**	17**	01	09**	30**	1				
10.Education	3.88	1.14	4107	01	13**	08**	05**	08**	.03*	08**	15**	.29**	1			
11.Birth Order	1.91	0.86	3707	05**	.02	01	10**	03	03	.07**	.06**	.02	05**	1		
12.Relation to Child	-	-	4107	.03*	01	.02	.02	.02	.01	.02	01	01	03*	04**	1	
13.Parent Sex	-	-	3844	01	.01	01	.03	.01	01	.03	01	.00	01	.01	01	1

Note. \*p <.05, \*\* p <.01. N = number of participants. M = mean. SD = Standard Deviation. Blank cells = information not relevant for the applicable variables.

# **Main Analyses**

# Research Question 1

Two multiple regression analyses were conducted to examine research question 1: Was alcohol use significantly associated with ERSBs in parents?

**Supportive ERSBs.** After controlling for parental stress, parental mental health, country of birth, education, income, occupation, relationship status, birth order, and biological/adoptive child status, parental alcohol use significantly associated with supportive ERSBs (Table 5). Parental alcohol use also explained a significant proportion of variance in supportive ERSBs,  $R^2 = .08$ , F(10,3681) = 32.13, p < .001. This suggested that higher parental alcohol use was associated with lower levels of supportive ERSBs.

**Non-Supportive ERSBs.** After controlling for the same set of control variables as above, parental alcohol use significantly predicted non-supportive ERSBs (Table 6). Parental alcohol use also explained a significant proportion of variance in non-supportive ERSBs,  $R^2 = .06$ , F(10,3681) = 23.15, p < .001, suggesting that higher parental alcohol use was associated with higher levels of non-supportive ERSBs.

Table 5

Results of the Multiple Linear Regression with Parental Alcohol Use as the Main

Independent Continuous Variable and Supportive Parental ERSBs as the Outcome Variable.

Variable	b	t	p	SE	Lower CI	Upper CI
AUDIT-C	13	-7.94	<.001*	0.01	-0.11	-0.06
PSS	19	-10.75	<.001*	0.01	-0.06	-0.04
HSCL-5	.05	2.81	.005*	0.01	0.01	0.03
Country of birth	.02	1.20	.231	0.06	-0.05	0.20
Education	.02	1.12	.264	0.02	-0.01	0.05
Income	12	-6.57	<.001*	0.03	-0.27	-0.14
Occupation	.05	3.18	.001*	0.03	0.04	0.15
Relationship status	.08	4.73	<.001*	0.06	0.17	0.41
Birth order	08	-4.82	<.001*	0.02	-0.13	-0.05
Biological/adoptive child status	03	-2.13	.034*	0.28	-1.15	-0.05

*Note*. Regression statistics of predictor variables (DF = 10,3681). b = standardized beta coefficients. t = t-statistic. \*p < .05. SE = standard error. CI = confidence interval of 95%.

Table 6

Results of the Multiple Linear Regression with Parental Alcohol Use as the Main

Independent Continuous Variable and Non-Supportive Parental ERSBs as the Outcome

Variable.

Variable	b	t	p	SE	Lower CI	Upper CI
AUDIT-C	.08	5.01	<.001*	0.01	0.03	0.08
PSS	.10	5.45	<.001*	0.01	0.02	0.03
HSCL-5	.00	0.01	.993	0.01	-0.01	0.01
Country of birth	.07	4.05	<.001*	0.07	0.14	0.39
Education	16	-9.63	<.001*	0.02	-0.17	-0.11
Income	.14	7.90	<.001*	0.03	0.19	0.31
Occupation	02	-1.31	.189	0.03	-0.10	0.02
Relationship status	02	-1.25	.211	0.06	-0.20	0.04
Birth order	.02	1.35	.176	0.02	-0.01	0.06
Biological/adoptive child status	.00	0.27	.789	0.29	-0.48	0.64

*Note*. Regression statistics of predictor variables (DF = 10,3681). b = standardized beta coefficients. t = t-statistic. \*p < .05. SE = standard error. CI = confidence interval of 95%.

# Research Question 2

Two multiple regression analyses were conducted to examine research question two: Were both low and high risk alcohol use significantly associated with lower levels of supportive and higher levels of non-supportive ERSBs when compared to a no risk alcohol use control group?

**Supportive ERSBs.** When exploring supportive ERSBs as the outcome variable, results revealed that both the low risk group (B = -.20, t(3674) = -4.01, p < .001, 95% CI [-0.30, -0.10]) and the high risk group (B = -.37, t(3674) = -4.94, p < .001, 95% CI [-0.51, -0.22]) differed significantly in supportive ERSBs when compared to the no risk group (N=440). Thus, for one unit increase in the low risk group, supportive ERSBs decreased by 0.20. Subsequently, for one unit increase in the high risk group, supportive ERSBs decreased by 0.37.

**Non-Supportive ERSBs.** For the second analysis, with non-supportive ERSBs as the outcome variable, results revealed that both the low risk group (B = .15, t(3674) = 2.94, p = .003, 95% CI [0.05, 0.25]) and high risk group (B = .30, t(3674) = 4.09, p < .001, 95% CI

[0.16, 0.45]) differed significantly in supportive ERSBs when compared to the no risk group. One unit increase in the low risk group corresponded to an increase of 0.15 in non-supportive ERSBs and one unit increase in the high risk group corresponded to an increase of 0.30 in non-supportive ERSBs.

## Research Question 3

To address the third research question (was the association between alcohol use and ERSBs moderated by parent sex?) four moderation models were conducted. Table 7 summarizes additional descriptive statistics for total alcohol use score split by parent sex and Table 8 summarizes additional descriptive statistics of supportive and non-supportive ERSBs scores for each of the alcohol use groups split by parent sex.

 Table 7

 Descriptive Statistics for Main Variables Split by Parent Sex

Parent Sex	Variable	Mean	SD	N
	Total Alcohol Use Score	3.29	1.51	2250
Females	Supportive ERSBs	91.12	11.81	2250
	Non-Supportive ERSBs	31.04	5.84	2250
Males	Total Alcohol Use Score	3.27	1.54	1594
	Supportive ERSBs	90.84	11.86	1594
	Non-Supportive ERSBs	31.19	5.84	1594

*Note.* SD = standard deviation, N = number of participants.

**Supportive ERSBs.** Firstly, a moderation analysis was conducted to examine the moderating role of parental sex on the relationship between parental alcohol use as a continuous variable and supportive ERSBs. A significant main effect of parental alcohol use on supportive ERSBs was revealed, b = -.09, t(3435) = -5.92, p < .001. However, the main effect of parent sex on supportive ERSBs was not significant (b = -.02, t(3435) = -.23, p = .816). Similarly, the moderating impact of parent sex on the relationship between alcohol use and supportive ERSBs was not significant, b = .004, t(3435) = .16, p = .870. These results indicate that the association between alcohol use and supportive ERSBs is similar for mothers and fathers.

**Non-Supportive ERSBs.** A second moderation analysis assessed the moderating role of parental sex in the relationship between parental alcohol use as a continuous variable and non-supportive ERSBs. A significant main effect of parental alcohol use on non-supportive

ERSBs was revealed (b = .05, t(3435) = 3.53, p < .001). The main effect of parent sex on non-supportive ERSBs was not significant, b = .05, t(3435) = .67, p = .503. Similarly, the results revealed a non-significant moderating impact of parent sex on the relationship between alcohol use and non-supportive ERSBs, b = -.01, t(3435) = -.39, p = .697. These results indicated that the association between alcohol use and non-supportive ERSBs was similar for mothers and fathers.

 Table 8

 Descriptive Statistics of DV's Split by Parent Sex and Alcohol Use Group

Parent Sex	Alcohol Use Group	Supportive ERSBs			Non-Supportive ERSBs		
		Mean	SD	N	Mean	SD	N
Females	No Risk	93.26	11.46	264	29.90	5.94	264
	Low Risk	91.11	11.75	1793	31.06	5.79	1793
	High Risk	88.31	12.26	193	32.39	5.87	193
Males	No Risk	94.89	11.02	199	30.27	5.55	199
	Low Risk	90.56	11.76	1260	31.12	5.82	1260
	High Risk	87.47	12.54	135	33.18	6.24	135

*Note*. SD = standard deviation, N = number of participants in each group.

**Supportive ERSBs.** The third moderation analysis was conducted to examine the moderating role of parent sex on the relationship between the three risk levels of alcohol use (no risk, low risk, and high risk) and supportive ERSBs. A significant main effect was revealed between of the three risk levels of parental alcohol use on supportive ERSBs was revealed, b = -.13, t(3435) = -2.81, p = .005. However, the main effect of parental sex on supportive ERSBs was not significant, b = .10, t(3435) = 1.31, p = .191. Similarly, the moderating impact of parent sex on the relationship between alcohol use groups and supportive ERSBs was not significant, b = -.11, t(3435) = -1.50, p = .133. These results indicated that the association between the three risk levels of alcohol use and supportive ERSBs was similar for mothers and fathers.

**Non-Supportive ERSBs.** Lastly, a fourth moderation analysis was conducted to examine the moderating role of parent sex on the relationship between the three risk levels of alcohol use (no risk, low risk, and high risk) and non-supportive ERSBs. A significant main effect of the three risk levels of parental alcohol use on non-supportive ERSBs was revealed, b = .15, t(3435) = 3.08, p = .002. The main effect of parental sex on non-supportive

ERSBs was not significant, b = .01, t(3435) = .10, p = .923. Similarly, results revealed a non-significant moderating impact of parent sex on the relationship between alcohol use groups and supportive ERSBs, b = .02, t(3435) = 0.24, p = .807. These results indicated that the association between the three risk levels of alcohol use and supportive ERSBs was similar for mothers and fathers.

#### Discussion

## **Main Findings**

The main aims of the present study were to explore the relationship between levels of parental alcohol use and parental ERSBs, and whether this relationship was moderated by parental sex. In other words, we aimed at studying whether various risk levels of alcohol use would relate to the way parents respond to negative emotions displayed by the child, and whether this was considerably different for mothers and fathers.

Results for the first research question revealed that the degree of alcohol use was significantly associated with lower levels of supportive ERSBs and higher levels of non-supportive ERSBs in parents. Thus, greater amounts of alcohol consumed by a parent were found to be linked to less supportive reactions and more non-supportive reactions in response to a child's negative emotions. The second hypothesis was similarly confirmed, as the results revealed that both levels of parental alcohol consumption significantly predicted supportive and non-supportive ERSBs when compared to the no risk alcohol use group. Similar to the first research question, both low and high risk parental alcohol consumption were linked to lower levels of supportive and higher levels of non-supportive ERSBs to children's negative emotions. Finally, regarding the third research question, support was not found for parent sex to moderate the relationship between alcohol use and ERSBs, indicating that the relationship between alcohol use and the way parents respond to children's negative emotions was not significantly different for mothers and fathers.

The overall findings from the present study will be discussed in the ensuing sections, along with the study's strengths, weaknesses, implications, and future directions.

## What is the Meaning of Alcohol Use for Emotion Socialization?

The results for the first research question supported the hypothesis that higher alcohol use is significantly associated with poorer ERSBs. These associations were observed even after controlling for parent mental health, stress, socioeconomic status, relationship status, birth order, and biological/adoptive child status.

This finding indicated that the way parents respond to their child's negative emotions was predicted by the amount of alcohol use reported. This finding both contributes to and provides some support for the findings from the two studies previously mentioned that have explored this relationship. While paternal alcohol abuse was highlighted as a significant contributor to non-supportive reactions in parents (Godleski et al., 2020), the present finding highlights parental alcohol use, not merely as a moderating factor, but as an important predictor of parental ERSBs. Furthermore, Keller et al. (2022) revealed parental problem drinking to be linked to college students' recollections of less supportive and more nonsupportive emotion socialization by their parents. The present study offers support to this notion while also contributing new understanding of the relationship between parental alcohol use and ERSBs in the present as opposed to the retrospective reports utilized by Keller et al. (2022). While limited research has endeavored to investigate the direct association between more severe alcohol use and ERSBs in parents, the current finding is consistent with previous literature on comparable topics. For example, cold, distant, and less positive parenting have been linked to parental alcohol use, suggesting other aspects of nonsupportive parenting to be associated with parental drinking (Iacopetti et al., 2021; Sternberg et al., 2018). Altogether, our findings along with previous evidence seem to support the notion that parental alcohol use, irrespective of severity, is associated with decreased supportive and increased non-supportive reactions to children's negative emotions.

An explanation for this association may be that the consumption of alcohol negatively influences other cognitive functions in the parent which can further inhibit their capacity to provide supportive reactions to children's negative emotions. Previous studies have shown that emotion regulation skills are a key component to optimal displays of ERSBs in parents (Hajal & Paley, 2020; Spinrad et al., 2020) and, without sufficient emotion regulation capacities, parents are more likely to engage in less supportive and more non-supportive ERSBs (Maliken & Katz, 2013; Morelen et al., 2016). With this in mind, alcohol consumption is further shown to inhibit the ability to optimally regulate emotions by affecting regions of the brain responsible for emotion regulation (Berboth & Morawetz, 2021; Hajal & Paley, 2020; Keller et al., 2022; Lannoy et al., 2021; Marinkovic et al., 2019). Thus, as parents consume more alcohol, their abilities to regulate and socialize emotions are subsequently weakened.

Another explanation for this finding could be that alcohol consumption alters one's ability to appraise and identify emotional situations or scenes (Sternberg et al., 2018). For instance, Huang et al. (2018) disclosed that non-binge drinkers presented wider ranges in

appraisal of neutral and emotional conditions than binge drinkers who displayed attenuated responses to such conditions. Thus, one's capacity to process differences in external emotional cues can be dampened by the consumption of alcohol. Viewed in the context of the present study's finding, parents' interpretation of, and subsequent reaction to, a child's negative emotion may not appropriately align with certain situational external emotional cues as a consequence of alcohol use. Furthermore, the ability to identify a child's emotional state may also be diminished due to the effects of alcohol consumption (Sternberg et al., 2018). This is supported by a recent study where binge drinkers performed poorer in recognizing fear and sadness in comparison to non-binge drinkers, suggesting that individuals who frequently intoxicate seem to have poorer abilities to recognize external emotions (Lannoy et al., 2021).

With this in mind, parents' alcohol use may result in decreased success for accurately recognizing negative emotions displayed by their child which can, assumably, influence their reaction to such emotions. However, it is important to note that the CCNES presupposes that parents have accurately recognized the negative emotions in their child when responding to the questionnaire. Thus, these explanations may not be fully applicable to the present study's finding.

# What is the Meaning of Low Risk and High Risk Alcohol Use for Emotion Socialization?

The second hypothesis proposed that both low and high risk alcohol use would significantly associate with lower levels of supportive and higher levels of non-supportive ERSBs when compared to the control group. Results revealed both low and high risk alcohol use to significantly predict supportive and non-supportive ERSBs in the hypothesized directions when compared to the no risk alcohol use group. This suggests that both low risk and high risk consumption of alcohol considerably relate to how parents react to children's negative emotions. Again, these associations were observed even after controlling for parents' mental health, parental stress, socioeconomic status, relationship status, birth order, and biological/adoptive child status.

The ideas put forth for explaining the findings of research question one translate similarly to research question two as both resulted in very similar outcomes by finding that parental alcohol use predicts poorer emotion socialization overall. As with our first hypothesis, the support found for our second hypothesis can be explained by alcohol having an inhibitory effect on parents' ability to regulate their own emotions, successfully appraise external emotional cues, and accurately identify external emotions, and, therefore, could

account for the relationship with parental ERSBs that was revealed by our findings. In the ensuing section, the distinction between the two hypotheses, namely parental alcohol use as a grouped variable instead of a continuous variable, will be discussed and interpreted.

This is the first study to our knowledge that has examined the association between distinct levels of parental alcohol use in a non-clinical sample, including low risk parental alcohol use, and parental ERSBs. Previous research and prevention work has primarily concentrated on the consequences of more severe, problematic, or clinical alcohol use, for example, by examining parents with alcohol use disorders. Yet, the findings from the present study indicated that lower levels of parental drinking could additionally result in negative consequences for the way in which parents socialize emotions. For instance, our findings are compatible with evidence put forth by Burdzovic Andreas, Torvik, & Lund (2022) who found significant associations between non-dependent parental drinking and offspring high-school non-completion, further arguing that parental drinking does not necessarily need to meet the clinical criteria to generate negative consequences in the offspring. The researchers further conveyed the importance of examining various levels of maternal and paternal drinking, including those outside the disorder paradigm, to gain a broader understanding of the subsequent consequences of this parental conduct. As the present study's finding provides evidence for both low and high risk parental alcohol use to relate to poorer emotion socialization, it supports Burdzovic Andreas, Torvik, & Lund's (2022) argument that various levels outside the disorder paradigm can result in diverse negative consequences (e.g., parental ERSBs, child outcomes).

Moreover, as there exists limited research investigating the relationship between low and high risk alcohol use and supportive and non-supportive ERSBs in parents, the results uncovered from the second hypothesis could expand insightfully on previous related research. For example, the importance of continuing to include explorations of various levels of parental alcohol use, as revealed by our finding, is reinforced by previous studies. An exploration of the effect of various parental drinking patterns on subsequent adolescent drinking revealed that two out of six parental drinking patterns studied were related to initiation or development of drinking in adolescence, namely, consuming 30 glasses throughout the week and consuming 10-15 glasses during the weekend (Vermeulen-Smit et al., 2012). As only particular drinking patterns were shown to affect child outcomes, it further supports the implication of our finding that measuring various levels of risk of parental alcohol use is necessary to gain a deeper understanding of the potential consequences. Expanding on this concept, Bryant et al., (2020) discovered that reports of negative

adolescent outcomes increased with higher levels of non-dependent parental drinking reported by the parent. Interestingly, while this study demonstrates the detrimental effects of higher levels of parental alcohol use, the researchers further conveyed that harm to offspring is shown to commence at a low level (Bryant et al., 2020). This corresponds with our finding that various levels of parental alcohol use, including lower risk, can result in negative consequences and should be included within future examinations regarding the significance of parental alcohol use.

Furthermore, the support found for both the first and second research questions offers insight into associations uncovered by previous research. Considering that parental alcohol use, including both low and high risk, was significantly associated with poorer emotion socialization, it could be speculated that parental ERSBs may be an important intermediary factor in previously revealed associations between parental alcohol use and negative child outcomes. As previously mentioned, literature considering the importance of parental socialization of emotions has revealed a child's emotional development to be significantly affected by how parents teach and react to emotions displayed by the child (Eisenberg et al., 1996; Nelson & Boyer, 2018). Correspondingly, while supportive ERSBs have been linked to more optimal emotion regulation skills and decreased conduct problems (Gottman et al., 1996; A. M. Johnson et al., 2017; Perry et al., 2020), non-supportive reactions have been shown to be related to emotion dysregulation, behavioral adjustment problems, and decreased social functioning (Bjørk et al., 2020; Denham et al., 2007; Eisenberg, 2020; A. M. Johnson et al., 2017; Morelen et al., 2016; Morris et al., 2007; Perry et al., 2020; Shaffer et al., 2012; Thompson, 2014). Knowing this, one could assume that as both low and high risk alcohol use were found to predict poorer parental ERSBs in the present study, this could subsequently predict negative outcomes in the child.

# Does Parent Sex Play a Role in the Relationship Between Alcohol Use and Emotion Socialization?

Considering that previous research has identified sex differences in both alcohol use (e.g., Bye & Rossow, 2022; Helsedirektoratet, 2021; E. Johnson et al., 2022) and emotion-related parenting (e.g., Baker et al., 2011; Brown et al., 2015; Cassano et al., 2007; Eisenberg, Cumberland, et al., 1998; Eisenberg et al., 1996; Klimes-Dougan & Zeman, 2007; McElwain et al., 2007; Nelson et al., 2009), we hypothesized that there would be sex differences when investigating these two variables together. Contrary to our expectations, parent sex was not found to moderate the relationship between alcohol use and parental ERSBs. This suggests that alcohol use as a risk factor for lower levels of supportive and

higher levels of non-supportive parental ERSBs seems to be similar for mothers and fathers across various levels of alcohol use. To illustrate this finding, regardless of whether you are a mother or a father, drinking alcohol may relate to how you respond to negative emotions in your child.

As this study was, to our knowledge, the first to examine whether the relation between parental socialization of emotion and alcohol use were significantly different for mothers and fathers, there were limited findings to compare our results with. However, the design in the present study may, to some extent, resemble that of an earlier study. Although they did not specifically set out to explore parent sex differences in the relation between parental problem drinking and parents' reactions to child negative emotions, Keller et al. (2022) conducted all their analyses separately for mothers and fathers. In line with our results, no meaningful differences between mothers and fathers were observed for this association. This was despite the fact that the degree to which this similarity was statistically significant was not examined. Thus, our study reinforces the findings of Keller and colleagues (2022), while additionally contributing to a deeper understanding of the role of parent sex in the relationship between parental alcohol use and emotion socialization.

A possible explanation for this finding may be related to the sampling method utilized by the FiN project, as our sample consisted of many parents from the same household. Due to this "family effect", the parents in the present study could be more similar to each other than mothers and fathers from different households. This aspect has not been considered in the analyses and should be kept in mind when interpreting the results.

An alternative explanation for our results may be rooted in the context of which the present study was carried out. As this study was conducted with a Norwegian sample, the findings reflect the Norwegian society and culture. In more detail, there are higher levels of gender equality with regards to caregiving in comparison to other cultures. For instance, empirical evidence suggests that males in Nordic cultures actively engage as caregivers (Kvande, 2022; Viana et al., 2021). In addition, Norway was considered the world's third most gender equal country in 2022 (World Economic Forum, 2022). This could be a result of the Norwegian Family and Equality policies' work in promoting equal involvement and caregiving for mothers and fathers, for instance, through increasing women's participation in work life and men's participation in childcare and household (Sandvik & Horgen, 2017). The recent expansion of fathers' paternity leave quota in 2018 to match the mothers' quota (Folketrygdloven, 1997, § 14-12) is an example of such policy arrangements which have resulted in a continuous increase in the proportion of fathers using their paternity leave quota

(Gram, 2019), leading to fathers working less and become more involved in caregiving, especially when children are very young (Sandvik, 2018).

Overall, this information implies that Norwegian fathers and mothers are increasingly working toward equal engagement in parenting, where mothers and fathers seem more alike in parenting qualities and in valuing caregiving compared to other cultures. Although it is unclear whether these policies indirectly affect emotion socialization practices in the context of parental alcohol use, one could assume that equal involvement in caregiving could, to some degree, explain this finding. For instance, gender equality policies arrange for increased time for fathers to spend with their child which, consistent with attachment theory, could lead to enhanced emotional connections and strengthening of the father-child attachment bond (Ainsworth & Bowlby, 1991; Dagan & Sagi-Schwartz, 2018; Eisenberg et al., 1998a). A recent qualitative study of Norwegian fathers further supports this assumption. Participants claimed that an increased paternity leave quota presented more opportunities for them to develop a greater autonomous relationship with their children as well as increased their confidence as caregivers (Kvande, 2022).

Taking this one step further, it is possible that the similarities between mothers and fathers in Norway also apply to factors affecting parenting practices, such as alcohol. There are clear sex differences in drinking habits in Norway (Bye & Rossow, 2022). However, for parents as a subgroup in Norwegian society, one could assume that the aforementioned similar opportunities for participation in family life and caregiving do not only result in parents being more similar in their parenting practices, but also in their alcohol use behaviors. In support of this assumption, a recent doctoral dissertation based on data from the Norwegian MoBa study (Norwegian Institute of Public Health, n.d.) showed that both fathers and mothers reduced their alcohol consumption when becoming aware of the mother's pregnancy (Mellingen, 2016). The researchers interpreted the changes in fathers' alcohol use as an early expression of identification with the caregiver role and suggested this to be a result of the high degree of gender equality in Norway.

In summary, the focus on gender equality and the implementation of family-friendly policy arrangements in Norway could, to some extent, account for the results revealing no significant differences between mothers and fathers.

## **Limitations and Future Directions**

Our study contributes important new knowledge in the field of parental socialization of emotion, however there were limitations that should be considered when interpreting the results. Firstly, the sample was overrepresented by parents with Norway as their country of

origin, not reflecting the cultural diversity of the parental population in Norway. This could be a result of the prerequisite of being able to understand Norwegian, as the questionnaire was in the Norwegian language only. Additionally, the sample primarily consisted of parents and their partners who were either twins themselves or related to twins. The sample may, therefore, not be representative of the general parental population in Norway. While this may limit the generalizability of our results, the utilized recruitment strategy was an important aspect of the FiN project's research aims.

Moreover, the generalizability of our findings may be limited to Norwegian culture. However, it is likely that the results may extend to countries with similar culture, such as Sweden or Finland, which are the two countries above Norway on the gender equality rank (World Economic Forum, 2022). Furthermore, an important aim of the present study was to specifically examine parents in Norway to provide important knowledge that could be useful for preventative purposes within the country. Replication of this study in non-Nordic cultures would provide knowledge on how alcohol as a risk factor to parental ERSBs may operate similarly or differently in various cultures, particularly in relation to sex differences, which is crucial for adapting preventative measures to each culture.

Secondly, the measuring tools CCNES and AUDIT-C rely solely on self-report, a method subject to social desirability (Nederhof, 1985). Additionally, self-reports do not necessarily correspond with actual behavior. However, as utilized by the CCNES, hypothetical scenarios are applied with the goal of encouraging more realistic responses and is further postulated to reduce social desirability (Steiner et al., 2016). Future studies of parental socialization of emotion could benefit from combining self-report questionnaires with more ecologically valid measures, such as observational methods, to ensure that reported behaviors reflect actual behaviors.

Thirdly, as we used a modified version of the CCNES that has not been used in any previous research, no assessments of the psychometric properties have been conducted and the scale's reliability and validity in measuring parental socialization of emotion have not been verified by other researchers. Of note, it does still resemble the original version (Fabes et al., 1990) which was found to be both valid and reliable (Fabes et al., 2002). Internal consistency analyses conducted in the current study revealed good reliability for only the supportive subscale and not for the non-supportive subscale. Thus, comparability of the present findings with previous studies that have used the original CCNES should be conducted with caution as different aspects of parental socialization of emotion may be captured by each version. The modifications made were, however, important to be able to

capture the distinctive modern parental roles in Scandinavian culture. Altogether, this is important to take into consideration when interpreting the findings while also substantiating the importance of future assessments of reliability and validity when utilizing this modified version in future research.

Fourth, the cross-sectional design limits the possibility of drawing causal conclusions. Specifically, we cannot be certain that increased alcohol use leads to poorer ERSBs or whether the relationship between these variables is the other way around. Nevertheless, this study provides an important foundation for future research to expand upon. For instance, replicating this study with a longitudinal research design could strengthen the newly established association between parental alcohol use and ERSBs and potentially uncover a causal link.

A final limitation is related to the third-variable problem. Although we controlled for many variables, there remain several factors that could explain the significant relationship between our variables of interest, such as child behavior. There is a broad consensus among researchers within developmental psychology on the emotionally evocative nature of parenting and the bidirectionality of emotion socialization processes (e.g., Eisenberg et al., 1998a; Hajal & Paley, 2020; Lunkenheimer et al., 2020; Wilson & Durbin, 2013). Taking these transactional parent-child processes into account in the context of parental alcohol use, one could assume that our findings may be partly explained by child characteristics or behaviors. To illustrate this, a child with high degree of temperamental reactivity who evokes negative emotions in their parents may lead their parents to engage in increased drinking behavior (Godleski et al., 2020) to cope with the stressful feelings (Abbey et al., 1993), which in turn may result in poorer ERSBs. However, the risk of this third-variable problem is likely reduced as parental stress was controlled for and can reflect the situation of children evoking negative emotions in their parents. Future research would benefit from including child characteristics as control variables to rule out the possibility of this to account for the association between parental alcohol use and parental ERSBs.

## **Strengths and Implications**

Despite the aforementioned limitations, there were several strengths with this study. First, the large sample size ensured increased statistical precision and power of the analyses. It also made our findings less prone to errors and improved the likelihood of providing reliable and meaningful results. A second strength was related to the gender balance of parents in the sample (58.5% mothers and 38.8% fathers). The unique role of fathers' emotion socialization behaviors has been understudied compared to mothers' (Root &

Denham, 2010) and researchers in the field of emotion socialization have highlighted the importance and value of including both mothers and fathers (Eisenberg, 2020; Godleski et al., 2020; Lunkenheimer et al., 2020).

The findings from this study also have several important implications, both theoretical and applied. Our study differs from others in the field, as it was the first to investigate whether parental alcohol use was associated with parental ERSBs in a non-clinical sample. By finding this relationship to be significant, new and important knowledge is added to the theoretical framework of Eisenberg and colleagues (1998a; 1998b). More specifically, it expands on the SE model by identifying alcohol use as an important parent characteristic, acting as a predictor for lower levels of non-supportive and higher levels of supportive ERSBs.

This study further contributes with knowledge on how various levels of alcohol use (low risk and high risk) relate to poorer emotion socialization. Our findings highlight the importance of acknowledging the potential risk of less severe drinking habits, typically perceived as non-hazardous, as these patterns of drinking are frequently overshadowed by the focus on more severe, and often clinically diagnosable, drinking behaviors. This is important information for health practitioners and professionals working preventively in Norway, as well as for researchers in the developmental psychology field, as it highlights the importance of expanding the focus to include less severe levels as crucial factors to examine in relation to parenting. Additionally, it enables increased awareness in parents around how their alcohol use may create elevated risk for engagement in more non-supportive, and less supportive, ERSBs.

By finding that parent sex did not moderate the relationship between alcohol use and ERSBs, the importance for future research to continue to examine parental socialization of emotion separately for mothers and fathers is emphasized. Further, this information has important implications for preventative work in Norway. For instance, interventions directed at parents should aim at targeting mothers and fathers similarly.

Moreover, considering the large body of research that has established a relationship between non-supportive ERSBs and negative child outcomes, as well as supportive ERSBs and positive outcomes in the child, less severe alcohol use could presumably be an explanatory factor within these pathways. This could be, for instance, through the increased risk of parents to engage in non-supportive ERSBs which may subsequently affect the child's emotional development in a negative manner. Thus, an important next step for research

would be to explore the potential effect of the association between parental alcohol use and parental ERSBs on child outcomes.

### Conclusion

Overall, the main aim of the current study was to investigate the association among various levels of parental alcohol use and supportive and non-supportive ERSBs in Norwegian parents. In addition, we sought to explore whether parent sex moderated this association.

The present findings suggest that parental alcohol use relates to overall poorer emotion socialization, and that this was similar for mothers and fathers. These findings support previous literature while also contributing novel knowledge. As the consequences of more severe, problematic, or clinical alcohol use have been the primary focus of previous research and prevention work, an especially important finding to highlight is that of research question two which revealed that both high risk and, more remarkably, low risk parental alcohol use negatively predicted a parent's ability to socialize emotions. Understanding that lower levels of parental drinking can also relate to the way in which parents socialize emotions, it will be important to include these levels of alcohol use in future examinations.

Explanations for these findings may be that alcohol diminishes the ability to regulate internal emotions and accurately process and recognize external emotions which, in turn, could inhibit a parent's ability to sufficiently respond to a child's negative emotions. In addition, the similarities found between alcohol's association with ERSBs in mothers and fathers could be explained by the emphasis on gender equality in Norwegian culture, as well as by the implementation of family-friendly policy arrangements, making it possible for mothers and fathers to participate equally in aspects of family life.

Overall, the present study highlights the significance of parental alcohol use in the context of how parents teach emotions to offspring. Thus, it is encouraged to continue to examine diverse levels of parental alcohol use, including low risk levels, to gain a deeper understanding of the different characteristics and factors associated with emotion socialization; a crucial parenting style for children's social and emotional development. The study further highlights the importance of targeting future preventative work in Norway equally for mothers and fathers.

### References

- Abbey, A., Smith, M. J., & Scott, R. O. (1993). The relationship between reasons for drinking alcohol and alcohol consumption: An interactional approach. *Addictive Behaviors*, 18(6), 659–670. https://doi.org/10.1016/0306-4603(93)90019-6
- Ainsworth, M. D. S., & Bowlby, J. (1991). An Ethological Approach to Personality

  Development. *American Psychologist*, 46(4), 333–341. <a href="https://doi.org/10.1037/0003-066X.46.4.333">https://doi.org/10.1037/0003-066X.46.4.333</a>
- Aminu, I. M., & Shariff, M. N. M. (2014). Strategic Orientation, Access to Finance, Business Environment and SMEs Performance in Nigeria: Data Screening and Preliminary Analysis. *European Journal of Business and Management*, 6(35), 124–131.

  <a href="https://www.researchgate.net/publication/347691618">https://www.researchgate.net/publication/347691618</a> Strategic Orientation Access to Finance Business Environment and SMEs Performance in Nigeria Data Screening and Preliminary Analysis</a>
- Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *AUDIT: the Alcohol Use Disorders Identification Test: Guidelines for use in primary health care*. (Report No. WHO/MSD/MSB/01.6a). World Health Organization. <a href="https://www.who.int/publications/i/item/WHO-MSD-MSB-01.6a">https://www.who.int/publications/i/item/WHO-MSD-MSB-01.6a</a>
- Baker, J. K., Fenning, R. M., & Crnic, K. A. (2011). Emotion Socialization by Mothers and Fathers: Coherence among Behaviors and Associations with Parent Attitudes and Children's Social Competence. *Social Development*, 20(2), 412–430. https://doi.org/10.1111/j.1467-9507.2010.00585.x
- Barne-, ungdoms- og familiedirektoratet (Bufdir). (2021). *Bufdirs arbeid med forskning 2020*. <a href="https://www2.bufdir.no/globalassets/global/nbbf/bufdir/bufdirs arbeid med forskning 2020.pdf">https://www2.bufdir.no/globalassets/global/nbbf/bufdir/bufdirs arbeid med forskning 2020.pdf</a>

- Barry, A. E., Chaney, B. H., Stellefson, M. L., & Dodd, V. (2015). Evaluating the psychometric properties of the AUDIT-C among college students. *Journal of Substance Use*, 20(1), 1–5. <a href="https://doi.org/10.3109/14659891.2013.856479">https://doi.org/10.3109/14659891.2013.856479</a>
- Berboth, S., & Morawetz, C. (2021). Amygdala-prefrontal connectivity during emotion regulation: A meta-analysis of psychophysiological interactions. *Neuropsychologia*, 153, Article 107767. https://doi.org/10.1016/j.neuropsychologia.2021.107767
- Berry, J. O., & Jones, W. H. (1995). The Parental Stress Scale: Initial Psychometric Evidence. *Journal of Social and Personal Relationships*, 12(3), 463–472. https://doi.org/10.1177/0265407595123009
- Bertie, L.-A., Johnston, K., & Lill, S. (2021). Parental emotion socialisation of young children and the mediating role of emotion regulation. *Australian Journal of Psychology*, 73(3), 293–305. <a href="https://doi.org/10.1080/00049530.2021.1884001">https://doi.org/10.1080/00049530.2021.1884001</a>
- Bjørk, R. F., Havighurst, S. S., Pons, F., & Karevold, E. B. (2020). Pathways to behavior problems in Norwegian kindergarten children: The role of parent emotion socialization and child emotion understanding. *Scandinavian Journal of Psychology*, 61(6), 751–762. <a href="https://doi.org/10.1111/sjop.12652">https://doi.org/10.1111/sjop.12652</a>
- Bjørk, R. F., Karevold, E. B., Havighurst, S. S., & Pons, F. (2022). Parental emotion socialization in a Nordic cultural context: The impact of parental emotion-related socialization behaviors on Norwegian kindergarten children's emotion understanding and externalizing behavior problems (Publication No. 879) [Doctoral dissertation, University of Oslo]. DUO Vitenarkiv. http://urn.nb.no/URN:NBN:no-92521
- Blå Kors. (2023, juni 3). *1 av 5 barn synes foreldrene bør drikke mindre: Bekymringsfylt*.

  Blakors. <a href="https://www.blakors.no/1-av-5-barn-synes-foreldrene-bor-drikke-mindre-alkohol/">https://www.blakors.no/1-av-5-barn-synes-foreldrene-bor-drikke-mindre-alkohol/</a>

- Boldt, L. J., Goffin, K. C., & Kochanska, G. (2020). The significance of early parent-child attachment for emerging regulation: A longitudinal investigation of processes and mechanisms from toddler age to preadolescence. *Developmental Psychology*, *56*(3), 431–443. <a href="https://doi.org/10.1037/dev0000862">https://doi.org/10.1037/dev0000862</a>
- Breaux, R. P., Harvey, E. A., & Lugo-Candelas, C. I. (2016). The Role of Parent

  Psychopathology in Emotion Socialization. *Journal of Abnormal Child Psychology*,

  44(4), 731–743. https://doi.org/10.1007/s10802-015-0062-3
- Brown, G. L., Craig, A. B., & Halberstadt, A. G. (2015). Parent Gender Differences in Emotion Socialization Behaviors Vary by Ethnicity and Child Gender. *Parenting*, 15(3), 135–157. <a href="https://doi.org/10.1080/15295192.2015.1053312">https://doi.org/10.1080/15295192.2015.1053312</a>
- Bryant, L., MacKintosh, A. M., & Bauld, L. (2020). An Exploration of the Impact of Non-Dependent Parental Drinking on Children. *Alcohol and Alcoholism*, *55*(1), 121–127. https://doi.org/10.1093/alcalc/agz086
- Bukowski, W. M., Rubin, K. H., & Parker, J. G. (2001). Social Competence: Childhood and Adolescence. I N. J. Smelser & P. B. Baltes (Red.), *International Encyclopedia of the Social & Behavioral Sciences* (s. 14258–14264). <a href="https://doi.org/10.1016/B0-08-043076-7/01678-8">https://doi.org/10.1016/B0-08-043076-7/01678-8</a>
- Burdzovic Andreas, J., Torvik, F. A., & Lund, I. O. (2022). Parental binge drinking and offspring's high school non-completion: A prospective HUNT survey and educational registry study. *Drug and Alcohol Dependence*, *230*, Article 109189. https://doi.org/10.1016/j.drugalcdep.2021.109189
- Burdzovic Andreas, J., Torvik, F. A., Ystrom, E., Skurtveit, S., Handal, M., Martinez, P., Laslett, A.-M., & Lund, I. O. (2022). Parental risk constellations and future alcohol use disorder (AUD) in offspring: A combined HUNT survey and health registries

- study. *Psychology of Addictive Behaviors*, *36*(4), 375–386. https://doi.org/10.1037/adb0000681
- Bush, K., Kivlahan, D. R., McDonell, M. B., Fihn, S. D., & Bradley, K. A. (1998). The AUDIT Alcohol Consumption Questions (AUDIT-C): An Effective Brief Screening Test for Problem Drinking. *Archives of Internal Medicine*, 158(16), 1789–1795. <a href="https://doi.org/10.1001/archinte.158.16.1789">https://doi.org/10.1001/archinte.158.16.1789</a>
- Bye, E. K., & Rossow, I. M. (2022, desember 20). *Alkoholbruk i den voksne befolkningen*.

  Folkehelseinstituttet. <a href="https://www.fhi.no/nettpub/alkoholinorge/omsetning-og-bruk/alkoholbruk-i-den-voksne-befolkningen/">https://www.fhi.no/nettpub/alkoholinorge/omsetning-og-bruk/alkoholbruk-i-den-voksne-befolkningen/</a>
- Bølstad, E., Havighurst, S. S., Tamnes, C. K., Nygaard, E., Bjørk, R. F., Stavrinou, M., & Espeseth, T. (2021). A Pilot Study of a Parent Emotion Socialization Intervention:
   Impact on Parent Behavior, Child Self-Regulation, and Adjustment. Frontiers in Psychology, 12. <a href="https://doi.org/10.3389/fpsyg.2021.730278">https://doi.org/10.3389/fpsyg.2021.730278</a>
- Callaghan, B., Meyer, H., Opendak, M., Van Tieghem, M., Harmon, C., Li, A., Lee, F. S., Sullivan, R. M., & Tottenham, N. (2019). Using a Developmental Ecology

  Framework to Align Fear Neurobiology Across Species. *Annual Review of Clinical Psychology*, *15*, 345–369. <a href="https://doi.org/10.1146/annurev-clinpsy-050718-095727">https://doi.org/10.1146/annurev-clinpsy-050718-095727</a>
- Cassano, M., Perry-Parrish, C., & Zeman, J. (2007). Influence of Gender on Parental Socialization of Children's Sadness Regulation. *Social Development*, 16(2), 210–231. https://doi.org/10.1111/j.1467-9507.2007.00381.x
- Chassin, L., Curran, P. J., Hussong, A. M., & Colder, C. R. (1996). The Relation of Parent Alcoholism to Adolescent Substance Use: A Longitudinal Follow-Up Study. *Journal of Abnormal Psychology*, *105*(1), 70–80. https://doi.org/10.1037/0021-843X
- Cui, L., Criss, M. M., Ratliff, E., Wu, Z., Houltberg, B. J., Silk, J. S., & Morris, A. S. (2020).

  Longitudinal links between maternal and peer emotion socialization and adolescent

- girls' socioemotional adjustment. *Developmental Psychology*, *56*(3), 595–607. https://doi.org/10.1037/dev0000861
- Dagan, O., & Sagi-Schwartz, A. (2018). Early Attachment Network with Mother and Father:

  An Unsettled Issue. *Child Development Perspectives*, *12*(2), 115–121.

  <a href="https://doi.org/10.1111/cdep.12272">https://doi.org/10.1111/cdep.12272</a>
- DeLucia, C., Belz, A., & Chassin, L. (2001). Do adolescent symptomatology and family environment vary over time with fluctuations in paternal alcohol impairment?

  \*Developmental Psychology, 37(2), 207–216. <a href="https://doi.org/10.1037/0012-1649.37.2.207">https://doi.org/10.1037/0012-1649.37.2.207</a>
- Denham, S. A. (2018). Implications of Carolyn Saarni's work for preschoolers' emotional competence. *European Journal of Developmental Psychology*, *15*(6), 643–657. https://doi.org/10.1080/17405629.2018.1479250
- Denham, S. A., Bassett, H. H., & Wyatt, T. (2007). The Socialization of Emotional

  Competence. I J. E. Grusec & P. D. Hastings (Red.), *Handbook of socialization:*Theory and research (2. utg., s. 614–637). The Guilford Press.
- Eisenberg, N. (2020). Findings, issues, and new directions for research on emotion socialization. *Developmental Psychology*, *56*(3), 664–670. https://doi.org/10.1037/dev0000906
- Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental Socialization of Emotion.

  \*Psychological Inquiry, 9(4), 241–273. <a href="https://doi.org/10.1207/s15327965pli0904\_1">https://doi.org/10.1207/s15327965pli0904\_1</a>
- Eisenberg, N., Fabes, R. A., & Murphy, B. C. (1996). Parents' Reactions to Children's Negative Emotions: Relations to Children's Social Competence and Comforting Behavior. *Child Development*, 67(5), 2227–2247. https://doi.org/10.2307/1131620
- Eisenberg, N., Fabes, R. A., Shepard, S. A., Guthrie, I. K., Murphy, B. C., & Reiser, M. (1999). Parental Reactions to Children's Negative Emotions: Longitudinal Relations

- to Quality of Children's Social Functioning. *Child Development*, 70(2), 513–534. https://doi.org/10.1111/1467-8624.00037
- Eisenberg, N., Hofer, C., Sulik, M. J., & Spinrad, T. L. (2014). Self-Regulation, Effortful Control, and Their Socioemotional Correlates. I J. J. Gross (Red.), *Handbook of Emotion Regulation* (2. utg., s. 157–172). The Guildford Press.
- Eisenberg, N., Spinrad, T. L., & Cumberland, A. (1998). The Socialization of Emotion:

  Reply to Commentaries. *Psychological Inquiry*, 9(4), 317–333.

  <a href="https://doi.org/10.1207/s15327965pli0904\_17">https://doi.org/10.1207/s15327965pli0904\_17</a>
- Fabes, R. A., Eisenberg, N., & Bernzweig, J. (1990). *The Coping with Children's Negative Emotions Scale (CCNES): Procedures and scoring*. Tempe, AZ: Arizona State University.
- Fabes, R. A., Poulin, R. E., Eisenberg, N., & Madden-Derdich, D. A. (2002). The Coping with Children's Negative Emotions Scale (CCNES): Psychometric Properties and Relations with Children's Emotional Competence. *Marriage & Family Review*, 34(3/4), 285–310. https://doi.org/10.1300/J002v34n03\_05
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <a href="https://doi.org/10.3758/BRM.41.4.1149">https://doi.org/10.3758/BRM.41.4.1149</a>
- Field, A. (2017). *Discovering Statistics Using IBM SPSS Statistics* (5th utg.). SAGE Publications Ltd.
- Fløtre, I. A., & Tuv, N. (2023, mars 30). *Hva er vanlig lønn i Norge?* Statistisk Sentralbyrå. <a href="https://www.ssb.no/arbeid-og-lonn/lonn-og-arbeidskraftkostnader/artikler/hva-er-vanlig-lonn-i-norge">https://www.ssb.no/arbeid-og-lonn/lonn-og-arbeidskraftkostnader/artikler/hva-er-vanlig-lonn-i-norge</a>
- Folketrygdloven. (1997). *Lov om folketrygd* (LOV-1997-02-28-19). Lovdata. https://lovdata.no/dokument/NL/lov/1997-02-28-19

- Freisthler, B. (2011). Alcohol Use, Drinking Venue Utilization, and Child Physical Abuse:

  Results from a Pilot Study. *Journal of Family Violence*, 26(3), 185–193.

  <a href="https://doi.org/10.1007/s10896-010-9352-2">https://doi.org/10.1007/s10896-010-9352-2</a>
- Freisthler, B., & Gruenewald, P. J. (2013). Where the Individual Meets the Ecological: A Study of Parent Drinking Patterns, Alcohol Outlets, and Child Physical Abuse.

  \*\*Alcoholism: Clinical and Experimental Research, 37(6), 993–1000.

  https://doi.org/10.1111/acer.12059
- Godleski, S. A., Eiden, R. D., Shisler, S., & Livingston, J. A. (2020). Parent socialization of emotion in a high-risk sample. *Developmental Psychology*, *56*(3), 489–502. https://doi.org/10.1037/dev0000793
- Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental Meta-Emotion Philosophy and the Emotional Life of Families: Theoretical Models and Preliminary Data. *Journal of Family Psychology*, 10(3), 243–268. https://doi.org/10.1037/0893-3200.10.3.243
- Gram, K. H. (2019, mai 12). Fedrekvoten fortsetter å fenge. Statistisk Sentralbyrå.

  <a href="https://www.ssb.no/befolkning/artikler-og-publikasjoner/fedrekvoten-forsetter-a-fenge">https://www.ssb.no/befolkning/artikler-og-publikasjoner/fedrekvoten-forsetter-a-fenge</a>
- Gross, J. J. (2015). Emotion Regulation: Current Status and Future Prospects. *Psychological Inquiry*, 26(1), 1–26. <a href="https://doi.org/10.1080/1047840X.2014.940781">https://doi.org/10.1080/1047840X.2014.940781</a>
- Hajal, N. J., & Paley, B. (2020). Parental emotion and emotion regulation: A critical target of study for research and intervention to promote child emotion socialization.
  Developmental Psychology, 56(3), 403–417. https://doi.org/10.1037/dev0000864
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process* analysis: A regression-based approach (2. utg.). The Guilford Press.

- Helsedirektoratet. (2021). Sektorrapport om folkehelse 2021 [Nettdokument].

  <a href="https://www.helsedirektoratet.no/rapporter/sektorrapport-om-folkehelse/sunne-valg/alkoholbruk">https://www.helsedirektoratet.no/rapporter/sektorrapport-om-folkehelse/sunne-valg/alkoholbruk</a>
- Helseforskningsloven. (2008). *Lov om medisinsk og helsefaglig forskning* (LOV-2008-06-20-44). Lovdata. https://lovdata.no/dokument/NL/lov/2008-06-20-44
- Huang, S., Holcomb, L. A., Cruz, S. M., & Marinkovic, K. (2018). Altered oscillatory brain dynamics of emotional processing in young binge drinkers. *Cognitive, Affective, & Behavioral Neuroscience*, 18(1), 43–57. <a href="https://doi.org/10.3758/s13415-017-0551-7">https://doi.org/10.3758/s13415-017-0551-7</a>
- Iacopetti, C., Londi, I., Patussi, V., & Cosci, F. (2021). Family climate in children living with parents who harmfully consume alcohol. *Clinical Psychology & Psychotherapy*, 28(5), 1128–1134. https://doi.org/10.1002/cpp.2562
- Jager, K. J., Tripepi, G., Chesnaye, N. C., Dekker, F. W., Zoccali, C., & Stel, V. S. (2020).
  Where to look for the most frequent biases? *Nephrology*, 25(6), 435–441.
  <a href="https://doi.org/10.1111/nep.13706">https://doi.org/10.1111/nep.13706</a>
- Jin, F. (2016). Questions Documentation Questionnaire 1 15th week of gestation. The

  Norwegian Mother and Child Cohort Study (MoBa).

  <a href="https://www.fhi.no/globalassets/dokumenterfiler/studier/den-norske-mor-far-og-barn-undersokelsenmoba/instrumentdokumentasjon/instrument-documentation-q1.pdf">https://www.fhi.no/globalassets/dokumenterfiler/studier/den-norske-mor-far-og-barn-undersokelsenmoba/instrumentdokumentasjon/instrument-documentation-q1.pdf</a>
- Johnson, A. M., Hawes, D. J., Eisenberg, N., Kohlhoff, J., & Dudeney, J. (2017). Emotion socialization and child conduct problems: A comprehensive review and meta-analysis.
  Clinical Psychology Review, 54, 65–80. <a href="https://doi.org/10.1016/j.cpr.2017.04.001">https://doi.org/10.1016/j.cpr.2017.04.001</a>
- Johnson, E., Fellowes, R., Cant, K., & Hunt, S. (2022). Self-Assured and Sober: The

  Relationship Between Maternal Parenting Sense of Competence, Stress, and Alcohol

  Use. *Frontiers in Global Women's Health*, 2, Article 778183.

  <a href="https://doi.org/10.3389/fgwh.2021.778183">https://doi.org/10.3389/fgwh.2021.778183</a>

- Keller, P. S., Michlitsch, H., & Rawn, K. P. (2022). Retrospective Reports of Parental
   Problem Drinking and Parent Reactions to Child Negative Emotions: Implications for
   Emotion Regulation in the Transition to Adulthood. *Emerging Adulthood*, 10(3), 620–631. <a href="https://doi.org/10.1177/21676968211024401">https://doi.org/10.1177/21676968211024401</a>
- King, G. L., Kehoe, C. E., Havighurst, S. S., Youssef, G. J., Macdonald, J. A., Dunsmore, J.
  C., Berkowitz, T. S., & Westrupp, E. M. (2022). Creation of a Short-Form and Brief
  Short-Form Version of the Coping With Children's Negative Emotions Scale.
  Assessment, 00(0), 1–22. https://doi.org/10.1177/10731911221126919
- King, K. M., & Chassin, L. (2004). Mediating and Moderated Effects of Adolescent Behavioral Undercontrol and Parenting in the Prediction of Drug Use Disorders in Emerging Adulthood. *Psychology of Addictive Behaviors*, 18(3), 239–249. <a href="https://doi.org/10.1037/0893-164X.18.3.239">https://doi.org/10.1037/0893-164X.18.3.239</a>
- Klimes-Dougan, B., Brand, A. E., Zahn-Waxler, C., Usher, B., Hastings, P. D., Kendziora, K., & Garside, R. B. (2007). Parental Emotion Socialization in Adolescence:

  Differences in Sex, Age and Problem Status. *Social Development*, *16*(2), 326–342.

  <a href="https://doi.org/10.1111/j.1467-9507.2007.00387.x">https://doi.org/10.1111/j.1467-9507.2007.00387.x</a>
- Klimes-Dougan, B., & Zeman, J. (2007). Introduction to the Special Issue of Social

  Development: Emotion Socialization in Childhood and Adolescence. *Social*Development, 16(2), 203–209. https://doi.org/10.1111/j.1467-9507.2007.00380.x
- Kvande, E. (2022). Individual Parental Leave for Fathers: Promoting Gender Equality in Norway. I M. Grau Grau, M. las Heras Maestro, & H. Riley Bowles (Red.), *Engaged Fatherhood for Men, Families and Gender Equality* (s. 153–163). Springer International Publishing. <a href="https://doi.org/10.1007/978-3-030-75645-1\_8">https://doi.org/10.1007/978-3-030-75645-1\_8</a>
- Lannoy, S., Duka, T., Carbia, C., Billieux, J., Fontesse, S., Dormal, V., Gierski, F., López-Caneda, E., Sullivan, E. V., & Maurage, P. (2021). Emotional processes in binge

- drinking: A systematic review and perspective. *Clinical Psychology Review*, 84, Article 101971. https://doi.org/10.1016/j.cpr.2021.101971
- Little, R. J. A. (1988). A Test of Missing Completely at Random for Multivariate Data with Missing Values. *Journal of the American Statistical Association*, 83(404), 1198–1202. https://doi.org/10.2307/2290157
- Lund, I. O., Bukten, A., Storvoll, E. E., Moan, I. S., Skurtveit, S., Handal, M., Nordfjærn, T., Brunborg, G. S., & Rossow, I. (2015). A Cohort Study on Long-Term Adverse Effects of Parental Drinking: Background and Study Design. *Substance Abuse:*\*Research and Treatment, 9(s2), 77–83. <a href="https://doi.org/10.4137/SART.S23329">https://doi.org/10.4137/SART.S23329</a>
- Lund, I. O., Skurtveit, S., Handal, M., Bukten, A., Ask Torvik, F., Ystrøm, E., & Burdzovic Andreas, J. (2019). Association of Constellations of Parental Risk With Children's Subsequent Anxiety and Depression: Findings From a HUNT Survey and Health Registry Study. *JAMA Pediatrics*, 173(3), 251–259.
  https://doi.org/10.1001/jamapediatrics.2018.4360
- Lunkenheimer, E., Hamby, C. M., Lobo, F. M., Cole, P. M., & Olson, S. L. (2020). The role of dynamic, dyadic parent–child processes in parental socialization of emotion.

  \*Developmental Psychology, 56(3), 566–577. https://doi.org/10.1037/dev0000808
- Magnus, M. C., Wright, R. J., Røysamb, E., Parr, C. L., Karlstad, Ø., Page, C. M., Nafstad,
  P., Håberg, S. E., London, S. J., & Nystad, W. (2018). Association of Maternal
  Psychosocial Stress With Increased Risk of Asthma Development in Offspring.
  American Journal of Epidemiology, 187(6), 1199–1209.
  https://doi.org/10.1093/aje/kwx366
- Maliken, A. C., & Katz, L. F. (2013). Exploring the Impact of Parental Psychopathology and Emotion Regulation on Evidence-Based Parenting Interventions: A Transdiagnostic

- Approach to Improving Treatment Effectiveness. *Clinical Child and Family Psychology Review*, 16(2), 173–186. <a href="https://doi.org/10.1007/s10567-013-0132-4">https://doi.org/10.1007/s10567-013-0132-4</a>
- Marinkovic, K., Beaton, L. E., Rosen, B. Q., Happer, J. P., & Wagner, L. C. (2019).
   Disruption of Frontal Lobe Neural Synchrony During Cognitive Control by Alcohol Intoxication. *Journal of Visualized Experiments*, 144, Article 58839.
   <a href="https://doi.org/10.3791/58839">https://doi.org/10.3791/58839</a>
- McElwain, N. L., Halberstadt, A. G., & Volling, B. L. (2007). Mother- and Father-Reported Reactions to Children's Negative Emotions: Relations to Young Children's Emotional Understanding and Friendship Quality. *Child Development*, 78(5), 1407–1425. http://www.jstor.org/stable/4620712
- Mellingen, S. (2016). *Alkoholbruk, partilfredshet og samlivsstatus. Før, inn i, og etter svangerskapet—Korrelater eller konsekvenser?* [Doctoral dissertation, University of Bergen]. BORA. <a href="https://www.uib.no/nye-doktorgrader/96120/hvordan-drikker-kvinner-og-menn-som-blir-foreldre">https://www.uib.no/nye-doktorgrader/96120/hvordan-drikker-kvinner-og-menn-som-blir-foreldre</a>
- Merakerås, G. K. (2022, februar 16). Langtidsstudie viser: Slik kan alkoholbruk som isolert sett ikke er problematisk, bli en risikofaktor for barn. RUS&SAMFUNN.

  <a href="https://www.rus.no/aktuelt/langtidsstudie-viser-slik-kan-alkoholbruk-som-isolert-sett-ikke-er-problematisk-bli-en-risikofaktor-for-barn-article3228-934.html">https://www.rus.no/aktuelt/langtidsstudie-viser-slik-kan-alkoholbruk-som-isolert-sett-ikke-er-problematisk-bli-en-risikofaktor-for-barn-article3228-934.html</a>
- Morelen, D., Shaffer, A., & Suveg, C. (2016). Maternal Emotion Regulation: Links to

  Emotion Parenting and Child Emotion Regulation. *Journal of Family Issues*, *37*(13),

  1891–1916. <a href="https://doi.org/10.1177/0192513X14546720">https://doi.org/10.1177/0192513X14546720</a>
- Morris, A. S., Criss, M. M., Silk, J. S., & Houltberg, B. J. (2017). The Impact of Parenting on Emotion Regulation During Childhood and Adolescence. *Child Development Perspectives*, 11(4), 233–238. <a href="https://doi.org/10.1111/cdep.12238">https://doi.org/10.1111/cdep.12238</a>

- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The Role of the Family Context in the Development of Emotion Regulation. *Social Development*, *16*(2), 361–388. <a href="https://doi.org/10.1111/j.1467-9507.2007.00389.x">https://doi.org/10.1111/j.1467-9507.2007.00389.x</a>
- Nederhof, A. J. (1985). Methods of coping with social desirability bias: A review. *European Journal of Social Psychology*, 15(3), 263–280. https://doi.org/10.1002/ejsp.2420150303
- Nelson, J. A., & Boyer, B. P. (2018). Maternal responses to negative emotions and child externalizing behavior: Different relations for 5-, 6-, and 7-year-olds. *Social Development*, 27(3), 482–494. <a href="https://doi.org/10.1111/sode.12296">https://doi.org/10.1111/sode.12296</a>
- Nelson, J. A., O'Brien, M., Blankson, A. N., Calkins, S. D., & Keane, S. P. (2009). Family stress and parental responses to children's negative emotions: Tests of the spillover, crossover, and compensatory hypotheses. *Journal of Family Psychology*, 23(5), 671–679. https://doi.org/10.1037/a0015977
- Nigg, J. T. (2017). Annual Research Review: On the relations among self-regulation, self-control, executive functioning, effortful control, cognitive control, impulsivity, risk-taking, and inhibition for developmental psychopathology. *Journal of Child Psychology and Psychiatry*, 58(4), 361–383. <a href="https://doi.org/10.1111/jcpp.12675">https://doi.org/10.1111/jcpp.12675</a>
- Norsk Helseinformatikk. (2020, september 18). *Alkohol risikosoner*. <u>https://nhi.no/sykdommer/psykisk-helse/alkohol/alkohol-risikosoner/</u>
- Norwegian Institute of Public Health. (n.d.). *Norwegian Mother, Father and Child Cohort*Study (MoBa). <a href="https://www.fhi.no/en/studies/moba/">https://www.fhi.no/en/studies/moba/</a>
- Nærde, A., & Sommer Hukkelberg, S. (2020). An examination of validity and reliability of the Parental Stress Scale in a population based sample of Norwegian parents. *PLOS ONE*, *15*(12), Article e0242735. <a href="https://doi.org/10.1371/journal.pone.0242735">https://doi.org/10.1371/journal.pone.0242735</a>

- Pereira, A. I., Santos, C., Barros, L., Roberto, M. S., Rato, J., Prata, A., & Marques, C. (2022). Patterns of Parental Reactions to Their Children's Negative Emotions: A Cluster Analysis with a Clinical Sample. *International Journal of Environmental Research and Public Health*, *19*(11), Article 6844.

  <a href="https://doi.org/10.3390/ijerph19116844">https://doi.org/10.3390/ijerph19116844</a>
- Perry, N. B., Dollar, J. M., Calkins, S. D., Keane, S. P., & Shanahan, L. (2020). Maternal socialization of child emotion and adolescent adjustment: Indirect effects through emotion regulation. *Developmental Psychology*, *56*(3), 541–552. https://doi.org/10.1037/dev0000815
- Reich, W., Earls, F., & Powell, J. (1988). A Comparison of the Home and Social

  Environments of Children of Alcoholic and Non-alcoholic Parents. *British Journal of Addiction*, 83(7), 831–839. <a href="https://doi.org/10.1111/j.1360-0443.1988.tb00518.x">https://doi.org/10.1111/j.1360-0443.1988.tb00518.x</a>
- Root, A. K., & Denham, S. A. (2010). The role of gender in the socialization of emotion: Key concepts and critical issues. *New Directions for Child and Adolescent Development*, 2010(128), 1–9. https://doi.org/10.1002/cd.265
- Rossow, I., Natvig, H., & Moan, I. S. (2009). *Nære pårørende av alkoholmisbrukere: Hvor mange er de og hvordan berøres de?* (Nr. 9). Statens institutt for rusmiddelforskning

  (SIRIUS). <a href="https://www.fhi.no/publ/eldre/nare-parorende-av-alkoholmisbrukere/">https://www.fhi.no/publ/eldre/nare-parorende-av-alkoholmisbrukere/</a>
- Rutherford, M. J., Cacciola, J. S., Alterman, A. I., McKay, J. R., & Cook, T. J. (1998). Young Men's Perceived Quality of Parenting Based on Familial History of Alcoholism.

  \*\*Journal of Child & Adolescent Substance Abuse, 6(3), 43–56.\*\*

  https://doi.org/10.1300/J029v06n03\_03
- Sandvik, O. (2018, oktober 29). Far jobber mindre- mor jobber mer. Statistisk Sentralbyrå.

  <a href="https://www.ssb.no/arbeid-og-lonn/artikler-og-publikasjoner/far-jobber-mindre-mor-jobber-mer">https://www.ssb.no/arbeid-og-lonn/artikler-og-publikasjoner/far-jobber-mindre-mor-jobber-mer</a>

- Sandvik, O., & Horgen, E. H. (2017). Foreldres arbeidstid: Hvordan deler småbarnsforeldre på arbeidet—Hjemme og ute? Samfunnsspeilet/Statistisk sentralbyrå, 3.

  <a href="https://www.ssb.no/arbeid-og-lonn/artikler-og-publikasjoner/hvordan-deler-smabarnsforeldre-pa-arbeidet-hjemme-og-ute--346913">https://www.ssb.no/arbeid-og-lonn/artikler-og-publikasjoner/hvordan-deler-smabarnsforeldre-pa-arbeidet-hjemme-og-ute--346913</a>
- Schmalbach, B., Zenger, M., Tibubos, A. N., Kliem, S., Petrowski, K., & Brähler, E. (2021).

  Psychometric Properties of Two Brief Versions of the Hopkins Symptom Checklist:

  HSCL-5 and HSCL-10. *Assessment*, 28(2), 617–631.

  <a href="https://doi.org/10.1177/1073191119860910">https://doi.org/10.1177/1073191119860910</a>
- Shaffer, A., Suveg, C., Thomassin, K., & Bradbury, L. L. (2012). Emotion Socialization in the Context of Family Risks: Links to Child Emotion Regulation. *Journal of Child and Family Studies*, 21(6), 917–924. https://doi.org/10.1007/s10826-011-9551-3
- Sola, E. (2022, oktober 6). Barn kan merke foreldres endring etter få alkoholenheter. Avog-til. <a href="https://avogtil.no/aktuelt/barn-kan-merke-foreldres-endring-etter-fa-alkoholenheter/">https://avogtil.no/aktuelt/barn-kan-merke-foreldres-endring-etter-fa-alkoholenheter/</a>
- Spinrad, T. L., Morris, A. S., & Luthar, S. S. (2020). Introduction to the special issue: Socialization of emotion and self-regulation: Understanding processes and application. *Developmental Psychology*, *56*(3), 385–389.

  https://doi.org/10.1037/dev0000904
- Sternberg, A., Pandika, D., Elam, K. K., & Chassin, L. (2018). The relation of parent alcohol disorder to young adult drinking outcomes mediated by parenting: Effects of developmentally limited versus persistent parent alcohol disorder. *Drug and Alcohol Dependence*, 188, 224–231. <a href="https://doi.org/10.1016/j.drugalcdep.2018.03.027">https://doi.org/10.1016/j.drugalcdep.2018.03.027</a>
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

- Thompson, R. A. (1994). Emotion Regulation: A Theme in Search of Definition.

  Monographs of the Society for Research in Child Development, 59(2/3), 25–52.

  https://doi.org/10.2307/1166137
- Thompson, R. A. (2014). Socialization of Emotion and Emotion Regulation in the Family. I

  J. J. Gross (Red.), *Handbook of Emotion Regulation* (2. utg., s. 173–186). The

  Guildford Press.
- U.S. Department of Veteran Affairs. (2019, november 9). *Alcohol Use Disorders Identification Test*. https://www.hepatitis.va.gov/alcohol/treatment/audit-c.asp
- Vermeulen-Smit, E., Koning, I. M., Verdurmen, J. E. E., Van der Vorst, H., Engels, R. C. M. E., & Vollebergh, W. A. M. (2012). The influence of paternal and maternal drinking patterns within two-partner families on the initiation and development of adolescent drinking. *Addictive Behaviors*, 37(11), 1248–1256.
  https://doi.org/10.1016/j.addbeh.2012.06.005
- Wilson, S., & Durbin, C. E. (2013). Mother-Child and Father-Child Dyadic Interaction:

  Parental and Child Bids and Responsiveness to Each Other During Early Childhood.

  Merrill-Palmer Quarterly, 59(3), 249–279. https://doi.org/10.1353/mpq.2013.0018
- Windle, M. (1996). Effect of Parental Drinking on Adolescents. *Alcohol Health and Research World*, 20(3), 181–184.
  - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6876511/pdf/arhw-20-3-181.pdf

Wolf, J. P., Freisthler, B., & Chadwick, C. (2021). Stress, alcohol use, and punitive parenting during the COVID-19 pandemic. *Child Abuse & Neglect*, 117, Article 105090. https://doi.org/10.1016/j.chiabu.2021.105090

World Economic Forum. (2022). *Global Gender Gap Report 2022* [Insight report]. <a href="http://reports.weforum.org/globalgender-gap-report-2022">http://reports.weforum.org/globalgender-gap-report-2022</a>.

## **Appendix A**

## **Invitation Letter**



## Vi inviterer deg til å delta i studie om foreldreroller i Norge i dag.

### Hvorfor blir du spurt?

Du er registrert som forelder til barn mellom 4- 13 år i Folkeregisteret, og er derfor invitert til å være med i studien. Dine søsken og/eller partner/medforelder, vil også bli invitert.

#### Hva er formålet med prosjektet?

Foreldrerollen påvirkes av samfunnsutviklingen og er i stadig endring. Det stilles andre krav til foreldre i Norge i dag sammenlignet med tidligere generasjoner, og det er behov for oppdatert kunnskap om foreldrerollen.

Formålet med studien er å skape ny kunnskap som kan brukes til å skape bedre støtte og veiledning for foreldre, og dermed på sikt kunne bidra til bedre livskvalitet og utvikling hos barn. Studien vil blant annet forsøke å belyse spørsmål som: hva påvirker foreldrestil, hvor forskjellige er foreldre i sin stil, hvordan møter foreldre sine barns følelser, og hva vektlegger og opplever foreldre i sin foreldrerolle.

### Hva innebærer deltakelse for deg?

Deltakelse i prosjektet innebærer å svare på et spørreskjema. Det tar ca 20 minutter å fylle ut skjemaet. Alle besvarelser anonymiseres.

### Hva kan du få ut av å delta?

Gjennom å delta i denne studien vil du bidra til kunnskap som kan bedre støtten og tjenestene til foreldre i Norge. Dette kan på sikt bedre barns trivsel og utvikling.

For deg personlig kan besvarelsen av spørsmålene bidra til en refleksjon og økt bevissthet om hvordan du utøver foreldrerollen og møter ditt barn. Hvis du ønsker det, får du en kort individuell tilbakemelding på egen foreldrestil, basert på noen av dine svar i spørreskjemaet. Den er kun tilgjengelig for deg via innlogging med Bankid.

### Alle som deltar, får et Universal gavekort på kr 400.

I tillegg får alle som ønsker det en kort oppsummering basert på hva de har svart om egen foreldrestil.

Denne invitasjonen er også sendt deg på SMS. Skjema kan besvares på pc eller mobil via <a href="https://nettskjema.no/a/foreldrepr">https://nettskjema.no/a/foreldrepr</a>. Ta gjerne kontakt på <a href="mailto:foreldrepraksis@psykologi.uio.no">foreldrepraksis@psykologi.uio.no</a> om det er noe du lurer på, eller se på <a href="mailto:foreldrepraksis@psykologi.uio.no">foreldrepraksis@psykologi.uio.no</a> om det er noe du lurer på, eller se på <a href="mailto:foreldrepraksis@psykologi.uio.no">foreldrepraksis@psykologi.uio.no</a> om det er noe du lurer på, eller se på <a href="mailto:foreldrepraksis@psykologi.uio.no">foreldrepraksis@psykologi.uio.no</a> om det er noe du lurer på, eller se på <a href="mailto:foreldrepraksis@psykologi.uio.no">foreldrepraksis@psykologi.uio.no</a> om det er noe du lurer på, eller se på <a href="mailto:foreldrepraksis@psykologi.uio.no">foreldrepraksis@psykologi.uio.no</a> om det er noe du lurer på, eller se på <a href="mailto:foreldrepraksis@psykologi.uio.no">foreldrepraksis@psykologi.uio.no</a> om det er noe du lurer på, eller se på <a href="mailto:foreldrepraksis@psykologi.uio.no">foreldrepraksis@psykologi.uio.no</a> om det er noe du lurer på, eller se på <a href="mailto:foreldrepraksis@psykologi.uio.no">foreldrepraksis@psykologi.uio.no</a> om det er noe du lurer på, eller se på <a href="mailto:foreldrepraksis@psykologi.uio.no">foreldrepraksis@psykologi.uio.no</a> om det er noe du lurer på, eller se på <a href="mailto:foreldrepraksis@psykologi.uio.no">foreldrepraksis@psykologi.uio.no</a> om det er noe du lurer på, eller se på <a href="mailto:foreldrepraksis@psykologi.uio.no">foreldrepraksis@psykologi.uio.no</a> om det er noe du lurer på se på

### Vi håper du vil bidra!

Med ønske om en god høst til deg og dine!

Egil Nygaard Yvonne Severinsen
Professor Stipendiat

Psykologisk institutt Universitetet i Oslo

## Appendix B

Participant Consent Form
Samtykkeskjema:
Informasjon og samtykke til studie om Foreldrepraksis i Norge
Samtykker du til deltagelse i prosjektet?
□ Ja
☐ Nei / jeg vil trekke tilbake mitt samtykke
(Hvis svart «Nei/jeg vil trekke tilbake mitt samtykke»)
Er dette førsteregistrering av nei til samtykke, eller tilbaketrekking av tidligere gitt
samtykke?
☐ Nei til å samtykke nå
☐ Tilbaketrekking av tidligere gitt samtykke
(Hvis svart «Ja»)
Jeg samtykker til (merk av alle for fullt samtykke):
☐ å delta i prosjektet og til at mine personopplysninger brukes slik det er beskrevet over

 $\square$  at prosjektet innhenter informasjon fra eksisterende register slik det er beskrevet over

a bli kontaktet på et senere tidspunkt for å bli spurt om jeg da vil bli med på

oppfølgingsstudie