

Interviewing alleged victims with mild and moderate intellectual disabilities and autism: A field study of police-investigated cases of physical and sexual abuse in a Norwegian national sample

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Abstract

Background People with intellectual disabilities (IDs) or autism are at great risk of being victims of physical and sexual abuse. This study uses transcriptions of real-life investigative interviews to examine the interview techniques (e.g. question type) used in investigative interviews of these groups of alleged victims.

Methods A national sample of transcribed investigative interviews ($N = 96$) of alleged victims with mild ID ($n = 48$, age 5–70 years old), moderate ID ($n = 18$, age 14–43 years old) and autism ($n = 16$, age 5–50 years old) was analysed.

Results The study shows a preponderance of alleged sexual offences (70.7%) and reveals that open-ended questions account for only 2.6% of the total number of questions asked. The interviewers relied heavily on yes/no (53.4%) and directive questions (32.2%). Suggestive questions (8.6%) were frequently used.

Conclusions The use of question type varied considerably within and across the diagnostic group. The study reveals the need for a more in-depth analysis of variables that influence investigative interviews of people with cognitive impairments.

Keywords Autism, Crime victims, Intellectual disabilities, Investigative interviews, Physical and sexual abuse

People with disabilities, such as intellectual disabilities (PWID) and autism (PWA), are more exposed to physical and sexual abuse than the general population (Mandell *et al.* 2005; Hershkowitz *et al.* 2007; Hughes *et al.* 2012; Jones *et al.* 2012; Nixon *et al.* 2017). PWID are characterised by deficits in intellectual functioning, social and adaptive domains such as language comprehension, memory skills and weaker comprehension of social demands (World Health Organization 2019). Similarly, PWA have deficits in social and adaptive domains, and many have cognitive delays (Howlin 2000; Kasari *et al.* 2013). However, cognitive delays are not a part of the diagnostic features of autism (World Health Organization 2019). Research indicates that these groups of victims encounter barriers in their interaction with the criminal justice system, particularly during police investigation, owing to impairments according to their diagnosis (Petersilia 2001; Crane *et al.* 2016; Beckene *et al.* 2017; Carlin 2018; Olsen *et al.* 2018). Scholars have therefore developed best-practice recommendations to safeguard the robust witness testimonies of PWID and PWA when entering the

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criminal justice system as alleged victims of abuse (Bull 2010; Wyman *et al.* 2018; Lamb *et al.* 2018b; Morrison *et al.* 2019; Maras *et al.* 2020).

Witness testimony is essential evidence in physical and sexual abuse cases because such crimes often lack physical evidence and other eyewitnesses (Pipe *et al.* 2013; Westera and Kebbell 2014). A complete and accurate testimony is considered necessary in such cases to ensure that the criminal justice system responds appropriately to the complaints (Westera and Kebbell 2014). This evidence may stand or fall on the completeness and credibility of a witness account (Brown *et al.* 2018; Lamb *et al.* 2018a). The quality of the interview techniques used in investigative interviews of PWID and PWA is therefore frequently referred to as a challenge in discussions of witness credibility. Additionally, studies have shown a relationship between the question types used and the accuracy of the witness account, for both PWID (Agnew and Powell 2004; Ternes and Yuille 2008; Gudjonsson and Joyce 2011; Brown and Lamb 2015; Brown *et al.* 2017; Lamb *et al.* 2018b; Morrison *et al.* 2019) and PWA (Maras and Bowler 2014; Almeida *et al.* 2018). The majority of these studies have, however, been conducted with children with or without ID in experimental settings (e.g. watching staged events or videos followed by an interview) (Agnew and Powell 2004; Brown *et al.* 2017; Almeida *et al.* 2018; Lamb *et al.* 2018b). Some studies have examined interviews of adults with ID and autism in an experimental setting. However, very few studies have analysed real-life investigative interviews with these groups (Gudjonsson *et al.* 2000; Ternes and Yuille 2008; Maras and Bowler 2014; Hershkowitz 2018; Norris *et al.* 2020). The current study adds to the research field by analysing how investigative interviews of adults and children with ID and autism are performed.

Best-practice recommendations for investigative interviewing are based on studies examining question types and interview protocols that are developed to enhance interview quality in investigative interviews. Studies and protocols generally recommend the use of both open-ended and directive questions (Brown *et al.* 2017; Almeida *et al.* 2018; Lamb *et al.* 2018b). Open-ended questions (e.g. 'tell me what happened') facilitate free narratives, which improves witness credibility and the accuracy of the account (Agnew and Powell 2004; Brown *et al.* 2017). Studies

furthermore indicate that PWID and PWA disclose more information when responding to directive questions (e.g. 'what happened in the bedroom?') compared with open-ended questions (Agnew and Powell 2004; Almeida *et al.* 2018). This seems to be even more evident for individuals with moderate ID (Brown *et al.* 2012, 2017). Reliance on open-ended and directive questions is a core recommendation in protocols such as the National Institute of Child Health and Human Development Protocol (NICHD) (Lamb 1996), Achieving Best Evidence (ABE) (Home Office 2011) and the Norwegian Sequential Interview Model (SI) (Langballe and Davik 2017).

Research on question types and recommendations referred to above is mainly based on experimental analogue studies. Knowledge of how questions are distributed in experimental studies builds a basic level of understanding of how they may be mirrored in real-life investigative interviews. Experimental studies of interviews of children with ID following the NICHD protocol show that 33% (mild ID, IQ score between 50 and 69) and 29% (moderate ID, IQ score between 35 and 49) of questions are open-ended (Brown *et al.* 2017). Almeida *et al.* (2018), who also used the NICHD protocol, reported that more than half of all questions were open-ended when questioning PWA. The proportion of directive questions in the same experimental studies was 34% (mild ID) and 32% (moderate ID) (Brown *et al.* 2017) and 18.6% for PWA (Almeida *et al.* 2018). The proportion of question types displayed in these studies following the NICHD protocol may indicate what to expect in real-life interviews if the NICHD protocol is followed. This is illustrated in one of the very few studies of real-life investigative interviews of adults with mild and moderate ID using the NICHD protocol (Hershkowitz 2018). The study reported that more than three-quarters of all interviewer questions were recommended questions (i.e. open-ended or directive questions) (Hershkowitz 2018). The experimental studies and the study of real-life interviews also found that people with mild ID were asked a higher proportion of open-ended questions than people with moderate ID (Agnew and Powell 2004; Brown *et al.* 2017; Hershkowitz 2018). People with moderate ID were also asked a slightly higher proportion of directive questions, which indicates that the interviewer adapts question types to the interviewees' cognitive abilities.

Other challenges when interviewing adults with disabilities include suggestibility (e.g. Tully and Cahill 1984, cited in Gudjonsson 2003), increased responsiveness to yes/no questions and their susceptibility to acquiescence (yea-saying) (Finlay and Lyons 2002; Gudjonsson and Joyce 2011; Stancliffe *et al.* 2015). Scholars suggest that yes/no questions might be challenging for PWID due to suggestibility, complex language and the type of judgements that these types of questions require (Finlay and Lyons 2002; Funazaki and Oi 2013). Suggestibility in terms of giving in to suggestive questions and coping with interrogative pressure may be challenging for PWID, partly due to their reduced or impaired memory capacity (Gudjonsson and Henry 2003; Henry *et al.* 2017). PWA are reported to be more resistant in terms of suggestibility (Griego *et al.* 2019) but may be vulnerable to compliance in terms of a tendency to agree to the request of others (Chandler *et al.* 2019). Yes/no and suggestive questions must, therefore, be used cautiously when interviewing PWID and PWA, to ensure their ability to provide an accurate account (Gudjonsson *et al.* 2000; Finlay and Lyons 2002).

When calling for changes to secure account credibility and accuracy in interviews with PWID and PWA, describing the problem in the criminal justice system is vital, as is pointed out by leading scholars in the field (Petersilia 2001; Lamb *et al.* 2018b). Because this study uses data from the Norwegian criminal justice system, case characteristics from a national sample will add valuable information to this field of research.

There is, as previously described, a gap in the existing knowledge of investigative interviews of PWID and PWA. The gap arises from the lack of studies describing case characteristics of the problem in the criminal justice system as well as the lack of research regarding how real-life investigative interviews are performed. We therefore conducted a national field study in which case characteristics were described, and the question types used in transcripts of real-life cases were analysed. The following research questions were addressed: What characterises the physical and sexual abuse cases of alleged victims with mild and moderate ID and autism investigated by the police in a Norwegian national sample? What question types are used in investigative interviews of these groups?

Method

Sample

The national sample consisted of 96 transcripts of real-life investigative interviews of alleged victims of physical and sexual abuse with mild and moderate ID and autism. The interviews were conducted in the period from October 2015 to December 2017. The total sample of $N = 96$ interviews included 14 second interviews of the same person. Two of the victims were interviewed four times, resulting in a total of $N = 82$ interviewees. Table 1 provides an overview of the sample according to diagnosis, type of crime, age and the victim's relation to the alleged suspect.

Transcriptions

In accordance with the Norwegian regulations on investigative interviews of PWID and PWA, the prosecuting officer decides whether to transcribe an interview if the information disclosed is such that it implies a criminal act has taken place. The regulations also allow the prosecuting officer to decide that only

Table 1 Characteristics of the sample across diagnosis age (M , SD), age group, type of abuse and relation to alleged perpetrator

	Mild ($n = 48$)	IDModerate ($n = 18$)	IDA ($n = 16$)	Autism ($n = 16$)
Age, M (SD)	22.3 (11.1)	26.0 (9.0)	18.7 (13.4)	
Range	5–70	14–43	5–50	
	Age group	Age group	Age group	
	>16	16≤	>16	16≤
	>16	16≤	>16	16≤
Gender				
Female	2	32	2	11
Male	7	7	—	5
Abuse type				
Violence	7	7	1	—
Sexual abuse	2	32	1	16
Relation to alleged perpetrator				
Familial	5	12	2	2
Friends and acquaintances	3	18	—	9
Abuse of power relations	1	5	—	3
Strangers	—	4	—	2

Note. Abuse of power relations is staff–client relations. Age limit for sexual consent in Norway is 16 years.

certain parts of the interview are to be transcribed. The sample includes interviews that consist of a transcription of the substantive phase of the interview, in cases carried forward to prosecution. The police transcription service transcribed the interviews.

The Norwegian judicial context

According to the General Civil Penal Code and the Criminal Procedure Act, all vulnerable witnesses, including PWID and PWA, are entitled to be questioned at a Norwegian Barnahus (Children's House). This is a part of the judicial sector and has been developed to facilitate investigative interviews of vulnerable witnesses (Johansson *et al.* 2017). The investigative interviews were conducted by experienced police investigators who hold a bachelor's degree from the Norwegian Police University and formal specialisation and training in performing investigative interviews of vulnerable alleged victims of abuse (for a detailed description of level of education, see Jakobsen *et al.* 2016). All the interviews took place in the period from October 2015 to December 2017. This period was selected owing to the implementation of a new General Civil Penal Code and a new Criminal Procedure Act in October 2015. The new Criminal Procedure Act included extensive changes, such as transferring the responsibility for investigative interviews from the courts to the police and the introduction of the mandatory use of Barnahus when interviewing vulnerable witnesses.

The Sequential Interview Model

In Norway, investigative interviews of vulnerable groups of alleged victims, including PWID and PWA, follow an investigative interview method developed in 2012 by police investigators from the National Criminal Investigation Service (NCIS), a psychologist and a Barnahus leader of one of the Barnahus in Norway in 2012 (Justis- og beredskapsdepartementet 2012). According to the developers, SI is a revised version of the Extended Forensic Interview model (EFI) developed by the National Children's Advocacy Center (Carnes *et al.* 1999, 2001) (for a more detailed description of SI, see Langballe and Davik 2017; Baugerud *et al.* 2020). SI splits the interview into two to three sessions, follows a funnel approach and uses multiple interviews. This model encourages the use of

open-ended questions and free narratives. Directive questions are recommended to be introduced when the free narratives are completed. The model aims to limit the usage of option-posing and yes/no questions and to avoid the use of suggestive or leading questions (Baugerud *et al.* 2020). SI was implemented by the Norwegian police in 2015.

Procedure

The State Attorney, the Police Directorate and the Norwegian Data Protection Authority granted us permission to contact all the police districts in Norway ($N = 12$), including the Barnahus. The Chief of Police in each police district was contacted, and the following information was requested: (1) a copy of all transcribed investigative interviews conducted with PWID and PWA alleged victims of sexual abuse (The General Civil Penal Code §291–320) and/or physical abuse (§271–288) for the period October 2015 to December 2017; (2) descriptive information about the criminal case including age and gender of the alleged victim, type of crime (i.e. sexual or physical abuse) and the relationship to the alleged perpetrators; and (3) information that could confirm the diagnosis of the interviewees.

Information of disabilities is registered in criminal cases in Norway prior to the investigative interview, as required by the Criminal Procedure Act §239. Norwegian regulations also require a diagnosis to be made by a specialist, in agreement with the *International Classification of Diseases (ICD-10)*. In this study, confirmation of diagnosis was provided by authorised health personnel and collected by the police.

Data coding

Interviewer questions and utterances in the substantive phase of the interviews (in which the alleged victim is encouraged to talk about the investigated incident) were coded as facilitators, open-ended, directive, yes/no, forced-choice and suggestive questions under the predetermined categories provided in Table 2. The coding scheme used in this study has been used in previous national studies of investigative interviews of typically developed children (Thoresen *et al.* 2009; Johnson *et al.* 2015) and is similar to the coding scheme used in comparable studies, for example, Lamb (1996). All exchanges on neutral topics (e.g. talking about the

Table 2 Question type coding

Question type	Explanation	Example
Invitations	Questions or prompts allowing the alleged victim to recall and tell about the incident in a free narrative	'Tell me what happened', 'You, told me you stayed in your house, tell me more about the house'
Directive questions	Questions aiming to provide more specific details about the investigative incident	'Where was his clothes?', 'What did you feel when he touched you?'
Option-posing questions	Questions that give the alleged victim explicit options from which to choose from	'Were the pants on or off?', 'Did he stand behind or in front of you?'
Yes/no questions	Questions or utterances where the alleged victims have an implicit or explicit choice to answer yes or no. Includes utterances where the interviewer seeks to get confirmation about statements the alleged victim has told about	'Did he touch you?' 'You said he hit you, is that correct?'
Suggestive questions/statements	Questions or utterances where the interviewer introduces either topics or themes that the alleged victim has not told about, or they assume details that have not been revealed earlier in the statement. Includes questions where the interviewer asks the alleged victim to speculate in other persons' intentions	'I know she did something to your body that you did not like, tell me about it', 'I guess he was angry, is that right?' 'Why do you think he did that to you?'
Facilitators	Utterances designed to facilitate the communication without being suggestive	'mmh', 'ok', 'I understand'.

interviewee's pet or leisure activities during the interview) and closure of the interview were excluded from the coding.

Inter-rater reliability

The second author (M. S. J.) trained the first author (T. H. Å.), who coded all the transcripts. Before the transcripts were coded, the first and second authors established inter-rater reliability on a separate set of transcripts until they reached 90% agreement on question types. The maintenance of a high level of reliability was ensured by the second author coding 20 randomly selected transcripts (20.8%) of the current sample of transcripts and kappa statistics being calculated for the overall agreement of question types between the two coders ($\kappa = 0.93$). Disagreement was resolved by discussion. The rest of the transcripts were coded by the first author.

Analytic strategy

A one-way repeated measures analysis of variance (ANOVA) was conducted to calculate possible variances in questioning types used, where the diagnostic group was the between-subject variable (mild ID, moderate ID and autism). Initial analysis was performed using all questions asked with and

without facilitators as the within-subject variable. The proportion of different question types described in Table 3 was used as the within-subject variable, to analyse possible variances across diagnostic groups and the question types used. Additional analysis was computed using gender, type of crime, age group, relation to the alleged perpetrator and diagnostic group, with the diagnostic group as the within-subject variable. When assumptions of sphericity were violated (Mauchley's test), degrees of freedom were corrected using Greenhouse–Geisser estimates of sphericity. SPSS version 26 was used.

Ethical considerations

Ethical approval was granted by the Council for Confidentiality and Research. Further approval was granted by the State Attorney, the Police Directorate and the Norwegian Data Protection Authority. Both authors signed the State Attorney's confidentiality declaration.

Results

Case characteristics

Case characteristics are based on information from $N = 82$ interviews. Fourteen interviews were repeated

Table 3 Total number and proportions of question types posed by interviewer to alleged victim

	Mild ID		Moderate ID		Autism	
	M (SD)	Min–max	M (SD)	Min–max	M (SD)	Min–max
Total questions posed	263.8 (157.6)	25–790	355.0 (391.2)	73–1907	223.8 (151.4)	44–577
Proportion of total questions	% (SD)		% (SD)		% (SD)	
Open-ended	3.2 (2.2)	0–9	3.1 (2.7)	0–9	2.6 (2.5)	0–9
Directive	35.4 (8.5)	18–56	32 (11)	3–50	33.2 (14.1)	0–58
Yes/no	47.6 (12)	9–69	50.7 (17.9)	13–95	50.3 (14.2)	23–79
Option posing	4.2 (3.1)	0–13	3.2 (1.8)	0–6.5	4.0 (3.7)	1–17
Suggestive	9.4 (7.4)	1–38	10.6 (12.8)	0–57	9.5 (9.3)	1–35

interviews of the same person, regarding the same case. Two of the alleged victims were interviewed four times. Case characteristics based on the total sample of interviews ($N = 82$) show that 70.7% ($n = 58$) of the cases involved allegations of sexual abuse and 29.3% ($n = 24$) of physical abuse. Most of the alleged victims were female victims of sexual abuse (59.8%, $n = 49$). Information regarding age and gender of the alleged victims, diagnostic group, type of abuse and relation to the alleged perpetrator is presented in Table 1. In 43.9% ($n = 36$) of the cases, and irrespective of the type of abuse, the alleged perpetrator was a friend or acquaintance, 34.1% ($n = 28$) being familial and 13.4% ($n = 11$) being abuse in a power relation. In seven cases (8.5%), the alleged perpetrators were unknown to the alleged victim.

Question strategies used in the investigative interviews

A total of 66 813 ($M = 695.9$, $SD = 397.5$) questions/utterances were identified across the sample of investigative interviews ($N = 96$). A total of 40 308 ($M = 419.9$, $SD = 243.8$) of the interviewer utterances were facilitators. The remaining question types across diagnostic groups are presented in Table 3, where both the total number of questions and the proportion of the total number of questions are provided.

The question types used in the total sample ($N = 96$), facilitators excluded, showed that 2.6% (698) of the questions were open-ended. Directive questions accounted for 32.2% (8522) of the

questions asked. Yes/no questions were the most frequent, at 53.4% (14 160). Moreover, 3.3% (880) of the questions were forced-choice questions, and 8.6% (2289) were suggestive questions.

The repeated measures ANOVA (using the diagnostic group as the between-subject factor and the total number of questions asked with and without facilitators as the within-subject factor) did not reveal any main effect, $F_{2,93} = 1.069$, $p = 0.348$. The results suggest no statistically significant differences in the number of questions posed across groups. Further analysis was computed without facilitators, as carried out in similar studies (Hershkowitz 2018). Analysis exploring whether question strategies (the proportion of question types) differed across diagnostic groups did not show any statistically significant main effects, $F_{3,662,170.29} = 0.543$, $p = 0.689$. This indicates no variance in questioning strategies across diagnostic groups.

Supplementary analyses were carried out to further expand our understanding of how investigative interviews with PWID and PWA are performed. The repeated measures ANOVA (within-subject factor; the proportion of question types, between-subject factor; diagnostic group) did not reveal any statistically significant main effects when controlling for gender, type of crime, age group or relation to perpetrator. The overall analysis suggests no statistically significant effect on the number of questions posed and question types used across diagnostic groups.

We found a relatively high proportion of suggestive questions (8.6%). Such questions are not

recommended for use in investigative interviews. However, according to a ‘funnel’ interview approach, suggestive questions might appear towards the end of an investigative interview (Brown and Lamb 2019). In addition, we were interested in whether these questions were asked at the beginning or the end of the interview (see Wolfman *et al.* 2016 for a similar procedure). We therefore examined the number of questions asked before the first suggestive question was asked. On average, the interviewers asked $M = 42.7$ ($SD = 44.6$), $min = 0$ and $max = 206$, questions before asking the first suggestive question. In all interviews, 15.5% of the total number of questions posed were asked before the first suggestive question. In only seven of the interviews were 50% or more of the total number of questions asked prior to the first suggestive question. Figure 1 depicts the number of questions asked before the first suggestive question in relation to the total number of questions (without facilitators) in each interview. The case with the highest number of questions was winsorised to facilitate the visual analysis of Fig. 1.

Discussion

This study examined transcripts of real-life investigative interviews in physical or sexual abuse cases involving alleged victims with mild and moderate ID and PWA. The study describes case characteristics and the question strategies used in police-investigated cases. In general, the findings reveal that the majority of victims were female in their early twenties and were victims of sexual abuse perpetrated by someone they knew. These findings are similar to those of other studies in the field; Van

Den Bergh and Hoekman (2006) found that the majority of victims in their study were female in their twenties who were alleged victims of sexual abuse. PWID’s vulnerability to being sexually exploited regardless of gender was also reported by Nixon *et al.* (2017).

The findings of the current study furthermore indicate that the questioning strategies used by Norwegian police investigators when interviewing PWID and PWA are not in accordance with best-practice recommendations. The low proportion of open-ended questions (2.6%) in the interviews presents grounds for concern. The proportion of open-ended questions is low compared with that of studies using the NICHD protocol, where 30–50% of the questions are reported to be open-ended (Brown *et al.* 2017; Almeida *et al.* 2018). The proportion of directive and open-ended questions, when collapsed into one category and which then represents the most recommended types of questions, also remains low. In this study, the use of directive and open-ended questions is 34.8%. Hershkowitz (2018), for example, reported as many as 80% of the questions to be directive and open-ended in the substantive phase of the interview of people with mild and moderate ID. The results of this study further show that the investigative interviewers relied heavily on yes/no questions. This type of question is challenging because PWID and PWA with cognitive delays strive to answer such questions due to their susceptibility to acquiescence (Finlay and Lyons 2002; Funazaki and Oi 2013). Some studies, however, suggest that PWA without cognitive delays provided more adequate responses to yes/no questions compared with direct questions (Oi 2010). Additionally, yes/no questions

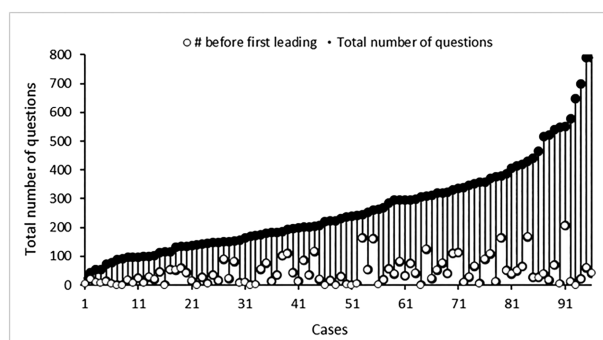


Figure 1. Occurrence of first leading question.

are shown to increase the responsiveness of PWID (Stancliffe *et al.* 2015). This might be an explanation for the extensive use of these questions. Finally, the use of suggestive questions in this study is of great concern. It is known that this type of question can contaminate the interviewee's account and influence the judicial process (Cederborg and Gumpert 2009). Suggestive questions are used more frequently in this study (8.6%) than in comparable results reported by Cederborg and Lamb (2008), in which 5.67% of the questions were suggestive.

Conducting investigative interviews with PWID and PWA is, due to their diagnostic features, challenging. Research does indicate that it is feasible to follow best-practice recommendations in interviews. There are, however, only a limited number of studies in this area. The inability to adhere to the recommended practice when conducting investigative interviews is, in general, often explained by poor training and a lack of supervision and feedback (Lamb *et al.* 2018c). Protocols have therefore been developed to support interviewer behaviour. Studies have shown that these have a positive effect and increase the use of recommended questioning strategies (Dion and Cyr 2008; Lamb *et al.* 2018c). In Norway, the implementation of the SI model for investigative interviewing of vulnerable victims is not supported by additional field research. No evaluations and assessments of SI have been undertaken when interviewing PWID and PWA, and there is no knowledge of adherence to the method in practice. This means that we lack knowledge of a possible relation between interviewer behaviour and the use of the interview model in interviews of PWID and PWA.

The findings of this study also indicate no adaption of question types to cognitive functioning based on a person's diagnosis. A large variance in the use of recommended question types was, however, seen within and across diagnostic groups. Some of the interviews included in the sample were carried out in accordance with best-practice recommendations. Other interviews almost exclusively relied on yes/no and suggestive questions. This variation may be explained by the complexity of conducting investigative interviews in general, of conducting interviews with this group of alleged victims in particular and their cognitive process competence such as memory capacity, recall and retrieval

strategies and language comprehension. Variation in question strategies may also be explained by the large age span in the sample, from young children 5 years of age to older persons aged 70. In Norway, the same interview model is used and recommended for typically developing children, older persons and people with ID and autism. However, we can assume that interview strategies will vary depending on the interviewees' age in addition to cognitive functioning, despite the lack of statistically significant effects. Investigative interviewers may require more sophisticated knowledge of how their communication style affects interviewees and of how to adapt questions to the interviewees' cognitive abilities, such that PWID and PWA are given the greatest opportunity possible to provide an accurate account.

The current study adds to the existing literature by providing one of the few empirical investigations into the field of investigative interviewing of PWID and PWA as alleged victims of sexual and physical abuse. Some limitations need, however, to be taken into consideration. One limitation relates to the nature of field studies in general, which affects the sample. Categorisation of a heterogeneous group of people such as the sample in the current study is challenging and was based on available documentation obtained from the police. Although the diagnostic information is from authorised health personnel, lack of details concerning diagnostic features (e.g. IQ scores) may have caused skewness across groups. Additionally, all the cases in the sample were moved forward to prosecution owing to the initial consideration that the interviewee disclosed information about abuse during the interview. This fact may create a different questioning pattern than interviews in which abuse is not disclosed. This must be considered when interpreting the results.

Other limitations relate to the lack of comparison groups and the fact that the analysis is based on transcriptions of investigative interviews. Lack of comparison groups makes it difficult to assess whether the questioning strategies displayed in this study are specific to interviews with PWID and PWA or whether they form a general pattern in the questioning of vulnerable witnesses. Transcriptions are often used in field studies owing to strong restrictions on accessing highly sensitive information (e.g. Wolfman *et al.* 2016; Hershkowitz 2018; Bull 2019) but limit the possibility of analysing other

important aspects of an interview such as body language and tone of voice. On the other hand, the sample presents all transcribed interviews that relate to the physical and sexual abuse of this particular group of alleged victims in the specified time period from all police districts in Norway. The interviews were conducted by several different police officers and therefore present a representative picture of how interviews of PWID and PWA are conducted in Norway.

Important aspects of investigative interviews of PWID and PWA in sexual and physical abuse cases in Norway are presented in this paper. One such aspect is the discrepancy between the question strategies used in real-life investigative interviews and best-practice recommendations. The lack of questioning strategy consistency can address several implications in practice and future research. Firstly, some of the data in the current study were collected a short time after the SI model was implemented in Norway. It is necessary to evaluate all of the phases in the SI model, in order to assess whether the interviewers are using the model as it is described and how improvements can be made to increase the use of recommended questioning strategies when interviewing PWID and PWA. Secondly, more knowledge is required of how to assist people with communication difficulties in terms of visual aids such as symbols, notes and drawings, as has been demonstrated in recent publications (Mattison and Dando 2019; Maras *et al.* 2020). Such aid may also be beneficial for people with severe ID. No individuals with severe ID were identified in the current sample of participants, which may indicate that interviews with this group are not moved forward to prosecution. Studies have furthermore compared questioning strategies used for children and concluded that these are recommendable for PWID and PWA regardless of age (Lamb *et al.* 2018b). There are more criminal cases within the criminal justice system that involve adult than child victims with disabilities (Van Den Bergh and Hoekman 2006; Nixon *et al.* 2017). We therefore require more knowledge of how adults with disabilities are questioned in investigative interviews. Finally, crimes against PWID and PWA are under-researched. More knowledge is required throughout the criminal justice system to secure the legal and human rights of this particular group of alleged victims of abuse and to empower the system to meet their individual needs.

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Conflict of interest

The authors declare no conflict of interest.

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