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Police interview training, cooperation with specialized units and the quality of forensic interviews in suspected cases of child sexual and physical abuse

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Objectives: Children are often the only witnesses in cases of sexual or physical abuse against them, which is why the quality of child forensic interviews used in abuse investigations is of paramount importance. The present study examined the quality of child forensic interviews conducted by Finnish police officers. In addition, the effect of interview training participation and cooperation with forensic psychiatric investigative units was examined.

Methods: The National Police Board of Finland granted a research permit for the present study. Transcribed child forensic interviews were requested from all police officers investigating alleged sexual or physical abuse against children. In addition, an online questionnaire was sent to each participating police officer. The total sample (n=27) consisted of 4,662 utterances that were coded into question types based on a research-based coding system. The association between interview quality and interview training participation, and cooperation with specialized units and interview training was examined using multilevel modeling.

Results: A majority of the police officers had participated in child forensic interview training. Police officers who had not attended child forensic interview training used significantly less facilitators. Police officers who reported cooperating with the forensic psychiatric investigative units used significantly more facilitators and directive utterances.

Conclusions: This study shed light on the effectiveness of interview training and on the reported cooperation between police officers and forensic psychiatric investigative units. The results of this study indicate that both interview training participation and the cooperation with forensic psychiatric investigative units promotes the ability of police officers of being present for the child through facilitating the child's narrative. The results can be utilized to motivate broader collaboration between authorities.

Tiivistelmä:

Tavoitteet: Lapset ovat usein ainoita todistajia heitä kohtaan kohdistetuissa epäillyn seksuaalisen hyväksikäytön tai pahoinpitelyn tilanteissa, minkä vuoksi lasten haastattelujen laadun takaaminen on välttämätön osa esitutkintaa. Tässä tutkimuksessa tarkasteltiin suomalaisten poliisien tekemien haastattelujen laatua tilanteissa, joissa lapsi oli asianomistajana, ja tutkittiin sekä haastattelukoulutukseen osallistumisen että poliisin ja oikeuspsykologisten yksiköiden välisen yhteistyön vaikutusta haastattelujen laatuun.

Menetelmät: Poliisihallitus myönsi tutkimusluvan tälle tutkimukselle. Kaikilta lapsirikosepäilyjä tutkivilta poliiseilta pyydettiin heidän viimeisimmät litteroidut haastattelunsa. Lisäksi poliiseille lähetettiin e-kyselylomake. Kokonaisaineisto (n=27) koostui 4,662 kysymyksestä, jotka koodattiin kysymyskategorioihin jo olemassa olevan koodausjärjestelmän mukaan. Haastattelujen laadun yhteyttä haastattelukoulutukseen osallistumisen välillä sekä laadun yhteyttä yhteistyöhön oikeuspsykologisten tutkimusyksiköiden välillä analysoitiin monitasomalleilla.

Tulokset: Suurin osa tutkimukseen osallistuneista poliiseista oli osallistunut haastattelukoulutukseen. Poliisit, jotka eivät olleet osallistuneet haastattelukoulutukseen, esittivät tilastollisesti merkitsevästi vähemmän fasilitoivia kysymyksiä. Poliisit, jotka olivat yhteistyössä oikeuspsykologisten tutkimusyksiköiden kanssa, esittivät tilastollisesti merkitsevästi enemmän fasilitoivia ja direktiivisiä kysymyksiä.

Johtopäätökset: Tämän tutkimuksen tulokset tukevat haastattelukoulutukseen osallistumista ja sen vaikutuksia sekä yhteistyötä poliisien ja oikeuspsykologisten tutkimusyksiköiden välillä. Tulokset osoittavat, että sekä haastattelukoulutukseen osallistuminen että yhteistyö oikeuspsykologisten tutkimusyksiköiden kanssa edistää poliisien kykyä olla läsnä lapselle, mikä osaltaan helpottaa lapsen kertomista. Tuloksia voidaan hyödyntää laajemman viranomaisten välisen yhteistyön tukena.

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1 Introduction

Children are often the only witnesses in cases of sexual or physical abuse against them, which is why the quality of child forensic interviews used in abuse investigations is of paramount importance (e.g., Korkman, 2006; La Rooy et al., 2015). It is therefore crucial to ensure the child forensic interviews are conducted in a way that maximizes the reliability of children's interview statements. Poorly planned and conducted interviews can have far-reaching negative effects, possibly leading to misunderstandings, false accusations, or possibly erroneous non-conviction, as they may be found inadmissible in court (Wood & Garven, 2000). In the early 2000s, it was observed that the quality of child forensic interviews was at a worryingly poor level both in Finland and in numerous other countries (e.g., Korkman, 2006; Lamb, Hershkowitz, Sternberg, Boat & Everson, 1996; Thoresen, Lønnum, Melinder, Stridbeck & Magnussen, 2006). These distressing findings led to changes in the field of forensic interviewing in Finland. In 2009, more forensic psychiatric investigative units were established to guarantee a child-friendly and specialized setting for investigating crimes against children (Korkman, Pakkanen & Laajasalo, 2017). In 2009, investigative interviewers of children, often consisting of police officers and psychologists working within specialized forensic psychiatric investigative units (Korkman, Pakkanen & Laajasalo, 2017). Since 2011, police officers are required by the Criminal Investigation Act (805/2011) to undergo specialized training in child interviews. Furthermore, police officers can request official assistance from forensic psychiatric investigative units in the investigation of cases that are deemed complicated due to factors regarding the child's development or cases involving very young children. The quality of interviews conducted in these aforementioned specialized research units was found to be significantly better compared to the troublesome results of interviews in the early 2000s (i.e., before the units were established) (Heikkilä, 2017).

The quality of interviews conducted by the police has not been sufficiently studied in Finland. The number of studies involving police officers as interviewers is scarce. This master's thesis aims to assess whether and how attending specialized interview training is associated with the quality of interviews in a sample of Finnish police officers. In addition, the association between the cooperation of police officers with the forensic psychiatric investigative units is examined. The questions asked by the interviewers are known to play a significant role in the quality and course of the interviews. Thus, this study analyses the quality of interviews through analyzing the question types used.

1.1 Child sexual and physical abuse

Sexual and physical abuse of children as a phenomenon has attained increasing attention in Finland during recent decades. A child's right to a safe and non-violent life is protected in Finland by certain laws and conventions. The Council of Europe Convention on Protection of Children against Sexual Exploitation and Sexual Abuse (The Lanzarote Convention) requires criminalization of all kinds of sexual offenses against children. It sets out that states in Europe, including Finland, shall adopt specific legislation and take measures to prevent sexual violence, to protect child victims, and to prosecute perpetrators. The Lanzarote Convention was adopted in Finland in 2011 (SDK 539/2011). However, according to a Finnish school survey (Ikonen & Helakorpi, 2019), four percent of 4th and 5th graders reported experiencing sexual commentary, suggestion, communication or seeing sexual material at least once in the past year, while two percent reported experiencing touching or being pressured to touch. Approximately one in four of 8th and 9th graders reported experiencing sexual harassment or suggestion at least once a year. Seven percent of teenagers had experienced sexual violence. Girls experienced sexual harassment more often than boys. About one in ten (10 – 13 %) girls reported experiencing sexual violence at least once a year, while less than five percent (3 – 4 %) of boys had experienced sexual violence.

In Finland, the physical punishment of children was prohibited by law in 1984 and The Convention on the Rights of the Child was adopted in 1991. Even the slightest physical abuse of a child is a crime under public prosecution according to the Criminal Code of Finland (1889/39). In the Finnish school survey, the definition of physical violence consisted of grasping, pushing or shaking, strangling, beating, hitting with a hand or an object, kicking or other physical injury. According to the survey (Ikonen & Helakorpi 2019), physical violence was reported by 13 percent of 4th and 5th graders and boys (15 %) had experienced physical violence more often than girls (11 %). Approximately one in ten (12 %) teenagers reported experiencing physical violence. Girls had experienced physical violence more often than boys among teenagers.

According to the Criminal Code of Finland (39/1889), sexual exploitation of a child is perpetrated by anyone who, by touching or otherwise, commits an act towards a child under the age of sixteen that is likely to negatively affect their development or causes the child to engage in such an act. Sexual abuse offenses against children according to the Criminal Code of Finland include sexual exploitation of a child, aggravated sexual exploitation and coercion of a child, coercion into sexual activity, purchase of sexual services from a young person, solicitation of a child for sexual

purposes, rape and aggravated rape. In principle, sexual acts are considered sexual abuse, whereas sexual intercourse with a child is usually assessed as aggravated sexual abuse. Since 2019, an offender who commits both aggravated rape and aggravated sexual abuse of a child is convicted of aggravated child rape. The Criminal Code of Finland does not apply to equal and consensual sexual relations between young people. If one or both parties are under the age of sixteen, there is no significant difference in the age or mental and physical maturity of the parties, and the act is not coercive, the act will not be judged under criminal law. According to the Criminal Code of Finland, the age of consent is sixteen years. However, the age limit is 18 years in cases where the perpetrator is a parent of the child or a person comparable to a parent who lives in the same household as the child or otherwise in a position of authority in relation to the child (for instance, a teacher).

All allegations of sexual offenses against a child and other than extremely minor physical abuse offenses must be reported to the police. According to the Finnish Institute for Health and Welfare (2020), acts or omissions by the child's parents or other adults that cause harm to the child are deemed as violence.

1.2 Child witnesses

Children as witnesses have been studied extensively in both natural (e.g., Baugerud, Magnussen & Melinder, 2014) and experimental settings (Brown et al., 2013; Eisen, Quin, Goodman & Davis, 2002). Over the last 30 years, interest in the aforementioned research has grown because of several factors, including high-profile child-abuse cases, such as the McMartin preschool case (Garven, Wood, Malpass & Shaw, 1998). Based on this research of children as witnesses, numerous conclusions have been made.

First, suggestibility is broadly associated with age differences. Even though people of all ages are prone to suggestibility, preschool children and younger children have been recognized as a markedly suggestible group compared to older children (e.g., Hritz et al., 2015, for a review) and adults (e.g., Redlich & Goodman, 2003). It has been found that the statements of younger children generally contain fewer details than statements of older children and are more prone to suggestibility (Ceci & Bruck, 2006; Ghetti & Alexander, 2004; La Rooy, Katz, Malloy & Lamb, 2010). Furthermore, young children are more likely to select inaccurate options when responding to forced-choice or closed-ended questions and to respond erroneously to suggestive questions (i.e.,

questions that aim to confirm the interviewer's hypothesis or expected outcome, such as "He touched you under your clothes, didn't he?") about their experiences (Goodman & Aman, 1990; Hritz et al., 2015; Oates & Shrimpton, 1991; Poole & Lindsay, 1998).

Second, the effect of individual differences on memory accuracy has been established (e.g., Bruck & Ceci, 1999; Klemfuss & Olaguez, 2020, for reviews). The literature on individual differences was summarized in a review by Klemfuss and Olaguez in 2020 which highlighted that language skills and intellectual impairment may influence the susceptibility of children. Klemfuss and Olaguez (2020) recommended clarifying the potential role of other factors (i.e., stress and mental health) on children's vulnerability to suggestion. Furthermore, the cognitive capacity, linguistic capabilities and social skills of children affect their ability to remember details, understand questions and provide reliable responses (Poole & Lamb, 1998).

Third, however, it has also been found in spite of the aforementioned vulnerabilities, that young children are generally reliable witnesses, and children as young as 4 years of age can respond informatively when allowed to give their accounts in their own words (Hershkowitz, Lamb, Orbach, Katz & Horowitz, 2012; Lamb, Brown, Hershkowitz, Orbach & Esplin, 2018). Moreover, after reaching 3 years of age children are able to remember salient events and experiences for longer periods of time (e.g., Fivush, Gray & Fromhoff, 1987; Lamb et al., 2018). Although children of all ages after reaching required linguistic capabilities can describe what happened to them, the quality of the narrative improves as a function of age (Hershkowitz et al., 2012). Age has been demonstrated to affect the accuracy of children's memories of alleged or suspected sexual abuse (Lamb, Sternberg & Esplin, 2000; Lamb et al., 2003).

In addition to age, the effect of the passage of time on a child's statement has been studied. Lamb, Sternberg & Esplin (2000) demonstrated that children were more likely to provide information in response to interviewers' questions within a month after the alleged abuse compared to children interviewed following longer delays. The shorter the delay between the time of the interview and the last incident, the more accessible the memory is (Flin, Boon, Knox & Bull, 1992). Moreover, the biggest concerns regarding delays are the possibilities of post-event contamination, such as source errors (e.g., Henkel, 2004). Furthermore, it has been established that the weaker the memory trace, the more susceptible it is to suggestion. Delayed disclosure is well established in the existing literature (Roesler & Wind, 1994; Paine & Hansen, 2002; Brennan & McElvaney, 2020). Factors affecting the timing of disclosure include the severity of the abuse, the relationship between the

perpetrator and the child, the fear of what will happen after the disclosure and the supportiveness of the child's parents (Goodman-Brown, Edelstein, Goodman, Jones & Gordon, 2003; Hershkowitz, Lanes & Lamb, 2007).

An issue that has sparked concern in the scientific community is the fact that after disclosing abuse children may be subject to multiple interviews or conversations. It has been proposed that multiple interviews can increase children's suggestibility through a variety of factors, such as the encouragement of false reports by discussing unfounded accusations or suspicions and stereotype induction (e.g., Henkel, 2004; Korkman, Juusola & Santtila, 2014). Repeated interviewing does not seem to have a negative impact per se, provided the interviews are conducted in an appropriate and non-leading manner (La Rooy et al., 2010). Interviewing children repeatedly has actually been established as beneficial because it allows for the interviewer to support the child through the disclosure (Blasbalg, Hershkowitz, Lamb & Karni-Visel, 2020; Faller, Cordisco-Steele & Nelson-Gardell, 2010; La Rooy et al., 2010). Furthermore, building rapport and supporting the child through the interview reduces children's anxiety (Davis & Bottoms, 2002) and reluctance to disclose (Hershkowitz, Orbach, Lamb, Sternberg & Horowitz, 2006).

The aforementioned examples are mainly associated with child-related factors, but the characteristics of the interview or the interviewer may also affect the testimonies of children. The characteristics of the interview may expose the child to suggestibility (Finnilä, Mahlberg, Santtila, Sandnabba & Niemi, 2003; La Rooy & Lamb, 2011), which is why it is essential that the interviewer is familiar with best-practice interviewing (e.g., Price & Roberts, 2011). It has been established that inappropriate interview techniques may taint or compromise the child's testimony as the testimony of child witnesses can be greatly affected by whether or not the child has been guided or prompted in the interview by using suggestive, coercive or closed questions (Bull, 2010; Klemfuss & Olaguez, 2020; Lamb et al., 2018). Poor interviewing practices, such as suggestive questioning, are the most likely sources of inaccurate or contradictory statements made by children (Orbach & Lamb, 2001). Moreover, the effects of suggestive questions are greater in situations where the question asked feels complicated or confusing to the witness, the memory of the event is not recent or vivid, or when the witness perceives the interviewer as an authority (Lamb, Sternberg, Orbach, Hershkowitz & Esplin, 1999).

Furthermore, a child might feel pressure to conform with suggestive questions posed by the interviewer, which can result in false allegations (Hershkowitz, 2001a). In addition to suggestive

questions, closed or option-posing questions (i.e., “Was the car red or white?”) have been found to increase the risk of inaccuracy because children simply may rely on picking one of the options by guessing (La Rooy et al., 2015). Thus, the underlying objective of every interviewing guideline is to provide interviewers with tools that help to avoid using hazardous question types and maximize eliciting information using open-ended questions (e.g., Lamb, Orbach, Hershkowitz, Esplin & Horowitz, 2007; Orbach & Lamb, 2001).

1.3 The effect of interview training on interview quality

Based on the research described above, there is now a consensus regarding the features that define and comprise a best practice interview. These features are included in other interview protocols, such as the Sequential Interview (Magnusson et al., 2021). The NICHD Protocol (the National Institute of Child Health and Human Development Protocol) was developed in the USA in the 1990s and has been researched extensively. The NICHD Protocol consists of different phases of an investigative interview and guides interviewers in maximizing the amount of information elicited from free-recall memory (e.g., Benia, Hauck-Filho, Dillenburg & Stein, 2015, for review). Many countries have introduced the NICHD Protocol because previous research has shown that it improves the quality of interviews and enhances the amount of information elicited from the child. The aforementioned best-practice features are presented below.

The first best-practice feature is to explain the instructional ground rules of the interview to the child (La Rooy et al., 2015). These rules include clarifying the child’s task (i.e., ensuring that the child understands the need to describe events elaborately and to tell the truth) and explaining the expectations and the course of the interview (i.e., that the child can and should say “I don’t know”, “I don’t understand” or “I don’t remember” if or when appropriate). The objective of introducing the child to these ground rules is to minimize error. Instructional rules have been found to potentially enhance the child’s ability to act as an accurate source (Brubacher, Poole & Dickinson, 2015; Cordón, Saetermoe, & Goodman, 2005; Krackow & Lynn, 2010).

The second best-practice feature is to conduct a practice interview (for review, see Lamb et al., 2007; La Rooy et al., 2010). During the practice interview, the child is encouraged to provide as much information as possible in response to open-ended questions. The practice interview thus provides the child with an opportunity to get used to the kind of communication that is preferrable

in an investigative interview setting: the interviewing posing as few and as open questions as possible, and the child providing as independent and detailed accounts as possible.

The third best-practice feature is the emphasis on open-ended questions (see Lamb et al., 2007). Open-ended questions are more likely than closed or leading questions to elicit valuable narrative responses (Feltis, Powell, Snow & Hughes-Scholes, 2010). Furthermore, answers to open-ended questions often contain more temporal as well as contextual details and the information elicited is more likely to be accurate (Orbach & Lamb, 2007; Benia et al., 2015). Responding to open-ended questions requires more extensive memory processing compared to specific or focused questions (Hershkowitz, 2001b; Poole & Lamb, 1998), which may – at least in part – explain why open-ended questions typically elicit more information than closed questions.

Even though the best-practice features are well established, the factual quality of child forensic interviews has been found to be inadequate in numerous earlier studies (e.g., Baugerud, Johnson, Hansen, Magnussen & Lamb, 2020; Cederborg, Orbach, Sternberg & Lamb, 2000; Korkman, Santtila & Sandnabba, 2006). Furthermore, multiple studies found that interviewers in the United States, United Kingdom, Canada, Norway, Sweden and Israel were relying more on suggestive and closed-ended or option-posing questions (Cederborg et al., 2000; Cyr & Lamb, 2009; Davies, Westcott & Horan, 2000; Lamb, 1996; Orbach et al., 2000; Thoresen et al., 2006). Studies have revealed that even when investigative interviewers believed they were adhering to the best-practice methods, in reality the amount of open-ended invitations the interviewers were using was lacking (e.g., Yi, Lamb & Jo, 2015). The above-mentioned gap between theory and practice has contributed to a broader reflection on the structure and organization of interview training programs, as in what kind of training is best in terms of content and implementation to ensure enduring improvements in the quality of forensic interviews (Lamb, Sternberg, Orbach, Esplin & Mitchell, 2002). Several studies have found that interview training improves the quality of interviews (e.g., Sternberg, Lamb, Orbach, Esplin & Mitchell, 2001; Lamb et al., 2002). However, there is also evidence that the benefits of training may not be long lasting. A study by Smith, Powell and Lum (2009) found that interviewers used a larger proportion of open-ended questions immediately after training, but as early as a month after attending training, the benefits of training had dissipated. The performance of trained interviewers was identical to that of a group of interviewers who had received no formal interview training. The effectiveness of training or instruction tends to decrease over time (Lamb et al., 2002), which is why continuous supervision and training are seen as paramount in ensuring the quality of child forensic interviews (Lamb et al., 2018).

The attitudes and beliefs held by interviewers can also affect the quality of the interviews. Interviewers tend to look for information that confirms their own already established beliefs or hypotheses about the course of events. For example, police officers tend to pose more guilt presumptive questions to suspects who are under arrest compared to suspects who have not been arrested (Lidén, 2018). Thus, interviewers may eventually end up refuting or ignoring information that challenges their own expectations. The aforementioned phenomenon is known as confirmation bias. Several studies have found that incorrect beliefs and strong attitudes can negatively influence children's interviews, especially in cases of child sexual abuse (Bruck & Ceci, 2004; Darwinkel, Powell & Tidmarsh, 2013; Finnilä-Tuohimaa et al., 2008; Lahtinen, Korkman, Laitila & Mehtätalo, 2017).

Adopting a research-based protocol, such as the NICHD Protocol, in the design and conduct of child forensic interviews has been associated with a higher number of open-ended utterances and fewer suggestive and option-posing or closed-ended prompts (Lamb et al., 2007; Lamb et al., 2009; Sternberg et al., 2001). The NICHD Protocol is built on the best-practice features. Furthermore, the NICHD Protocol has been further developed over the past 10 years to, in addition to linguistic, memory and suggestibility aspects, take into account psychosocial factors associated with interviewing (Hershkowitz, Lamb, Katz & Malloy, 2013; Benia et al., 2015). The purpose of the revised NICHD Protocol is to assist interviewers in creating a safe and supportive environment to prevent reluctance and to encourage rapport-building in addition to conducting the interview in accordance with the developmental level of the child and structuring the questions around open-ended prompts. Supportive interviews can be beneficial in certain circumstances where, for example, a child is anxious, reluctant, sensitive to environmental factors, or has to focus on recalling emotional events for long periods of time (Saywitz, Wells, Larson & Hobbs, 2019). In the revised version, the rapport-building phase (i.e., showing interest in the child's experiences and validating the child's feelings) precedes the introduction of ground rules. The use of the revised version of the NICHD Protocol was associated with children being more likely to disclose abuse and the association was mediated by enhanced willingness to collaborate (Blasbalg et al., 2020).

1.4 Police officers as interviewers

The perceptions and beliefs held by police officers have been explored in many ways (e.g., Hughes-Scholes, Powell & Sharman, 2014). A study by Guadagno, Powell & Wright (2006) found that police officers perceived very detailed information (i.e., location, date or time of the offence) as the most important factors in a police investigation. In addition, the police believed that by investigating and uncovering as many separate incidents as possible, as well as succeeding in attaching specific details to each of these incidents, the investigation would be more successful and the evidence would be more reliable. According to Fisher & Geiselman (2010), in a typical police-led interview, the police is in a superior role and dominates the interview while the interviewee is in a subordinate role. Furthermore, it was suggested that the questions asked by the police interviewer depend heavily on the evidence required in the investigation.

The significance of police interview training is highlighted in a study by Hughes-Scholes et al. (2014) examining police beliefs about how children allege abuse. The police based their decision making on three areas: whether i) they thought the incident was likely to have happened, ii) the child's language was deemed as age-appropriate and iii) the child's behavior (i.e., if the child behaved or acted as the police believed someone would act after witnessing or experiencing a traumatic incident). Children, like adults, often take on a passive role in front of the police because of the police officer's authority (Fisher & Geiselman, 2010). A study by Fisher, Geiselman & Raymond (1987) found that often in interrogation or interviewing situations, interviewees sit quietly and wait passively for the interviewer to ask questions. According to current knowledge, the active role of the interviewee is facilitated by encouraging and instructing the interviewee, asking more open-ended questions and not interrupting the interviewee (e.g., Benia et al., 2015; Fisher & Geiselman, 2010).

The performance of police officers can be affected by working overtime, time pressure and shortages in resources (Brown & Campbell, 1990; Shane, 2010). Due to these stressors, police officers may find it more difficult to plan and conduct interviews according to best practice. Investigating physical and sexual abuse offences against children usually takes considerably more time than investigating offences against adults. According to Finnish police officers, the resources assigned to investigations of crimes against children have not been sufficient (Heinonen & Ellonen, 2013; Humppi & Ellonen, 2010). As stress has been found to contribute to the quality of interviews, it is reasonable to highlight the importance of guidance, further training and the communication and

cooperation with the forensic psychiatric investigative units as possible protective factors against the deterioration of interview quality. Identifying protective factors is paramount because poorly planned and conducted interviews can have far-reaching negative effects (Wood & Garven, 2000). As the role of continuous guidance and training are significant in ensuring the quality of child forensic interviews (Lamb et al., 2002), it is important to explore the effects of cooperation with the forensic psychiatric investigative units.

1.5 Previous studies of interview quality in Finland

In Finland, the quality of child forensic interviews has not been studied comprehensively. The research focusing on the quality of child forensic interviews has mainly consisted of evaluating interviews conducted by psychologists or other professionals (e.g., psychiatrists and social workers). Studies evaluating interviews conducted by the police exclusively are virtually nonexistent, even though the police conduct a large proportion of child forensic interviews in Finland. As in numerous other countries, in the beginning of the 2000s, the quality of child forensic interviews was found to be worryingly poor (Korkman et al., 2006; Korkman, Santtila, Westeråker & Sandnabba, 2008). Korkman et al. (2006) examined child forensic interviews conducted by psychologists, psychiatrists and police officers between 1990 and 1998. In that sample more than half of the questions used in the interviews were either closed-ended (31%) or suggestive (26%), and invitations consisted only 2% of the questions. However, the sample from this study may have been potentially biased, which led Korkman et al. (2008) to study a new representative sample of investigative interviews collected between 1997 and 2002. The results were very similar with suggestive (15%) and closed-ended (33%) questions comprising more than half of the questions, while the amount of invitations (6%) was below par. In addition to these findings, a study by Finnilä-Tuohimaa, Santtila, Sainio, Niemi and Sandnabba (2005) found alarmingly that Finnish psychologists, social workers and psychiatrists relied more on their clinical experience than on scientific knowledge when assessing their own skills as investigators of sexual abuse. Furthermore, it was found that the interviewers had different problematic pre-trial beliefs (Finnilä-Tuohimaa et al., 2005).

As a result of these studies, Finland began to pay more attention to the quality of child forensic interviews, which in part led to the introduction of the NICHD protocol in the early 2000s (Taskinen, 2006). Furthermore, the findings paved the way for promoting hypothesis generation and

the establishment of the first child forensic psychology center for children and adolescents (forensic psychiatric investigative unit) in 2006 (Laajasalo et al., 2018). The forensic psychiatric investigative units work in collaboration with the police and offer guidance and feedback on conducting child forensic interviews (Korkman et al., 2017). In Finland, forensic psychiatric investigative units mainly conduct interviews for under 7-year-old children as well as for children with developmental challenges or mental health problems.

The above findings also contributed to The Finnish Police beginning a one-year interview training program for child forensic interviews in 2009 (Korkman et al., 2017). The Ministry of Internal affairs and the National Police board were responsible for the organization of the interview training program from 2009 to 2019. In 2020, the Police University College was given the duty of coordinating the training program. Presently the program, stretched over the course of one year, includes 10 days of theoretical training about children's developmental capabilities, such as memory, decision making, suggestibility and language. In addition to adapting the theoretical framework, the interviewer trainees are requested to evaluate their own interviews using the NICHD protocol. The trainees are divided into small supervised groups where each trainee bring their video recorded interviews for feedback and where participants also plan upcoming interviews based on the allegations they are faced with.

A study by Kaunisto (2013) was the first in Finland to examine the quality of investigative interviews conducted by the police. Kaunisto (2013) studied the effect of the interview training on the quality of child forensic interviews. The sample consisted of psychologists and police officers who had participated in the training in 2011 (n=34, of which 26 were police officers). The psychologists all worked at forensic psychiatric investigative units and in their profession interviewed children within the context of the pre-trial investigation led by the police. Before attending the training program, the questions asked by the police consisted mainly of facilitative (28%), directive (25%) and closed-ended questions (29%). Kaunisto (2013) found that both the psychologists and police officers used more invitations after training. However, Lahtinen et al. (2017) studied the effect of interview training on investigative interviewers' beliefs and attitudes related held by the investigative interviewers. The study found that the training decreased incorrect beliefs. The amount of incorrect beliefs was significantly smaller after the follow-up compared to the time at the beginning of the training. However, after 12 months of the training, the interviewers, comprised of police officers and health care professionals, tended to trust their intuition more than at the end of the training (Lahtinen et al., 2017). These conclusions further support previous

findings emphasizing the significance of continuous supervision, feedback and training in ensuring the quality of child forensic interviews (Lamb et al., 2002; Ellonen & Rantaeskola, 2016).

The most recent study analyzed child forensic interviews conducted by psychologists (and one social worker) between 2014 and 2015 (Heikkilä, 2017). Heikkilä (2017) compared the interviews with the results of the study by Korkman et al. (2008). She found that the quality of the interviews had improved significantly when compared to the earlier samples studied. The amounts of invitations and facilitative questions had increased, while the number of directive, closed-ended and suggestive questions had decreased (Heikkilä, 2017).

1.6 Present study

The present study aims to assess whether the quality of child forensic interviews has improved since the results of previous studies, which is partly to be expected, taking into account the effort of investing in training and unified recommendations. The study by Kaunisto (2013) found that the quality of investigative interviews had improved after participating in the training program in 2011, but the question of the sustainability of the effects of the interview training program remained unresolved. However, it has been found that receiving continuous guidance and feedback is more useful than individual training sessions (Lamb et al., 2002; Lahtinen et al., 2017). Thus, cooperation and communication with the forensic psychiatric investigative units could serve as a safeguard against the deterioration of interview quality. Therefore, the association between the cooperation with the forensic psychiatric investigative units and the quality of interviews was examined. The present study aims to expand the knowledge revolving the factors affecting the quality of child forensic interviews.

The research questions are presented as follows:

1. *Is the participation of a child forensic interview training program associated with the quality of child forensic interviews?*
2. *Is cooperation with the forensic psychiatric investigative units associated with the quality of child forensic interviews?*

2 Method

2.1 Sample

The sample was collected by requesting each police officer investigating crimes against children of all 11 police departments in Finland to provide three of their most recent transcribed interviews. Transcribed interviews were received from a total of 74 police officers. However, due to time constraints regarding the data collection and the coding process, only one transcribed interview by each police officer was randomly selected. After receiving the data from the police officers, an online questionnaire assessing details of the interview process, work environment, work-related stress and child forensic interview training program participation was distributed to all 74 police officers taking part in the study. A total of 27 police officers completed the questionnaire by the set deadline. Thus, the total sample consisted of 27 transcribed child forensic interviews conducted in Finland between 2019 and 2020. All child forensic interviews were related to the investigation of incidents of alleged sexual or physical abuse. The children were plaintiffs in all alleged cases. The total number of interviewer utterances in the 27 interviews was 4,662. Thus, the dataset consisted of 4,662 observations for 27 police officers. The interviews were collected from 9 Finnish police departments, excluding the Helsinki Police Department and the Southeastern Finland Police Department due to them not being able to submit the requested data in time. Each individual police officer provided their most recent transcribed child forensic interview. All interviews were conducted in Finnish.

The National Police Board does not compile statistics on the number of interviews conducted with children in Finland. Thus, it is not possible to estimate how this sample represents the total amount of child forensic interviews conducted by the Finnish police between 2019 and 2020.

2.2 Procedure

The National Police Board of Finland granted a research permit for the current study. The transcribed interviews were anonymized to ensure the privacy of the plaintiffs. Two independent raters coded all the transcribed interviews using definitions and categories based on the refined research-based coding system (e.g., Lamb, 1996; Lamb et al., 2007; Lamb et al., 2018; Korkman, 2006). The coding system applied in this study is further elaborated below. To assess interrater

reliability, Cohen's Kappa was used. Two independent coders coded six randomly selected interviews (comprising 22,2% of the interviews) until they reached a Kappa coefficient of 0.80. A clear consensus of an ideal Kappa coefficient does not exist. Fleiss, Levin & Paik (2013) deemed a coefficient over 0.75 of being adept, while Landis & Koch (1977) suggested a coefficient of over 0.8 of signifying exemplary agreement. The remaining interviews were then randomized and distributed for the two coders. When inter-rater reliability was assessed again for the remaining interviews (i.e., the agreement regarding the categorization of the question types), the Kappa coefficient was 0.82.

2.3 Coding

All interviewer utterances (N=4,662) were coded into six categories based on the research-based coding system (Korkman et al., 2008; Lamb et al., 1996). In each interview the raters coded the utterances starting from the first utterance introducing the topic of the alleged abuse. The definitions of the categories of the coding system are listed below:

1. *Invitations.* Open-ended utterances that encompass free narrative invitations (e.g., "Tell me what happened"). In addition, all questions, statements or imperatives used to encourage the child to talk freely or to talk about a topic that has been mentioned by the child (e.g., "You said you saw him. Tell me about that").

2. *Facilitators.* Non-suggestive utterances (e.g., "Mmhmm", "okay", "I see") designed to encourage the child to continue with a response and to facilitate communication. This category includes comments and statements that paraphrase or summarize the child's previous statements. Also, the interviewer's efforts to validate the experience of the child (e.g., "I know this might feel wrong or difficult for you, but I have spoken to children about these kinds of subjects before") and to alleviate the child's stress (e.g., "You haven't done anything wrong, I am here to listen – I just want to know what happened"). All interviewer utterances that were associated with the topic of the alleged abuse were coded as facilitators only if the source of question or statement could be deemed as reliable (e.g., "I heard you showed a large bruise to your school nurse" or "I heard that there were some pictures taken"). In aforementioned situations, the utterances were coded as facilitators even if the child had not mentioned the subject in the interview himself. Furthermore, in situations where the interviewer verbalized the gestures of a child (e.g., "Oh, so you're pointing your

knee" or "You're nodding"), the utterances were coded in this category.

3. *Directive utterances*. Questions that aim to focus the child's attention to specific details mentioned by the child, requesting further explanation. With these questions, the interviewer sought answers to the questions what, who, where and when (e.g., "When did this happen?", "Who was there?", "What did he look like?" or "Where were you?").

4. *Option-posing utterances*. Closed-ended utterances that focus the child's attention on details that the child has not previously mentioned, without indicating a specific anticipated answer. Questions that the child answers by either selecting an interviewer-provided option or by saying "yes" or "no" (e.g., "Was it day or night?" or "Did you have fun?").

5. *Suggestive utterances*. Questions that focus the child's attention on details regarding the incident that 1) the child has not previously mentioned and 2) the source could not be deemed reliable (e.g., "He took his clothes off in that situation, didn't he?" or "Show me where he always touches you with his cane"). If there is no evidence of a child's actual statement, it must strongly be taken into account that references to the child's previous statements can and may be misinterpreted by adults (Korkman, Juusola & Santtila, 2014; Korkman, Laajasalo, Uusivuori, Juusola & Santtila, 2015). Also, repeating the same question more than twice when the child remained silent or had already answered were coded in this category. Furthermore, in situations where the interviewer strongly communicated the expected response or where the interviewer pointed the child in the direction of the answer expected by the interviewer (e.g., "I already know what happened to you, but I want you to tell me about those horrible things yourself" or "Something bad happened that night. What was it?"). Interviewer's negative feedback and social pressure on the child's response were also coded in this category.

6. *Other utterances*. Utterances and questions that were not relevant and were therefore excluded. For example, in situations where the interviewer did not hear the child's response and asked for clarification, the interviewer's utterances were coded in this category. In addition, if the child asked the interviewer something irrelevant or outside of the topic, such as the interviewer's age, the interviewer's response was coded in this category.

2.4 Variables

The participation of child forensic interview training program was assessed with the following question: ”*Have you attended the one-year child forensic interview training program organized by the National Police Board (or Police University College since the beginning of 2020)?*”. If the respondent had attended the child forensic interview training program (i.e., answered yes), they were asked to indicate further details of attendance (i.e., the date of participation). This study did not assess the effects of time due to the small sample size.

The cooperation with the forensic psychiatric investigative units was assessed with the following question: ”*How closely do you work or cooperate with the forensic psychiatric investigative units?*”. The respondents were asked to respond on a Likert scale of seven answer options: “*Never”* (0), “*Once a year or less”* (1), “*Several times a year”* (2), “*Once a month”* (3), “*More than once a month”* (4), “*Once a week”* (5) and “*On a daily basis or several times a week”* (6). Due to the small sample size and to ensure the functionality of the statistical analysis, the variable was treated as a continuous variable.

2.5 Statistical analyses

All statistical analyses were conducted using the IBM SPSS Statistics 27.0 software. Inter-rater reliability was assessed using Cohen’s Kappa. Before implementing the analyses, the data was aggregated by police officers and question types. There were no missing values in the data.

The association between the frequency of question types and interview training was examined using multilevel modeling that take into account the hierarchical structure of the data. The association between the frequency of question types and cooperation with the forensic psychiatric investigative units was also examined with this model. As the utterances in the *Other* category were not relevant, they were removed before performing the analyses. Furthermore, *Suggestive utterances* (n=11) were incidentally excluded from the multilevel model due to only two police officers having using them. The exclusion was justified due to the large number of other question types and to ensure the goodness of fit of the model. The total amount of utterances used in the analyses was 4,461.

Due to the variation in the length of the interviews (i.e., the amount of utterances asked per

interview), a generalized linear mixed model was used to examine the distribution of frequencies. Count data is not normally distributed, which is why the frequencies of question types were modeled using negative binomial regression. Negative binomial regression is suitable in situations of count data with high variance (Walters, 2007). To control random effects, both the error term occurring at the question type level and the internal error term of police officers were taken into account. Satterthwaite approximation was used to account for the differences in sample variances. Robust estimation was used to handle violations of the model assumptions.

First, the main effect of question type and interview training and the interaction between question type and interview training were examined. Second, the main effect of the cooperation with the forensic psychiatric investigative units and the interaction between the cooperation and the type of question were assessed.

3 Results

3.1 Sample characteristics

Descriptive statistics for the total sample are presented in Table 1. Men were underrepresented in this sample (n=3) compared to women (n=27). A majority of the participants had participated in child forensic interview training (n=23). Three participants had not participated in interview training. The average age of the participants was 42.15 years. The average amount of time since interview training participation was 4.65 years.

A majority of the participants reported cooperating or working with the forensic psychiatric investigative units several times a year (n=9) or once a month (n=8). Five participants reported cooperating more than once a month. Only female participants reported cooperating once a week (n=1) or on a daily basis or several times a week (n=4). None of the participants reported cooperating with the forensic psychiatric investigative units less than once a year or never, indicating the important role of the forensic psychiatric investigative units.

Table 1. Descriptive statistics by gender for the total sample.

	All (n=27) Mean (SD) or N (%)	**Men (n=3)** Mean (SD) or N (%)	**Women (n=24)** Mean (SD) or N (%)
Age (years)	42,15 (7,60)	35,67 (3,22)	42,96 (7,77)
Has participated in child forensic interview training	23 (85,2%)	2 (66,6%)	21 (87,5%)
Has not participated in child forensic interview training	4 (14,8%)	1 (33,3%)	3 (12,5%)
Time since participation, years	4,65 (3,0)	2,5 (2,12)	4,86 (3,10)
Cooperation with the forensic psychiatric investigative units			
Several times a year	9 (33,3%)	1 (33,3%)	8 (33,3%)
Once a month	8 (29,6%)	1 (33,3%)	7 (29,2%)
More than once a month	5 (18,5%)	1 (33,3%)	4 (16,7%)
Once a week	1 (3,7%)	0	1 (4,1%)
On a daily basis or several times a week	4 (14,8%)	0	4 (16,7%)

3.1 Question types

Table 2 shows the frequencies of question types. The majority of questions posed by the interviewers were either *facilitators* (37,4%) or *directive* utterances (32,2%), followed by *option-posing* utterances (22,3%), *invitations* (3,9%) and *suggestive* utterances (0,2%). *Other* and *suggestive* utterances were excluded from the model. It is noteworthy to establish that in some studies facilitators have been excluded from the analyses (e.g., Cyr & Lamb, 2009), and they seem to function similarly to the previous utterance elicited (Hershkowitz, 2002). *Facilitators* and *invitations* comprised a total of 41.2% of the data.

Table 2. Frequencies of question types.

Question types	Frequency	Percent (%)	CI
Invitations	180	3,9	[3.33, 4.45]
Facilitators	1741	37,4	[35.95, 38.75]
Directive utterances	1501	32,2	[30.86, 33.56]
Option-posing utterances	1038	22,3	[21.08, 23.49]
Suggestive utterances	11	0,2	[0.12, 0.43]
Other utterances	191	4,1	[3.55, 4.71]
Total	4662	100,0	

3.2 The effects of interview training on interview quality

The effects of interview training on interview quality was assessed using a generalized linear mixed model. The fixed effect of interview training participation operated as a predictor for the frequencies of question types. A police officer who had not attended child forensic interview training used significantly less *facilitators* than a person who had attended child forensic interview training (*B = -1.070, t = -5,886, p<.001*). The participation of interview training was not significantly associated with the frequencies of *invitations* or *directive* utterances. The results are presented in Table 3.

Table 3. Fixed effect estimates for a multilevel model. The effects of interview training on the frequency of question types.

Question type		Estimate	SE	t	p
Invitation	IT	0.544	0.430	1.267	0.208
Facilitator	IT	-1.070	0.182	-5.886	**<.001**
Directive	IT	-0.015	0.1538	-.095	0.946
Option-posing	Reference				

Note. The value of the interview training variable (IT) is set as 0 (0 = no training, 1= has participated training). Option-posing category was the reference category. Statistically significant (p<.05) estimates are highlighted in bold.

3.3 The effects of cooperation with the forensic psychiatric investigative units

The effects of cooperation with the forensic psychiatric investigative units was assessed using a generalized linear mixed model. The fixed effect of cooperation with the forensic psychiatric investigative units operated as a predictor for the frequencies of question types. Due to the small sample size, the variable was treated as a continuous variable. The cooperation with the forensic psychiatric investigative units had a statistically significant interaction with the frequencies of *facilitators* (*B=0.270, t=4.305, p<.001*) and *directive* utterances (*B=0.135, t=2.556, p<.05*). Police officers who cooperate with the forensic psychiatric investigative units use significantly more *facilitators* and *directive* utterances. The cooperation with the forensic psychiatric investigative units was not significantly associated with the frequencies of *invitations*. The results are presented in Table 4.

Table 4. Fixed effect estimates for a multilevel model. The effects of cooperation with the forensic psychiatric investigative units on the frequency of question types.

Question type		Estimate	SE	t	p
Invitation	COOP	-0.013	0.085	-0.147	0.883
Facilitator	COOP	0.270	0.067	4.035	**<.001**
Directive	COOP	0.135	0.053	2.556	**<.05**
Option-posing	Reference				

Note. The cooperation with forensic psychiatric investigative units (COOP) is treated as a continuous variable. Option-posing category was the reference category. Statistically significant (p<.05) estimates are highlighted in bold.

4 Discussion

The present study aimed to examine whether child forensic interview training participation is associated with the quality of interviews. In addition, the effect of cooperation with the forensic psychiatric investigative units on interview quality was examined. This study is the first to assess the quality of interviews conducted solely by police officers in Finland.

The results indicate an improvement in the quality of interviews and are in line with previous literature. This study found that police officers who had participated in interview training asked significantly more facilitators. Furthermore, the cooperation with the forensic psychiatric investigative units was found to be significantly associated with the amount of directive utterances and facilitators. The results indicate that interview training participation promotes the police officers' ability of engaging in active listening and avoiding closed and suggestive questions. 41.2% of all the questions posed were facilitators and invitations. Moreover, the results indicate that the cooperation with the forensic psychiatric investigative units can act as a safeguard against interview quality deterioration. In conclusion, the results of this study point to the effectiveness of interview training and consultation.

4.1 Factors affecting the interview quality

In this study, both attending the child forensic interview training program and the cooperation with the forensic psychiatric investigative units had a statistically significant association with the frequency of question types associated with good quality in child interviews. Police officers who had not attended the child forensic interview training used significantly less facilitators compared to police officers who had attended the said training. Facilitating utterances, which are described as communicative gestures compared to requests for information, encourage children to continue with their narrative and elicit additional information (Hershkowitz, 2002). Even though facilitators do not generate answers per se, they communicate interest and active listening. Their role as extensions of open-ended questions and as building blocks of trust through engaging in active listening should be emphasized. Because supportive interviews increase the amount of details elicited compared to neutral or non-supportive interviews (Saywitz et al., 2019), it is reasonable to assume that supportiveness may expedite the investigation process. Short answers containing a small amount of details are not only challenging in terms of reliability. By ensuring that the interview is conducted in the best possible way, the child is given a possibility to elicit reliable and detailed accounts. Supportive best-practice interviewing may prevent the stress of being a part of a police investigation in situations where, for example, the allegation requires further investigation, and the child needs to be repeatedly interviewed. It can be less burdensome for the child if they do not have to disclose and recall their possible traumatic experiences several times during the investigation. The importance of supportiveness can also be prominent in situations where the child has shared their experiences with, for example, an adult who, due to their own distress or state of shock, has not

encountered the child's disclosure with sufficient sensitivity, validation and empathy.

The significance of supportive interviews was further highlighted in situations where, for example, a child is agitated, reluctant or anxious (Saywitz et al., 2019). Being interviewed by the police can be stressful for an adult as well, which is why, even more so, the interview situation can be expected to affect the child as a stressful element. Furthermore, children often take on a passive role in investigative interviews (Fisher & Geiselman, 2010). The stress experienced by children in situations involving the police has been studied, for example, in an eyewitness study by Lowenstein, Blank and Sauer (2010), where children made significantly more false identifications when the police officers were wearing uniforms, presumably because children felt uncomfortable of admitting of being uncertain. Therefore, the findings of the present study indicating that police officers who had participated in interview training used more facilitators during their interviews is significant because it can play a role in creating a supportive atmosphere and thus contribute to the child's willingness to share their possible experiences. Most of the police officers interviewing children only conduct investigations on crimes against children and often are forced to perform on a very tight schedule. Due to pressure experienced by police officers, it may be easier to forget that both the interview and being a part of a pre-trial investigation can be very stressful for the child. It is possible that the benefits brought by interview training participation are partly due to the police officer taking the child's feelings into consideration while planning and conducting the interview.

In addition, older children and teenagers are able to decide for themselves if they are willing to disclose or not. If they do disclose, they often provide much more information compared to younger children. Young children are not yet able to concentrate continuously for long periods of time, and producing a detailed and extensive description of an event may be challenging (Lamb et al., 2003), which is why the disclosure of young children can be facilitated by increasing the amount of cued invitations. Especially for older children, engaging in active listening and posing facilitative utterances can ease and support a child's decision to disclose their experiences (Saywitz et al., 2019), which further highlights the results of the present study. Even though the police officers who had participated in interview training posed significantly more facilitators, further research is required. The present study did not examine at what stage of the interview the questions were posed (i.e., what questions were asked in the beginning of the interview compared to the end). Future research should further analyze the order in which the police have asked questions. According to research, the so-called *funnel approach* is, in principle, the best approach for asking questions, in which the interviewers start by posing open-ended questions and proceed to move on to more

specific and detailed questions (e.g., Fisher & Schreiber, 2017. In addition, future research should examine which question types elicit the most relevant answers. For example, having a child provide information after asking an open-ended question followed by a facilitator can be seen as a preferable result, whereas having a child elicit substantial information after asking a suggestive question followed by a facilitator would be potentially questionable.

The cooperation with the forensic psychiatric investigative units was significantly associated with the frequency of facilitators and directive utterances. However, the definition of cooperation was not clear cut and the variable merely assessed the perceived quantity or prevalence of cooperation. As the units provide consultation, supervision and feedback for police interviewers, the results may suggest that cooperation through the continuous training and counseling can act as protective factors against the deterioration of interview quality, in line with previous studies (Lamb et al., 2002). The duty of police officers is different from that of forensic psychiatric investigative units. For example, in Finland, the police essentially interview all school-age children without developmental challenges (e.g., delays in language development). However, according to police officers, they do not have sufficient resources (Heinonen & Ellonen, 2013; Humppi & Ellonen, 2010). As late as the 2010s, there were large regional differences in cooperation between Finnish authorities (Humppi & Ellonen, 2010), but working policies have since been unified and, for example, cooperation with forensic psychiatric investigative units is increasingly recommended to police officers. The result of the present study that cooperation between the police and forensic psychiatric investigative units increases the amount of facilitators and directive questions further supports the significance of collaboration among authorities.

Based on previous findings (e.g., Lamb et al., 2007), it would have been reasonable to assume that both the participation of interview training and the cooperation with the forensic psychiatric investigative units would have had an effect on the frequency of invitations. Principally, police officers interview school-age children and teenagers where investigative units are responsible for conducting the interviews of younger children, which can affect the distribution of questions asked. Because the children interviewed by the police are often older than children interviewed by forensic psychiatric investigative units are, police officers may ask more directive units. The underlying belief may be that children deemed as old or mature enough are able to elicit truthful and detailed accounts to directive questions. Furthermore, when considering the effects of cooperation with the forensic psychiatric investigative units, it is paramount to take into account their geographical locations. In Finland, the forensic psychiatric investigative units are located in the vicinity of

University Hospitals (Helsinki, Turku, Tampere, Oulu and Kuopio). If cooperation with the forensic psychiatric investigative units acts as a protective factor against the deterioration of interview quality, it is possible that further studies will reveal associations between interview quality and the locations of Finnish police departments. The interviews of the present study were collected from 9 Finnish police departments, excluding the Helsinki Police Department and the Southeastern Finland Police Department. The association of police department locations with the quality of interviews was not assessed due to limited data. Moreover, the majority of police officers taking part in this study were women. Therefore, assessing the gender of police officers in the future with a larger data will further shed light on the potential effects of gender differences.

The interaction between interview training participation, cooperation with the forensic psychiatric investigative units and frequency of question types was not assessed in this study due to limited data.

4.2 The quality of forensic interviews in Finland

The present study provided information on factors affecting the quality of interviews conducted by the police in Finland and information on the distribution of question types. The results provided by this study suggest that the quality of interviews in Finland has in fact improved during recent decades. Of the police officers participating in this study, those who had not received any interview training did not pose suggestive questions. Based on previous findings (La Rooy et al., 2015), one might have thought that this would have been possible. Although the present study did not compare the results with previous studies of interview quality in Finland (e.g., Kaunisto, 2013; Korkman et al., 2008), the fact that 41.2% of the questions posed were facilitators and invitations indicate an improvement in the quality of interviews. A comparison of distribution of question types is presented in Table 5.

Table 5. A comparison of distribution of question types.

Question types	Present study	Korkman et al. 2008	Heikkilä, 2017
Invitations	3,9%	6,4%	12,4%
Facilitators	37,4%	14,6%	47,2%
Directive	32,2%	31,2%	27,2%
Option-posing	22,3%	32,6%	11,4%
Suggestive	0,2%	14,7%	0,3%

Note. The sample of the present study consisted of police officers. The sample of Heikkilä (2017) consisted of psychologists, a social worker and a psychologist trainee.

The role of the forensic psychiatric investigative units has become established after the founding of the first forensic psychiatric investigative unit in Helsinki in 2006 (Laajasalo et al., 2018). However, the role of forensic psychiatric investigative units as a part of the pre-trial investigation is still evolving and, for example, there is still variation in practices between different units. Therefore, the experiences of police officers may affect the extent to which consultation is sought and cooperation between the authorities is emphasized. This study found that cooperation between the police and forensic psychiatric investigative units was associated with the amount of facilitators and directive questions, which may imply a positive impact on the quality of interviews. Although the significance and generalization of the results of this study requires caution, the results indicate that the changes made during the past decade have been of utmost importance. The significance of cooperation between the forensic psychiatric investigative units and police departments needs to be further examined.

4.3 Practical implications

Ensuring the quality of child forensic interviews is a paramount element of a perspective that focuses on protection of children and adolescents. If a child is suspected of being a victim of a crime, the investigation and the interview should be conducted in adherence of best-practice features. The interview should be based on a well-established protocol (e.g., the NICHD Protocol) to promote the rights and safety of the child. Poorly conducted interviews can, at worst, lead to the accused of not being prosecuted in a situation where sexual or physical abuse has actually taken place. The prevention of aforementioned situations can have a significant effect on a child's life.

For example, by breaking the cycle of abuse and preventing the child of having to stay with his abuser, the child is given an opportunity to grow and develop in a safer environment.

Although previous research shows a fairly clear picture of how children should be interviewed, there is still variation both between and within countries (e.g., La Rooy et al., 2015). Internationally and across the scientific community, countries are working towards unifying standards and practices, which can be seen as being advantageous for the Finnish police as well.

This study indicates that interview training participation promotes the ability of police officers of being present for the child through facilitating the child's narrative. Furthermore, this study provided indications of the usefulness of cooperation between the police and the forensic psychiatric investigative units. In practice, the results of this study can be utilized to motivate broader collaboration between authorities.

4.4 Strengths and limitations

The small number of police officers (n=27) participating in this study affected the statistical analyses performed due to the hierarchical structure of the data. The small sample size limited the inclusion and examination of further predictor variables. Moreover, the sample was further limited due to the imbalance of interview training participation. Only three police officers had not attended the training, which extended the challenges of statistical modeling. Furthermore, the distribution of gender was skewed as female police officers were overrepresented (n=24) in the sample. However, it has been found that female police officers often end up working with child-related issues (Violanti, 2014). Furthermore, The National Police Board of Finland does not compile statistics on child forensic interviews, which limits the examination of sample representativeness due to difficulties of estimating the proportion of interviews.

The interaction between interview training participation, cooperation with the forensic psychiatric investigative units and frequency of question types was not assessed in this study due to limited data. Although this study was not able to examine the effect of time passed since participating the interview training (i.e., the amount of years passed since participation) due to limited data, the relevancy of interview training at least in terms of facilitators can be established. Furthermore, the present study indicates that interview training participation and the cooperation with forensic

psychiatric investigative units promotes the supportiveness of police officers. However, this study is not without limitations. The National Police Board of Finland does not compile statistics on child forensic interviews, which limits the examination of sample representativeness due to difficulties of estimating the proportion of interviews. Moreover, the sample size of police officers (n=27) poses limitations on the reliable generalization of the results of this study.

Although the coding of the question types was based on the research-based coding system (Korkman et al., 2008; Lamb, 1996), the differences between the definitions of question types have provoked debate. For example, Cyr & Lamb (2009) excluded facilitators from their analyses. In addition, some studies have further analyzed and dissected the categorization of suggestive questions (e.g., Korkman, 2006). In the present study, five categories (invitations, facilitators, directive, option-posing and suggestive) were used to ensure the generalizability and comparability of the results. In the data of the present study, police officers asked very few suggestive questions (n=11). Therefore, it is difficult to draw conclusions about the number of suggestive questions due to limited data.

4.5 Conclusions

This study examined the association between interview training participation and the quality of interviews conducted by police officers. In addition, the cooperation with the forensic psychiatric investigative units was examined. Those who had not attended the child forensic interview training asked significantly less facilitators than those who had attended the interview training. The cooperation with the forensic psychiatric investigative units was associated with the frequency of facilitators and directive utterances. This study shed light of the benefits of interview training and cooperation with specialized units in a Finnish police sample.

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